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Supplementary appendix

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Appendix Text 1. NCD Risk Factor Collaboration (NCD-RisC)

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Appendix Text 2. Data sources

Data access

We used data from a population-based database on cardiometabolic risk factors collated by the Non-Communicable Disease Risk Factor Collaboration (NCD-RisC), as detailed previously.[1-5] Data were obtained from publicly available multi-country and national measurement surveys (e.g., Demographic and Health Surveys, WHO STEPwise approach to Surveillance (STEPS) surveys, and those identified via the Inter-University Consortium for Political and Social Research, European Health Interview and Health Examination Surveys Database, and the UK Data Service). With the help of the World Health Organization (WHO) regional and country offices, we identified and accessed population-based survey data from national health and statistical agencies. We searched and reviewed published studies as detailed previously and invited eligible studies to join NCD-RisC,[1-5] as we did with data holders from a previous pooled analyses of cardiometabolic risk factors.[6-9] The NCD-RisC database is continuously updated through all the above routes as well as through periodic requests to NCD-RisC members, which consist of representatives of participating studies who are knowledgeable with the study's methods and measurements and often with other studies in their countries and regions, to suggest additional sources in their countries.

Data inclusion criteria and characteristics of included studies

We carefully checked that each data source met our inclusion criteria, described below. Potential duplicate data sources were first identified by comparing studies from the same country and year, followed by checking with NCD-RisC members who had provided data whether sources from the same country and year, and with similar sample sizes and age ranges, were the same or distinct. If two sources were confirmed as duplicates, only one was maintained and used. All NCD-RisC members were also periodically asked to review the list of sources from their countries, to verify that the included data met the inclusion criteria, were not duplicates, and were appropriately classified in terms of the population that they had sampled from.

For each data source, we recorded the study population, the sampling approach, the years of measurement and the measurement methods. This information was provided by participating studies together with available documentation on study design and methods. Using this information, data sources were classified in terms of whether they covered the whole country, one or more subnational regions (that is one or more provinces or states, more than three cities, or more than five rural communities), or one or a small number of communities (limited geographical scope not meeting the above national or subnational criteria). As stated in Appendix Text 3, these study-level attributes were used in the Bayesian hierarchical meta-regression model that was used to estimate prevalence of body-mass index (BMI) categories, while taking into account differences in the populations from which different studies had sampled. All submitted data were checked by at least two persons independently. Questions and clarifications were discussed with NCD-RisC members and resolved before data were incorporated into the database.

Data were included if the following criteria were met: measured data on height and weight were available; study participants were five years of age and older; data were collected using a probabilistic sampling method with a defined sampling frame; data were from population samples at the national, subnational, or community level as defined above; and data were from the countries and territories listed in Appendix Table 2.

We excluded all data sources that were solely based on self-reported height and weight without a measurement component because these data are subject to biases that vary by geography, time, age, sex and socioeconomic characteristics.[10-12] Due to these variations, approaches to correcting self-reported data may leave residual bias. We also excluded data sources on population subgroups whose anthropometric status may differ systematically from the general population, including the following: studies that had included or excluded people based on their health status; studies whose participants were only specific educational,

occupational, socioeconomic or ethnic subgroups of the general population; studies that recruited participants or collected data through educational or health facilities, with the exceptions noted below; and females aged 15-19 years in surveys which sampled only ever-married women or measured height and weight only among mothers.

We used school-based data in countries and age-sex groups with school enrolment of 70% or higher. We used studies whose sampling frame was health insurance schemes in countries where at least 80% of the population had insurance coverage, financed publicly, privately or through employment. Finally, we used studies that had recruited participants or data collected through general practice and primary care systems in high-income and central European countries with universal insurance because contact with the primary care systems tends to be as good as or better than response rates for population-based surveys.[13]

Data cleaning and management

We excluded participants whose age was <18 years if their data were not reported by single year of age (<0.01% of all participants), because height and weight may have non-linear age associations in these ages, especially during growth spurts. We excluded BMI data for females who were pregnant at the time of measurement (0.19% of all participants), because weight changes during pregnancy. We excluded 0.23% of participants with recorded values outside of predefined ranges, which were likely to reflect measurement or data recording errors: those who had recorded height <60 cm or >180 cm for ages <10 years; <80 cm or >200 cm for ages 10-14 years; <100 cm or >250 cm for ages ≥15 years, recorded weight <5 kg or >90 kg for age <10 years; <8 kg or >150 kg for ages 10-14 years; <12 kg or >300 kg for ages ≥15 years, or recorded BMI <6 kg/m^2 or >40 kg/m^2 for ages <10 years; <8 kg/m^2 or >60 kg/m^2 for ages 10-14 years; <10 kg/m^2 or >80 kg/m^2 for ages ≥15 years.

Anonymised individual data from the studies from 1980 to 2022 in the NCD-RisC database were reanalysed according to a common protocol. We calculated prevalence in the following

BMI ranges: for children and adolescents, prevalence of BMI <-2SD, -2SD to <-1SD, -1SD to 1SD, >1 SD to 2SD, and >2SD;[14] for adults, prevalence of BMI <18.5 kg/m^2, 18.5 kg/m^2 to <20 kg/m^2, 20 kg/m^2 to <25 kg/m^2, 25 kg/m^2 to <30 kg/m^2, 30 kg/m^2 to <35 kg/m^2, 35 kg/m^2 to <40 kg/m^2, and ≥40 kg/m^2.

76% of the studies with BMI data were included in the NCD-RisC database as individual participant data; another 16% were provided as summary statistics, i.e., age–sex specific prevalence of relevant BMI categories. When summary statistics were prepared by study investigators, detailed instructions were provided, as was computer code when requested, to ensure analysis was conducted according to the study protocol. The cut-offs for calculating prevalence in the BMI categories for school-aged children and adolescents were all age-specific and sex-specific and were applied to data in single years of age. All analyses incorporated sample weights and complex survey design, when applicable, in calculating summary statistics. Information on survey design and sample weights were provided by participating studies. For studies which used multistage (stratified) sampling, we accounted for survey design features when calculating standard errors, including clusters, strata and sample weights, using Taylor series linearisation as implemented in the R package 'survey' v4.2.1.[15]

We used two additional types of data sources, accounting for 8% of studies. First, we had some data from a previous pooling analysis.[6] We invited these studies to join NCD-RisC, as stated above. However, data from some studies were no longer available, for example because the authors had retired or moved, or because data had been permanently archived or stored using older storage technologies that could not be easily retrieved. Second, summary statistics for nationally representative data from sources that were identified but not accessed via the above routes were extracted from published reports. Data were also extracted for two STEPS surveys that were not publicly available.[16,17] These data made up 2.4% of our data points for children and adolescents and 9.6% for adults (a data point is an

age-sex-study-specific prevalence in a BMI category which is used in the Bayesian meta-regression model as described below to make estimates for all age groups, countries and years). These studies had information on mean BMI and/or on a subset of BMI categories that were analysed in this work. In order to use these data, we used previously validated conversion regressions to estimate the missing primary outcome from the available BMI metric(s). Additional details on conversion regression model specifications and the model coefficients are reported at https://github.com/NCD-RisC/ncdrisc-methods/.

Appendix Text 3. Statistical methods

Overview

We used a Bayesian hierarchical meta-regression model, fitted using a Markov chain Monte Carlo (MCMC) sampler, with inference made using posterior MCMC samples, to estimate trends in the prevalence of different BMI categories by sex, age, country, and year from 1980 to 2022. We used data from 1980 so that estimates for the early part of the reporting period, when data were more sparse, were also informed by data in preceding years. The categories analysed were: for children and adolescents, prevalence of BMI <-2SD, -2SD to <-1SD, -1SD to 1SD, >1 SD to 2SD, and >2SD;[14] for adults, prevalence of BMI <18.5 kg/m^2, 18.5 kg/m^2 to <20 kg/m^2, 20 kg/m^2 to <25 kg/m^2, 25 kg/m^2 to <30 kg/m^2, 30 kg/m^2 to <35 kg/m^2, 35 kg/m^2 to <40 kg/m^2, and ≥40 kg/m^2. As stated in the main paper, we report trends from 1990.

The original version of the model is described in detail in a statistical paper[18] and related substantive papers.[4,9,19] The model used in this paper included adaptations that better capture the variations over age and time of BMI, described in previous publications.[3,20] Model specification is summarised here and described using statistical notation below together with details of its implementation and computation.

In summary, we organised countries into 20 regions, mostly based on geography and national income, which were further grouped into eight super-regions (Appendix Table 2). The super-regions were: Central and eastern Europe, Central Asia, Middle East and north Africa, High-income western, Latin America and the Caribbean, Oceania, South Asia, East and southeast Asia and the Pacific, sub-Saharan Africa. The model had a hierarchical structure in which estimates for each country and year were informed by its own data, if available, and by data from other years in the same country and from other countries, especially those in the same region and super-region with data for similar time periods. The extent to which estimates for each country-year were influenced by data from other years and other countries depended on whether the country had data, the sample size of data, whether the sources were at national,

subnational or community level, and the within-country and within-region variability of the available data.

The model included non-linear time trends through a combination of linear and second-order random walk terms, all modelled hierarchically. The age association of BMI was modelled using a cubic spline to allow non-linear age patterns, which might vary across countries. The coefficients of the splines were modelled hierarchically.[3,20] As detailed below, for adults, we allowed the coefficients to vary over time to reflect changing age associations,[20] whereas for children and adolescents, a simpler model without age-time interaction had better performance.[3]

The model accounted for the possibility that BMI in subnational and community samples might systematically differ from, and have larger variation than, nationally representative surveys through the inclusion of fixed-effect and random-effect terms. The fixed effects adjusted for systematic differences between subnational or community studies and national studies and allowed these differences to vary over time. The random effects allowed national data to have a larger influence on the estimates than subnational or community data with similar sample sizes. The model also accounted for urban-rural differences in the prevalence of a BMI category through data-driven fixed effects for urban-only and rural-only studies. These urban and rural effects were weighted by the difference between study-level and country-level urbanisation in the year when the study was conducted and were also permitted to vary across time.

We performed all analyses separately for each of the prevalence categories given above and by sex because there were differences in their levels and trends in relation to category and sex.[1,5] We also conducted separate analyses for adults and for school-aged children and adolescents. Data on participants aged 5-19 years were included in the analysis of trends in children and adolescents, and data on participants aged 18 years and older were included in

the analysis of trends in adults. Data on participants aged 18 and 19 years were included in both sets of models because these groups form a transitional age from adolescence to adulthood, and hence inform the estimates in both groups.

Statistical model specification

This section, and the following sections, describe the specification of the Bayesian meta-regression model used to estimate the prevalence of each of the BMI categories listed above.

Each study contributed up to 15 data points for each BMI category and sex, with the exact number depending on the age groups represented in the study. In the model specification an observation $y_{h,i}$, that is the number of people in the prevalence category from age group h of study i, carried out in country j at time t, was specified to have a binomial distribution with sample size $n_{h,i}$. The distribution of $y_{h,i}$ given prevalence $p_{h,i}$ was

$$y_{h,i} \sim Bin\left(n_{h,i},\ p_{h,i}\right).$$

We modelled the prevalence $p_{h,i}$ via a latent variable $\alpha_{h,i} = \Phi^{-1}\left(p_{h,i}\right)$, representing probit-transformed prevalence, which follows a Gaussian distribution:

$$\alpha_{h,i} \sim N\left(a_{j[i]} + b_{j[i]}t[i] + u_{j[i],t[i]} + \gamma_i(z_h) + \boldsymbol{X_i\beta} + e_i, \tau^2\right)$$

where j, the country in which a study was carried out, and t, the study year, are uniquely determined by the study index i; we denote this determination of j and t on i by $j[i]$ and $t[i]$ respectively. The country-specific intercept and linear time slope from country j are denoted a_j and b_j respectively, with $j \in \{1,..J\}$, where J = 200 is the total number of countries and territories in our analysis. We describe the hierarchical model used for the a's and the b's in the section *Linear components of country time trends*. Letting T = 43 be the total number of years from 1980 to 2022, the T-length vector u_j captures smooth non-linear change over time in country j, as described in the section *Nonlinear change*. The contribution of the age term for age group h (with mid-age z_h) in study i is denoted by $\gamma_i(z_h)$; these are described in detail in the section *Age model*. The matrix $\boldsymbol{X}$ contains terms describing whether studies were

representative at the national, subnational or community level, and whether they were urban-only, rural-only, or covered both areas, and $\boldsymbol{\beta}$ contains the associated fixed effects. In addition, a random effect e_i was estimated for each study. These study-specific terms are described in the section *Study-level terms and study-specific random effects*. The variance term τ^2 captures variability not accounted for by the study-specific random effects, described in the section *Residual age-by-study variability*. Details on model fitting and convergence are given in the section *Model implementation.* Finally, details on how country-level inference was performed are given in the section *Model inference.*

Linear components of country time trends

The model had a hierarchical structure, whereby studies were nested in countries, which were nested in regions (indexed by *l*), which were nested in super-regions (indexed by m), which were all nested in the globe (see Appendix Table 2 for a list of countries and territories in each region, and regions in each super-region). This structure allowed the model to share information across units to a greater degree when data were non-existent or weakly informative (for example, had a small sample size or were not nationally representative) and, to a lesser extent, in data-rich countries and regions.[21]

The a and b terms are country-specific linear intercepts and time slopes with terms at each level of the hierarchy, denoted by the superscripts *c*, *r*, *s* and *g*, respectively:

$$a_j = a_j^c + a_{l[j]}^r + a_{m[j]}^s + a^g,$$

$$b_j = b_j^c + b_{l[j]}^r + b_{m[j]}^s + b^g,$$

$$a^x \sim N(0, \kappa_a^x),$$

$$b^x \sim N(0, \kappa_b^x),$$

where $x \in \{c, r, s\}$. The κ terms were each assigned a flat prior on the standard deviation scale.[21] We also assigned flat priors to a^g and b^g.

Nonlinear change

The prevalence of a BMI category may change nonlinearly over time.[1,4] We captured smooth nonlinear change in time in country j using the vector u_j. Just as a_j and b_j are each defined as the sum of country, region, super-region and global components, we defined

$$u_j = u_j^c + u_{l[j]}^r + u_{m[j]}^s + u^g.$$

To allow the model to differentiate between the degrees of nonlinearity that exist at the country, region, super-region and global levels, we assigned the four components of each u a discrete second-order Gaussian autoregressive prior.[22,23] In particular, the vectors $u_j^c, j \in \{1, \ldots, J\}$, $u_l^r, l \in \{1, \ldots, L\}$, $u_m^s, m \in \{1, \ldots, M\}$, and u^g, all of length T, are each given a Gaussian prior with mean zero and precision $\lambda_c P$, $\lambda_r P$, $\lambda_s P$ and $\lambda_g P$ respectively, where the scaled precision matrix P in the Gaussian autoregressive prior penalizes first and second differences as follows:

$$P = \begin{bmatrix} 1 & 0 & 0 & \cdots & 0 \\ -2 & 1 & 0 & \cdots & 0 \\ 1 & -2 & 1 & \cdots & 0 \\ 0 & 1 & -2 & \cdots & 0 \\ 0 & 0 & 1 & \cdots & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \cdots & 1 \end{bmatrix} \begin{bmatrix} 1 & -2 & 1 & 0 & 0 & \cdots & 0 \\ 0 & 1 & -2 & 1 & 0 & \cdots & 0 \\ 0 & 0 & 1 & -2 & 1 & \cdots & 0 \\ \vdots & \vdots & \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & 0 & 0 & \cdots & 1 \end{bmatrix}$$

$$= \begin{bmatrix} 1 & -2 & 1 & 0 & 0 & \cdots & 0 \\ -2 & 5 & -4 & 1 & 0 & \cdots & 0 \\ 1 & -4 & 6 & -4 & 1 & \cdots & 0 \\ 0 & 1 & -4 & 6 & -4 & \cdots & 0 \\ 0 & 0 & 1 & -4 & 6 & \cdots & 0 \\ \vdots & \vdots & \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & 0 & 0 & \cdots & 1 \end{bmatrix}.$$

P is multiplied by the estimated precision parameters λ_c, λ_r, λ_s, and λ_g, thus upweighting or downweighting the strength of its penalties and ultimately determining the degree of smoothing at each level. For each of the four precision parameters, we used a truncated flat prior on the standard deviation scale ($1/\sqrt{\lambda}$).[21] We truncated these priors such that $\log\lambda \leq 20$ for each of the four $\lambda's$. This upper bound is enforced as a computational convenience, whereby models with $\log\lambda > 20$ are treated as equivalent to a model with $\log\lambda = 20$, as they

essentially have no extra-linear variability in time. In practice, this upper bound had little effect on the parameter estimates. Furthermore, we ordered the $\lambda's$ a priori as follows: $\lambda_c < \lambda_r < \lambda_s < \lambda_g$. This prior constraint conveys the expectation that the global trend in the prevalence of a BMI category has less extra-linear variability than the trend of any given super-region, which has less than those of constituent regions, which in turn has less variability than the trends of constituent countries.

The matrix P has rank $T-2$, corresponding to a flat, improper prior on the mean and the slope of the u_j^c's, the u_l^r's, the u_m^s's and u^g, and is not invertible.[24] Thus, we had a proper prior in a reduced-dimension space,[25] with the prior expressed as follows:

$$P\left(u_j^c \middle| \lambda_c\right) \propto \lambda_c^{\frac{T-2}{2}} \exp\left\{-\frac{\lambda_c}{2} u_j^{c\prime} P u_j^c\right\}.$$

Note that if u_j^c had a non-zero mean, this would introduce non-identifiability with respect to a_j^c. By the same token, b_j^c would not be identifiable if u_j^c had a non-zero time slope, and similarly for the other means and slopes. Thus, to achieve identifiability of the a's, b's, and u's, we constrained the mean and slope of u^g and each of u^s, u^r, and u^c to be zero. Enforcing orthogonality between the linear and nonlinear portions of the time trends meant that each can be interpreted independently.

For the countries in which there are observations for at least two different time points, this improper prior will not lead to an improper posterior because the data will provide information about the mean and slope. In order to enforce the desired orthogonality between the linear and nonlinear portions of the model, we used the Rue and Held correction.[25] For the countries without data (for adults, four for women and eight for men; for children and adolescents, ten for girls and 20 for boys), we took the Moore-Penrose pseudoinverse of P,[26] setting to infinity those eigenvalues that correspond to the non-identifiability. This effectively constrained the non-identified portions of the model to zero, as the corresponding variances are set to zero;[23]

in this case the Rue and Held correction[25] is not needed. An intermediate case occurs when data are observed for only one time point in a country. In this case, the full conditional precision has rank $T-1$ because the mean but not the linear trend of u_j^c is identified by the data. We therefore constrained the linear trend of u_j^c to zero in this case, by taking the generalized inverse of the full conditional precision. We then constrained the mean of u_j^c to zero using the one-dimensional version of the Rue and Held correction.[25] Computational details are given in a previous paper.[9]

Age model

We sought a smooth function that could characterise gradual changes in BMI over age, as seen in the data, with parsimonious number of parameters to allow robust estimation. To achieve this, we modelled age using cubic splines, with the number and position of the knots of the spines selected based on epidemiological and physiological knowledge about changes in body shape[14,27] and statistical considerations, as previously described.[1,5] Statistically, we used age stratified residuals to confirm the number and position of knots.

For age group h with mid-age z_h, in study i, the age term is given by

$$\gamma_i(z_h) = \gamma_{1,i} z_h + \gamma_{2,i} z_h^2 + \gamma_{3,i} z_h^3 + \gamma_{4,i}(z_h - k_1)_+^3 + \gamma_{5,i}(z_h - k_2)_+^3,$$

where for children and adolescents the two knots were placed at ages $(k_1, k_2) = (10, 15)$ and for adults at $(k_1, k_2) = (45, 60)$ years. To reduce dependence among model parameters, we centred the age variable.

We used different age models for children and adolescents and for adults, as explained below, following previous analyses,[3,5,20] visual inspection of results as well as formal model testing carried out using the Watanabe-Akaike information criterion (WAIC).[28,29]

For adults, each of the spline coefficients was allowed to vary across countries and was modelled hierarchically, and was further allowed to vary across time, in order to reflect different trends in prevalence across age groups. We modelled spline coefficients consistently with previous analysis,[20] with the k^{th} age term coefficients for study i given as follows:

$$\gamma_{k,i} = \psi_k^g + \psi_{k,j[i]}^c + \psi_{k,l[i]}^r + \psi_{k,m[i]}^s + \left(\phi_k^g + \phi_{k,j[i]}^c + \phi_{k,l[i]}^r + \phi_{k,m[i]}^s\right) t[i],$$

$$\psi_{k,j[i]}^c \sim N\left(0, \sigma_{\psi,k,c}^2\right),$$

$$\psi_{k,l[i]}^r \sim N\left(0, \sigma_{\psi,k,r}^2\right),$$

$$\psi_{k,m[i]}^s \sim N\left(0, \sigma_{\psi,k,s}^2\right),$$

$$\phi_{k,j[i]}^c \sim N\left(0, \sigma_{\phi,k,c}^2\right),$$

$$\phi_{k,l[i]}^r \sim N\left(0, \sigma_{\phi,k,r}^2\right),$$

$$\phi_{k,m[i]}^s \sim N\left(0, \sigma_{\phi,k,s}^2\right).$$

Here ψ^g, ψ^c, ψ^r, and ψ^s are global, country, region, and super-region intercepts, and ϕ^g, ϕ^c, ϕ^r, and ϕ^s are global, country, region and super-region time slope parameters. A flat improper prior was placed on each of the σ_ψ's and σ_ϕ's.

For children and adolescents, use of the model comparison criteria WAIC showed that the age-time interaction terms, ϕ, did not improve model fit. Therefore, each of the spline coefficients was still allowed to vary across countries and was modelled hierarchically but was held constant over time. The k^{th} age term coefficients for study i were given as follows:

$$\gamma_{k,i} = \psi_k^g + \psi_{k,j[i]}^c + \psi_{k,l[i]}^r + \psi_{k,m[i]}^s,$$

$$\psi_{k,j[i]}^c \sim N\left(0, \sigma_{\psi,k,c}^2\right),$$

$$\psi_{k,l[i]}^r \sim N\left(0, \sigma_{\psi,k,r}^2\right),$$

$$\psi_{k,m[i]}^s \sim N\left(0, \sigma_{\psi,k,s}^2\right),$$

with flat improper priors placed on each of the σ_ψ's.

Study-level terms and study-specific random effects

The prevalence of a BMI category as measured in individual studies may vary from the true unobserved country-year prevalence due to study implementation factors such as those associated with sampling, participation and response, and measurement. We included time-varying offsets (referred to above as fixed effects) to help account for potential systematic differences associated with data sources that are representative of subnational or community populations, and data sources that are representative of urban-only or rural-only populations, through the terms in $\boldsymbol{X_i\beta}$:

$$\boldsymbol{X_i\beta} = \beta_1 \mathbf{I}\{\boldsymbol{X}_i^{cvrg} = subnational\} + \beta_2 \mathbf{I}\{\boldsymbol{X}_i^{cvrg} = subnational\} t[i]$$
$$+ \beta_3 \mathbf{I}\{\boldsymbol{X}_i^{cvrg} = community\} + \beta_4 \mathbf{I}\{\boldsymbol{X}_i^{cvrg} = community\} t[i]$$
$$+ \beta_5 \boldsymbol{X}_{j[i],t[i]}^{c.urb} \mathbf{I}\{\boldsymbol{X}_i^{s.urb} = rural\} + \beta_6 \mathrm{X}_{\mathrm{j[i]},t[i]}^{\mathrm{c.urb}} \mathbf{I}\{\boldsymbol{X}_i^{s.urb} = rural\} t[i]$$
$$+ \beta_7 \left(1 - \boldsymbol{X}_{j[i],t[i]}^{c.urb}\right) \mathbf{I}\{\boldsymbol{X}_i^{s.urb} = urban\} + \beta_8 (1 - \boldsymbol{X}_{j[i],t[i]}^{c.urb}) \mathbf{I}\{\boldsymbol{X}_i^{s.urb} = urban\} t[i],$$

where $\boldsymbol{X}_i^{cvrg}$ is the indicator for whether the coverage of study i, in country j and year t, is subnational or community, $\boldsymbol{X}_i^{s.urb}$ is the indicator for whether the study i covered rural-only or urban-only populations, and $\boldsymbol{X}_{j[i],t[i]}^{c.urb}$ is the percentage of the national population of country j in year t living in urban areas, as obtained from the 2018 revision to the United Nation's World Urbanization Prospects.[30] We note that β_5 through β_8 are all multiplied by zero for studies which are urban-only in countries where all residents lived in urban areas (e.g., Singapore) and for studies which are rural-only in countries where all residents lived in rural areas (e.g., Tokelau), i.e., in such cases the model does not consider studies classified as urban (respectively rural) to have potential systematic differences from the true underlying prevalence in the country.

Even after accounting for sampling variability, national studies may still not reflect the true prevalence of a BMI category in a country with perfect accuracy, and subnational and community studies have even larger variability. We include the study-specific random effect e_i to allow all age groups from the same study to have an unusually high or an unusually low prevalence, after conditioning on the other terms in the model. Each e_i is assigned a Gaussian

prior with variance dependent on whether study i is representative at the national, subnational or community level. Random effects from national studies were constrained to have smaller variance (v_n) than random effects of subnational studies (v_s), which were in turn constrained to have smaller variance than community studies (v_c).

Residual age-by-study variability

The age patterns across communities within a given country may differ from the overall age pattern of that country. This within-study variability cannot be captured by the e_i terms, which are equal across age-specific observations in each study, so we included an additional variance component for each study, τ^2.

Model implementation

The model was fitted through a bespoke MCMC sampler coded in R, which uses a combination of Metropolis-Hastings and Gibbs updates.[31] To generate starting values for the model runs we ran an initial set of eight MCMC chains. We generated the starting values of each initial chain by first randomly generating log variance parameter values from diffuse Gaussian distributions centred on estimates from previous analyses, and then generating all other starting values conditional on these variance parameters. We ran each of the initial chains for 50,000 iterations after burn-in, thinned, and combined across chains to obtain 5000 posterior draws. In order to estimate a distribution from which to sample initial values for the final model runs, we fitted a multivariate Gaussian distribution to the posterior distribution of all non-study-specific parameters obtained from the initial chains, scaling the variance-covariance matrix by a factor of 1.5; this equates to an increase in the variance of the multivariate Gaussian distribution of approximately 50% relative to the target posterior distribution. This is a conservative overdispersion compared to that of 10%, which is considered sufficient for the Rhat convergence diagnostic.[32] To obtain initial values for study-specific parameters, we first sampled a study-specific random effect e_i, for each study i, from

a Gaussian distribution with mean zero and variance given by the sampled initial values of v_n, v_s, or v_c, dependent on whether study i was representative at national, subnational or community level. We then sampled initial values of the latent variable $\alpha_{h,i}$ for each age group h and study i from its Gaussian distribution, conditional on all other sampled parameter values, including the study-specific random effect e_i.

We had a target of eight converged MCMC chains for generating our estimates, which is twice the recommended minimum number to assess convergence using the Rhat diagnostic.[29,33] The exact numbers of chains used for the model runs are not critical so long as at least four chains are run in order to estimate between chain variation, which is necessary for the Rhat convergence diagnostic,[33] and so long as there are sufficient computational resources to run chains to convergence and subsequently to collect samples. We ran ten chains for each BMI category sex combination, with chains ordered by their seeds. The additional two chains were run to allow for a small number of the first eight chains to be discarded if mixing was slow. In practice, only one chain, for the prevalence of BMI -1SD to 1SD in girls, was slow to converge and was replaced. We did not run more chains because the computational and time cost outweighed the gains, if any, in results. We identified, through visual inspection of hyperparameter trace plots, a burn-in period of 20,000 iterations for adult prevalence categories, and 30,000 for child and adolescent categories. We took 50,000 post-burn-in iterations from each of the eight target chains, and combined and thinned to obtain a final sample of 5000 posterior draws for each outcome.

Convergence was confirmed through visual inspection as well as through calculated split-Rhat diagnostic for country-year-age outcomes as implemented in the R package 'rstan' v2.26.15.[33,34] The 97.5th quantile of split-Rhat ranged across BMI categories and sexes from 1.002 to 1.014 for adults, and from 1.005 to 1.019 for children and adolescents. Over 99.97%

of country-year-age outcomes across all categories and sexes for adults and for children and adolescents had split-Rhat < 1.05.

Inference and post-processing

All inference was done for country-year-age combinations, through combining the a, b, u, and γ terms, and setting $\beta = e_i = 0$. We set $\beta = 0$ as fixed effects associated with study design are not relevant for country-level inference. We set $e_i = 0$ as random effects arising from imperfections and variations in study design and implementation, and from within-country variability of the prevalence of a BMI category, are also not relevant for country-level inference.

As in previous work,[1] we re-scaled the estimated prevalence of different categories so that their sum was 1 in each sex, age, country, and year. The average scaling factors across samples ranged from 0.99 to 1.02 for children and adolescents and 0.99 to 1.03 for adults, i.e., the sum of the separately estimated prevalence categories was close to 1. We calculated the prevalence of double burden at the posterior draw level, as the sum of the prevalence of underweight/thinness and obesity. We also calculated the proportion of the combined burden which was composed of obesity at the draw level.

Posterior estimates were made in one-year age groups for ages 5-19 years, because BMI changes rapidly in relation to age in these ages, and in five-year age groups for those aged 20 years and older. For presentation, we summarised results for ages 5-19 years for children and adolescents, and for ages 20 years and older for adults, as age-standardised results. Age-standardisation puts the population for each country-year on the same (standard) age distribution, and hence enables comparisons to be made over time and across countries. Age-standardisation was performed by taking the weighted means of age-sex-specific estimates, separately for children and adolescents and for adults, using age weights from the WHO standard population.[35] Estimates for regions and the world were calculated as population-weighted averages of the constituent country estimates by sex and age group. The number of

adults who were affected by underweight, the number of children and adolescents who were in the thinness category, and the number of adults or adolescents with obesity were calculated by multiplying the corresponding age-specific prevalence by the age-specific population by sex, country, and year.

Throughout results, we report Pearson correlation coefficients among specific quantities of interest as a measure of their association, with correlation coefficients and their credible intervals calculated at the posterior draw level.

The uncertainties of our estimates, represented by their posterior distributions, include the following sources: uncertainty due to sampling in each data source; uncertainty associated with the variability of national data beyond what is accounted for by sampling; uncertainty associated with subnational and community data, which are more variable than national data; and uncertainty due to making estimates by country, year, and age when data were missing, scarce or weakly informative. The reported credible intervals (CrI) represent the 2.5^{th} to 97.5^{th} percentiles of the posterior distributions, which contain the true estimates with 95% probability. We obtained the posterior probability (PP) that an estimated change in underweight/thinness or in obesity represented a true increase as the proportion of draws from the posterior distribution that indicated an increase, i.e., a positive change. We obtained the PP that obesity was more prevalent than underweight/thinness as the proportion of posterior draws for which obesity prevalence was greater than underweight/thinness prevalence. Similarly, we obtained the PP that underweight/thinness was more prevalent as the proportion of posterior draws for which underweight/thinness prevalence was greater than obesity prevalence.

Appendix Text 4. Comparison with previous studies

To our knowledge, there are no previous reports of the combined prevalence of underweight and obesity for all countries in the world, and the latest data on the individual outcomes are from 2016.[1] The estimated prevalence for both underweight or thinness and obesity for 2016 from this study were correlated with the estimates in the earlier work, but there were differences in some countries and years, because the current estimates benefitted from 48% more data. The additional six years of data covered a period of significant shift in both the character of double burden, i.e., towards obesity dominance, and in its geographical epicentre, which is increasingly in middle-income nations. A report on double burden of malnutrition[36] used a mix of indicators (stunting, thinness and overweight) and age groups and hence is not directly comparable to our results; nonetheless, the study reached similar conclusions about the role of obesity in increasing double burden of malnutrition, especially in low- and middle-income countries. A few studies used data from Demographic Health Surveys or Global School-Based Health Surveys to report double burden of malnutrition in low- and middle-income countries, but they were restricted to women of reproductive age or school-aged children and adolescents.[37-44] Only two studies[37,38] reported change over time, but these studies did not use data after 2012 as we did; their findings were consistent with ours about obesity making up an increasing share of the overall burden of malnutrition in low- and middle-income countries. Two additional studies reviewed published data and reported double burden of malnutrition in multiple world regions.[45,46] They did not provide country-level results, and hence are not comparable with our results. Our results are consistent with trends in underweight or obesity reported in specific countries. In particular, the decline in female obesity in Spain and France, the only two countries where we estimated a decline in obesity in adults, has been noted in some age groups in other studies that used measurement data.[47-49] Spain and France also have self-reported data on height and weight which are subject to bias and hence differ from measurement surveys[50,51] used for our estimates.

Appendix Table 1. Data sources used in the analysis.

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1	Afghanistan	2013	National Nutrition Survey	National	both		10-49		18,433	
2	Afghanistan	2018	STEPS	National	both	18-69	18-69	1,984	1,703	
3	Albania	2001	Shapo et al., Public Health Nutr 6:471-77, 2003	Community	urban	24+	24+	535	585	
4	Albania	2008-2009	DHS	National	both	15-49	15-49	2,978	7,386	
5	Albania	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-9	7-9	2,971	2,794	
6	Albania	2013-2015	Balkan Survey of Inactivity in Children (BASIC)	National	both	6-16	6-16	4,978	4,972	
7	Albania	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-9	7-9	3,358	3,062	
8	Albania	2017-2018	DHS	National	both	15-59	15-59	5,953	14,447	
9	Algeria	2003	STEPS	Subnational	both	25-64	25-64	1,612	2,437	
10	Algeria	2005	Transition and Health Impact in North Africa	National	both	35-70	35-70	2,004	2,741	
11	Algeria	2007-2009	The ISOR (InSulino-resistance in ORan) Study	Community	urban	30-64	30-64	376	408	
12	Algeria	2016-2017	STEPS	National	both	18-69	18-69	2,991	3,636	
13	American Samoa	1976-1978	McGarvey, Am J Clin Nutr 53(6 Suppl):1586S-1594S, 1991	National	both	5+	5+	1,017	1,329	1
14	American Samoa	1990	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	25+	25+	359	484	
15	American Samoa	1992	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	27+	27+	232	337	
16	American Samoa	1994	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	29+	29+	165	245	
17	American Samoa	2004	STEPS	National	both	25-64	25-64	949	1,060	
18	Andorra	2004-2005	Enquesta Nutricional D'Andora	National	both	18-75	18-75	400	447	
19	Angola	2013-2014	CardioBengo - Population based cardiovascular longitudinal study in Bengo Province, Angola	Community	both	14-65	14-65	875	1,486	
20	Antigua and Barbuda	2009	Global School-based Student Health Survey	National	both	13-17	13-17	70	122	
21	Argentina	1981-1985	Hernandez et al., Diabetes Res Clin Pract 3:277-83, 1987	Community	urban	20-74	20-74	395	414	
22	Argentina	1985-1986	INTERSALT	Community	urban	20-59	20-59	100	100	
23	Argentina	1995-1998	de Sereday et al., Diabetes Metab 30:335-9, 2004	Subnational	urban	15-74	15-74	924	1,246	
24	Argentina	2003	CEDES-Programa VIGI+A-Banco Mundial, 2004	Community	urban	15-74	15-74	151	176	
25	Argentina	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	733	742	
26	Argentina	2005	Encuesta Nacional de Nutrición y Salud 2005	National	both		10-49		6,581	
27	Argentina	2006	Virasoro Survey	Community	urban	15-84	15-84	261	306	
28	Argentina	2008-2011	The VELA Project	Community	rural	5+	5+	380	543	
29	Argentina	2011	Primera Encuesta Alimentaria y Nutricional de la Ciudad Autónoma de Buenos Aires - EANCABA	Community	urban	5-18; 60+	5-49; 60+	1,173	2,229	
30	Argentina	2011-2012	CESCAS Study	Community	urban	35-74	35-74	1,571	2,359	
31	Argentina	2012	Global School-based Student Health Survey	National	both	13-17	13-17	8,333	8,904	
32	Argentina	2012-2013	Primer estudio sobre el estado nutricional y los hábitos alimentarios de la población adulta de Rosario	Community	urban	18-70	18-70	371	823	
33	Argentina	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	573	693	
34	Argentina	2018	Encuesta Nacional de Factores de Riesgo 2018	National	both	18+	18+	6,960	9,449	
35	Argentina	2018-2019	Encuesta Nacional de Nutricion y Salud	National	urban	5+	5+	6,482	7,332	
36	Armenia	1998	The health and nutritional status of children and women in Armenia	National	both		18-45		2,420	
37	Armenia	2000	DHS	National	both		15-49		5,982	
38	Armenia	2005	DHS	National	both	15-49	15-49	1,160	6,123	
39	Armenia	2015-2016	DHS	National	both		15-49		5,731	
40	Armenia	2016	STEPS	National	both	18-69	18-69	604	1,447	
41	Armenia	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	1,860	1,703	
42	Australia	1980	Risk Factor Prevalence Study	National	urban	25-64	25-64	2,756	2,781	
43	Australia	1981	Busselton Health Study	Community	urban	18+	18+	225	290	
44	Australia	1983	MONICA, Newcastle	Subnational	urban	35-64	35-64	1,215	1,244	
45	Australia	1983	Risk Factor Prevalence Study	National	urban	25-64	25-64	3,731	3,813	
46	Australia	1985	Australian Schools Health and Fitness Survey (ASHFS)	National	both	7-15	7-15	4,302	4,189	
47	Australia	1988-1989	Dubbo Study of Australian Elderly	Community	urban	59+	59+	877	1,219	
48	Australia	1988-1989	MONICA, Newcastle	Subnational	urban	35-64	35-64	672	671	
49	Australia	1988-1989	MONICA, Newcastle	Community	urban	25-34	25-34	70	84	
50	Australia	1989	Risk Factor Prevalence Study	National	urban	20-69	20-69	4,497	4,678	
51	Australia	1992-1993	Australia Longitudinal Study of Ageing	Community	urban	65+	65+	814	746	
52	Australia	1994	MONICA, Newcastle	Subnational	urban	35-64	35-64	637	688	
53	Australia	1994	MONICA, Perth inner	Community	urban	25-64	25-64	363	349	
54	Australia	1994	MONICA, Perth outer	Community	urban	25-64	25-64	373	387	
55	Australia	1995	National Nutrition Survey 1995	National	both	5+	5+	5,983	6,390	
56	Australia	1996	The Nepean Longitudinal Cohort Study	Community	urban	7-8	7-8	221	215	
57	Australia	1996-1998	Western Australian AAA Screening Program	Community	urban	65-84		12,194		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
58	Australia	1997	South Australia Schools Fitness and Physical Activity Survey	Subnational	both	10-12	10-12	921	765	
59	Australia	1999-2000	The Australian Diabetes, Obesity and Lifestyle Study 1999-2000	National	both	25+	25+	4,991	6,070	
60	Australia	1999-2003	North West Adelaide Health Study	Community	urban	18+	18+	1,932	2,122	
61	Australia	2000	Perth children	Community	both	25	25	266	334	
62	Australia	2004	The Longitudinal Study of Australian Children, K cohort (child)	National	both	5	5	425	431	
63	Australia	2004	The Nepean Longitudinal Cohort Study	Community	urban	14-15	14-15	143	149	
64	Australia	2004-2005	Janus et al., Med J Aust 187:147-52, 2007	Community	rural	25-74	25-74	383	422	
65	Australia	2004-2005	The Australian Diabetes, Obesity and Lifestyle Study 2004-2005	National	both	30+	30+	2,874	3,472	
66	Australia	2004-2006	North West Adelaide Health Study	Community	urban	20+	20+	1,523	1,679	
67	Australia	2006	The Longitudinal Study of Australian Children, K cohort (child)	National	both	6-7	6-7	2,245	2,156	
68	Australia	2007	Children's Nutrition and Physical Activity Survey	National	both	5-16	5-16	1,649	1,669	
69	Australia	2007-2008	National Health Survey	National	both	18+	18+	5,279	5,655	
70	Australia	2008	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	5	5	508	513	
71	Australia	2008	The Longitudinal Study of Australian Children, K cohort (child)	National	both	8-9	8-9	2,121	2,023	
72	Australia	2008-2010	North West Adelaide Health Study	Community	urban	24+	24+	1,168	1,318	
73	Australia	2010	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	6-7	6-7	2,148	2,014	
74	Australia	2010	The Longitudinal Study of Australian Children, K cohort (child)	National	both	10-11	10-11	2,052	1,945	
75	Australia	2010	NSW School physical activity and nutrition survey	Subnational	both	5-16	5-16	4,076	3,764	
76	Australia	2011-2013	Australian Health Survey	National	both	5+	5+	12,190	13,011	2
77	Australia	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	243	285	
78	Australia	2012	The Australian Diabetes, Obesity and Lifestyle Study 2012	National	both	37+	37+	2,048	2,530	
79	Australia	2012	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	8-9	8-9	2,041	1,947	
80	Australia	2012	The Longitudinal Study of Australian Children, K cohort (child)	National	both	12-13	12-13	1,948	1,851	
81	Australia	2014	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	10-11	10-11	1,829	1,742	
82	Australia	2014	The Longitudinal Study of Australian Children, K cohort (child)	National	both	14-15	14-15	1,694	1,581	
83	Australia	2014-2015	National Health Survey	National	both	5+	5+	8,331	9,424	
84	Australia	2015	NSW School physical activity and nutrition survey	Subnational	both	5-16	5-16	3,571	3,791	
85	Australia	2016	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	12-13	12-13	1,639	1,529	
86	Australia	2016	The Longitudinal Study of Australian Children, K cohort (child)	National	both	16-17	16-17	1,477	1,380	
87	Australia	2017-2018	National Health Survey	National	both	18+	18+	7,576	8,729	
88	Australia	2018	The Longitudinal Study of Australian Children, B cohort (infant)	National	both	14-15	14-15	1,523	1,403	
89	Australia	2018	The Longitudinal Study of Australian Children, K cohort (child)	National	both	18-19	18-19	1,304	1,233	
90	Austria	1983	The Austrian Conscription Database	National	both	17-18		58,517		
91	Austria	1984	The Austrian Conscription Database	National	both	17-18		58,830		
92	Austria	1985	The Austrian Conscription Database	National	both	17-18		58,638		
93	Austria	1986	CINDI	Community	both	25-64	25-64	657	715	
94	Austria	1986	The Austrian Conscription Database	National	both	17-18		57,870		
95	Austria	1987	The Austrian Conscription Database	National	both	17-18		55,292		
96	Austria	1988	The Austrian Conscription Database	National	both	17-18		51,050		
97	Austria	1989	The Austrian Conscription Database	National	both	17-18		49,380		
98	Austria	1990	The Austrian Conscription Database	National	both	17-18		47,102		
99	Austria	1991	CINDI survey Vorarlberg/Austria	Subnational	both	25-64	25-64	698	738	
100	Austria	1991	The Austrian Conscription Database	National	both	17-18		44,288		
101	Austria	1992	The Austrian Conscription Database	National	both	17-18		43,553		
102	Austria	1992	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	18+	18+	14,161	18,835	
103	Austria	1993	The Austrian Conscription Database	National	both	17-18		42,356		
104	Austria	1994	The Austrian Conscription Database	National	both	17-18		40,401		
105	Austria	1995	The Austrian Conscription Database	National	both	17-18		39,809		
106	Austria	1996	The Austrian Conscription Database	National	both	17-18		39,587		
107	Austria	1997	The Austrian Conscription Database	National	both	17-18		40,408		
108	Austria	1998	The Austrian Conscription Database	National	both	17-18		43,131		
109	Austria	1998	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	18+	18+	16,153	20,915	
110	Austria	1998-1999	CINDI survey Vorarlberg/Austria	Subnational	both	25-64	25-64	409	414	
111	Austria	1999	The Austrian Conscription Database	National	both	17-18		44,163		
112	Austria	2000	The Austrian Conscription Database	National	both	17-18		44,275		
113	Austria	2001	The Austrian Conscription Database	National	both	17-18		43,315		
114	Austria	2002	The Austrian Conscription Database	National	both	17-18		42,899		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
115	Austria	2003	The Austrian Conscription Database	National	both	17-18		42,389		
116	Austria	2004	The Austrian Conscription Database	National	both	17-18		42,774		
117	Austria	2004	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	18+	18+	20,160	23,893	
118	Austria	2004-2005	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	6-17	6-17	17,504	15,823	
119	Austria	2005	The Austrian Conscription Database	National	both	17-18		42,906		
120	Austria	2006	The Austrian Conscription Database	National	both	17-18		44,571		
121	Austria	2006-2007	HELENA	Community	urban	12-17	12-17	191	211	
122	Austria	2007	The Austrian Conscription Database	National	both	17-18		44,755		
123	Austria	2008	The Austrian Conscription Database	National	both	17-18		44,880		
124	Austria	2008-2009	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	6-17	6-17	16,847	15,295	
125	Austria	2009	The Austrian Conscription Database	National	both	17-18		45,594		
126	Austria	2009-2011	Mayer et al., Ann Hum Biol 42(1):45-55, 2015	National	both	5-17	5-17	6,634	6,340	
127	Austria	2010	The Austrian Conscription Database	National	both	17-18		44,968		
128	Austria	2010-2012	Austrian Study on Nutritional Status 2012	National	both	6-80	6-80	363	446	
129	Austria	2011	The Austrian Conscription Database	National	both	17-18		44,076		
130	Austria	2011-2012	BMI in Upper Austrian children and adolescents	Subnational	both	6-17	6-17	7,808	6,853	
131	Austria	2012	The Austrian Conscription Database	National	both	17-18		42,768		
132	Austria	2012-2013	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	6-17	6-17	14,760	13,648	
133	Austria	2013	The Austrian Conscription Database	National	both	17-18		41,574		
134	Austria	2013-2014	Prevalence of obesity and motor performance in Tyrolean preschool children	Subnational	both	5	5	550	513	
135	Austria	2013-2017	Austrian Study on Nutrition (ASN)	National	both	19-64	19-64	774	1,332	
136	Austria	2014	The Austrian Conscription Database	National	both	17-18		41,740		
137	Austria	2014-2015	Influence of selected risk factors on the motor performance of 10 to 11-year-old schoolchildren	Subnational	both	10-11	10-11	197	129	
138	Austria	2015	The Austrian Conscription Database	National	both	17-18		39,154		
139	Austria	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	8-9	8-9	1,220	1,175	
140	Austria	2015-2016	Vorarlberg Health Monitoring and Promotion Programme (VHM&PP)	Subnational	both	6-17	6-17	13,037	12,048	
141	Austria	2015-2017	The Tyrolean Early Vascular Ageing-study (EVA-Tyrol) - East-Tyrol	Subnational	both	14-17	14-17	680	831	
142	Austria	2016	The Austrian Conscription Database	National	both	17-19		35,944		
143	Austria	2017	The Austrian Conscription Database	National	both	17-19		34,399		
144	Austria	2018	The Austrian Conscription Database	National	both	17-19		34,188		
145	Austria	2019	Fitness and health status of primary school children - before and during the COVID-19 pandemic	Community	both	7-10	7-10	381	382	
146	Austria	2019	The Austrian Conscription Database	National	both	17-19		32,185		
147	Austria	2019	Childhood Obesity Surveillance Initiative 5	National	both	8-9	8-9	1,223	1,137	
148	Austria	2020	Fitness and health status of primary school children - before and during the COVID-19 pandemic - June	Community	both	7-10	7-10	381	383	
149	Austria	2020	Fitness and health status of primary school children - before and during the COVID-19 pandemic - September	Community	both	8-11	8-11	380	382	
150	Austria	2021	Fitness and health status of primary school children - before and during the COVID-19 pandemic	Community	both	8-11	8-11	374	372	
151	Austria	2021-2023	Early Vascular Ageing in the YOUth (EVA4YOU)	Community	both	14-17	14-17	373	665	
152	Azerbaijan	1996	Health and Nutrition Survey	National	both	19-59	19-59	121	295	
153	Azerbaijan	2001	Reproductive Health Survey	National	both		15-44		1,726	
154	Azerbaijan	2006	DHS	National	both	15-59	15-49	2,388	7,868	
155	Azerbaijan	2013	Azerbaijan Nutrition Survey	National	both		15-49		2,839	
156	Azerbaijan	2017	STEPS	National	both	18-69	18-69	1,117	1,577	
157	Bahamas	2011-2012	STEPS	National	both	25-64	25-64	586	938	
158	Bahamas	2013	Global School-based Student Health Survey	National	both	13-17	13-17	460	533	
159	Bahamas	2019	STEPS	National	both	18-69	18-69	862	1,317	
160	Bahrain	1991-1992	Al-Mannai et al., J R Soc Health 116:30-2, 7-40, 1996	Community	both	20+	20+	137	153	
161	Bahrain	1995	Musaiger et al., Ann Hum Biol 28:346-50, 2001	Community	both	30+	30+	298	216	
162	Bahrain	1998-1999	National Nutrition Survey	National	both	19+	19+	1,120	1,181	
163	Bahrain	2001-2004	Global database on growth and malnutrition of school children and adolescents, WHO	National	both	6-19	6-20	1,268	1,326	
164	Bahrain	2007	STEPS	National	both	20-64	20-64	854	858	
165	Bahrain	2016	Global School-based Student Health Survey	National	both	12-17	12-17	3,416	3,262	
166	Bangladesh	1992	Rahman et al., Hypertension 33:74-8, 1999	Community	rural	30+	30+	965	643	
167	Bangladesh	1996-1997	DHS	National	both		20-49		3,384	
168	Bangladesh	1998	Zaman et al., J Health Popul Nutr 21:162-63, 2003	Community	rural	20+	20+	290	379	
169	Bangladesh	1999-2000	Hussain et al., Eur J Public Health 17:291-96, 2007	Community	rural	20-59	20-59	2,037	2,720	
170	Bangladesh	1999-2000	DHS	National	both		20-49		3,887	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
171	Bangladesh	2000-2004	Nutritional Surveillance Project	National	rural		15-45		224,251	
172	Bangladesh	2002	STEPS	Community	rural	25-64	25-64	2,086	2,038	
173	Bangladesh	2002	STEPS	Community	urban	25-64	25-64	3,533	3,737	
174	Bangladesh	2004	DHS	National	both		20-49		9,165	
175	Bangladesh	2006	Urban Health Survey	Subnational	urban	20-59	20-59	6,109	5,898	
176	Bangladesh	2007	DHS	National	both		20-49		9,037	
177	Bangladesh	2009-2010	STEPS	National	both	25+	25+	4,310	4,849	
178	Bangladesh	2011	DHS	National	both	15+	20+	5,254	16,679	
179	Bangladesh	2011-2012	Chronic Disease Risk Factor Study	Community	rural	14+	14+	327	470	
180	Bangladesh	2013	STEPS	National	both	25+	25+	1,812	2,261	
181	Bangladesh	2014	DHS	National	both		20-49		14,963	
182	Bangladesh	2015-2016	An Assessment of BRAC Health Nutrition and Population Programme and Benchmark Survey of Sustainable Development Goal - 2015	National	rural	35+	11+	5,432	18,378	
183	Bangladesh	2016	Diabetes Mellitus: Action through community Groups or Health Information for better Control of population blood glucose, risk factors, knowledge and care seeking (DMagic)	Subnational	rural	30+	30+	5,630	6,414	
184	Bangladesh	2017-2018	DHS	National	both		15-49		17,073	
185	Bangladesh	2018	STEPS	National	both	18-69	18-69	3,784	4,229	
186	Bangladesh	2018-2019	National Nutrition Surveillence	National	both	10+	10+	12,212	12,104	
187	Barbados	1987-1992	Barbados Eye Study	National	both	40-84	40-84	1,980	2,627	
188	Barbados	1991-1994	Cooper et al., Am J Public Health 87(2):160-68, 1997	Community	urban	25-100	25-100	329	482	
189	Barbados	1997-2002	The Barbados Incidence Studies of Eye Diseases II	National	both	40-84	40-84	1,004	1,441	
190	Barbados	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	559	866	3
191	Barbados	2011	Global School-based Student Health Survey	National	both	13-17	13-17	627	708	
192	Barbados	2011-2013	Health of the Nation (HotN)	National	both	25+	25+	455	703	
193	Belarus	2016-2017	STEPS	National	both	18-69	18-69	2,085	2,894	
194	Belarus	2020	STEPS	National	both	18-69	18-69	2,271	2,978	
195	Belgium	1983-1985	MONICA, Luxembourg	Community	urban	35-64	35-64	944	936	
196	Belgium	1984-1985	Belgian Interuniversity Research on Nutrition and Health	National	both	25-74	25-74	5,837	5,242	
197	Belgium	1985-1986	INTERSALT, Ghent	Community	urban	20-59	20-59	100	100	
198	Belgium	1985-1987	INTERSALT, Charleroi	Community	urban	20-59	20-59	82	75	
199	Belgium	1985-1987	MONICA, Charleroi	Community	urban	25-64	25-64	347	327	
200	Belgium	1985-1987	MONICA, Ghent	Community	urban	25-64	25-64	549	459	
201	Belgium	1985-1990	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	20+	20+	656	692	
202	Belgium	1987-1990	MONICA, Charleroi	Community	urban	25-64	25-64	325	301	
203	Belgium	1988-1990	MONICA, Ghent	Community	urban	25-64	25-64	456	449	
204	Belgium	1990-1992	MONICA, Ghent	Community	urban	25-64	25-64	507	475	
205	Belgium	1990-1993	MONICA, Charleroi	Community	urban	25-64	25-64	337	332	
206	Belgium	1991-1994	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	26+	26+	393	416	
207	Belgium	1992-1995	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	27+	27+	298	312	
208	Belgium	1994-1996	BIRNH Elderly: Belgian Interuniversity Research on Nutrition and Health in the Elderly	National	both	65-89	65-89	1,147	959	
209	Belgium	1996-1998	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	404	403	
210	Belgium	1998	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	32+	32+	320	359	
211	Belgium	1998-2000	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	220	217	
212	Belgium	1999-2001	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	232	254	
213	Belgium	2001	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	242	222	
214	Belgium	2002-2003	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	174	197	
215	Belgium	2002-2004	SPAH	Subnational	both	18-75	18-75	2,594	2,308	
216	Belgium	2002-2005	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	447	462	
217	Belgium	2003	The European Male Ageing Study	Community	both	40+		433		
218	Belgium	2005-2008	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	348	357	
219	Belgium	2006-2007	HELENA	Community	urban	12-17	12-17	156	180	
220	Belgium	2006-2008	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	10+	10+	111	110	
221	Belgium	2007-2008	Childhood Obesity Surveillance Initiative 1	Subnational	both	6-9	6-9	64,322	61,754	
222	Belgium	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	822	834	
223	Belgium	2008	The European Male Ageing Study	Community	both	40+		383		
224	Belgium	2009-2010	Childhood Obesity Surveillance Initiative 2	Subnational	both	6-9	6-9	67,775	65,365	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
225	Belgium	2009-2013	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	20+	20+	330	335	
226	Belgium	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	Subnational	urban	10-12	10-12	460	497	
227	Belgium	2010-2015	Flemish Study on Environment, Genes and Health Outcomes	Community	rural	15+	15+	388	410	
228	Belgium	2012-2013	Childhood Obesity Surveillance Initiative 3	Subnational	both	6-9	6-9	70,441	67,874	
229	Belgium	2014-2015	Food Consumption Survey	National	both	5-64	5-64	1,477	1,485	
230	Belgium	2018-2019	Belgian Health Examination Survey	National	both	18+	18+	558	614	4
231	Belgium	2021-2022	OUTSIDE-IN	Community	both	11-12	11-12	212	184	
232	Belgium	2022	OUTSIDE-IN	Community	both	12-13	12-13	210	172	
233	Belgium	2023	OUTSIDE-IN, spring	Community	both	11-13	11-13	218	188	5
234	Belize	2005-2006	CAMDI	National	both	20+	20+	599	1,018	
235	Belize	2011	Global School-based Student Health Survey	National	both	13	13	163	188	
236	Belize	2017	Survey of Risk Factors for Chronic Kidney Disease (SRFCKD)	National	both	20-55	20-55	3,019	4,481	
237	Benin	1996	DHS	National	both		20-49		2,137	
238	Benin	2001	DHS	National	both		15-49		5,449	
239	Benin	2006	DHS	National	both		15-49		14,891	
240	Benin	2007	STEPS	Community	urban	25-64	25-64	955	1,508	
241	Benin	2008	STEPS	National	both	25-64	25-64	3,430	3,365	
242	Benin	2011-2012	DHS	National	both		15-49		14,589	
243	Benin	2015	STEPS	National	both	18-69	18-69	2,304	2,543	
244	Benin	2017-2018	DHS	National	both		15-49		7,180	
245	Bhutan	2007	STEPS	Community	urban	25-74	25-74	1,125	1,322	
246	Bhutan	2014	STEPS	National	both	18-69	18-69	1,069	1,674	
247	Bhutan	2019	STEPS	National	both	15-69	15-69	2,159	3,340	
248	Bolivia	1994	DHS	National	both		20-49		2,128	
249	Bolivia	1998	DHS	National	both		20-49		3,939	
250	Bolivia	2003	DHS	National	both		15-49		16,349	
251	Bolivia	2005-2007	Cardiovascular and metabolic syndrome risk assessment of Bolivian school children and adolescents - Relationships to obesity, diabetes, income, food intake and physical activity	National	both	12-18	12-18	1,499	1,841	
252	Bolivia	2008	DHS	National	both		15-49		15,543	
253	Bolivia	2019	STEPS	National	both	18-69	18-69	1,733	2,371	
254	Bosnia and Herzegovina	2002	Non-communicable disease risk factor survey, Federation of B&H	Subnational	both	25-64	25-64	1,118	1,613	
255	Bosnia and Herzegovina	2012	Non-communicable disease risk factor survey, Federation of B&H	Subnational	rural	18+	18+	1,191	1,274	
256	Bosnia and Herzegovina	2012	Non-communicable disease risk factor survey, Federation of B&H	Subnational	urban	18+	18+	591	697	
257	Bosnia and Herzegovina	2018-2019	Determining anthropometric measurements of students aged seven to eight from Sarajevo Canton, Bosnia and Herzegovina	Community	both	6-8	6-8	42	43	
258	Botswana	2007	STEPS	National	both	25-64	25-64	1,243	2,577	
259	Botswana	2014	STEPS	National	both	15-69	15-69	1,298	2,602	
260	Brazil	1989	Pesquisa Nacional sobre Saude e Nutricao	National	both	5+	5+	26,642	27,504	
261	Brazil	1990-1991	Fornes et al., Rev Saude Publica 36:12-8, 2002	Community	urban	20+	20+	432	613	
262	Brazil	1991-1993	EPIDOSO	Community	urban	65+	65+	269	473	
263	Brazil	1992-1998	Moraes et al., Int J Cardiol 90:205-11, 2003	Community	urban	18+	18+	438	543	
264	Brazil	1995	Health and Nutrition Survey of Rio de Janeiro	Community	urban	60+	60+	248	385	
265	Brazil	1995	The 1982 Pelotas (Brazil) Birth Cohort: 13 years follow-up	Community	urban	13	13	352	363	
266	Brazil	1995-1996	Cohort study from Porto Alegre	Community	urban	18+	18+	489	596	
267	Brazil	1996	DHS	National	both		20-49		2,884	
268	Brazil	1996-1997	Pesquisa sobre Padrões de Vida (PPV)	Subnational	both	5+	5+	7,451	8,466	
269	Brazil	1996-1997	The Bambui Cohort Study of Ageing	Community	urban	18+	18+	931	1,335	
270	Brazil	1997	The 1982 Pelotas (Brazil) Birth Cohort: 15 years follow-up	Community	urban	15	15	559	513	
271	Brazil	1998	Belo Horizonte Heart Study	Community	urban	6-18	6-18	658	738	
272	Brazil	1999-2000	Pelotas cross-sectional survey	Community	urban	20-69	20-69	839	1,096	
273	Brazil	1999-2000	Projeto Esporte Brasil	National	urban	6-11	6-11	107	102	
274	Brazil	1999-2000	Prevalence of Risk Factors for Coronary Artery Disease in the State of Rio Grande do Sul	Subnational	urban	20+	20+	504	548	
275	Brazil	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	732	1,064	3
276	Brazil	2000	The 1982 Pelotas (Brazil) Birth Cohort: 18 years follow-up	Community	urban	18		2,228		
277	Brazil	2001	Freitas et al., Arq Bras Cardiol 88:191-99, 2007	Community	urban	15+	15+	310	331	
278	Brazil	2001	The 1982 Pelotas (Brazil) Birth Cohort: 19 years follow-up	Community	urban		19		919	
279	Brazil	2001	Projeto Esporte Brasil	National	urban	6-14	6-17	249	225	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
280	Brazil	2001-2003	Bustos et al., Nutr Metab Cardiovasc Dis 17:581-89, 2007	Community	both	22-28	22-28	992	1,064	
281	Brazil	2002	Study of the prevalence of obesity in children and adolescents (Estudo da prevalência da obesidade em crianças e adolescentes (EPOCA))	Community	urban	7-10	7-10	1,504	1,430	
282	Brazil	2002-2003	Pesquisa de Orcamentos Familiares	National	both	5+	5+	81,152	80,163	
283	Brazil	2002-2004	1978-1979 Ribeira Preto Birth Cohort	Community	urban	22-25	22-25	1,012	1,082	
284	Brazil	2003	Nutrition, Physical Activity, and Health Survey (PNAFS)	Community	urban	20+	20+	1,155	1,941	
285	Brazil	2003	Projeto Esporte Brasil	National	both	6-14	6-17	2,016	2,073	
286	Brazil	2003	Women health in Southern Brazil	Community	urban		20-60		986	
287	Brazil	2003-2005	Sao Paulo Health and Ageing Study	Community	urban	65+	65+	783	1,198	
288	Brazil	2004	Caju & Virgen das Gracas	Community	rural	18+	18+	291	286	
289	Brazil	2004	Projeto Esporte Brasil	National	both	6-14	6-17	14,447	12,254	
290	Brazil	2004-2005	The 1982 Pelotas (Brazil) Birth Cohort: 23 years follow-up	Community	urban	23	23	2,173	1,935	
291	Brazil	2004-2005	The 1993 Pelotas (Brazil) Birth Cohort: 11 years follow-up	Community	urban	10-12	10-12	2,184	2,257	
292	Brazil	2004-2005	1994 Ribeira Preto Birth Cohort	Community	urban	10-11	10-11	400	388	
293	Brazil	2004-2006	Hearts of Brazil	National	urban	18+	18+	550	626	
294	Brazil	2005	Prevalência e Fatores de Risco Cardiovascular em Crianças	Community	urban	7-12	7-12	776	719	
295	Brazil	2005	Projeto Esporte Brasil	National	both	6-14	6-17	3,615	3,287	
296	Brazil	2005	Syndrome of Obesity and Risk Factors for Cardiovascular Disease Study	Community	urban	18-90	18-90	739	1,093	
297	Brazil	2005-2006	Sao Luis Birth Cohort	Community	urban	7-8	7-8	347	325	
298	Brazil	2006	Krause et al., J Aging Phys Act 17:387-97, 2009	Community	urban	60+	60+	93	1,069	
299	Brazil	2006	ATITUDE	Subnational	both	14	14-20	51	2,665	
300	Brazil	2006	The Ouro Preto Study	Community	urban	7-14	7-14	364	399	
301	Brazil	2006	Pesquisa Nacional de Demografia e Saude 2006	National	both		15-49		14,783	
302	Brazil	2006	Projeto Esporte Brasil	National	both	6-14	6-17	7,390	6,211	
303	Brazil	2006-2007	Syndrome of Obesity and Risk Factors for Cardiovascular Disease Study among Teenagers	Community	urban	11-18	11-18	230	236	
304	Brazil	2007	Cardiovascular Disease Risk Factors in Caxias do Sul-RS, Brazil Adolescents	Community	urban	11-17	11-17	774	886	
305	Brazil	2007	Study of the prevalence of obesity in children and adolescents (Estudo da prevalência da obesidade em crianças e adolescentes (EPOCA))	Community	urban	7-14	7-14	1,354	1,463	
306	Brazil	2007	Prevalence of overweight and obesity in children from Medianeira, Paraná, Brazil	Community	urban	5-12	5-12	529	515	
307	Brazil	2007	Projeto Esporte Brasil	National	both	6-14	6-17	4,444	4,215	
308	Brazil	2007-2008	Christofaro et al., Scand J Med Sci Sports 23(3):317-22, 2013	Community	urban	10-16	10-16	493	528	
309	Brazil	2007-2008	Nutritional status of children in daycare center	Community	urban	5-7	5-7	83	81	
310	Brazil	2007-2009	Schoolchildren's Health	Community	both	6-14	6-17	690	742	
311	Brazil	2008	The Bambui Cohort Study of Ageing	Community	urban	71+	71+	248	456	
312	Brazil	2008	Caju & Virgen das Gracas	Community	rural	18+	18+	273	287	
313	Brazil	2008	The 1993 Pelotas (Brazil) Birth Cohort: 15 years follow-up	Community	urban	14-15	14-15	2,001	2,095	
314	Brazil	2008	Projeto Esporte Brasil	National	both	6-14	6-17	2,979	2,386	
315	Brazil	2008-2009	Pesquisa de Orcamentos Familiares	National	both	5+	5+	85,725	88,156	
316	Brazil	2008-2010	Machado-Rodrigues et al., Ann Hum Biol 41(3): 271-6, 2013	Community	urban	10-17	10-17	376	507	
317	Brazil	2009	Pesquisa Nacional de Saude do Escolar (PeNSE)	National	both	13-14	13-16	17,945	30,060	
318	Brazil	2009	Projeto Esporte Brasil	National	both	6-14	6-17	652	767	
319	Brazil	2009-2010	EpiFloripa Cohort Study of Ageing - Wave 1	Community	urban	60+	60+	592	1,047	
320	Brazil	2009-2010	EpiFloripa Adults Cohort Study	Community	urban	20-59	20-59	755	940	
321	Brazil	2010	Longitudinal Study of Health and Wellbeing in Preschool Age (Project ELOS-Pré)	Community	urban	5	5	255	247	
322	Brazil	2010	Projeto Esporte Brasil	National	both	6-14	6-17	871	1,047	
323	Brazil	2010	San Pedro	Community	rural	18+	18+	153	214	
324	Brazil	2010-2011	The 2004 Pelotas (Brazil) Birth Cohort: 6 years follow-up	Community	urban	6-7	6-7	1,721	1,631	
325	Brazil	2010-2015	Baependi Heart Study	Community	rural	18+	18+	1,002	1,357	
326	Brazil	2011	ATITUDE	Subnational	both	14	14-19	79	3,658	
327	Brazil	2011	Pregnancy in adolescence in municipalities of small size in the Northeast of Brazil	Community	both	13-19	13-19	512	563	
328	Brazil	2011	Projeto Esporte Brasil	National	both	6-14	6-17	904	929	
329	Brazil	2011-2012	The 1993 Pelotas (Brazil) Birth Cohort: 18 years follow-up	Community	urban	17-19	17-19	1,970	2,004	
330	Brazil	2011-2012	Schoolchildren's Health	Community	both	6-14	6-17	708	1,052	
331	Brazil	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	277	287	
332	Brazil	2011-2014	Profile of Risk Factors for Coronary Arterial Disease in Rio Grade do Sul - Revaluation After 10 Years	Subnational	urban	20+	20+	364	466	
333	Brazil	2012	Anthropometric indices in Brazilian children: Colombo, Parana, Brazil	Community	both	6-11	6-11	1,022	1,013	
334	Brazil	2012	Longitudinal Study of Health and Wellbeing in Preschool Age (Project ELOS-Pré)	Community	urban	5-7	5-7	388	348	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
335	Brazil	2012	EpiFloripa Adults Cohort Study	Community	urban	22-62	22-62	486	655	
336	Brazil	2012	Projeto Esporte Brasil	National	both	6-14	6-17	2,610	1,976	
337	Brazil	2012-2013	Study of the prevalence of obesity in children and adolescents (Estudo da prevalência da obesidade em crianças e adolescentes (EPOCA))	Community	urban	7-14	7-14	1,162	1,322	
338	Brazil	2012-2013	Evaluation of the realization of the human right to adequate food among public and private elementary school students in Maceió	Subnational	urban	9-11	9-11	639	701	
339	Brazil	2012-2013	The 1982 Pelotas (Brazil) Birth Cohort: 30 years follow-up	Community	urban	30	30	1,753	1,798	
340	Brazil	2012-2013	Prevalence of Leptin Polymorphism Gln223Arg	Community	urban	18+	18+	282	523	
341	Brazil	2013	Pesquisas Nacional de Saude	National	both	18+	18+	24,918	32,351	
342	Brazil	2013	Projeto Esporte Brasil	National	urban	6-14	6-17	1,026	960	
343	Brazil	2013-2014	EpiFloripa Cohort Study of Ageing - Wave 2	Community	urban	63+	63+	404	744	
344	Brazil	2013-2014	Estudo de Riscos Cardiovasculares em Adolescentes (ERICA)	National	both	12-17	12-17	32,723	40,675	
345	Brazil	2014	Brazilian Guide to the Physical Fitnees related to Health Assessment and Lifestyle Habits	Community	urban	14-19	14-19	473	535	
346	Brazil	2014	Longitudinal Study of Health and Wellbeing in Preschool Age (Project ELOS-Pré)	Community	urban	7-9	7-9	223	200	
347	Brazil	2014	Projeto Esporte Brasil	National	both	6-14	6-17	219	212	
348	Brazil	2014-2015	II Diagnóstico de Saúde da População Materno-Infantil do Estado de Alagoas	Subnational	both		19-49		3,135	
349	Brazil	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	942	1,058	
350	Brazil	2014-2015	EpiFloripa Adults Cohort Study	Community	urban	25-65	25-65	353	476	
351	Brazil	2014-2015	Schoolchildren's Health	Community	both	6-14	6-17	923	1,398	
352	Brazil	2015	The 2004 Pelotas (Brazil) Birth Cohort: 11 years follow-up	Community	urban	10-11	10-11	1,736	1,632	
353	Brazil	2015	Pesquisa Nacional de Saude do Escolar (PeNSE)	National	both	13-14	13-17	2,219	5,054	
354	Brazil	2015	Projeto Esporte Brasil	National	urban	6-14	6-17	383	496	
355	Brazil	2015-2016	The Ouro Preto Study	Community	rural	18+	18+	184	329	
356	Brazil	2015-2016	Brazilian Longitudinal Study of the Elderly Health and Wellness	National	both	50+	50+	3,937	5,064	
357	Brazil	2015-2016	The 1993 Pelotas (Brazil) Birth Cohort: 22 years follow-up	Community	urban	21-23	21-23	1,687	1,872	
358	Brazil	2016	ATITUDE	Subnational	both	14	14-19	64	3,198	
359	Brazil	2016	Projeto Esporte Brasil	National	urban	6-14	6-17	169	110	
360	Brazil	2016-2017	Schoolchildren's Health	Community	both	6-14	6-17	904	1,424	
361	Brazil	2016-2017	Study in Presidente Prudente	Community	urban	18+	18+	304	481	
362	Brazil	2017	Effectiveness of interventions for health promotion in frail older adults with chronic non-communicable diseases in primary healthcare in Recife: a randomized community trial	Community	urban	60+	60+	155	528	
363	Brazil	2017	HealthRise Evaluation	Subnational	both	30+	30+	599	1,169	
364	Brazil	2017	Projeto Esporte Brasil	National	both	6-14	6-17	2,226	1,350	
365	Brazil	2017	Intervention in physical education classes to reduce sedentary behavior and improve cognitive function: SACODE	Community	both	14-19	14-19	501	631	
366	Brazil	2017-2018	EpiFloripa Cohort Study of Ageing - Wave 3	Community	urban	60+	60+	361	635	
367	Brazil	2018	Healthy Living study in Lagoa do Carro	Community	both	5-15	5-15	704	657	
368	Brazil	2018	Projeto Esporte Brasil	National	both	6-14	6-17	956	1,151	
369	Brazil	2018-2019	Study of the prevalence of obesity in children and adolescents (Estudo da prevalência da obesidade em crianças e adolescentes (EPOCA))	Community	urban	7-14	7-14	680	871	
370	Brazil	2018-2019	BP-SAMPA Project	Community	urban	10-17	10-17	1,328	1,853	
371	Brazil	2018-2019	Epidemiology in the health (Santo Anastácio Edition)	Community	urban	18+	18+	105	145	
372	Brazil	2019	Pesquisas Nacional de Saude	National	both	15+	15+	3,304	3,243	
373	Brazil	2019	Projeto Esporte Brasil	National	both	6-14	6-17	1,126	1,356	
374	Brazil	2020	Projeto Esporte Brasil	National	urban	6-14	6-17	276	153	
375	Brazil	2020-2022	ATITUDE	Subnational	both	14	14-19	36	2,271	
376	Brazil	2021	Projeto Esporte Brasil	National	urban	6-14	6-17	131	170	
377	Brunei Darussalam	2010-2011	National Health And Nutritional Status Survey (NHANSS)	National	both	5-75	5-75	1,027	1,157	
378	Brunei Darussalam	2014	Global School-based Student Health Survey	National	both	12-17	12-17	1,145	1,326	
379	Brunei Darussalam	2015-2016	National Non-Communicable Diseases Survey (NNCDS)	National	both	18-69	18-69	814	1,075	
380	Brunei Darussalam	2019	Global School-based Student Health Survey	National	both	12-17	12-17	1,061	1,152	
381	Bulgaria	1984-1988	Postnatal growth of SGA and normal born high school graduates	Community	urban	5	5	753	952	
382	Bulgaria	1985-1989	Postnatal growth of SGA and normal born high school graduates	Community	urban	6	6	788	993	
383	Bulgaria	1986-1990	Postnatal growth of SGA and normal born high school graduates	Community	urban	7	7	817	1,049	
384	Bulgaria	1987-1991	Postnatal growth of SGA and normal born high school graduates	Community	urban	8	8	767	989	
385	Bulgaria	1988-1992	Postnatal growth of SGA and normal born high school graduates	Community	urban	9	9	732	940	
386	Bulgaria	1989-1993	Postnatal growth of SGA and normal born high school graduates	Community	urban	10	10	719	906	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
387	Bulgaria	1990-1994	Postnatal growth of SGA and normal born high school graduates	Community	urban	11	11	729	927	
388	Bulgaria	1991-1995	Postnatal growth of SGA and normal born high school graduates	Community	urban	12	12	740	972	
389	Bulgaria	1992-1996	Postnatal growth of SGA and normal born high school graduates	Community	urban	13	13	752	947	
390	Bulgaria	1993	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	6-7	6-7	109	119	
391	Bulgaria	1993-1997	Postnatal growth of SGA and normal born high school graduates	Community	urban	14	14	750	893	
392	Bulgaria	1994	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	7-8	7-8	108	118	
393	Bulgaria	1994-1998	Postnatal growth of SGA and normal born high school graduates	Community	urban	15	15	816	972	
394	Bulgaria	1995	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	8-9	8-9	109	120	
395	Bulgaria	1995-1999	Postnatal growth of SGA and normal born high school graduates	Community	urban	16	16	896	1,012	
396	Bulgaria	1995-2001	Anthropometric characterization of growth and development in children aged 7 to17 years from Sofia at the beginning of the 21st century	Community	urban	7-17	7-17	1,127	1,132	
397	Bulgaria	1996	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	9-10	9-10	109	119	
398	Bulgaria	1996-2000	Postnatal growth of SGA and normal born high school graduates	Community	urban	17	17	816	872	
399	Bulgaria	1997	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	10-11	10-11	109	119	
400	Bulgaria	1997-2000	Postnatal growth of SGA and normal born high school graduates	Community	urban	18	18	485	322	
401	Bulgaria	1998	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	11-12	11-12	109	118	
402	Bulgaria	1999	Anthropometric characterization of growth and development in children aged 7 to 13 years from Sofia at the beginning of the 21st century	Community	urban	12-13	12-13	109	118	
403	Bulgaria	2004	National Nutrition Survey	National	both	15+	15+	515	515	
404	Bulgaria	2004-2005	Anthropometric characterization of growth and development in children aged 3 to 6 years from Sofia at the beginning of the 21st century	Community	urban	5-6	5-6	160	160	
405	Bulgaria	2006-2007	Waist circumference percentile curves for Bulgarian children and adolescents aged 6-18 years	Community	urban	5-18	5-18	2,052	1,758	
406	Bulgaria	2008	Childhood Obesity Surveillance Initiative 1	National	both	7-8	7-8	1,657	1,661	
407	Bulgaria	2009	Survey of children in Varna kindergartens	Community	urban	5-6	5-6	188	157	
408	Bulgaria	2013	Childhood Obesity Surveillance Initiative 3	National	both	7	7	1,671	1,677	
409	Bulgaria	2014	Bulgarian National Monitoring of Dietary Intake	National	both	20+	20+	1,421	1,552	
410	Bulgaria	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7	7	1,702	1,698	
411	Bulgaria	2016	Feel4Diabetes	Community	urban	6-10	6-10	1,447	1,522	
412	Bulgaria	2016-2017	Erasmus plus KA2, Healthyland	Community	urban	5	5	26	24	
413	Bulgaria	2017-2018	Erasmus plus KA2, Healthyland	Community	urban	5-6	5-6	49	51	
414	Bulgaria	2019	Childhood Obesity Surveillance Initiative 5	National	both	7	7	1,536	1,531	
415	Bulgaria	2020	National Survey on Risk Factors for Population's Health in Bulgaria 2020	National	both	5+	5+	1,686	2,297	
416	Burkina Faso	1992-1993	DHS	National	both		20-49		3,190	
417	Burkina Faso	1998-1999	DHS	National	both		20-49		3,114	
418	Burkina Faso	2002	Vulnérabilité Alimentaire et Sécurité Nutritionnelle dans la Gnagna (VASN-Gnagna)	Subnational	rural	5+	5+	1,471	3,522	
419	Burkina Faso	2003	DHS	National	both		15-49		11,001	
420	Burkina Faso	2004	Ouedraogo et al., Public Health Nutr 11:1280-87, 2008	Community	urban	35+	35+	956	1,066	
421	Burkina Faso	2010	DHS	National	both		15-49		7,755	
422	Burkina Faso	2013	STEPS	National	both	25-64	25-64	2,223	2,250	
423	Burkina Faso	2017	ARISE Network Adolescent Health Study (Nouna)	Community	both	12-19	12-19	915	680	
424	Burkina Faso	2021	DHS	National	both		15-49		8,005	
425	Burkina Faso	2021	STEPS	National	both	18-69	18-69	1,467	2,002	
426	Burundi	2010	DHS	National	both		15-49		4,188	
427	Burundi	2016-2017	DHS	National	both		15-49		7,909	
428	Cabo Verde	2007	STEPS	National	both	25-64	25-64	658	1,066	
429	Cabo Verde	2020	STEPS	National	both	18-69	18-69	1,824	2,636	
430	Cambodia	2000	DHS	National	both		15-49		6,915	
431	Cambodia	2005	DHS	National	both		15-49		8,130	
432	Cambodia	2008	Anthropometrics Survey	National	both		15-49		5,955	
433	Cambodia	2010	DHS	National	both		15-49		8,856	
434	Cambodia	2010	STEPS	National	both	25-64	25-64	1,881	3,344	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
435	Cambodia	2014	DHS	National	both		15-49		10,821	
436	Cambodia	2021-2022	DHS	National	both		15-49		9,332	
437	Cambodia	2023	STEPS	National	both	18-69	18-69	1,504	2,669	5
438	Cameroon	1998	DHS	National	both		20-49		1,429	
439	Cameroon	1998-1999	Essential Non-communicable disease Health Intervention Project (ENHIP)	Community	rural	15+	15+	523	738	
440	Cameroon	1998-1999	Essential Non-communicable disease Health Intervention Project (ENHIP)	Community	urban	15+	15+	523	640	
441	Cameroon	2003	STEPS	Subnational	urban	15+	15+	3,672	5,490	
442	Cameroon	2004	DHS	National	both		15-49		4,646	
443	Cameroon	2007	Cameroon Burden of Diabetes - Second Survey	Subnational	urban	18+	18+	3,345	4,633	
444	Cameroon	2009	National Survey of Micronutrient Status and Consumption of Fortifiable Foods	National	both		15-49		816	
445	Cameroon	2009-2012	Anthropologie nutritionnelle des migrants d'Afrique centrale à la ville et en France	Subnational	both	18-76	18-76	528	584	
446	Cameroon	2011	DHS	National	both		15-49		7,343	
447	Cameroon	2013	Prevalence and risk factors of chronic kidney disease in urban adult Cameroonians according to three common estimators of the glomerular filtration rate: a cross-sectional study	Community	urban	19+	19+	265	232	
448	Cameroon	2014	Prevalence and determinants of chronic kidney disease in rural and urban Cameroonians: A cross-sectional study	Community	both	20+	20+	177	246	
449	Cameroon	2014-2015	Cardiovascular risk factors screening in urban and rural areas in the Far-North Region Cameroon	Subnational	both	20+	20+	520	369	
450	Cameroon	2018	Prevalence and determinants of chronic kidney disease in urban adults' populations of northern Cameroon	Community	urban	20+	20+	210	221	
451	Cameroon	2018-2019	DHS	National	both		15-64		6,255	
452	Canada	1981	Canada Fitness Survey	National	both	7-64	7-64	7,432	7,940	
453	Canada	1985-1986	INTERSALT, St Johns	Community	urban	20-59	20-59	100	100	
454	Canada	1985-1988	MONICA, Halifax	Community	both	25-64	25-64	438	420	
455	Canada	1986-1992	Canada Heart Health Survey	National	both	18-74	18-74	9,644	9,777	
456	Canada	1991-1992	Canadian Study of Health and Aging	Community	both	70+	70+	236	348	
457	Canada	1993	Chen et al., Int J Obes Relat Metab Disord 22:771-77, 1998	Community	rural	18-74	18-74	803	988	
458	Canada	1995	MONICA, Halifax	Community	both	25-64	25-64	274	287	
459	Canada	1995-1997	Canadian Multicentre Osteoporosis Study (CaMos) - Adult Baseline	Subnational	both	25+	25+	2,803	6,343	
460	Canada	1996	Canadian Study of Health and Aging	Community	both	70+	70+	236	348	
461	Canada	1997	PEI Nutrition Survey	Subnational	both	18-74	18-74	999	995	
462	Canada	1998-2000	Canadian Multicentre Osteoporosis Study (CaMos) - Adult Year 3 follow-up	Subnational	both	42-64	42-64	782	1,670	
463	Canada	2000-2003	Canadian Multicentre Osteoporosis Study (CaMos) - Adult Year 5 follow-up	Subnational	both	30+	30+	1,992	4,820	
464	Canada	2004-2005	Canadian Multicentre Osteoporosis Study (CaMos) - Youth baseline	Subnational	both	16-24	16-24	471	521	
465	Canada	2005	Canadian Community Health Survey	National	both	15+	15+	1,684	2,030	
466	Canada	2005-2008	Canadian Multicentre Osteoporosis Study (CaMos) - Adult Year 10 follow-up	Subnational	both	35+	35+	1,486	3,661	
467	Canada	2006-2008	Canadian Multicentre Osteoporosis Study (CaMos) - Youth Year 2 follow-up	Subnational	both	17-27	17-27	331	383	
468	Canada	2007-2009	Canadian Health Measures Survey, Cycle 1	National	both	6-79	6-79	2,703	2,864	
469	Canada	2008	Canadian Community Health Survey	National	both	15+	15+	1,689	1,987	
470	Canada	2009-2011	Canadian Health Measures Survey, Cycle 2	National	both	5-79	5-79	2,870	3,086	
471	Canada	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	238	327	
472	Canada	2012-2013	Canadian Health Measures Survey, Cycle 3	National	both	5-79	5-79	2,670	2,676	
473	Canada	2012-2014	Canadian Multicentre Osteoporosis Study (CaMos) - Adult Year 16 follow-up	Subnational	both	60+	60+	445	1,307	
474	Canada	2014-2015	Canadian Health Measures Survey, Cycle 4	National	both	5-79	5-79	2,697	2,674	
475	Canada	2016-2017	Canadian Health Measures Survey, Cycle 5	National	both	5-79	5-79	2,677	2,660	
476	Canada	2018-2019	Canadian Health Measures Survey, Cycle 6	National	both	5-79	5-79	2,685	2,680	
477	Central African Republic	1994-1995	DHS	National	both		20-49		1,760	
478	Central African Republic	2010	STEPS	Subnational	both	25-64	25-64	1,846	1,967	
479	Central African Republic	2011-2012	Epidemiology of dementia in Central Africa: Bangui	Community	urban	65+	65+	157	300	
480	Central African Republic	2011-2012	Epidemiology of dementia in Central Africa: Nola	Community	rural	65+	65+	184	264	
481	Central African Republic	2017	STEPS	Subnational	both	25-64	25-64	1,076	1,834	
482	Chad	1996-1997	DHS	National	both		20-49		3,262	
483	Chad	2004	DHS	National	both		20-49		2,618	
484	Chad	2008	STEPS	Community	urban	25-64	25-64	995	845	
485	Chad	2014-2015	DHS	National	both		15-49		9,733	
486	Chile	1988	Chilean Health Study	Subnational	urban	15+	15+	471	741	
487	Chile	1989	INCLEN	Community	urban	35-65		199		
488	Chile	1992-1993	Miquel et al., Gastroenterology 115(4):937-46, 1998	Community	urban	18+	18+	657	1,031	
489	Chile	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	410	806	3

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
490	Chile	2000	Nervi et al., J Hepatol 45(2):299-305, 2006	Community	urban	18+	18+	335	624	
491	Chile	2001-2003	Bustos et al., Nutr Metab Cardiovasc Dis 17:581-89, 2007	Community	both	22-28	22-28	436	562	
492	Chile	2003	Encuesta Nacional de Salud	National	both	17+	17+	1,557	1,867	
493	Chile	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	783	865	
494	Chile	2005	Palomo et al., Rev Med Chil 135:904-12, 2007	Community	urban	18-74	18-74	339	668	
495	Chile	2009-2010	Encuesta Nacional de Salud	National	both	15+	15+	1,935	2,869	
496	Chile	2010-2011	Encuesta Nacional de Consumo Alimentario	National	both	5+	5+	1,840	2,902	
497	Chile	2011-2012	CESCAS Study	Community	urban	35-74	35-74	917	1,000	
498	Chile	2013	Global School-based Student Health Survey	National	both	13-17	13-17	799	793	
499	Chile	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	425	454	
500	Chile	2016-2017	Encuesta Nacional de Salud	National	both	15+	15+	1,977	3,420	
501	China	1979-1982	East Beijing Study 1	Community	urban	20-84	20-84	361	380	
502	China	1982	China National Nutrition Survey	National	both	7+	7+	14,418	13,683	
503	China	1983	Sino-MONICA Shanghai	Community	rural	30-64	30-64	624	630	
504	China	1984-1985	Sino-MONICA Beijing	Community	both	25-64	25-64	813	857	
505	China	1985	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	205,041	204,796	
506	China	1985-1986	Shatin New Town Study	Community	urban	70+	70+	276	669	
507	China	1986	INTERSALT, Beijing	Community	urban	20-59	20-59	100	100	
508	China	1986	INTERSALT, Nanning	Community	both	20-59	20-59	100	100	
509	China	1986	INTERSALT, Tianjin	Community	urban	20-59	20-59	100	100	
510	China	1986-1989	Ewang et al., Zhonghua Liu Xing Bing Xue Za Zhi 26:394-9, 2005	Community	both	45-64		18,244		
511	China	1986-1989	Sino-MONICA Shanghai	Community	rural	25-64	25-64	675	753	
512	China	1987	INCLEN	Community	urban	35-65		989		
513	China	1988	Sino-MONICA Hebei	Community	both	25-64		800		
514	China	1988	Sino-MONICA Heilongjiang	Community	urban	25-64	25-64	800	800	
515	China	1988	Sino-MONICA Henan	Community	urban	25-64	25-64	345	427	
516	China	1988	Sino-MONICA Neimenggu	Community	urban	25-64	25-64	396	400	
517	China	1988	Sino-MONICA Sichuan	Community	both	25-64	25-64	312	334	
518	China	1988	Sino-MONICA Shandong	Community	urban	25-64	25-64	211	225	
519	China	1988-1989	Sino-MONICA Beijing	Community	both	25-64	25-64	701	862	
520	China	1988-1989	Sino-MONICA Jilin	Community	urban	25-64	25-64	380	400	
521	China	1988-1989	Sino-MONICA Jiangxi	Community	urban	25-64	25-64	379	386	
522	China	1988-1989	Sino-MONICA Liaoning	Community	both	25-64	25-64	728	734	
523	China	1988-1990	East Beijing Study 2	Community	urban	20-84	20-84	135	148	
524	China	1989	The Tianjin Project	Community	urban	15-64	15-64	3,894	3,971	
525	China	1989	China Health and Nutrition Study	National	both	5-45	5-45	2,556	2,715	6
526	China	1989	Sino-MONICA Fujian	Community	urban	25-64	25-64	179	191	
527	China	1989	Sino-MONICA Jiangsu	Community	rural	25-64	25-64	398	399	
528	China	1990-1991	China Prospective Study	National	both	40-79		230,676		
529	China	1991	Hua et al., Zhonghua Nei Ke Za Zhi 36:18-20, 1997	Community	rural	60+	60+	288	335	
530	China	1991	The Hong Kong study on health, health risk and quality of life in the Chinese elderly cohort	Community	both	70+	70+	943	944	
531	China	1991	China National Hypertension Survey Epidemiology Follow-up Study	National	both	40+	40+	75,696	79,040	
532	China	1991	China Health and Nutrition Study	National	both	5+	5+	5,586	5,920	6
533	China	1991	Sino-MONICA Shanghai	Community	rural	30-64	30-64	564	624	
534	China	1991-1992	Fangshan Cohort Study	Community	urban	34-86	34-86	871	1,736	
535	China	1992	Huashan Study	Community	urban	35-75	35-75	892	965	
536	China	1992	China National Nutrition Survey	National	both	5+	5+	33,714	36,271	
537	China	1992	Sino-MONICA Sichuan	Community	both	25-64	25-64	608	526	
538	China	1992-1993	Anzhen 02 Cohort Study	Community	urban	34-65	34-65	2,032	2,120	
539	China	1993	China Health and Nutrition Study	National	both	5+	5+	5,371	5,563	6
540	China	1993	Sino-MONICA Anhui	Community	urban	25-64	25-64	193	195	
541	China	1993	Sino-MONICA Beijing	Community	both	25-64	25-64	613	816	
542	China	1993	Sino-MONICA Jiangsu	Community	urban	25-64	25-64	462	365	
543	China	1993	Sino-MONICA Liaoning	Community	both	25-64	25-64	493	500	
544	China	1995	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	103,009	101,772	
545	China	1995-1996	Hong Kong Cardiovascular Risk Factor Prevalence Study 1995-1996	Community	urban	25-74	25-74	1,412	1,478	
546	China	1996	Wang et al., Zhonghua Liu Xing Bing Xue Za Zhi 24:272-75, 2003	Community	both	25-64	25-64	735	720	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
547	China	1996	The Tianjin Project	Community	urban	15-64	15-64	722	717	
548	China	1996-2000	Shanghai Women's Health Study	Community	urban		40-70		74,915	
549	China	1996-2003	Wu et al., Osteoporos Int 15:751-59, 2004	Community	urban		18+		3,418	
550	China	1997	China Health and Nutrition Study	National	both	5+	5+	5,550	5,648	6
551	China	1997	INTERMAP, Beijing	Community	rural	40-59	40-59	133	139	
552	China	1997	INTERMAP, Guangxi	Community	rural	40-59	40-59	140	138	
553	China	1997	INTERMAP, Shanxi	Community	rural	40-59	40-59	143	146	
554	China	1998	Shanghai Diabetes Study	Community	urban	25+	25+	1,264	1,768	
555	China	1998-2000	Jia et al., Obes Rev 3:157-65, 2002	Community	urban	20+	20+	1,106	1,670	
556	China	1999	Chen et al., Zhonghua Yi Xue Za Zhi 85(40):2830-4, 2005	Subnational	both	35-85	35-85	13,549	10,315	
557	China	1999	Wang et al., Zhonghua Liu Xing Bing Xue Za Zhi 24:272-75, 2003	Community	both	25-64	25-64	817	684	
558	China	1999-2000	Xu et al., Public Health Nutr 8:47-51, 2005	Community	both	35+	35+	18,194	18,902	
559	China	2000	China Health and Nutrition Study	National	both	5+	5+	5,829	6,099	6
560	China	2000	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	107,997	108,096	
561	China	2000-2001	The International Collaborative Study of Cardiovascular Disease in Asia	National	both	35-74	35-74	7,512	8,006	
562	China	2001	Shanghai Diabetes Study	Community	urban	25+	25+	1,264	1,768	
563	China	2002	Ma et al., Zhonghua Liu Xing Bing Xue Za Zhi 25:1035-8, 2004	Subnational	both	18+	18+	7,352	7,352	
564	China	2002	China National Nutrition and Health Survey	National	both	5+	5+	84,194	92,687	
565	China	2002-2003	Fan et al., J Gastroenterol Hepatol 20:1825-32, 2005	Community	urban	15+	15-74	5,502	7,767	
566	China	2002-2006	Shanghai Men's Health Study	Community	urban	40-74		61,445		
567	China	2004	Tian et al., Prev Med 48:59-63, 2009	Community	rural	15+	15+	1,022,669	1,163,313	
568	China	2004	Beijing Child and Adolescent Metabolic Syndrome study	Community	both	5-18	5-18	10,562	10,412	
569	China	2004	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18-69	18-69	9,561	10,937	
570	China	2004	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18-69	18-69	4,978	7,317	
571	China	2004	China Health and Nutrition Study	National	both	5+	5+	5,229	5,516	6
572	China	2004-2005	Xinjiang Children and Adolescent Survey	Community	urban	7-18	7-18	2,030	2,231	
573	China	2004-2006	Pang et al., Intern Med 47:893-97, 2008	Community	rural	35+	35+	22,962	22,962	
574	China	2004-2006	Shanghai Women's Health Study	Community	urban		45-80		64,545	
575	China	2004-2008	China Kadoorie Biobank baseline survey	Subnational	rural	35-74	35-74	115,792	162,848	
576	China	2004-2008	China Kadoorie Biobank baseline survey	Subnational	urban	35-74	35-74	89,219	132,860	
577	China	2004-2008	Shanghai Men's Health Study	Community	urban	41-80		54,800		
578	China	2005	Ye et al., J Am Coll Cardiol 49:1798-805, 2007	Community	urban	50-70	50-70	743	906	
579	China	2005	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	117,598	116,704	
580	China	2005-2006	Zhou et al., World J Gastroenterol 13:6419-24, 2007	Community	urban	18-79	18-79	1,101	2,063	
581	China	2005-2006	Hong Kong Growth Survey	Community	urban	7-19	7-19	7,472	7,370	
582	China	2006	Beijing Eye Study	Community	both	45+	45+	1,394	1,820	
583	China	2006	China Health and Nutrition Study	National	both	5+	5+	4,950	5,397	6
584	China	2006-2007	Handan Eye Study	Community	rural	30+	30+	2,995	3,456	
585	China	2006-2012	Qingdao Diabetes Cohort Study	Subnational	both	35-74	35-74	4,047	6,346	
586	China	2007	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18-69	18-69	14,212	15,006	
587	China	2007	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18-69	18-69	8,461	10,160	
588	China	2007-2008	China National Diabetes & Metabolic Disorders Study	National	both	20+	20+	18,419	27,820	
589	China	2007-2010	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	5,759	6,616	
590	China	2007-2011	Shanghai Women's Health Study	Community	urban		47-83		52,116	
591	China	2008	China Health and Retirement Longitudinal Study (CHARLS), pilot survey	Subnational	both	45+	45+	919	920	
592	China	2008-2009	Chinese Longitudinal Healthy Longevity Survey	National	both	65+	65+	6,827	8,976	7
593	China	2008-2010	Fangshan Family-based Ischemic Stroke Study in China (FISSIC) program	Community	rural		40+		36,449	
594	China	2008-2011	Shanghai Men's Health Study	Community	urban	43-84		51,948		
595	China	2009	The 33 Chinese Communities Health Study (33CCHS)	Subnational	urban	18-74	18-74	8,156	7,321	
596	China	2009	China Health and Nutrition Study	National	both	5+	5+	5,176	5,489	6
597	China	2009	The nutrition-based comprehensive intervention study on childhood obesity in China	Subnational	urban	6-11	6-11	4,495	4,269	
598	China	2009-2010	China National Survey of Chronic Kidney Disease	National	both	18+	18+	20,003	26,854	
599	China	2009-2011	The FAMILY Cohort	Community	urban	15+	15+	8,318	9,557	
600	China	2010	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18+	18+	27,827	31,844	
601	China	2010	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18+	18+	17,239	21,608	
602	China	2010	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	107,611	107,611	
603	China	2010-2013	China Nutrition and Health Surveillance	National	both	5+	5+	72,494	87,092	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
604	China	2010-2014	National Free Preconception Health Examination Project	National	rural	20-64		16,166,534		
605	China	2011	Beijing Childhood Eye Study	Community	both	7-18	7-18	6,686	6,967	
606	China	2011	Beijing Children Eye Study	Community	both	5-13	5-13	291	261	
607	China	2011	Beijing Eye Study	Community	both	50+	50+	1,467	1,895	
608	China	2011	China Health and Nutrition Study	National	both	5+	5+	6,770	7,478	6
609	China	2011-2012	China Health and Retirement Longitudinal Study (CHARLS), baseline survey	National	both	45+	45+	6,337	7,003	
610	China	2011-2012	Chinese Longitudinal Healthy Longevity Survey	National	both	65+	65+	4,035	4,620	7
611	China	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	293	258	
612	China	2011-2014	The FAMILY Cohort	Community	urban	15+	15+	4,593	5,557	
613	China	2012	Beijing Children Eye Study	Community	both	5-13	5-13	283	251	
614	China	2012	Beijing Eye High School Students Study	Community	both	16-18	16-18	2,088	2,340	
615	China	2012	China Health and Retirement Longitudinal Study (CHARLS), wave 2 pilot survey	Subnational	both	45+	45+	856	934	
616	China	2012	Shandong Children Study	Community	rural	5-18	5-18	1,663	1,385	
617	China	2012	Shandong Children Study	Community	urban	5-18	5-18	1,423	1,381	
618	China	2012-2013	The Kailuan Study	Community	urban	18+	18+	80,921	21,385	
619	China	2012-2013	The Seven Northeastern Cities (SNEC) Study	Subnational	urban	5-17	5-17	4,769	4,577	
620	China	2012-2015	Shanghai Men's Health Study	Community	urban	47-87		40,921		
621	China	2012-2015	Shanghai Women's Health Study	Community	urban		52-88		49,592	
622	China	2013	China Health and Retirement Longitudinal Study (CHARLS), wave 2 survey	National	both	45+	45+	5,898	6,582	
623	China	2013	Gobi Desert Children Eye Study	Community	urban	6-21	6-21	800	761	
624	China	2013-2014	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18-69	18-69	39,987	51,871	
625	China	2013-2014	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18-69	18-69	26,374	38,695	
626	China	2014	Chinese Longitudinal Healthy Longevity Survey	National	both	65+	65+	2,978	3,172	7
627	China	2014	Chinese National Surveys on Students Constitution and Health	National	both	7-18	7-18	107,216	107,138	
628	China	2014	Shanghai Municipal Surveys on Students Constitution and Health	Community	both	7-18	7-18	7,758	7,665	
629	China	2014-2015	The Kailuan Study	Community	urban	18+	18+	73,161	18,280	
630	China	2015	China Nutrition and Health Surveillance (Adult Chronic Disease and Nutrition Surveillance)	National	both	18+	18+	84,991	97,136	
631	China	2015	China Health and Retirement Longitudinal Study (CHARLS), wave 3 survey	National	both	45+	45+	7,032	7,719	
632	China	2015	China Health and Nutrition Study	National	both	5+	5+	6,538	7,222	6
633	China	2015-2016	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18-69	18-69	43,616	49,395	
634	China	2015-2016	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18-69	18-69	30,987	38,057	
635	China	2015-2016	INTERMAP China Prospective (ICP)	Subnational	rural	40-79	40-79	334	413	
636	China	2015-2017	Henan Rural Cohort	Subnational	rural	18-79	18-79	15,432	23,652	
637	China	2016	Greater Beijing School Children Myopia Study	Subnational	rural	6-18	6-18	12,873	12,866	
638	China	2016	Greater Beijing School Children Myopia Study	Subnational	urban	6-18	6-18	4,384	3,650	
639	China	2016-2017	China Nutrition and Health Surveillance (Children and Lactating Women)	National	both	5-17	5-17	42,215	42,301	
640	China	2016-2018	The FAMILY Cohort	Community	urban	18+	18+	839	1,122	
641	China	2016-2018	Smart device usage, lifestyles behaviors, physical fitness, and eye problems: A prospective study in Hong Kong adolescents	Community	urban	7-15	7-15	703	741	
642	China	2018	China Health and Nutrition Survey	National	both	5+	5+	7,870	8,845	6
643	China	2018	Chinese Longitudinal Healthy Longevity Survey	National	both	65+	65+	6,430	7,781	7
644	China	2018-2019	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	rural	18-69	18-69	37,707	46,845	
645	China	2018-2019	China Chronic Disease and Risk Factors Surveillance (CCDRFS)	National	urban	18-69	18-69	29,780	41,081	
646	China	2019	Chinese National Surveys on Students Constitution and Health	National	both	6-18	6-18	114,825	113,992	
647	Colombia	1986	INTERSALT	Community	rural	20-59	20-59	96	95	
648	Colombia	1995	DHS	National	both		20-49		3,068	
649	Colombia	1997-1998	Identification of Risk Factors of Non-Transmissible Adult Chronic Diseases in School-age Populations in the City of de Cali	Community	urban	6-17	6-17	1,084	1,077	
650	Colombia	2000	DHS	National	both		20-49		2,929	
651	Colombia	2001	CINDI/CARMEN - Bucaramaga	Community	urban	15-74	15-74	627	1,218	
652	Colombia	2002	CINDI/CARMEN - Bogota	Community	urban	15-74	15-74	322	570	
653	Colombia	2002	The Santa Fe Study (Santa Fe)	Community	urban	15-69	15-69	394	684	
654	Colombia	2002	The Santa Fe Study (Tunjuelito)	Community	urban	15-29	15-29	208	312	
655	Colombia	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	738	812	
656	Colombia	2005	DHS	National	both	5-64	5-64	43,436	57,778	
657	Colombia	2005	Encuesta Nacional de Situacion Nutricional	National	both	5-12	5-49	2,644	6,088	
658	Colombia	2007	Encuesta Nacional de Salud	National	both	18-69	18-69	5,462	7,686	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
659	Colombia	2010	DHS	National	both	5-64	5-64	65,086	76,792	
660	Colombia	2010	STEPS	Subnational	both	15-64	15-64	1,034	1,356	
661	Colombia	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	454	462	
662	Colombia	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	394	404	
663	Colombia	2015	Encuesta Nacional de Situacion Nutricional	National	both	5-64	5-64	51,180	58,896	
664	Colombia	2015	STEPS	Subnational	both	15-64	15-64	979	1,181	
665	Colombia	2016	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	National	both	60+	60+	9,041	11,467	
666	Colombia	2018	COPEN: Estudio Colombiano de Perfiles Nutricionales	Subnational	urban	5-75	5-75	916	919	
667	Colombia	2022	COPEN: Estudio Colombiano de Perfiles Nutricionales	Subnational	urban	5-80	5-80	959	1,029	
668	Comoros	1996	DHS	National	both		20-49		744	
669	Comoros	2011	STEPS	National	both	25-64	25-64	1,541	3,505	
670	Comoros	2012	DHS	National	both		15-49		4,845	
671	Congo	1986	Enquête Brazzaville 1986	Community	urban	5-50	5-50	129	1,005	
672	Congo	1987	Maire et al., Rev Epidemiol Sante Publique 40:252-58, 1992	Community	rural		16-45		750	
673	Congo	1987	Enquête Nationale Congo 1987	National	rural		13-49		1,356	
674	Congo	1991	Enquête Brazzaville 1991	Community	urban	5-90	5-90	2,393	3,149	
675	Congo	1996	Enquête Brazzaville 1996	Community	urban	5-90	5-90	2,496	3,073	
676	Congo	2004	STEPS	Community	urban	25-64	25-64	1,013	956	
677	Congo	2005	DHS	National	both		15-49		6,266	
678	Congo	2011-2012	DHS	National	both		15-49		5,060	
679	Congo	2019	Diabetes prevalence and risk factors	Community	both	19+	19+	721	807	
680	Cook Islands	2003	STEPS	National	both	25-64	25-64	925	958	
681	Cook Islands	2011	Global School-based Student Health Survey	National	both	13-17	13-17	530	543	
682	Cook Islands	2013-2015	STEPS	National	both	18-64	18-64	456	469	
683	Cook Islands	2015	Global School-based Student Health Survey	National	both	13-17	13-17	304	313	
684	Costa Rica	2004	CAMDI	Community	urban	20+	20+	304	624	
685	Costa Rica	2004-2006	Costa Rican Longevity and Healthy Aging Study Pre-1945 Cohort Wave 1	National	both	60+	60+	1,163	1,346	
686	Costa Rica	2006-2008	Costa Rican Longevity and Healthy Aging Study Pre-1945 Cohort Wave 2	National	both	62+	62+	944	1,102	
687	Costa Rica	2008-2009	Encuesta Nacional de Nutricion 2008-2009	National	both		45-64		661	
688	Costa Rica	2009	Global School-based Student Health Survey	National	both	13	13-17	356	1,308	
689	Costa Rica	2009-2010	Costa Rican Longevity and Healthy Aging Study Pre-1945 Cohort Wave 3	National	both	64+	64+	737	887	
690	Costa Rica	2010	Costa Rican National Cardiovascular Risk Factors Survey, 2010	National	both	20+	20+	778	1,958	
691	Costa Rica	2010-2011	Costa Rican Longevity and Healthy Aging Study 1945-1955 Cohort Wave 1	National	both	54-66	54-66	1,058	1,676	
692	Costa Rica	2012-2014	Costa Rican Longevity and Healthy Aging Study 1945-1955 Cohort Wave 2	National	both	56-68	56-68	867	1,470	
693	Costa Rica	2014	Costa Rican National Cardiovascular Risk Factors Survey, 2014	National	both	20+	20+	1,003	2,196	
694	Costa Rica	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	397	403	
695	Costa Rica	2016	Censo Escolar peso y talla	National	both	6-12	6-12	178,416	168,958	
696	Cote d'Ivoire	1994	DHS	National	both		20-49		2,682	
697	Cote d'Ivoire	1998-1999	DHS	National	both		15-49		2,740	
698	Cote d'Ivoire	2005	STEPS	Subnational	rural	15-64	15-64	894	1,022	
699	Cote d'Ivoire	2005	STEPS	Subnational	urban	15-64	15-64	1,071	1,437	
700	Cote d'Ivoire	2011-2012	DHS	National	both		15-49		4,601	
701	Cote d'Ivoire	2014	Prevalence and factors associated with obesity in a periurban west African population	Community	urban	18+	18+	153	317	
702	Cote d'Ivoire	2021	DHS	National	both		15-49		6,767	
703	Croatia	1997-1999	Croatian Health Survey	National	both	18+	18+	1,972	2,983	
704	Croatia	2002-2007	Epidemiology of arterial hypertension in Croatia (EH-UH)	National	both	18+	18+	446	600	
705	Croatia	2003-2004	School Health Survey	National	both	7-17	7-17	1,302	1,153	
706	Croatia	2005	Endemic Nephropathy and Arterial hypertension (ENAH)	Subnational	rural	18+	18+	264	367	
707	Croatia	2006-2008	The cardiovascular risk factors in school age - intervention model development	National	both	6-20	6-20	6,011	5,625	
708	Croatia	2008	Endemic Nephropathy and Arterial hypertension (ENAH)	Subnational	rural	18+	18+	331	527	
709	Croatia	2010	Endemic Nephropathy and Arterial hypertension (ENAH)	Subnational	rural	18+	18+	252	393	
710	Croatia	2014	Croatian Physical Activity in Adolesence Longitudinal Study (CRO-PALS)	Community	both	14-17	14-17	428	410	
711	Croatia	2015	Endemic Nephropathy and Arterial hypertension (ENAH) Follow-up Study	Subnational	rural	18+	18+	224	460	
712	Croatia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	8	8	1,364	1,364	
713	Croatia	2015-2019	Motor skills in preschool children	National	both	5-7	5-7	405	382	
714	Croatia	2016-2017	Croatian Physical Activity in Adolesence Longitudinal Study (CRO-PALS)	Community	both	17-20	17-20	383	384	
715	Croatia	2018-2021	Epidemiology of arterial hypertension in Croatia (EH-UH)	National	both	18+	18+	381	622	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
716	Croatia	2019	Childhood Obesity Surveillance Initiative 5	National	both	8-9	8-9	2,778	2,677	
717	Cuba	1981-1982	Berdasco, Eur J Clin Nutr 1994; 48 Suppl 3:S155-63; discussion S64, 1994	Subnational	both	20-59	20-59	11,355	18,708	
718	Cuba	1991	Non communicable disease risk factors in Cienfuegos	Community	urban	15+	15+	527	600	
719	Cuba	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	630	1,044	3
720	Cuba	2001	Non communicable disease risk factors in Cienfuegos	Community	urban	15-74	15-74	727	888	
721	Cuba	2001	National Survey on Risk Factors and Chronic Diseases (NSRFCD)	National	urban	15+	15+	10,163	11,376	
722	Cuba	2010	National Survey on Risk Factors and Chronic Diseases (NSRFCD)	National	both	15+	15+	3,344	3,868	
723	Cuba	2010-2011	Non communicable disease risk factors in Cienfuegos	Community	urban	15-74	15-74	611	873	
724	Cuba	2018-2020	Encuesta nacional de salud Cuba	National	both	6+	6+	5,991	7,479	
725	Cyprus	1999-2000	Countrywide Integrated Noncommunicable Diseases Intervention Programme Cyprus	National	both	25-65	25-65	457	546	
726	Cyprus	2007-2008	Asthma Study Cyprus	National	both	15-18	15-18	368	490	
727	Cyprus	2007-2008	Childhood asthma and atopy in Cyprus	Subnational	both	7-9, 13-15	7-9, 13-15	566	590	
728	Cyprus	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	1,129	1,106	
729	Cyprus	2015-2016	Childhood Obesity Surveillance Initiative 4	National	urban	6-9	6-9	685	623	
730	Cyprus	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-10	6-10	1,001	994	
731	Czechia	1985	Czech-MONICA	National	both	25-64	25-64	1,243	1,303	
732	Czechia	1988	Czech-MONICA	National	both	25-64	25-64	1,357	1,408	
733	Czechia	1992	Czech-MONICA	National	both	25-64	25-64	1,131	1,207	
734	Czechia	1997-1998	Czech post-MONICA	National	both	25-64	25-64	1,527	1,665	
735	Czechia	1998-2002	Health, Lifestyle and the Environment	National	urban	45-54	45-54	1,539	2,044	
736	Czechia	1999-2000	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	8	8	445	444	
737	Czechia	2000-2001	Czech post-MONICA	National	both	25-64	25-64	1,628	1,690	
738	Czechia	2001	6th Nationwide Anthropometric Survey of Children and Adolescents 2001	National	both	5-19	5-20	18,960	22,523	
739	Czechia	2002-2003	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	11	11	544	521	
740	Czechia	2002-2005	Health, Alcohol and Psychosocial Factors In Eastern Europe	Subnational	urban	45-70	45-70	3,289	3,901	
741	Czechia	2004-2005	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	13	13	440	366	
742	Czechia	2004-2005	Health, Lifestyle and the Environment	National	urban	45-54	45-54	775	1,072	
743	Czechia	2006-2007	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	15	15	517	456	
744	Czechia	2006-2009	Czech post-MONICA	National	both	25-64	25-64	1,717	1,861	
745	Czechia	2008	Childhood Obesity Surveillance Initiative 1	National	both	6-7	6-7	834	838	
746	Czechia	2009	Health, Lifestyle and the Environment	National	urban	45-54	45-54	307	447	
747	Czechia	2009-2010	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	18	18	262	280	
748	Czechia	2010	Childhood Obesity Surveillance Initiative 2	National	both	6-7	6-7	1,203	1,239	
749	Czechia	2010-2011	ELSPAC (The European Longitudinal Study of Pregnancy and Childhood)	Community	both	19	19	127	147	
750	Czechia	2013	Childhood Obesity Surveillance Initiative 3	National	both	6-7	6-7	1,267	1,200	
751	Czechia	2014-2015	European Heath Examination Survey	National	both	25-64	25-64	473	691	
752	Czechia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-7	6-7	809	883	
753	Czechia	2015-2018	Czech post-MONICA	National	both	25-64	25-64	1,220	1,345	
754	Czechia	2019-2020	European Heath Examination Survey	National	both	25-64	25-64	425	627	
755	Czechia	2019-2022	CELSPAC: YA (The Central European Longitudinal Studies of Parents and Children: Young Adults)	Community	both	27-30	27-30	140	152	
756	Czechia	2020	Childhood Obesity Surveillance Initiative 5	National	both	6-7	6-7	1,149	1,112	
757	Denmark	1977	The Danish Conscription Database	National	both	17-26		25,710		1
758	Denmark	1978	The Danish Conscription Database	National	both	17-26		13,580		1
759	Denmark	1979	The Danish Conscription Database	National	both	17-26		6,661		1
760	Denmark	1980	The Danish Conscription Database	National	both	17-26		2,897		
761	Denmark	1980	Copenhagen School Health Records Register	Community	urban	6-13	6-13	11,234	11,194	
762	Denmark	1981	The Danish Conscription Database	National	both	17-26		1,752		
763	Denmark	1981	Copenhagen School Health Records Register	Community	urban	6-13	6-13	11,433	11,349	
764	Denmark	1981-1983	Copenhagen City Heart Study	Subnational	urban	20+	20+	5,633	6,937	
765	Denmark	1982	The Danish Conscription Database	National	both	17-26		1,186		
766	Denmark	1982	Copenhagen School Health Records Register	Community	urban	6-13	6-13	10,971	10,746	
767	Denmark	1982-1984	MONICA I (baseline), The Glostrup Population Studies	Subnational	urban	30-61	30-61	1,940	1,844	
768	Denmark	1983	The Danish Conscription Database	National	both	17-26		762		
769	Denmark	1983	Copenhagen School Health Records Register	Community	urban	6-13	6-13	7,956	7,945	
770	Denmark	1984	The Danish Conscription Database	National	both	17-26		379		
771	Denmark	1984	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,886	4,947	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
772	Denmark	1984-1985	The Epidemiology of Gallstones in a 70 Year-Old Danish Population	Community	both	70	70	187	157	
773	Denmark	1985	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,266	4,275	
774	Denmark	1985	INTERSALT	Community	urban	20-59	20-59	99	100	
775	Denmark	1986	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,533	4,462	
776	Denmark	1986-1987	MONICA II, The Glostrup Population Studies	Subnational	urban	29-61	29-61	746	753	
777	Denmark	1987	Nilsson et al., J Intern Med 237:479-86, 1995	Community	urban	51		439		
778	Denmark	1987	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,686	4,544	
779	Denmark	1987-1988	MONICA I (5-year follow-up), The Glostrup Population Studies	Subnational	urban	35-66	35-66	1,524	1,463	
780	Denmark	1988	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,738	4,501	
781	Denmark	1989	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,845	4,598	
782	Denmark	1990	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,669	4,449	
783	Denmark	1991	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,844	4,811	
784	Denmark	1991-1992	Monica III, the Glostrup population studies	Subnational	both	29-71	29-71	1,009	998	
785	Denmark	1991-1994	Copenhagen City Heart Study	Subnational	urban	20+	20+	4,274	5,416	
786	Denmark	1992	Copenhagen School Health Records Register	Community	urban	6-13	6-13	5,243	5,104	
787	Denmark	1993	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,968	4,890	
788	Denmark	1993-1994	MONICA I (10-year follow-up), The Glostrup Population Studies	Subnational	urban	41-72	41-72	1,333	1,323	
789	Denmark	1993-1997	EPIC Aarhus	Community	urban	50-65	50-65	8,430	8,717	
790	Denmark	1993-1997	EPIC Copenhagen	Community	urban	50-65	50-65	18,729	21,133	
791	Denmark	1994	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,065	4,005	
792	Denmark	1995	Copenhagen School Health Records Register	Community	urban	6-13	6-13	5,437	5,379	
793	Denmark	1996	Copenhagen School Health Records Register	Community	urban	6-13	6-13	4,674	4,670	
794	Denmark	1996-1997	Drivsholm et al., Diabet Med 18:126-32, 2001	Subnational	urban	60	60	325	370	
795	Denmark	1997	Copenhagen School Health Records Register	Community	urban	7-13	7-13	4,105	4,025	
796	Denmark	1997-1998	European Youth Heart Study	Community	urban	8-18	8-18	485	532	
797	Denmark	1998	Copenhagen School Health Records Register	Community	urban	8-13	8-13	3,203	3,253	
798	Denmark	1999	Copenhagen School Health Records Register	Community	urban	9-13	9-13	2,860	2,777	
799	Denmark	2000	Copenhagen School Health Records Register	Community	urban	10-13	10-13	1,911	1,923	
800	Denmark	2001	Copenhagen School Health Records Register	Community	urban	11-13	11-13	1,594	1,595	
801	Denmark	2001-2002	The Copenhagen School Child Intervention Study	Community	urban	5-8	5-8	362	329	
802	Denmark	2001-2003	Copenhagen City Heart Study	Subnational	urban	20+	20+	2,567	3,446	
803	Denmark	2002	Copenhagen School Health Records Register	Community	urban	12-13	12-13	860	895	
804	Denmark	2002-2003	Odense Androgen Study	Community	urban	20-29		783		
805	Denmark	2003	Copenhagen School Health Records Register	Community	urban	13	13	322	369	
806	Denmark	2003-2004	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,828	5,397	
807	Denmark	2003-2004	European Youth Heart Study	Community	urban	8-17	8-17	392	509	
808	Denmark	2004-2005	The Copenhagen School Child Intervention Study	Community	urban	8-11	8-11	121	130	
809	Denmark	2005	Copenhagen General Population Study 1	Subnational	urban	20+	20+	5,171	6,023	
810	Denmark	2006	Copenhagen General Population Study 1	Subnational	urban	20+	20+	5,055	4,861	
811	Denmark	2006	The Danish Conscription Database	National	both	17-26		25,063		
812	Denmark	2006-2008	The Health2006 Cohort (baseline), The Glostrup Population Studies	Subnational	urban	18-71	18-71	1,553	1,916	
813	Denmark	2007	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,027	6,913	
814	Denmark	2007	The Danish Conscription Database	National	both	17-26		27,194		
815	Denmark	2007-2008	The Danish Health Examination Survey 2007-2008	National	both	18+	18+	7,349	10,651	
816	Denmark	2008	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,735	6,467	
817	Denmark	2008	The Childhood Health Activity and Motor Performance School Study	Community	both	5-10	5-10	544	626	
818	Denmark	2008	The Danish Conscription Database	National	both	17-26		24,538		
819	Denmark	2008	The Copenhagen School Child Intervention Study	Community	urban	12-14	12-14	99	111	
820	Denmark	2009	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,214	5,244	
821	Denmark	2009	The Childhood Health Activity and Motor Performance School Study - Fall	Community	both	6-12	6-12	240	246	
822	Denmark	2009	The Childhood Health Activity and Motor Performance School Study - Spring	Community	both	6-11	6-11	231	243	
823	Denmark	2009	The Danish Conscription Database	National	both	17-26		27,093		
824	Denmark	2009-2010	European Youth Heart Studyy	Community	both	14-28	14-28	481	553	
825	Denmark	2010	Copenhagen General Population Study 1	Subnational	urban	20+	20+	3,967	4,891	
826	Denmark	2010	The Childhood Health Activity and Motor Performance School Study - Fall	Community	both	7-13	7-13	254	248	
827	Denmark	2010	The Childhood Health Activity and Motor Performance School Study - Spring	Community	both	7-12	7-12	234	235	
828	Denmark	2010	The Danish Conscription Database	National	both	17-26		30,814		

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829	Denmark	2011	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,935	5,824	
830	Denmark	2011	The Childhood Health Activity and Motor Performance School Study	Community	both	8-13	8-13	245	241	
831	Denmark	2011	The Danish Conscription Database	National	both	17-26		30,719		
832	Denmark	2011-2012	The Health2006 Cohort (5-year follow-up), The Glostrup Population Studies	Subnational	urban	24-76	24-76	1,057	1,249	
833	Denmark	2011-2012	The OPUS School Meal Study	Subnational	both	8-11	8-11	427	388	
834	Denmark	2012	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,516	5,423	
835	Denmark	2012	The Childhood Health Activity and Motor Performance School Study	Community	both	9-14	9-14	273	249	
836	Denmark	2012	The Danish Conscription Database	National	both	17-26		29,651		
837	Denmark	2012-2015	DanFunD (baseline), The Glostrup Population Studies	Subnational	urban	18-72	18-72	3,451	4,034	
838	Denmark	2013	Copenhagen General Population Study 1	Subnational	urban	20+	20+	4,001	4,703	
839	Denmark	2013	The Childhood Health Activity and Motor Performance School Study	Community	both	10-15	10-15	225	208	
840	Denmark	2013	The Danish Conscription Database	National	both	17-26		30,565		
841	Denmark	2013	Learning, Cognition and Motion (LCoMotion)	Subnational	both	11-14	11-14	353	365	
842	Denmark	2014	Copenhagen General Population Study 2	Subnational	urban	20+	20+	1,391	1,782	
843	Denmark	2014	The Danish Conscription Database	National	both	17-26		32,397		
844	Denmark	2014-2015	Copenhagen General Population Study 1	Subnational	urban	20+	20+	2,245	2,837	
845	Denmark	2015	Copenhagen General Population Study 2	Subnational	urban	20+	20+	4,103	5,107	
846	Denmark	2015	The Childhood Health Activity and Motor Performance School Study	Community	both	12-17	12-17	122	120	
847	Denmark	2015	The Danish Conscription Database	National	both	17-26		28,907		
848	Denmark	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-7	6-7	1,339	1,281	
849	Denmark	2016	Copenhagen General Population Study 2	Subnational	urban	20+	20+	4,493	5,495	
850	Denmark	2016	The Danish Conscription Database	National	both	17-29		29,057		
851	Denmark	2017	Copenhagen General Population Study 2	Subnational	urban	20+	20+	3,182	4,395	
852	Denmark	2017	The Danish Conscription Database	National	both	17-29		31,057		
853	Denmark	2018	The Danish Conscription Database	National	both	17-29		27,597		
854	Denmark	2019	The Danish Conscription Database	National	both	17-29		25,412		
855	Denmark	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-7	6-7	1,204	1,291	
856	Dominica	2007-2008	STEPS	National	both	15-64	15-64	459	568	
857	Dominica	2009	Global School-based Student Health Survey	National	both	13-17	13-17	508	542	
858	Dominican Republic	1991	DHS	National	both		20-49		1,965	
859	Dominican Republic	1993	Aono et al., J Epidemiol 7(4):238-43, 1997	National	both	20-70	20-70	767	1,149	
860	Dominican Republic	1996	DHS	National	both		15-49		7,441	
861	Dominican Republic	1996-1998	Estudio factores de riesgo cardiovascular y sindrome metabolico en la Republica Dominicana I (EFRICARD I)	National	both	18-75	18-75	2,087	4,095	
862	Dominican Republic	2010-2012	Estudio factores de riesgo cardiovascular y sindrome metabolico en la Republica Dominicana II (EFRICARD II)	National	both	18-75	18-75	1,599	3,180	
863	Dominican Republic	2013	DHS	National	both	15-59	15-49	10,433	8,960	
864	Dominican Republic	2017	Prevalencia de hta y factores de riesgo en La Republica Dominicana al 2017 (ENPREFAR HAS 17)	National	both	18+	18+	1,001	1,008	
865	DR Congo	2001	Multiple Indicator Cluster Survey 2	National	both		15-49		5,520	
866	DR Congo	2005	STEPS	Subnational	urban	15+	15+	761	1,152	
867	DR Congo	2007	DHS	National	both		15-49		4,137	
868	DR Congo	2007	Diabetes and intermediate hyperglycaemia in Kisantu, DR Congo: a cross-sectional prevalence study	Community	urban	20+	20+	653	1,199	
869	DR Congo	2008	Visite de la Tension Artérielle et des Facteurs de Risque Associés en Afrique subsaharienne (VITARAA) - Sud-Kivu, RD Congo	Community	both	20+	20+	246	408	
870	DR Congo	2008	Visite de la Tension Artérielle et des Facteurs de Risque Associés en Afrique subsaharienne (VITARAA) - Kinshasa, RD Congo	Community	urban	10+	10+	810	979	
871	DR Congo	2011-2012	Epidemiology of dementia in Central Africa: Brazzaville	Community	urban	65+	65+	171	262	
872	DR Congo	2011-2012	Epidemiology of dementia in Central Africa: Gamboma	Community	rural	65+	65+	187	299	
873	DR Congo	2013-2014	DHS	National	both		15-49		8,163	
874	DR Congo	2016-2017	Prevalence and Risk Factors of CKD in South Kivu, Democratic Republic of Congo: A Large-Scale Population Study	Subnational	both	18+	18+	499	791	
875	Ecuador	2004	Encuesta Demografica y de Salud Materno e Infantil/ Reproductive Health Survey	National	both		15-49		3,850	
876	Ecuador	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	813	814	
877	Ecuador	2008-2009	Food Nutrition and Health	Community	both	10-16	10-16	379	375	
878	Ecuador	2009-2010	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	National	both	60+	60+	2,341	2,595	
879	Ecuador	2011-2013	Encuesta Nacional de Salud y Nutrición (ENSANUT)	National	both	5-59	5-59	22,919	25,767	
880	Ecuador	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	517	586	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
881	Ecuador	2018	Encuesta Nacional de Salud y Nutrición (ENSANUT)	National	both	5+	5+	63,176	65,597	
882	Ecuador	2018	STEPS	National	both	18-69	18-69	1,893	2,579	
883	Egypt	1992	DHS	National	both		20-49		4,654	
884	Egypt	1995	DHS	National	both		20-49		6,499	
885	Egypt	2000	DHS	National	both		20-49		13,602	
886	Egypt	2002	National Survey of Smoking, Obesity, Blood Pressure and Blood Glucose	National	both	6+	6+	4,397	5,161	
887	Egypt	2003	DHS	National	both		20-49		7,930	
888	Egypt	2003-2004	Marzouk et al., Gut 56(8):1105-10, 2007	Community	rural	25+	25+	322	456	
889	Egypt	2005	DHS	National	both		20-49		16,864	
890	Egypt	2005	STEPS	National	both	15-65	15-65	4,757	4,428	
891	Egypt	2007-2009	Mostafa et al., Gut 59(8):1135-40, 2010	Community	rural	35+	35+	642	843	
892	Egypt	2008	DHS	National	both	10-59	20-49	14,261	15,242	
893	Egypt	2011	Global School-based Student Health Survey	National	both	13-17	13-17	325	454	
894	Egypt	2011	STEPS	National	both	15-65	15-65	1,761	2,977	
895	Egypt	2014	DHS	National	both		20-49		18,891	
896	Egypt	2015	DHS	National	both	15-59	15-59	7,235	8,471	
897	Egypt	2017	STEPS	National	both	15-69	15-69	2,273	3,692	
898	El Salvador	2002-2003	Encuesta Nacional de Salud Familiar	National	both		15-49		3,885	
899	El Salvador	2004	CAMDI	Community	urban	20+	20+	396	811	
900	El Salvador	2008	Encuesta Nacional de Salud Familiar	National	both		15-49		6,808	
901	El Salvador	2013	Global School-based Student Health Survey	National	both		13-15		675	
902	El Salvador	2014-2015	Encuesta Nacional de Enfermedades Crónicas (ENECA-ELS)	National	both	20+	20+	1,684	2,945	
903	El Salvador	2016	National height and weight census	National	both	6-8	6-8	56,034	53,321	
904	Equatorial Guinea	2011	DHS	National	both		15-49		1,074	
905	Eritrea	1995	DHS	National	both		15-49		1,621	
906	Eritrea	2002	DHS	National	both		15-49		3,223	
907	Eritrea	2004	STEPS	National	both	15-64	15-64	1,113	1,089	
908	Eritrea	2010	STEPS	National	both	25-74	25-74	1,712	4,285	
909	Estonia	1984-1986	Abina et al., Blood Press 12:111-21, 2003	Community	urban	20-54	30-54	2,477	851	
910	Estonia	1992-1994	Abina et al., Blood Press 12:111-21, 2003	Community	urban	20-54	20-54	921	678	
911	Estonia	1997	Pomerleau et al., Public Health Nutrition 3(1):3-10, 2000	National	both	19-64	19-64	525	629	
912	Estonia	1999-2001	Abina et al., Blood Press 12:111-21, 2003	Community	urban	20-54	20-54	635	692	
913	Estonia	2002	Estonian Biobank	National	both	18+	18+	89	217	
914	Estonia	2003	Estonian Biobank	National	both	18+	18+	2,695	5,688	
915	Estonia	2003	The European Male Ageing Study	Community	both	40+		416		
916	Estonia	2004	Estonian Biobank	National	both	18+	18+	527	947	
917	Estonia	2007	Estonian Biobank	National	both	18+	18+	1,000	2,187	
918	Estonia	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	558	634	
919	Estonia	2008	Estonian Biobank	National	both	18+	18+	5,147	10,990	
920	Estonia	2008	The European Male Ageing Study	Community	both	40+		305		
921	Estonia	2009	Estonian Biobank	National	both	18+	18+	3,963	6,493	
922	Estonia	2010	Estonian Biobank	National	both	18+	18+	4,052	7,045	
923	Estonia	2013-2015	National Dietary Survey (RTU) 2014	National	both	5-74	5-74	1,260	2,202	
924	Estonia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	6,502	6,198	
925	Estonia	2018-2019	Childhood Obesity Surveillance Initiative 5	National	both	7-11	7-11	6,066	6,038	
926	Estonia	2022	Childhood Obesity Surveillance Initiative 6	National	both	7-14	7-14	9,177	8,792	
927	Eswatini	2006-2007	DHS	National	both	15-49	15-49	4,074	4,714	
928	Eswatini	2014	STEPS	National	both	15-69	15-69	1,102	1,976	
929	Ethiopia	2000	DHS	National	both		15-49		13,912	
930	Ethiopia	2005	DHS	National	both		15-49		6,133	
931	Ethiopia	2006	STEPS	Subnational	urban	25-64	25-64	1,642	2,295	
932	Ethiopia	2011	DHS	National	both	15-59	15-49	14,329	15,111	
933	Ethiopia	2015	National Micronutrient Survey	National	both	5-54	5-49	1,187	2,459	
934	Ethiopia	2015	STEPS	National	both	15-69	15-69	3,912	5,369	
935	Ethiopia	2016	ARISE Network Adolescent Health Study (Harar)	Community	urban	10-19	10-19	499	556	
936	Ethiopia	2016	ARISE Network Adolescent Health Study (Kersa)	Community	both	10-19	10-19	526	418	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
937	Ethiopia	2016	DHS	National	both	15-59	15-49	12,380	14,104	
938	Ethiopia	2018	Sustainable Urban Diets (SUDS) Addis Ababa	Community	urban		18-49		994	
939	Ethiopia	2018	Sustainable Urban Diets (SUDS) Kersa	Community	rural		18-49		1,015	
940	Fiji	1980	National Cardiovascular and Diabetes Survey (NCVDS)	Subnational	both	20+	20+	1,448	1,522	
941	Fiji	2002	STEPS	National	both	15-64	15-64	2,684	3,820	
942	Fiji	2005-2007	Pacific Obesity Prevention in Communities - Healthy Youth Health Communities Study	Subnational	urban	11-19	11-19	3,730	4,109	
943	Fiji	2007-2008	Pacific Obesity Prevention in Communities - Healthy Youth Health Communities Study	Subnational	urban	13-22	13-22	1,492	1,832	
944	Fiji	2009	Fiji Eye Health Survey 2009	National	both	40+	40+	582	776	
945	Fiji	2011	STEPS	National	both	25-64	25-64	1,123	1,417	
946	Fiji	2016	Global School-based Student Health Survey	National	both	13-17	13-17	1,394	1,469	
947	Finland	1980	Young Finns Study 1980	National	rural	5-18	5-18	752	814	
948	Finland	1980	Young Finns Study 1980	National	urban	5-18	5-18	704	727	
949	Finland	1982	MONICA, North Karelia/Kuopio/Turku/Loimaa	Subnational	both	25-64	25-64	4,550	4,659	
950	Finland	1983	Young Finns Study 1983	National	rural	6-21	6-21	727	773	
951	Finland	1983	Young Finns Study 1983	National	urban	6-21	6-21	656	685	
952	Finland	1984	Finland, Italy, Netherlands, Elderly (Fine-Finland)	Community	rural	65-84		673		
953	Finland	1984-1989	Kuopio Ischaemic Heart Disease Risk Factor Study	Subnational	both	42-61		2,672		
954	Finland	1985	INTERSALT, Turku	Community	urban	20-59	20-59	100	100	
955	Finland	1985-1986	INTERSALT, Joensuu	Community	urban	20-59	20-59	100	100	
956	Finland	1986	Young Finns Study 1986	National	rural	9-24	9-24	594	631	
957	Finland	1986	Young Finns Study 1986	National	urban	9-24	9-24	587	666	
958	Finland	1987	MONICA, North Karelia/Kuopio/Turku/Loimaa	Subnational	both	25-64	25-64	2,896	3,151	
959	Finland	1989	Finland, Italy, Netherlands, Elderly (Fine-Finland)	Community	rural	70-89		446		
960	Finland	1990-1992	Oulu 35 Study	Community	urban	56-57	56-57	231	326	
961	Finland	1991-1993	Kuopio Ischaemic Heart Disease Risk Factor Study	Subnational	both	46-65		1,037		
962	Finland	1992	The National FINRISK Study	Subnational	both	25-64	25-64	2,849	3,201	
963	Finland	1994	Finland, Italy, Netherlands, Elderly (Fine-Finland)	Community	rural	75-94		266		
964	Finland	1996-1998	Oulu 35 Study	Community	urban	60-63	60-63	242	345	
965	Finland	1996-1998	Savitaipale Study, Baseline	Community	rural	40-66	40-66	574	574	
966	Finland	1997	The National FINRISK Study	National	both	25-74	25-74	4,128	4,131	
967	Finland	1997	Northern Finland Birth Cohort 1966	Community	both	30-31	30-31	2,614	141	
968	Finland	1998-2001	Kuopio Ischaemic Heart Disease Risk Factor Study	Subnational	both	53-73	53-73	834	919	
969	Finland	2000	Finland, Italy, Netherlands, Elderly (Fine-Finland)	Community	rural	81-96		92		
970	Finland	2000-2001	Health 2000 Survey	National	both	30+	30+	2,663	3,222	
971	Finland	2001	Young Finns Study 2001	National	rural	24-39	24-39	346	393	
972	Finland	2001	Young Finns Study 2001	National	urban	24-39	24-39	658	769	
973	Finland	2001-2002	Northern Finland Birth Cohort 1986	Community	both	15-17	15-17	3,126	3,194	
974	Finland	2001-2003	Oulu 45 Study	Community	urban	55-58	55-58	426	550	
975	Finland	2001-2004	Helsinki Birth Cohort Study	Community	urban	56-69	56-69	927	1,074	
976	Finland	2002	The National FINRISK Study	National	both	25-74	25-74	3,299	3,826	
977	Finland	2004-2005	FIN-D2D	Subnational	both	45-74	45-74	1,364	1,461	
978	Finland	2005	Mantyselka et al., Rheumatology (Oxford) 47(8):1235-38, 2008	Community	rural	30-65	30-65	230	241	
979	Finland	2005-2008	Kuopio Ischaemic Heart Disease Risk Factor Study	Subnational	both	60-81	60-81	1,241	634	
980	Finland	2007	The National FINRISK Study	National	both	25-74	25-74	2,934	3,323	
981	Finland	2007	Oulu 35 Study	Community	urban	71-73	71-73	182	271	
982	Finland	2007	Young Finns Study 2007	National	rural	30-45	30-45	374	431	
983	Finland	2007	Young Finns Study 2007	National	urban	30-45	30-45	602	714	
984	Finland	2007-2008	Savitaipale Study, 10-year Follow-up	Community	rural	51-75	51-75	430	483	
985	Finland	2008	Control group for Finnish male former elite athletes	National	both	61+		206		
986	Finland	2011	Young Finns Study 2011	National	rural	34-49	34-49	364	424	
987	Finland	2011	Young Finns Study 2011	National	urban	34-49	34-49	506	636	
988	Finland	2011-2012	Health 2011 Survey	National	both	30+	30+	2,041	2,535	
989	Finland	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	253	282	
990	Finland	2012	The National FINRISK Study	National	both	25-74	25-74	2,774	3,052	
991	Finland	2012	Northern Finland Birth Cohort 1966	Community	both	45-47	45-47	2,362	2,966	
992	Finland	2016	Register of Primary Health Care visits	National	rural	5-17	5-17	37,441	35,048	
993	Finland	2016	Register of Primary Health Care visits	National	urban	5-17	5-17	92,177	87,911	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
994	Finland	2017	The FinHealth Survey	National	both	18+	18+	2,700	3,136	
995	Finland	2017	Register of Primary Health Care visits	National	rural	5-17	5-17	41,744	38,890	
996	Finland	2017	Register of Primary Health Care visits	National	urban	5-17	5-17	106,968	100,998	
997	Finland	2018	Register of Primary Health Care visits	National	rural	5-17	5-17	44,828	41,905	
998	Finland	2018	Register of Primary Health Care visits	National	urban	5-17	5-17	112,753	106,296	
999	Finland	2018-2019	Savitaipale Study, 22-year Follow-up	Community	rural	62-86	62-86	263	341	
1000	Finland	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-9	7-9	5,749	5,096	
1001	Finland	2019-2020	Northern Finland Birth Cohort 1986	Community	both	33-35	33-35	579	916	
1002	France	1985-1987	MONICA, Strasbourg	Subnational	both	35-64	35-64	664	713	
1003	France	1985-1987	MONICA, Strasbourg	Subnational	both	25-34	25-34	65	78	
1004	France	1985-1987	MONICA, Toulouse	Subnational	both	35-64	35-64	675	644	
1005	France	1986-1989	MONICA, Lille	Community	urban	25-64	25-64	878	732	
1006	France	1988-1991	MONICA, Toulouse	Subnational	both	35-64		586		
1007	France	1994-1996	MONICA, Toulouse	Subnational	both	35-64	35-64	608	566	
1008	France	1995-1997	MONICA, Lille	Community	urban	36-67	36-67	598	590	
1009	France	1995-1997	MONICA, Strasbourg	Subnational	both	35-64	35-64	526	523	
1010	France	1996-2003	Jaquet et al., Diabetologia 48(5):849-55, 2005	Community	urban	15-34	15-34	173	164	
1011	France	1999-2001	The Three City Study	Community	urban	65+	65+	2,423	3,778	
1012	France	2000	Corpulence 7-9 ans	Subnational	both	7-9	7-9	786	796	
1013	France	2004-2006	National Monitoring of Arterial Risk in Lille (MONA LISA Lille)	Subnational	urban	35-75	35-75	783	795	
1014	France	2005-2007	Etude individuelle nationale des consommations alimentaires 2 (INCA2), adults	National	both	18-79	18-79	1,001	1,368	
1015	France	2005-2007	Etude individuelle nationale des consommations alimentaires 2 (INCA2), children and adolescents	National	both	5-17	5-17	607	684	
1016	France	2005-2007	National Monitoring of Arterial Risk in Bas-Rhin (MONA LISA Bas-Rhin)	Subnational	both	35-74	35-74	780	787	
1017	France	2005-2007	National Monitoring of Arterial Risk in Toulouse (MONA LISA Toulouse)	Subnational	both	35-74	35-74	829	796	
1018	France	2006-2007	Etude Nationale Nutrition Santé	National	both	5-74	5-74	1,505	2,030	8
1019	France	2006-2007	HELENA	Community	urban	12-17	12-17	122	165	
1020	France	2006-2008	The Three City Study	Community	urban	72+	72+	768	1,217	
1021	France	2007	Corpulence 7-9 ans	National	both	7-9	7-9	1,281	1,244	
1022	France	2008-2011	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	5	5	639	569	
1023	France	2009-2012	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	6	6	306	283	
1024	France	2010-2013	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	7	7	339	320	
1025	France	2011-2013	Enquête LIttorale Souffle Air Biologie EnvironnementT (ELISABET) Dunkerque	Community	urban	40-64	40-64	750	779	
1026	France	2011-2013	Enquête LIttorale Souffle Air Biologie EnvironnementT (ELISABET) Lille	Community	urban	40-64	40-64	753	838	
1027	France	2011-2014	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	8	8	269	236	
1028	France	2012-2014	Cohorte des consultants des Centres d'examens de santé (CONSTANCES)	National	urban	18-69	18-69	22,515	26,317	
1029	France	2012-2015	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	9	9	86	79	
1030	France	2013-2016	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	10	10	193	178	
1031	France	2014-2016	L'Etude de Sante sur l'Environnement, la Biosurveillance, l'Activite physique et la Nutrition (Etude Esteban)	National	both	6-74	6-74	1,662	1,913	9
1032	France	2014-2017	Study of pre- and early postnatal determinants of child health and development (EDEN)	Community	both	11	11	246	230	
1033	France	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-9	7-9	2,510	2,561	
1034	France	2015-2017	Cohorte des consultants des Centres d'examens de santé (CONSTANCES)	National	urban	18-69	18-69	45,102	51,410	
1035	France	2017-2019	Cohorte des consultants des Centres d'examens de santé (CONSTANCES), follow up	Subnational	urban	22-76	22-76	10,443	11,334	
1036	France	2018-2019	Cohorte des consultants des Centres d'examens de santé (CONSTANCES)	National	urban	18-69	18-69	23,891	27,546	
1037	France	2020-2021	Cohorte des consultants des Centres d'examens de santé (CONSTANCES)	Subnational	urban	18-69	18-69	1,467	1,813	
1038	France	2020-2023	Cohorte des consultants des Centres d'examens de santé (CONSTANCES), follow up	Subnational	urban	22-80	22-80	22,053	23,119	
1039	French Polynesia	2010	STEPS	National	both	18-64	18-64	1,458	1,916	
1040	French Polynesia	2015	Global School-based Student Health Survey	National	both	12-17	12-17	1,310	1,438	
1041	Gabon	2000	DHS	National	both		20-49		2,082	
1042	Gabon	2009	STEPS	Subnational	urban	15-64	15-64	1,051	1,515	
1043	Gabon	2012	DHS	National	both		15-49		5,066	
1044	Gabon	2019-2021	DHS	National	both		15-64		5,663	
1045	Gambia	1996-1997	National Survey of Blindness and Low Vision	National	both	16+	16+	1,733	2,071	
1046	Gambia	2003	Siervo et al., Eur J Clin Nutr 60(4):455-63, 2006	Community	urban	14-50	14-50	50	50	
1047	Gambia	2010	STEPS	National	both	25-64	25-64	1,610	1,919	
1048	Gambia	2013	DHS	National	both		15-49		4,180	
1049	Gambia	2018	The Gambia Micronutrient Survey (GMNS)	National	both		15-49		1,640	
1050	Gambia	2019-2020	DHS	National	both		15-49		5,474	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1051	Georgia	2010	STEPS	National	both	18-64	18-64	1,842	4,460	
1052	Georgia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	1,685	1,585	
1053	Georgia	2016	STEPS	National	both	18-69	18-69	1,188	2,784	
1054	Georgia	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	1,777	1,646	
1055	Germany	1982	MONICA, Erfurt	Community	urban	25-64	25-64	106	103	
1056	Germany	1982-1984	MONICA, Chemnitz	Community	urban	25-64	25-64	267	295	
1057	Germany	1982-1984	MONICA, Zwickau	Community	urban	25-64	25-64	246	276	
1058	Germany	1982-1985	MONICA, Rest of Karl-Marx-Stadt County	Subnational	urban	25-64	25-64	592	657	
1059	Germany	1982-1985	MONICA, Rest of DDR-MONICA	Subnational	urban	25-64	25-64	235	232	
1060	Germany	1983-1984	MONICA, Halle County	Subnational	urban	25-64	25-64	1,110	1,172	
1061	Germany	1983-1987	MONICA, Rhein-Neckar Region	Community	urban	25-64	25-64	1,489	1,609	
1062	Germany	1984	The German Conscription Database	Subnational	both	19		419,719		
1063	Germany	1984	German Cardiovascular Prevention Study (GCP) - National Health Survey 1984	Subnational	both	25-69	25-69	2,415	2,366	
1064	Germany	1984	MONICA, Bremen North/West	Community	urban	25-64	25-64	813	852	
1065	Germany	1984-1985	MONICA, Berlin-Lichtenberg	Community	urban	25-64	25-64	593	635	
1066	Germany	1984-1985	KORA-S1 (Cooperative Health Research in the Augsburg Region) - formerly MONICA Augsburg	Community	both	24-65	24-65	2,006	1,963	
1067	Germany	1984-1986	MONICA, Cottbus County	Community	urban	25-64	25-64	657	739	
1068	Germany	1985	The German Conscription Database	Subnational	both	19		402,487		
1069	Germany	1985-1986	INTERSALT, Cottbus	Community	urban	20-59	20-59	99	99	
1070	Germany	1985-1986	INTERSALT, Heidelberg	Community	urban	20-59	20-59	97	99	
1071	Germany	1985-1986	CINDI	Subnational	both	25-64	25-64	1,875	1,990	
1072	Germany	1985-1986	INTERSALT, Bernried	Community	urban	20-59	20-59	99	98	
1073	Germany	1986	The German Conscription Database	Subnational	both	19		382,632		
1074	Germany	1987	The German Conscription Database	Subnational	both	19		349,083		
1075	Germany	1987-1988	MONICA, Erfurt	Community	urban	25-64	25-64	871	909	
1076	Germany	1988	The German Conscription Database	Subnational	both	19		303,265		
1077	Germany	1988	German Cardiovascular Prevention Study (GCP) - National Health Survey 1988	Subnational	both	25-69	25-69	2,642	2,678	
1078	Germany	1988	MONICA, Berlin-Lichtenberg	Community	urban	25-64	25-64	690	728	
1079	Germany	1988	MONICA, Bremen North/West	Community	urban	25-69	25-69	619	632	
1080	Germany	1988	MONICA, Bremen Center/South/East	Community	urban	25-69	25-69	499	582	
1081	Germany	1988	MONICA, Chemnitz	Community	urban	25-64	25-64	288	382	
1082	Germany	1988	MONICA, Zwickau	Community	urban	25-64	25-64	193	250	
1083	Germany	1988-1989	CINDI	Subnational	both	25-64	25-64	1,361	1,435	
1084	Germany	1988-1989	MONICA, Halle County	Subnational	urban	25-64	25-64	959	1,201	
1085	Germany	1988-1989	MONICA, Rest of Karl-Marx-Stadt County	Subnational	urban	25-64	25-64	541	626	
1086	Germany	1989	The German Conscription Database	Subnational	both	19		245,740		
1087	Germany	1989-1990	MONICA, Cottbus County	Community	urban	25-64	25-64	539	529	
1088	Germany	1989-1990	KORA-S2 (Cooperative Health Research in the Augsburg Region) - formerly MONICA Augsburg	Community	both	24-75	24-75	2,439	2,374	
1089	Germany	1990	The German Conscription Database	Subnational	both	19		206,599		
1090	Germany	1990-1992	European Community Respiratory Health Survey, Hamburg	Community	urban	20-47	20-47	146	138	
1091	Germany	1990-1992	European Community Respiratory Health Survey, Erfurt	Community	urban	20-47	20-47	146	124	
1092	Germany	1991	The German Conscription Database	National	both	19		138,195		
1093	Germany	1991-1992	MONICA, Bremen North/West	Community	urban	25-69	25-69	599	671	
1094	Germany	1991-1992	MONICA, Bremen Center/South/East	Community	urban	25-69	25-69	524	546	
1095	Germany	1991-1992	CINDI	Subnational	both	25-64	25-64	1,326	1,400	
1096	Germany	1991-1992	German Cardiovascular Prevention Study (GCP) - National Health Survey 1991	Subnational	both	25-69	25-69	2,599	2,670	
1097	Germany	1991-1992	First National Examination of life conditions, Environment and Health in East Germany 1991/92	Subnational	both	25-69	25-69	1,042	1,155	
1098	Germany	1991-1992	MONICA, Erfurt	Community	urban	25-64	25-64	587	572	
1099	Germany	1992	The German Conscription Database	National	both	19		220,956		
1100	Germany	1993	The German Conscription Database	National	both	19		188,655		
1101	Germany	1993-1994	MONICA, Chemnitz	Community	urban	25-64	25-64	408	424	
1102	Germany	1993-1994	MONICA, Zwickau	Community	urban	25-64	25-64	139	186	
1103	Germany	1994	The German Conscription Database	National	both	19		155,426		
1104	Germany	1994-1995	KORA-S3 (Cooperative Health Research in the Augsburg Region) - formerly MONICA Augsburg	Community	both	24-75	24-75	2,358	2,372	
1105	Germany	1994-1998	EPIC Heidelberg	Community	urban	40-64	35-64	11,680	13,458	
1106	Germany	1994-1998	EPIC Potsdam	Community	urban	40-64	35-64	10,224	15,995	
1107	Germany	1995	The German Conscription Database	National	both	19		185,762		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1108	Germany	1996	The German Conscription Database	National	both	19		191,260		
1109	Germany	1997	The German Conscription Database	National	both	19		148,738		
1110	Germany	1997-1999	German National Health Interview and Examination Survey (GNHIES98)	National	both	18-79	18-79	3,406	3,580	
1111	Germany	1997-2001	Study of Health in Pomerania (SHIP-START-0) baseline study	Subnational	both	20-80	20-80	2,109	2,168	10
1112	Germany	1998	The German Conscription Database	National	both	19		146,528		
1113	Germany	1999	The German Conscription Database	National	both	19		292,732		
1114	Germany	1999-2001	KORA-S4 (Cooperative Health Research in the Augsburg Region)	Community	both	24-75	24-75	2,071	2,138	
1115	Germany	2000-2001	European Community Respiratory Health Survey, Hamburg	Community	urban	30-57	30-57	146	138	
1116	Germany	2000-2001	European Community Respiratory Health Survey, Erfurt	Community	urban	30-57	30-57	146	124	
1117	Germany	2000-2002	Epidemiological study of the chances of prevention, early recognition and optimal treatment of chronic diseases in an elderly population (ESTHER)	Subnational	both	50-75	50-75	4,344	5,334	
1118	Germany	2000-2003	Heinz Nixdorf Recall Study	Subnational	urban	45-75	45-75	2,380	2,401	11
1119	Germany	2002	Echinoccoccus Multilocularis and Internal Diseases in Leutkirch	Community	urban	12-65	12-65	1,172	1,257	
1120	Germany	2002-2006	Study of Health in Pomerania (SHIP-START-1) 5-year follow-up	Subnational	both	25-85	25-85	1,578	1,691	10
1121	Germany	2003-2006	German Health Interview and Examination Survey for Children and Adolescents (KiGGS)	National	both	5-17	5-17	6,602	6,260	
1122	Germany	2005-2008	Heinz Nixdorf Recall Study	Subnational	both	50-80	50-80	2,044	2,099	11
1123	Germany	2006-2007	HELENA	Community	urban	12-17	12-17	282	194	
1124	Germany	2006-2008	KORA-F4 (Cooperative Health Research in the Augsburg Region) - first follow up of KORA-S4	Community	both	31-82	31-82	1,478	1,580	
1125	Germany	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	772	762	
1126	Germany	2007-2012	Gutenberg Health Study	Community	urban	35-74	35-74	7,577	7,419	
1127	Germany	2008	The German Conscription Database	National	both	19		98,926		
1128	Germany	2008-2011	Epidemiological study of the chances of prevention, early recognition and optimal treatment of chronic diseases in an elderly population (ESTHER)	Subnational	both	58-84	58-84	1,468	1,622	
1129	Germany	2008-2011	German Health Interview and Examination Survey for adults 2008-11 (DEGS1)	National	both	18-79	18-79	3,389	3,650	
1130	Germany	2008-2012	Study of Health in Pomerania (SHIP-START-2) 11-year follow-up	Subnational	both	31-81	31-81	1,049	1,201	10
1131	Germany	2008-2012	Study of Health in Pomerania, second cohort (SHIP-TREND-0)	Subnational	both	20-79	20-79	2,099	2,229	10
1132	Germany	2009	The German Conscription Database	National	both	19		111,455		
1133	Germany	2009-2013	Join the Healthy Boat	Subnational	both	5-9	5-9	837	827	
1134	Germany	2010	The German Conscription Database	National	both	19		101,911		
1135	Germany	2011-2014	Heinz Nixdorf Recall Study	Subnational	both	56-85	56-85	1,493	1,560	11
1136	Germany	2012-2017	Gutenberg Health Study	Community	urban	40-80	40-80	6,356	6,062	
1137	Germany	2013-2014	KORA-FF4 (Cooperative Health Research in the Augsburg Region) - second follow up of KORA-S4	Community	both	38-88	38-88	1,099	1,176	
1138	Germany	2014-2016	Study of Health in Pomerania (SHIP-START-3) 16-year follow-up	Subnational	both	37-87	37-87	778	907	10
1139	Germany	2014-2017	German Health Interview and Examination Survey for Children and Adolescents (KiGGS) - Wave 2	National	both	5-17	5-17	1,541	1,584	
1140	Germany	2016-2017	Join the Healthy Boat	Subnational	both	5-6	5-6	124	129	
1141	Germany	2016-2019	Study of Health in Pomerania, second cohort (SHIP-TREND-1) 8-year follow-up	Subnational	both	28-90	28-90	1,200	1,273	10
1142	Germany	2017-2021	Gutenberg Health Study	Community	urban	45+	45+	4,209	3,927	
1143	Germany	2018-2019	Childhood Obesity Surveillance Initiative 5 - Bremen	Community	urban	7-9	7-9	1,110	1,111	
1144	Ghana	1993	DHS	National	both		20-49		1,650	
1145	Ghana	1997	Amoah et al., Ethn Dis 13(2 Suppl 2):S97-101, 2003	Community	both	25+	25+	1,857	2,875	
1146	Ghana	1998	DHS	National	both		20-49		1,979	
1147	Ghana	2001	Addo et al., Ethn Dis 16(4):894-99, 2006	Community	rural	15+	15+	89	206	
1148	Ghana	2001-2002	Cappuccio et al., Hypertension 43(5):1017-22, 2004	Community	both	35-84	35-84	194	338	
1149	Ghana	2002	Amoah et al., Ethn Dis 13(2 Suppl 2):S97-101, 2003	Community	both	25+	25+	1,859	2,947	
1150	Ghana	2003	Women's Health Study of Accra (WHSA-I)	Community	urban		18+		1,184	
1151	Ghana	2003	DHS	National	both		15-49		4,935	
1152	Ghana	2006	STEPS	Community	urban	25+	25+	841	1,635	
1153	Ghana	2007-2008	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	2,192	1,987	
1154	Ghana	2008	DHS	National	both		15-49		4,455	
1155	Ghana	2008-2010	Women's Health Study of Accra (WHSA-II)	Community	urban		18+		2,677	
1156	Ghana	2012-2014	Research on Obesity and Diabetes among African Migrants (RODAM), control group	Subnational	rural	25+	25+	431	676	
1157	Ghana	2012-2014	Research on Obesity and Diabetes among African Migrants (RODAM), control group	Subnational	urban	25+	25+	418	1,034	
1158	Ghana	2014	DHS	National	both	15-59	15-49	4,293	4,393	
1159	Ghana	2016-2017	Ghana Living Standards Survey	National	both	5+	5+	18,888	20,977	
1160	Ghana	2017	Ghana Micronutrient Survey	National	both		15-49		1,001	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1161	Ghana	2018	Intervention to reduce cardiovascular disease risk factors among secondary school students: Randomised controlled trial - Baseline	Subnational	both	14-19	14-19	411	437	
1162	Ghana	2018	Intervention to reduce cardiovascular disease risk factors among secondary school students: Randomised controlled trial - Post-intervention study	Subnational	both	14-19	14-19	199	218	
1163	Ghana	2022	Global School-based Student Health Survey (Sekondi-Takoradi)	Community	urban	13-16	13-16	1,429	1,700	
1164	Greece	1991	Seven Countries Study	Subnational	both	70-89		177		
1165	Greece	1997	The Didima Study	Community	rural	18+	18+	265	373	
1166	Greece	1997	Greece Physical Fitness Study	National	both	8	8	31,619	29,980	
1167	Greece	1997-2000	Dietary criteria of adolescents: The role of physical activity, anthropometrics, dietetic, psychological and other factors	Community	urban	12-18	12-18	494	505	
1168	Greece	1998	Greece Physical Fitness Study	National	both	8-10	8-10	33,370	32,057	
1169	Greece	1999	Greece Physical Fitness Study	National	both	8	8	30,090	28,570	
1170	Greece	2000	Greece Physical Fitness Study	National	both	8	8	32,466	30,109	
1171	Greece	2000-2001	Karalis et al., BMC Public Health7:351, 2007	Community	rural	5+	5+	73	87	
1172	Greece	2001	Greece Physical Fitness Study	National	both	8	8	31,504	29,956	
1173	Greece	2003	National Epidemiological Survey	National	both	13-19	13-19	6,675	7,778	
1174	Greece	2003	Greece Physical Fitness Study	National	both	8	8	33,575	31,495	
1175	Greece	2004	Greece Physical Fitness Study	National	both	8	8	33,239	31,989	
1176	Greece	2004-2005	Arsakeion School Study	Community	urban	6-18	6-18	358	420	
1177	Greece	2005	Daphne	Community	rural	17-18	17-18	41	57	
1178	Greece	2005	Greece Physical Fitness Study	National	both	9	9	33,206	31,950	
1179	Greece	2005-2006	Prevalence of hypertension and association of dietary mineral intake with blood pressure in healthy school children from Northern Greece aged 7-15years	Community	urban	7-15	7-15	308	297	
1180	Greece	2006	Greece Physical Fitness Study	National	both	9	9	33,545	31,944	
1181	Greece	2006	Paliouri Study	Community	rural	65-94	65-94	92	66	
1182	Greece	2006	Samos	Community	both	5-13	5-13	55	65	
1183	Greece	2006-2007	HELENA, Athens	Community	urban	12-17	12-17	158	162	
1184	Greece	2006-2007	HELENA, Heraklion	Community	urban	12-17	12-17	135	149	
1185	Greece	2007	Greece Physical Fitness Study	National	both	9	9	33,501	31,870	
1186	Greece	2007-2009	Healthy Growth Study	Subnational	both	9-13	9-13	1,317	1,300	
1187	Greece	2008	Greece Physical Fitness Study	National	rural	8	8	8,411	8,077	
1188	Greece	2008	Greece Physical Fitness Study	National	urban	8	8	28,189	27,247	
1189	Greece	2008-2009	Greek Childhood Obesity Study (GRECO)	National	both	10-12	10-12	2,033	2,160	
1190	Greece	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	National	both	10-12	10-12	493	577	
1191	Greece	2010-2011	Childhood Obesity Surveillance Initiative 2	National	both	7-9	7-9	2,581	2,688	
1192	Greece	2010-2012	ADONUT	National	both	12-19	12-19	18,668	18,675	
1193	Greece	2013	Telemedicine screening adolescent metabolic syndrome in Greek schools	Community	urban	12-17	12-17	669	905	
1194	Greece	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-10	7-10	3,965	3,908	
1195	Greece	2013-2014	Greek National Health and Nutrition Survey - HYDRIA	National	both	18+	18+	1,798	2,082	
1196	Greece	2013-2015	Hellenic National Nutrition and Health Survey (HNNHS)	Subnational	urban	5+	5+	476	757	
1197	Greece	2013-2016	National Survey of Morbidity and Risk Factors (EMENO)	National	both	18+	18+	2,039	2,726	
1198	Greece	2014-2015	Evaluation of a web-based dietary intervention among primary school children (NUTRI-WEB Children project)	Community	both	7-12	7-12	387	433	
1199	Greece	2014-2017	National Survey of Morbidity and Risk Factors, Children substudy (EMENO-Children)	National	both	5-18	5-18	187	164	
1200	Greece	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-9	7-9	1,907	1,872	
1201	Greece	2016	SKG-Elderly	Community	urban	60+	60+	51	63	
1202	Greece	2016-2017	Erasmus plus KA2, Healthyland	Community	rural	5	5	13	9	
1203	Greece	2017-2018	Erasmus plus KA2, Healthyland	Community	rural	5-6	5-6	33	12	
1204	Greece	2018	Greece Physical Fitness Study	National	both	5-19	5-19	165,298	156,790	
1205	Greece	2018	STEPS-Thessaloniki	Community	both	60+	60+	353	141	
1206	Greece	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-10	7-10	2,013	2,014	
1207	Greenland	2005-2010	Population Health Survey in Greenland	National	both	18+	18+	1,336	1,714	
1208	Greenland	2016-2019	Population Health Survey in Greenland	National	both	15+	15+	1,117	1,308	
1209	Grenada	2011	STEPS	National	both	25-64	25-64	438	637	
1210	Guatemala	1995	DHS	National	both		20-49		4,547	
1211	Guatemala	1998-1999	DHS	National	both		20-49		2,172	
1212	Guatemala	2001-2002	CAMDI	Community	urban	20+	20+	293	638	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1213	Guatemala	2002	Reproducive Health Survey	National	both	15-59	15-49	2,164	7,374	
1214	Guatemala	2003-2005	The Institute of Nutrition of Central America and Panama Nutrition Supplementation Trial Cohort	Community	both	25-41	25-41	268	288	
1215	Guatemala	2008-2009	Encuesta Nacional de Salud Materno Infantil	National	both	15-59	15-49	6,636	15,271	
1216	Guatemala	2013	Sistema de vigilancia Epidemiológica de Salud y Nutrición (SIVESNU)	National	both		15-49		1,545	
1217	Guatemala	2014-2015	DHS	National	both		15-49		24,195	
1218	Guatemala	2015	Sistema de vigilancia Epidemiológica de Salud y Nutrición (SIVESNU)	National	both		15-49		1,542	
1219	Guatemala	2015	STEPS	Subnational	urban	18+	18+	432	1,444	
1220	Guatemala	2015-2017	Nutrition on early childhood and metabolomic and cardiometabolic profile on adulthood (META)	Community	both	37-55	37-55	213	311	
1221	Guatemala	2016	Sistema de vigilancia Epidemiológica de Salud y Nutrición (SIVESNU)	National	both		15-49		1,560	
1222	Guatemala	2017-2018	Sistema de vigilancia Epidemiológica de Salud y Nutrición (SIVESNU)	National	both		15-49		1,557	
1223	Guatemala	2018	Assessing the food environment inside and around rural public schools in three villages of El Progreso, Guatemala. A pilot study.	Community	rural	6-15	6-15	202	192	
1224	Guatemala	2018-2019	Population-Based Survey of Chronic Kidney Disease in Guatemala	Community	rural	18+	18+	265	509	
1225	Guatemala	2018-2019	Sistema de vigilancia Epidemiológica de Salud y Nutrición (SIVESNU)	National	both		15-49		1,588	
1226	Guatemala	2019	Evaluación del estado nutricional de escolares de nivel preprimario y primario en el marco de la ley de alimentación escolar	National	both	5-14	5-14	9,645	8,979	
1227	Guatemala	2021	Evaluación del estado nutricional de escolares de nivel preprimario y primario en el marco de la ley de alimentación escolar	National	both	5-14	5-14	11,919	11,376	
1228	Guinea	1999	DHS	National	both		20-49		2,984	
1229	Guinea	2005	DHS	National	both		15-49		3,574	
1230	Guinea	2009	STEPS	Subnational	both	15-64	15-64	1,124	1,232	
1231	Guinea	2012	DHS	National	both		15-49		4,229	
1232	Guinea	2018	DHS	National	both		15-49		4,905	
1233	Guinea Bissau	2010	Multiple Indicator Cluster Survey	National	both		15-49		7,676	
1234	Guyana	2009	DHS	National	both	15-49	15-49	3,412	4,575	
1235	Guyana	2010	Global School-based Student Health Survey	National	both	13-17	13-17	987	1,261	
1236	Guyana	2016	STEPS	National	both	18-69	18-69	1,060	1,571	
1237	Haiti	1994-1995	DHS	National	both		20-49		1,788	
1238	Haiti	2000	DHS	National	both		15-49		9,163	
1239	Haiti	2005-2006	DHS	National	both		15-49		5,011	
1240	Haiti	2012	DHS	National	both		15-49		8,993	
1241	Haiti	2015-2016	Haiti Health Study (Carrefour)	Community	urban	25-65	25-65	557	835	
1242	Haiti	2015-2016	Haiti Health Study (Thomonde)	Community	rural	25-65	25-65	257	420	
1243	Haiti	2016-2017	DHS	National	both		15-49		9,049	
1244	Honduras	1996	Honduras National Micronutrient Survey	National	both		20-40		722	
1245	Honduras	2003-2004	CAMDI	Community	urban	20+	20+	428	764	
1246	Honduras	2005-2006	DHS	National	both		15-49		18,125	
1247	Honduras	2011-2012	DHS	National	both		15-49		21,097	
1248	Hungary	1982-1983	MONICA, Pecs	Community	urban	25-64	25-64	823	861	
1249	Hungary	1982-1984	MONICA, Budapest	Community	urban	25-64	25-64	774	737	
1250	Hungary	1985	INTERSALT	Community	rural	20-59	20-59	100	100	
1251	Hungary	1985-1988	First Hungarian Representative Nutrition Survey	National	both	15+	15+	3,079	8,916	
1252	Hungary	1987-1988	MONICA, Budapest	Community	urban	25-64	25-64	1,413	1,594	
1253	Hungary	1987-1988	MONICA, Pecs	Community	urban	35-64	35-64	1,573	1,510	
1254	Hungary	2003	The European Male Ageing Study	Community	both	40+		428		
1255	Hungary	2006-2007	HELENA	Community	urban	12-17	12-17	197	197	
1256	Hungary	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	1,128	1,169	
1257	Hungary	2008	The European Male Ageing Study	Community	both	40+		349		
1258	Hungary	2009	Hungarian diet and nutritional status survey	National	both	18+	18+	463	666	
1259	Hungary	2010	Childhood Obesity Surveillance Initiative 2	National	both	7	7	553	682	
1260	Hungary	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	National	both	11-13	11-13	452	557	
1261	Hungary	2014	Hungarian diet and nutritional status survey	National	both	18+	18+	369	478	
1262	Hungary	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-8	6-8	2,750	2,572	
1263	Hungary	2016	Feel4Diabetes	Community	both	6-10	6-10	1,447	1,522	
1264	Hungary	2016	Hungarian National Student Fitness Test (NETFIT) - Primary	National	both	10-15	10-15	164,897	158,087	
1265	Hungary	2016	Hungarian National Student Fitness Test (NETFIT) - Secondary	National	both	14-19	14-19	134,129	132,326	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1266	Hungary	2017	Hungarian National Student Fitness Test (NETFIT) - Primary	National	both	10-15	10-15	170,978	163,599	
1267	Hungary	2017	Hungarian National Student Fitness Test (NETFIT) - Secondary	National	both	14-19	14-19	136,278	134,646	
1268	Hungary	2018	Hungarian National Student Fitness Test (NETFIT) - Primary	National	both	10-15	10-15	169,915	162,664	
1269	Hungary	2018	Hungarian National Student Fitness Test (NETFIT) - Secondary	National	both	14-19	14-19	128,717	127,821	
1270	Hungary	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-8	6-8	3,173	2,996	
1271	Hungary	2019	Hungarian National Student Fitness Test (NETFIT) - Primary	National	both	10-15	10-15	171,701	165,199	
1272	Hungary	2019	Hungarian National Student Fitness Test (NETFIT) - Secondary	National	both	14-19	14-19	132,647	130,182	
1273	Hungary	2019	Hungarian diet and nutritional status survey	National	both	18+	18+	419	493	
1274	Iceland	1979-1981	The Reykjavik Study (Men)	Subnational	urban	45-74		3,235		
1275	Iceland	1981-1984	The Reykjavik Study (Women)	Subnational	urban		46-75		3,567	
1276	Iceland	1983	MONICA, Arnes County	Community	rural	25-64	25-64	388	450	
1277	Iceland	1983	MONICA, Reykjavik	Subnational	urban	25-64	25-64	434	461	
1278	Iceland	1983-1985	The Reykjavik Study for the young	Subnational	urban	29-45	29-45	823	895	
1279	Iceland	1985-1986	INTERSALT	Community	urban	20-59	20-59	100	100	
1280	Iceland	1985-1987	The Reykjavik Study (Men)	Subnational	urban	51-79		2,584		
1281	Iceland	1987-1991	The Reykjavik Study (Women)	Subnational	urban		52-82		2,993	
1282	Iceland	1988-1989	MONICA, Arnes County	Community	rural	25-64	25-64	385	435	
1283	Iceland	1988-1989	MONICA, Reykjavik	Subnational	urban	25-64	25-64	414	443	
1284	Iceland	1991-1994	The Reykjavik Study (Men)	Subnational	urban	70-86		797		
1285	Iceland	1993-1994	MONICA, Arnes County	Community	rural	25-64	25-64	422	484	
1286	Iceland	1993-1994	MONICA, Reykjavik	Subnational	urban	25-64	25-64	441	448	
1287	Iceland	1994-1996	The Reykjavik Study (Women)	Subnational	urban		69-88		1,101	
1288	Iceland	2001-2003	The Reykjavik Study for the young	Subnational	urban	47-62	47-62	626	705	
1289	Iceland	2002-2006	AGES	Subnational	urban	66-96	66-96	2,414	3,282	
1290	Iceland	2005-2011	Risk Evaluation For INfarct Estimates (REFINE)	Subnational	urban	20-73	20-73	3,402	3,525	
1291	Iceland	2007-2011	AGESII	Subnational	urban	71-98	71-98	1,374	1,929	
1292	Iceland	2010-2012	Risk Evaluation For INfarct Estimates (REFINE) follow-up visit (REFINELO)	Subnational	urban	26-74	26-74	653	667	
1293	Iceland	2012-2013	Risk Evaluation For INfarct Estimates (REFINE) follow-up visit (REFLOCT)	Subnational	urban	55-73	55-73	516	561	
1294	India	1975-1979	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	52,704	37,750	1
1295	India	1982-1983	Bengali School Children	Community	urban	7-21		808		
1296	India	1986	INTERSALT	Community	urban	20-59	20-59	100	99	
1297	India	1988-1989	Ramachandran et al., Diabetes Res Clin Pract 58(1):55-60, 2002	Community	urban	20-74	20-74	455	437	
1298	India	1990	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	7,607	9,649	
1299	India	1991-1994	Prabhakaran et al., Chronic Illn 3(1):8-19, 2007	Community	rural	35-64	35-64	542	630	
1300	India	1991-1994	Prabhakaran et al., Chronic Illn 3(1):8-19, 2007	Community	urban	35-64	35-64	1,388	1,455	
1301	India	1991-1995	Reddy et al., Obes Rev 3(3):197-202, 2002	Community	rural	35-64	35-64	1,070	1,332	
1302	India	1991-1995	Reddy et al., Obes Rev 3(3):197-202, 2002	Community	urban	35-64	35-64	1,456	1,594	
1303	India	1991-1997	Mumbai Cohort Study	Community	urban	35+	35+	88,658	59,515	
1304	India	1992-1994	Jaipur Heart Watch 1	Community	urban	20-80	20-80	1,385	782	
1305	India	1992-1994	Jaipur Heart Watch 1	Community	rural	20-80	20-80	1,946	1,147	
1306	India	1993-1994	Khongsdier, Eur J Clin Nutr 56(6):484-89, 2002	Community	both	18-59		575		
1307	India	1995	Shobana et al., Diabetes Res Clin Pract 42(3):18186, 1998	Community	urban	20-74	20-74	1,061	1,093	
1308	India	1995-1996	Kusuma et al., Ann Hum Biol 29(5):502-12, 2002	Community	both	15-84	15-84	747	737	
1309	India	1995-1996	Epidemiology of blood pressure across cross-cultural populations of Visakhapatnam district, Andhra Pradesh, India	Community	rural	19-76	19-76	209	228	
1310	India	1995-1997	Aravind Comprehensive Eye Survey	Community	rural	40+	40+	2,308	2,830	
1311	India	1995-1997	Kashmiri Adults	Subnational	both	40+	40+	2,496	2,587	
1312	India	1996-1997	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	22,155	27,802	
1313	India	1996-1999	Chennai Urban Population Study	Community	urban	20+	20+	557	705	
1314	India	1997	Ramachandran et al., Diabetes Res Clin Pract 44(3):207-13, 1999	Community	rural	20-74	20-74	738	879	
1315	India	1998-1999	DHS	National	both		20-49		72,536	
1316	India	1998-2001	Chennai Prospective Study	Community	urban	35+	35+	264,848	235,968	
1317	India	1998-2002	Vellore Birth Cohort	Subnational	both	25-31	25-31	1,160	1,050	
1318	India	1999-2001	Jaipur Heart Watch 2	Community	urban	20-75	20-75	534	569	
1319	India	1999-2002	Bengali School Children	Community	urban	7-21		1,152		
1320	India	1999-2002	New Delhi Birth Cohort	Community	urban	26-33	26-33	886	638	
1321	India	2000	Ramachandran et al., Diabet Med 20(3):220-24, 2003	Subnational	urban	20-75	20-75	4,640	5,257	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1322	India	2000-2001	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	18,046	24,844	
1323	India	2001-2004	Chennai Urban Rural Epidemiology Study	Community	urban	20+	20+	1,094	1,254	
1324	India	2002-2003	Blood pressure epidemiology in tribal, rural and urban communities of Orissa with special reference to physical and social parameters	Community	rural	18-80	18-80	200	186	
1325	India	2002-2005	The Chennai Glaucoma Study	Subnational	urban	40+	40+	1,577	1,972	
1326	India	2003-2004	Jaipur Heart Watch 3	Community	urban	20-75	20-75	211	228	
1327	India	2003-2004	ICMR RF RHD Registry, Jai Vigyan Mission Mode, Kochi	Subnational	both	5-16	5-16	11,327	13,515	
1328	India	2003-2005	STEPS, Ballabgarh	Subnational	rural	15-69	15-69	1,360	1,468	
1329	India	2003-2005	STEPS, Ballabgarh	Subnational	urban	15-69	15-69	1,263	1,294	
1330	India	2003-2005	STEPS, Chennai	Subnational	rural	15-69	15-69	1,372	1,338	
1331	India	2003-2005	STEPS, Chennai	Subnational	urban	15-69	15-69	1,282	1,282	
1332	India	2003-2005	STEPS, Delhi	Subnational	urban	15-69	15-69	1,250	1,265	
1333	India	2003-2005	STEPS, Dibrugarh	Subnational	rural	15-69	15-69	1,460	1,410	
1334	India	2003-2005	STEPS, Dibrugarh	Subnational	urban	15-69	15-69	1,243	1,254	
1335	India	2003-2005	STEPS, Nagpur	Subnational	rural	15-69	15-69	1,252	1,256	
1336	India	2003-2005	STEPS, Nagpur	Subnational	urban	15-69	15-69	1,252	1,261	
1337	India	2003-2005	STEPS, Trivandrum	Subnational	rural	15-69	15-69	1,199	1,324	
1338	India	2003-2005	STEPS, Trivandrum	Subnational	urban	15-69	15-69	1,250	1,252	
1339	India	2004-2005	India Human Development Survey	National	both	8-11	8-11	6,959	6,406	12
1340	India	2005-2006	DHS	National	both	15-54	15-49	71,463	115,828	
1341	India	2005-2006	Risk factor profile for chronic non-communicable diseases: Results of a community-based study in Kerala, India	Community	both	15-64	15-64	2,795	2,926	
1342	India	2005-2006	ICMR RF RHD Registry, Jai Vigyan Mission Mode, Kochi	Subnational	both	5-16	5-16	9,754	10,509	
1343	India	2005-2006	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	20,448	25,272	
1344	India	2005-2007	Prevalence of cardiovascular risk factors in rural Tamil Nadu	Community	rural	25-64	25-64	4,927	5,573	
1345	India	2005-2011	Bengali School Children	Community	urban	7-21	7-21	847	2,180	
1346	India	2006	Ramachandran et al., Diabetes Care 31(5):893-98, 2008	Community	both	20+	20+	3,321	3,745	
1347	India	2006-2007	Kusuma et al., Asia Pac J Public Health 21(4):497-507, 2009	Community	urban	15-74	15-74	182	192	
1348	India	2006-2007	Jaipur Heart Watch 4	Community	urban	20-75	20-75	533	558	
1349	India	2006-2008	Central India Eye and Medical Study	Community	rural	30+	30+	2,190	2,518	
1350	India	2006-2008	Kashmiri Young Adults	Subnational	both	20-40	20-40	2,119	905	
1351	India	2006-2009	New Delhi Birth Cohort	Community	urban	33-38	33-38	650	445	
1352	India	2007-2008	Urban population in Hyderabad	Community	urban	20-60	20-60	1,519	1,560	
1353	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Andhra	Subnational	both	15-64	15-64	2,674	3,390	
1354	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Kerala	Subnational	both	15-64	15-64	1,672	2,403	
1355	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Madhya	Subnational	both	15-64	15-64	2,797	2,862	
1356	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Maharashtra	Subnational	both	15-64	15-64	3,025	2,921	
1357	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Mizoram	Subnational	both	15-64	15-64	2,232	2,108	
1358	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Tamil	Subnational	both	15-64	15-64	2,039	2,928	
1359	India	2007-2008	Integrated Disease Surveillance Project Non-communicable Disease Risk Factors Survey, Uttrakhand	Subnational	both	15-64	15-64	2,094	3,110	
1360	India	2007-2008	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	3,213	3,147	
1361	India	2007-2009	Prevalence of NCD risk factor in people above 15 year in rural area Nagpur using WHO STEP approach	Community	rural	15+	15+	1,984	1,828	
1362	India	2008-2010	ICMR-India Diabetes (INDIAB) Study, Phase I	National	both	20+	20+	6,953	6,850	
1363	India	2009-2010	Jaipur Heart Watch 5	Community	urban	20-75	20-75	425	275	
1364	India	2009-2010	Baseline Survey for the assessment of prevalence of risk factors of NCDs in Gandhinagar District	Community	rural	15-64	15-64	875	774	
1365	India	2009-2010	Baseline Survey for the assessment of prevalence of risk factors of NCDs in Gandhinagar District	Community	urban	15-64	15-64	895	890	
1366	India	2010	Kerala 2010 follow-up	Community	rural	21-70	21-70	214	237	
1367	India	2010-2011	Longitudinal Aging Study in India	Subnational	both	45+	45+	630	678	
1368	India	2010-2012	Centre for cArdiometabolic Risk Reduction in South-Asia (CARRS) - Surveillance Study	Community	urban	20+	20+	4,320	5,138	13
1369	India	2011-2012	Body Mass Index, Social Conditions and Environmental Effect on High Blood Pressure among the Adolescent School Children	National	both	12-16	12-16	1,096	1,161	
1370	India	2011-2012	India Human Development Survey	National	both	8-11	8-11	6,285	5,758	14
1371	India	2011-2012	National Nutrition Monitoring Bureau rural survey	National	rural	5+	5+	34,447	43,063	
1372	India	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	292	328	
1373	India	2012-2013	Health Survey in Anand School Children	Community	both	5-13	5-13	1,628	959	
1374	India	2012-2013	District Level Household and Facility Survey (DLHS) 4	National	both	5+	5+	538,808	602,926	
1375	India	2012-2013	ICMR-India Diabetes (INDIAB) Study, Phase II	Subnational	both	20+	20+	8,165	10,738	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1376	India	2012-2013	Processed and non-processed foods	National	both	5+	5+	7,161	7,800	
1377	India	2012-2014	Jaipur Heart Watch 6	Community	urban	20-75	20-75	1,013	722	
1378	India	2012-2015	ICMR-India Diabetes (INDIAB) Study, North East Phase	Subnational	both	20+	20+	14,071	16,456	
1379	India	2013-2014	Vellore Birth Cohort	Subnational	both	39-44	39-44	580	499	
1380	India	2014	Annual Health Survey: Clinical, Anthropometric and Bio-chemical	National	both	5+	5+	658,441	680,611	
1381	India	2014-2015	Control of Hypertension In Rural India (CHIRI) - Rishi Valley	Community	rural	18+	18+	2,591	3,518	
1382	India	2014-2015	Control of Hypertension In Rural India (CHIRI) - Trivandrum	Community	rural	18+	18+	1,848	1,898	
1383	India	2014-2015	Control of Hypertension In Rural India (CHIRI) - West Godavari	Community	rural	18+	18+	2,230	2,233	
1384	India	2015-2016	DHS	National	both	15-54	15-49	108,751	655,681	
1385	India	2015-2016	Diet and nutritional status of urban population and prevalence of hypertension	National	urban	5+	5+	68,893	81,999	
1386	India	2016-2017	Secular TRends in DiabEtes in India (STRiDE-I) -Change in Prevalence in Ten Years among Urban and Rural Populations in Tamil Nadu	Community	both	20+	20+	4,527	5,321	
1387	India	2016-2019	Vellore Birth Cohort	Subnational	both	43-48	43-48	843	758	
1388	India	2017-2018	ICMR-India Diabetes (INDIAB) Study, Phase III	Subnational	both	20+	20+	7,146	7,550	
1389	India	2017-2018	National Noncommunicable Disease Monitoring Survey (NNMS)	National	both	15-69	15-69	6,223	5,657	
1390	India	2017-2019	Longitudinal Aging Study in India	National	both	45+	45+	27,341	31,725	
1391	India	2018-2019	ICMR-India Diabetes (INDIAB) Study, Phase IV	Subnational	both	20+	20+	8,850	10,154	
1392	India	2019-2020	Prevalence, awareness, treatment and control of hypertension among adults aged 30 years and above in Barmer district, Rajasthan, India	Community	rural	30+	30+	153	146	
1393	India	2019-2020	ICMR-India Diabetes (INDIAB) Study, Phase V	Subnational	both	20+	20+	6,597	6,656	
1394	India	2019-2021	DHS	National	both	15-54	15-49	95,959	672,286	
1395	India	2021	STEPS, Mumbai	Community	urban	18-69	18-69	2,551	2,530	
1396	India	2022	Global School-based Student Health Survey (Jaipur)	Community	urban	12-15	12-15	1,524	1,355	
1397	Indonesia	1983-1987	Strickland et al., Eur J Clin Nutr 48 Suppl 3: S98-108; discussion S-9, 1994	Community	both	18+	18+	447	564	
1398	Indonesia	1993-1994	Indonesian Family Life Surveys	National	both	5+	5+	8,211	9,480	
1399	Indonesia	1997-1998	Indonesian Family Life Surveys	National	both	5+	5+	12,154	13,897	
1400	Indonesia	2000-2001	Indonesian Family Life Surveys	National	both	5+	5+	15,442	16,225	
1401	Indonesia	2001	Ng et al., Bull World Health Organ 84(4):305-13, 2006	Community	both	15-74	15-74	1,261	1,234	
1402	Indonesia	2001	STEPS/SURKESNAS	National	both	15-64	15-64	4,100	4,775	
1403	Indonesia	2003	A genetic-ecological study of the risk factors for lifestyle-related diseases in Oceanian populations, Study A	Community	rural	18-79	18-79	99	103	
1404	Indonesia	2003	A genetic-ecological study of the risk factors for lifestyle-related diseases in Oceanian populations, Study B	Community	rural	18-79	18-79	100	140	
1405	Indonesia	2006	Jakarta Non Communicable Disease Risk Factor Surveillance	Community	urban	25-64	25-64	641	950	
1406	Indonesia	2007-2008	Indonesian Family Life Surveys	National	both	5+	5+	17,869	19,157	
1407	Indonesia	2011	SEANUTS	National	both	5-12	5-12	1,363	1,380	
1408	Indonesia	2013	Population Health Basic Health Research 2013 (Riskesdas 2013)	National	both	5+	5+	454,771	474,011	
1409	Indonesia	2014-2015	Indonesian Family Life Surveys	National	both	5+	5+	20,328	21,540	
1410	Indonesia	2015	Global School-based Student Health Survey	National	both	13-17	13-17	3,845	4,688	
1411	Indonesia	2018	Indonesian Basic Health Survey 2018	National	both	15+	15+	8,677	14,460	
1412	Iran	1990-1991	National Health Survey I	National	both	5-18	5-18	8,883	9,038	
1413	Iran	1997-1998	Khadivzadeh, East Mediterr Health J 8(4-5):612-18, 2002	Community	urban		15-49		1,513	
1414	Iran	1999-2000	National Health Survey II	National	both	5+	5+	23,727	26,636	
1415	Iran	1999-2001	Tehran Lipid and Glucose Study	Community	urban	5+	5+	6,339	7,988	
1416	Iran	2000	ASADABADI Study	Community	urban	18+	18+	131	168	
1417	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Arak	Community	rural	19+	19+	1,023	1,080	
1418	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Arak	Community	urban	19+	19+	2,084	2,124	
1419	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Isfahan	Community	rural	19+	19+	232	233	
1420	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Isfahan	Community	urban	19+	19+	1,760	1,912	
1421	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Najaf Abad	Community	rural	19+	19+	405	416	
1422	Iran	2001	Isfahan Healthy Heart Programme (IHHP), Najaf Abad	Community	urban	19+	19+	573	571	
1423	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Arak	Community	rural	11-18	11-18	144	192	
1424	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Arak	Community	urban	11-18	11-18	323	303	
1425	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Isfahan	Community	rural	11-18	11-18	89	118	
1426	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Isfahan	Community	urban	11-18	11-18	242	225	
1427	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Najaf Abad	Community	rural	11-18	11-18	61	74	
1428	Iran	2001	Isfahan Healthy Heart Programme (IHHP) Students, Najaf Abad	Community	urban	11-18	11-18	62	72	
1429	Iran	2002-2005	Tehran Lipid and Glucose Study	Community	urban	5+	5+	2,736	3,388	
1430	Iran	2003-2004	Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease (CASPIAN)	National	both	6-18	6-18	10,791	10,170	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1431	Iran	2003-2004	The Persian Gulf Healthy Heart Study	Subnational	urban	25-75	25-75	1,736	1,973	
1432	Iran	2004	Hajian-Tilaki et al., Obes Rev 8(1):3-10, 2007	Community	urban	20-70	20-70	1,800	1,800	
1433	Iran	2004-2008	Golestan Cohort Study Main Phase	Subnational	rural	40-75	40-75	17,298	22,708	
1434	Iran	2004-2008	Golestan Cohort Study Main Phase	Community	urban	40-75	40-75	3,931	6,100	
1435	Iran	2005	Dastgiri et al., Public Health Nutr 9(8): 996-1000, 2006	Subnational	urban	18-70	18-70	116	151	
1436	Iran	2005	STEPS	National	both	15-64	15-64	40,722	39,748	
1437	Iran	2005-2006	Rashidy-Pour, Obes Rev (1):2-6, 2009	Subnational	both	30-70	30-70	1,695	2,104	
1438	Iran	2005-2008	Tehran Lipid and Glucose Study	Community	urban	5+	5+	3,104	3,808	
1439	Iran	2006	STEPS	National	both	16-65	16-65	14,885	14,617	
1440	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Arak	Community	rural	19+	19+	1,028	1,024	
1441	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Arak	Community	urban	19+	19+	1,424	1,359	
1442	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Isfahan	Community	rural	19+	19+	155	151	
1443	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Isfahan	Community	urban	19+	19+	1,309	1,301	
1444	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Najaf Abad	Community	rural	19+	19+	253	253	
1445	Iran	2007	Isfahan Healthy Heart Programme (IHHP), Najaf Abad	Community	urban	19+	19+	494	542	
1446	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Arak	Community	rural	11-18	11-18	177	164	
1447	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Arak	Community	urban	11-18	11-18	327	341	
1448	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Isfahan	Community	rural	11-18	11-18	16	19	
1449	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Isfahan	Community	urban	11-18	11-18	396	335	
1450	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Najaf Abad	Community	rural	11-18	11-18	38	39	
1451	Iran	2007	Isfahan Healthy Heart Programme (IHHP) Students, Najaf Abad	Community	urban	11-18	11-18	44	67	
1452	Iran	2007	STEPS - National	National	both	15-64	15-64	2,372	2,312	
1453	Iran	2007	STEPS - Provincial	National	both	15-64	15-64	14,867	14,550	
1454	Iran	2008	STEPS	National	both	15-64	15-64	14,757	14,353	
1455	Iran	2008-2011	Tehran Lipid and Glucose Study	Community	urban	20+	20+	4,622	5,884	
1456	Iran	2009	STEPS	National	both	15-64	15-64	14,834	14,495	
1457	Iran	2009-2010	Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease (CASPIAN)	National	both	10-18	10-18	2,799	2,814	
1458	Iran	2009-2010	The Persian Gulf Healthy Heart Study	Subnational	urban	31-79	31-79	834	1,016	
1459	Iran	2010-2011	The Yazd Eye Study	Subnational	both	40-80	40-80	876	1,012	
1460	Iran	2010-2012	Golestan Cohort Study Second Phase	Subnational	rural	43-82	43-82	4,325	4,919	
1461	Iran	2010-2012	Golestan Cohort Study Second Phase	Community	urban	43-82	43-82	1,091	1,061	
1462	Iran	2011	STEPS	National	both	6-69	6-69	4,903	6,548	
1463	Iran	2011-2012	Amol county study	Community	rural	10+	10+	1,862	1,098	
1464	Iran	2011-2012	Amol county study	Community	urban	10+	10+	1,624	1,548	
1465	Iran	2011-2012	Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease (CASPIAN)	National	both	6-18	6-18	6,649	6,443	
1466	Iran	2012	National Integrated Micronutrient Survey (NIMS) 2012	National	both	6-60	6-60	10,526	11,087	
1467	Iran	2012-2013	Tehran City	Community	urban	10-90	10-90	419	537	
1468	Iran	2012-2013	Zahedan City	Community	urban	10-90	10-90	1,377	1,205	
1469	Iran	2012-2014	Pars Cohort Study	Community	rural	40-90	40-90	4,272	4,987	
1470	Iran	2013-2014	Bushehr Elderly Health Program (BEH)	Community	urban	60+	60+	1,437	1,514	
1471	Iran	2013-2014	Gilan Eye Study	Subnational	both	50+	50+	1,059	1,439	
1472	Iran	2013-2014	Isfahan Salt Study (ISS)	Community	urban	6-18	6-18	400	383	
1473	Iran	2014-2015	Childhood and Adolescence Surveillance and Prevention of Adult Noncommunicable Disease (CASPIAN)	National	both	7-18	7-18	7,164	6,966	
1474	Iran	2014-2016	The PERSIAN Fasa Cohort Study	Community	rural	35-70	35-70	3,742	4,578	
1475	Iran	2014-2016	The PERSIAN Fasa Cohort Study	Community	urban	35-70	35-70	721	806	
1476	Iran	2014-2016	The PERSIAN Guilan Cohort Study	Community	rural	35-70	35-70	2,645	3,261	
1477	Iran	2014-2016	The PERSIAN Guilan Cohort Study	Community	urban	35-70	35-70	2,236	2,349	
1478	Iran	2014-2016	The PERSIAN Kermanshah Cohort Study	Community	rural	35-70	35-70	1,806	2,194	
1479	Iran	2014-2016	The PERSIAN Kermanshah Cohort Study	Community	urban	35-70	35-70	2,940	2,973	
1480	Iran	2014-2016	The PERSIAN Kharameh Cohort Study	Community	rural	35-70	35-70	2,913	3,860	
1481	Iran	2014-2016	The PERSIAN Kharameh Cohort Study	Community	urban	35-70	35-70	1,794	2,000	
1482	Iran	2014-2016	The PERSIAN Tabriz Cohort Study	Community	rural	35-70	35-70	1,974	2,548	
1483	Iran	2014-2016	The PERSIAN Tabriz Cohort Study	Community	urban	35-70	35-70	4,670	5,592	
1484	Iran	2015	Iranian School Measurement Database	National	both	6-18	6-18	911,584	912,687	
1485	Iran	2015-2017	The PERSIAN Mazandaran Cohort Study	Community	rural	35-70	35-70	936	1,608	
1486	Iran	2015-2017	The PERSIAN Mazandaran Cohort Study	Community	urban	35-70	35-70	3,179	4,421	
1487	Iran	2015-2017	The PERSIAN Rafsanjan Cohort Study	Community	rural	35-70	35-70	1,560	1,030	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1488	Iran	2015-2017	The PERSIAN Rafsanjan Cohort Study	Community	urban	35-70	35-70	3,591	4,270	
1489	Iran	2015-2017	The PERSIAN Yazd Cohort Study	Community	urban	30-70	30-70	4,947	4,818	
1490	Iran	2015-2018	The PERSIAN Zahedan Cohort Study	Community	urban	35-70	35-70	3,890	6,013	
1491	Iran	2016	STEPS	National	both	18+	18+	14,080	15,036	
1492	Iran	2016-2017	Iranian Children and Adolescents Psychiatric Disorders (IRCAP) Survey	National	both	6-18	6-18	13,049	13,476	
1493	Iran	2016-2018	The PERSIAN Ahvaz Cohort Study	Community	rural	35-70	35-70	1,475	2,282	
1494	Iran	2016-2018	The PERSIAN Ahvaz Cohort Study	Community	urban	35-70	35-70	2,507	3,551	
1495	Iran	2016-2018	The PERSIAN BandarKong Cohort Study	Community	rural	35-70	35-70	232	366	
1496	Iran	2016-2018	The PERSIAN BandarKong Cohort Study	Community	urban	35-70	35-70	1,470	1,893	
1497	Iran	2016-2018	The PERSIAN Urmia Cohort Study	Community	rural	35-70	35-70	1,750	2,323	
1498	Iran	2016-2018	The PERSIAN Urmia Cohort Study	Community	urban	35-70	35-70	411	473	
1499	Iran	2016-2019	The Khuzestan comprehensive health study: A platform for NCDs, blood borne and mental diseases research	Subnational	both	20-65	20-65	10,846	19,427	
1500	Iran	2016-2019	The PERSIAN Shahrekord Cohort Study	Community	rural	35-70	35-70	1,136	1,686	
1501	Iran	2016-2019	The PERSIAN Shahrekord Cohort Study	Community	urban	35-70	35-70	3,450	3,474	
1502	Iran	2016-2020	The PERSIAN Ardabil Cohort Study	Community	urban	35-70	35-70	9,501	11,200	
1503	Iran	2017-2018	The PERSIAN Kavar Cohort Study	Community	urban	35-70	35-70	2,417	2,539	
1504	Iran	2017-2018	PERSIAN Elderly Component-Iranian Longitudinal Study on Ageing	Subnational	urban	50-95	50-95	3,357	3,839	
1505	Iran	2017-2019	The PERSIAN Dena (Yasouj) Cohort Study	Community	rural	35-70	35-70	524	809	
1506	Iran	2017-2019	The PERSIAN Dena (Yasouj) Cohort Study	Community	urban	35-70	35-70	918	1,083	
1507	Iran	2017-2019	The PERSIAN Sabzevar Cohort Study	Community	urban	35-70	35-70	1,874	2,320	
1508	Iran	2018-2019	Prevalence of risk factors for cardiovascular disease among a rural population in eastern Iran	Community	rural	18-69	18-69	148	146	
1509	Iran	2018-2019	The PERSIAN Dehgolan (Kordistan) Cohort Study	Community	urban	35-70	35-70	1,741	2,197	
1510	Iran	2020-2021	STEPS	National	both	18+	18+	12,402	15,333	
1511	Iraq	2006	STEPS	National	both	25-64	25-64	2,251	2,252	
1512	Iraq	2013-2014	Qadir et al., Malays J Med Health Sci, 10(2):27-38, 2014	Community	urban	13-17	13-17	832	748	
1513	Iraq	2015	STEPS	National	both	18+	18+	1,589	2,312	
1514	Ireland	1997-1999	North/South Ireland Food Consumption Survey	National	both	18-64	18-64	613	698	
1515	Ireland	1998	Survey of Lifestyle, Attitudes and Nutritional in Ireland 1998	National	both	18+	18+	123	296	
1516	Ireland	2002	Survey of Lifestyle, Attitudes and Nutritional in Ireland 2002	National	both	18+	18+	164	216	
1517	Ireland	2003-2004	National Children's Food Survey	National	both	5-12	5-12	293	301	
1518	Ireland	2005-2006	National Teens Food Survey	National	both	13-17	13-17	224	216	
1519	Ireland	2006-2007	Survey of Lifestyle, Attitudes and Nutritional in Ireland 2006-2007	National	both	18+	18+	945	1,225	
1520	Ireland	2007-2008	Growing Up in Ireland - Child Cohort	National	both	9	9	3,899	4,107	15
1521	Ireland	2008	Childhood Obesity Surveillance Initiative 1	National	both	7	7	1,098	1,285	
1522	Ireland	2008-2010	National Adult Nutrition Survey	National	both	18+	18+	658	696	
1523	Ireland	2009-2011	The Irish Longitudinal Study on Ageing	National	both	50+	50+	2,693	3,170	
1524	Ireland	2010	Murtagh et al., Pediatr Exerc Sci 25(2):300-7, 2013	Community	rural	7-12	7-12	20	11	
1525	Ireland	2010	Murtagh et al., Pediatr Exerc Sci 25(2):300-7, 2013	Community	rural	7-12	7-12	19	19	
1526	Ireland	2010	Murtagh et al., Pediatr Exerc Sci 25(2):300-7, 2013	Community	rural	7-12	7-12	14	12	
1527	Ireland	2010	Murtagh et al., Pediatr Exerc Sci 25(2):300-7, 2013	Community	rural	7-12	7-12	16	21	
1528	Ireland	2010	Childhood Obesity Surveillance Initiative 2	National	both	6-9	6-9	1,452	1,533	
1529	Ireland	2011-2012	Growing Up in Ireland - Child Cohort	National	both	13	13	3,537	3,661	15
1530	Ireland	2012-2013	Childhood Obesity Surveillance Initiative 3	National	both	6-9	6-9	1,087	1,054	
1531	Ireland	2013	Growing Up in Ireland - Infant Cohort	National	both	5	5	4,498	4,382	15
1532	Ireland	2013-2016	Project Spraoi	Community	both	5-11	5-11	474	429	
1533	Ireland	2015	Active Classrooms Study	Community	both	8-11	8-11	124	120	
1534	Ireland	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-10	6-10	1,441	1,679	
1535	Ireland	2015-2016	Growing Up in Ireland - Child Cohort	National	both	18	18	551	583	15
1536	Ireland	2016	Growing Up in Ireland - Infant Cohort	National	both	7-8	7-8	2,016	1,921	15
1537	Ireland	2017-2018	Growing Up in Ireland - Infant Cohort	National	both	9	9	3,943	3,892	15
1538	Ireland	2017-2018	National Children's Food Survey II	National	both	5-12	5-12	298	298	
1539	Ireland	2018-2019	Childhood Obesity Surveillance Initiative 5	National	both	6-12	6-12	2,793	2,768	
1540	Ireland	2018-2019	Growing Up in Ireland - Child Cohort	National	both	20	20	2,202	2,352	15
1541	Ireland	2019-2020	National Teens' Food Survey II	National	both	13-18	13-18	211	214	
1542	Israel	1975-1979	Israeli Conscripts	National	both	16-19	16-19	125,532	73,424	1
1543	Israel	1980-1984	Israeli Conscripts	National	both	16-19	16-19	133,146	85,931	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1544	Israel	1985-1986	MONICA, Tel Aviv	Community	urban	25-64	25-64	653	685	
1545	Israel	1985-1989	Israeli Conscripts	National	both	16-19	16-19	148,878	105,833	
1546	Israel	1990-1991	The Jerusalem Longitudinal Cohort Study	Community	urban	69-70	69-70	245	199	
1547	Israel	1990-1994	Israeli Conscripts	National	both	16-19	16-19	191,052	139,555	
1548	Israel	1995-1999	Israeli Conscripts	National	both	16-19	16-19	202,608	146,585	
1549	Israel	1997-1998	The Jerusalem Longitudinal Cohort Study	Community	urban	76-77	76-77	422	429	
1550	Israel	1999-2001	Mabat First Israeli National Health and Nutrition Survey	National	both	25-64	25-64	1,371	1,410	
1551	Israel	1999-2005	The Israel Glucose Intolerance, Obesity and Hypertension Study (GOH)	National	urban	58-93	58-93	511	527	
1552	Israel	2000-2004	Israeli Conscripts	National	both	16-19	16-19	202,713	152,674	
1553	Israel	2002-2008	The Hadera District Study (HDS)	Subnational	urban	25-78	25-78	385	369	
1554	Israel	2003-2004	Mabat Youth First Israeli National Health and Nutrition Survey in 7th-12th grade students	National	both	12-18	12-18	2,553	3,073	
1555	Israel	2005-2006	The Jerusalem Longitudinal Cohort Study	Community	urban	83-85	83-85	490	584	
1556	Israel	2005-2006	Mabat Zahav First National Health and Nutrition Survey in ages 65 and over	National	urban	65+	65+	743	819	
1557	Israel	2005-2009	Israeli Conscripts	National	both	16-19	16-19	192,835	146,308	
1558	Israel	2010-2011	The Jerusalem Longitudinal Cohort Study	Community	urban	89-92	89-92	185	201	
1559	Israel	2010-2014	Israeli Conscripts	National	both	16-19	16-19	213,094	148,908	
1560	Israel	2014-2015	Mabat Zahav Second National Health and Nutrition Survey ages in 65 and over	National	both	65+	65+	307	318	
1561	Israel	2014-2016	Mabat Second Israeli National Health and Nutrition Survey	National	both	18-64	18-64	1,061	1,073	
1562	Israel	2015-2016	The Jerusalem Longitudinal Cohort Study	Community	urban	94-96	94-96	50	65	
1563	Israel	2015-2016	Rav Mabat Kids - First National Health and Nutrition Survey in 2-11 year olds	National	rural	2-11	2-11	73	88	
1564	Israel	2015-2016	Rav Mabat Kids - First National Health and Nutrition Survey in 2-11 year olds	National	urban	2-11	2-11	515	463	
1565	Israel	2015-2016	Mabat Youth Second Israeli National Health and Nutrition Survey in 7th-12th grade students	National	both	12-18	12-18	2,221	2,415	
1566	Israel	2015-2019	Israeli Conscripts	National	both	16-19	16-19	199,488	152,571	
1567	Israel	2018-2019	Childhood Obesity Surveillance Initiative 5	National	both	6-7	6-7	73,724	73,561	
1568	Italy	1980-1982	Po river delta epidemiological study - first survey	Community	rural	8-64	8-64	1,573	1,710	
1569	Italy	1982-1987	MONICA, Latina	Community	both	24-66	24-66	852	868	
1570	Italy	1983-1984	Malattie cardiovascolari ATerosclerotiche Istituto Superiore di Sanità (MATISS)	Community	rural	19-69	19-69	1,709	1,921	
1571	Italy	1983-1985	Gubbio Study	Community	both	5+	5+	2,431	2,749	
1572	Italy	1985	Finland, Italy, Netherlands, Elderly (Fine-Italy)	Community	rural	65-84		650		
1573	Italy	1985	INTERSALT, Naples	Community	urban	20-59	20-59	100	100	
1574	Italy	1985-1988	Pisa epidemiological study - first survey	Community	urban	5-90	5-90	1,834	2,019	
1575	Italy	1986	INTERSALT, Bassiano	Community	urban	20-59	20-59	99	100	
1576	Italy	1986	INTERSALT, Mirano	Community	urban	20-59	20-59	100	100	
1577	Italy	1986	MONICA, Friuli	Subnational	both	25-64	25-64	921	918	
1578	Italy	1986-1987	Malattie cardiovascolari ATerosclerotiche Istituto Superiore di Sanità (MATISS)	Community	rural	19-72	19-72	1,273	1,568	
1579	Italy	1986-1987	MONICA, Brianza	Subnational	urban	25-64	25-64	814	832	
1580	Italy	1988-1991	Po river delta epidemiological study - second survey	Community	rural	8-73	8-73	1,341	1,497	
1581	Italy	1989	MONICA, Friuli	Subnational	both	25-64	25-64	902	900	
1582	Italy	1989	Ventimiglia Heart Study	Community	rural	5+	5+	603	701	
1583	Italy	1989-1990	MONICA, Brianza	Subnational	urban	25-64	25-64	787	786	
1584	Italy	1989-1992	Gubbio Study	Community	both	10+	10+	1,677	1,958	
1585	Italy	1990	Bruneck Study	Community	rural	40-79	40-79	469	450	
1586	Italy	1991	Finland, Italy, Netherlands, Elderly (Fine-Italy)	Community	rural	70-90		389		
1587	Italy	1991-1993	Pisa epidemiological study - second survey	Community	urban	8-97	8-97	1,288	1,553	
1588	Italy	1992-1993	Italian Longitudinal Study on Aging	National	both	65-84	65-84	1,666	1,455	
1589	Italy	1992-1998	Vobarno Study	Community	both	25-64	35-64	265	309	
1590	Italy	1993-1994	MONICA, Brianza	Subnational	urban	25-64	25-64	801	856	
1591	Italy	1993-1996	Malattie cardiovascolari ATerosclerotiche Istituto Superiore di Sanità (MATISS)	Community	rural	20-77	20-77	965	999	
1592	Italy	1993-1998	EPIC Florence	Community	urban	24-72	24-72	3,498	9,968	
1593	Italy	1994	MONICA, Friuli	Subnational	both	25-64	25-64	882	888	
1594	Italy	1995	Bruneck Study	Community	rural	45-84	45-84	411	408	
1595	Italy	1995-1996	Friuli Studio Emostatico	Community	urban	45-64	45-64	198	198	
1596	Italy	1995-1996	Italian Longitudinal Study on Aging	National	both	68-90	68-90	1,011	808	
1597	Italy	1995-1999	PROgetto Veneto Anziani (PROVA)	Subnational	both	65+	65+	1,187	1,722	
1598	Italy	1997-1999	Lucca CUORE Study	Community	urban	15-84	15-84	897	1,123	
1599	Italy	1998-1999	Progetto VIP	Community	both	25-74	25-74	599	600	
1600	Italy	1998-2000	InCHIANTI study	Community	both	15+	15+	560	681	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1601	Italy	1998-2002	Osservatorio Epidemiologico Cardiovascolare (OEC)	National	both	35-74	35-74	4,870	4,752	
1602	Italy	2000	Bruneck Study	Community	rural	50-89	50-89	331	361	
1603	Italy	2000	Sorveglianza Nutrizionale Infanzia e Adolescenza (SoNIA)	Subnational	both	13-15	13-15	236	244	
1604	Italy	2000-2001	Italian Longitudinal Study on Aging	National	both	73-93	73-93	557	473	
1605	Italy	2000-2001	Sorveglianza Nutrizionale Infanzia e Adolescenza (SoNIA)	Subnational	both	8-9	8-9	444	413	
1606	Italy	2000-2003	PROgetto Veneto Anziani (PROVA)	Subnational	both	67+	67+	795	1,331	
1607	Italy	2001-2003	The Study of Asti	Community	both	45-64	45-64	780	878	
1608	Italy	2001-2007	Gubbio Study	Community	both	26+	26+	1,187	1,454	
1609	Italy	2002-2005	PROgetto Veneto Anziani (PROVA)	Subnational	both	68+	68+	621	1,138	
1610	Italy	2003	The European Male Ageing Study	Community	both	40+		433		
1611	Italy	2003	Sorveglianza Nutrizionale Infanzia e Adolescenza (SoNIA)	Subnational	both	5-6	5-6	1,355	1,327	
1612	Italy	2004-2005	Italian Project on the Epidemiology of Alzheimer's Disease	National	both	65-84	65-84	1,569	1,421	
1613	Italy	2004-2005	Vobarno study	Community	rural	55-74	55-74	99	113	
1614	Italy	2004-2008	Cardiolab project	National	urban	40+	40+	19,022	14,526	
1615	Italy	2005	Bruneck Study	Community	rural	55-93	55-93	264	307	
1616	Italy	2005-2007	Moli-family Study	Subnational	both	14+	14+	243	301	
1617	Italy	2005-2010	Moli-sani Study	Subnational	both	35+	35+	11,693	12,614	
1618	Italy	2006-2007	HELENA	Community	urban	12-17	12-17	119	185	
1619	Italy	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	893	847	
1620	Italy	2008	Childhood Obesity Surveillance Initiative 1	National	both	8-9	8-9	4,100	3,896	
1621	Italy	2008	The European Male Ageing Study	Community	both	40+		346		
1622	Italy	2008-2009	Progetto VIP	Community	both	25-74	25-74	597	598	
1623	Italy	2008-2012	Osservatorio Epidemiologico Cardiovascolare/Health Examination Survey (OEC/HES)	National	both	35-80	35-80	4,368	4,332	
1624	Italy	2009	The ZOOM8 study: nutrition and physical activity of primary school children	National	both	6-11	6-11	1,083	1,045	
1625	Italy	2009-2010	Grosso et al., J Epidemiol 24(4):327-33, 2014	Community	both	19+	19+	760	1,129	
1626	Italy	2009-2011	Pisa epidemiological study - third survey	Community	urban	6+	6+	496	574	
1627	Italy	2010	Bruneck Study	Community	rural	60+	60+	225	259	
1628	Italy	2010	Childhood Obesity Surveillance Initiative 2	National	both	8-9	8-9	21,474	20,190	
1629	Italy	2010-2012	CArdiovascular risk MEtabolic syndrome LIver and Autoimmunity diseases (CA.ME.LI.A)	Community	both	18-75	18-75	477	515	
1630	Italy	2011	Grosso et al., Nutrients 5(12):4908-23, 2013	Community	rural	13-16	13-16	115	89	
1631	Italy	2011	Grosso et al., Nutrients 5(12):4908-23, 2013	Community	urban	13-16	13-16	512	419	
1632	Italy	2011	CONVERGI Study	Community	urban	13-19	13-19	159	269	
1633	Italy	2011-2012	ALImentazione e stile di vita negli ADOlescenti (ALIADO)	Subnational	both	15-16	15-16	149	194	
1634	Italy	2011-2012	Vobarno study	Community	rural	49-62	49-62	107	143	
1635	Italy	2012	Childhood Obesity Surveillance Initiative 3	National	both	8-9	8-9	23,137	22,405	
1636	Italy	2012-2014	Mistretta et al., Obes Res Clin Pract 11(2):215-226, 2017	Community	urban	11-16	11-16	878	753	
1637	Italy	2014	OKkio alla SALUTE	National	both	8-9	8-9	24,457	22,855	
1638	Italy	2014-2016	Mediterranean healthy Eating, Aging and Lifestyles (MEAL) study	Subnational	both	20+	20+	762	1,130	
1639	Italy	2015	Bruneck Study	Community	rural	65+	65+	171	169	
1640	Italy	2016	Childhood Obesity Surveillance Initiative 4	National	both	8-9	8-9	22,732	21,454	
1641	Italy	2016	The Tyrolean Early Vascular Ageing-study (EVA-Tyrol) - South-Tyrol	Subnational	both	14-18	14-18	108	200	
1642	Italy	2017-2020	Moli-sani Study	Subnational	both	47-94	47-94	1,160	1,422	
1643	Italy	2018-2019	Progetto VIP	Community	both	25-74	25-74	600	598	
1644	Italy	2018-2019	Health Examination Survey 2018-2019 - CUORE Project	National	both	35-74	35-74	1,035	1,060	
1645	Italy	2019	Childhood Obesity Surveillance Initiative 5	National	both	8-9	8-9	23,432	22,462	
1646	Jamaica	1993	Zohoori et al., West Indian Med J 52(2):111-17, 2003	Community	urban	25-74	25-74	845	1,245	
1647	Jamaica	1994-1995	Cooper et al., Am J Public Health 87(2):160-68, 1997	Community	urban	25-100	25-100	597	833	
1648	Jamaica	1998	Ragoobirsingh et al., Diabetes Obes Metab 6(1):23-27, 2004	National	both	15+	15+	552	945	
1649	Jamaica	2000-2001	Jamaica Health and Lifestyle Survey	National	both	15-74	15-74	653	1,281	
1650	Jamaica	2005	Jamaica Youth Risk and Resiliency Behaviour Survey 2005	National	both	10-15	10-15	1,328	1,386	
1651	Jamaica	2006-2007	Jamaica Youth Risk and Resiliency Behaviour Survey 2006	National	both	15-19	15-19	585	701	
1652	Jamaica	2007-2008	Jamaica Health and Lifestyle Survey	National	both	15-74	15-74	862	1,904	
1653	Jamaica	2010	Global School-based Student Health Survey	National	both		13-17		787	
1654	Jamaica	2012	Older Persons in Jamaica 2012	National	both	60+	60+	158	205	16
1655	Jamaica	2016-2017	Jamaica Health and Lifestyle Survey	National	both	15+	15+	939	1,491	
1656	Japan	1977	National Nutrition Survey	National	both	5+	5+	6,455	8,094	1

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1657	Japan	1978	National Nutrition Survey	National	both	5+	5+	6,979	8,694	1
1658	Japan	1979	National Nutrition Survey	National	both	5+	5+	7,249	9,031	1
1659	Japan	1980	National Cardiovascular Survey	National	both	5+	5+	7,955	9,437	
1660	Japan	1980-1983	Aito Town Study	Community	rural	20-77	20-77	741	970	
1661	Japan	1981	National Nutrition Survey	National	both	5+	5+	5,922	7,828	
1662	Japan	1982	National Nutrition Survey	National	both	5+	5+	6,845	8,831	
1663	Japan	1983	National Nutrition Survey	National	both	5+	5+	6,609	8,478	
1664	Japan	1984	National Nutrition Survey	National	both	5+	5+	6,389	8,072	
1665	Japan	1985	INTERSALT, Osaka	Community	urban	20-59	20-59	100	97	
1666	Japan	1985	INTERSALT, Tochigi	Community	urban	20-59	20-59	95	99	
1667	Japan	1985	INTERSALT, Toyama	Community	urban	20-59	20-59	100	100	
1668	Japan	1985	National Nutrition Survey	National	both	5+	5+	7,461	8,865	
1669	Japan	1985-1986	Akabane Study	Community	urban	40-69	40-69	812	1,022	
1670	Japan	1986	National Nutrition Survey	National	both	5+	5+	7,280	8,635	
1671	Japan	1987	Konan Town Study	Community	rural	20-79	20-79	70	88	
1672	Japan	1987	National Nutrition Survey	National	both	5+	5+	6,427	8,160	
1673	Japan	1988	Konan Town Study	Community	rural	20-79	20-79	76	85	
1674	Japan	1988	The Hisayama Study	Community	rural	40+	40+	1,165	1,573	
1675	Japan	1988	National Nutrition Survey	National	both	5+	5+	6,885	8,045	
1676	Japan	1989	Aito Town Study	Community	rural	5-74	5-84	529	525	
1677	Japan	1989	Konan Town Study	Community	rural	20-79	20-79	58	63	
1678	Japan	1989	National Nutrition Survey	National	both	5+	5+	5,767	6,882	
1679	Japan	1990	Konan Town Study	Community	rural	20-79	20-79	27	51	
1680	Japan	1990	National Nutrition Survey and National Cardiovascular Survey	National	both	5+	5+	6,080	7,291	
1681	Japan	1990-1994	Japan Public Health Center-based prospective Study (JPHC Study), Cohort I	Subnational	both	40-59	40-59	8,749	14,481	
1682	Japan	1991	Konan Town Study	Community	rural	20-79	20-79	93	116	
1683	Japan	1991	Shigaraki Town Study	Community	rural	30-89	30-89	230	319	
1684	Japan	1991	National Nutrition Survey	National	both	5+	5+	6,036	7,098	
1685	Japan	1992	Konan Town Study	Community	rural	20-79	20-79	45	47	
1686	Japan	1992	Shigaraki Town Study	Community	rural	30-89	30-89	288	385	
1687	Japan	1992	National Nutrition Survey	National	both	5+	5+	5,635	6,656	
1688	Japan	1993	Konan Town Study	Community	rural	20-79	20-79	54	65	
1689	Japan	1993	Shigaraki Town Study	Community	rural	30-89	30-89	301	452	
1690	Japan	1993	Iwata kids health study	Community	urban	10	10	513	485	
1691	Japan	1993	National Nutrition Survey	National	both	5+	5+	5,708	6,740	
1692	Japan	1993-1994	Japan Public Health Center-based prospective Study (JPHC Study), Cohort II	Subnational	both	40-69	40-69	8,534	16,190	
1693	Japan	1994	Japanese Population-Based Osteoporosis Study	Subnational	both		15-79		3,222	
1694	Japan	1994	Konan Town Study	Community	rural	20-79	20-79	43	59	
1695	Japan	1994	Shigaraki Town Study	Community	rural	30-89	30-89	251	336	
1696	Japan	1994	Iwata kids health study	Community	urban	10	10	569	567	
1697	Japan	1994	National Nutrition Survey	National	both	5+	5+	5,439	6,386	
1698	Japan	1995	Konan Town Study	Community	rural	20-79	20-79	45	61	
1699	Japan	1995	Shigaraki Town Study	Community	rural	30-89	30-89	300	470	
1700	Japan	1995	Iwata kids health study	Community	urban	10	10	524	567	
1701	Japan	1995	National Nutrition Survey	National	both	5+	5+	5,480	6,365	
1702	Japan	1996	Shigaraki Town Study	Community	rural	30-89	30-89	86	152	
1703	Japan	1996	Iwata kids health study	Community	urban	10	10	552	480	
1704	Japan	1996	National Nutrition Survey	National	both	5+	5+	5,277	6,185	
1705	Japan	1996-1997	INTERMAP, AitoTown	Community	rural	40-59	40-59	130	129	
1706	Japan	1997	Shigaraki Town Study	Community	rural	30-89	30-89	61	100	
1707	Japan	1997	Iwata kids health study	Community	urban	10	10	506	537	
1708	Japan	1997	National Nutrition Survey	National	both	5+	5+	5,104	6,068	
1709	Japan	1997-1998	INTERMAP, Sapporo	Community	urban	40-59	40-59	149	148	
1710	Japan	1997-1998	INTERMAP, Toyama	Community	urban	40-59	40-59	149	150	
1711	Japan	1997-1998	INTERMAP, Wakayama	Community	urban	40-59	40-59	146	144	
1712	Japan	1997-2000	Sudo et al., J Orthop Sci 13(5):413-18, 2008	Community	rural	55+	45+	261	785	
1713	Japan	1998	Iwata kids health study	Community	urban	10	10	527	464	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1714	Japan	1998	Niigata Study	Community	urban	70	70	287	284	
1715	Japan	1998	National Nutrition Survey	National	both	5+	5+	5,381	6,249	
1716	Japan	1999	Iwata kids health study	Community	urban	10	10	468	463	
1717	Japan	1999	Niigata Study	Community	urban	71	71	245	216	
1718	Japan	1999	National Nutrition Survey	National	both	5+	5+	4,367	5,333	
1719	Japan	2000	Iwata kids health study	Community	urban	10	10	440	401	
1720	Japan	2000	Niigata Study	Community	urban	72	72	233	202	
1721	Japan	2000	National Nutrition Survey and National Cardiovascular Survey	National	both	5+	5+	4,665	5,430	
1722	Japan	2001	Iwata kids health study	Community	urban	10	10	452	414	
1723	Japan	2001	The Japan Association of Health Service Database	Subnational	both	20+	20+	1,471,868	1,231,378	
1724	Japan	2001	Niigata Study	Community	urban	73	73	235	201	
1725	Japan	2001	National Nutrition Survey	National	both	5+	5+	4,527	5,448	
1726	Japan	2002	Iwata kids health study	Community	urban	10	10	496	398	
1727	Japan	2002	Niigata Study	Community	urban	74	74	228	202	
1728	Japan	2002	National Nutrition Survey	National	both	5+	5+	4,104	4,941	
1729	Japan	2002-2003	The Hisayama Study	Community	rural	40+	40+	1,414	1,884	
1730	Japan	2003	Iwata kids health study	Community	urban	10	10	415	399	
1731	Japan	2003	National Health and Nutrition Survey	National	both	5+	5+	4,035	4,920	
1732	Japan	2003	Niigata Study	Community	urban	75	75	215	189	
1733	Japan	2004	Iwata kids health study	Community	urban	10	10	463	412	
1734	Japan	2004	National Health and Nutrition Survey	National	both	5+	5+	3,384	3,952	
1735	Japan	2004	Niigata Study	Community	urban	76	76	215	185	
1736	Japan	2005	Iwata kids health study	Community	urban	10	10	476	420	
1737	Japan	2005	National Health and Nutrition Survey	National	both	5+	5+	3,154	3,802	
1738	Japan	2005	Niigata Study	Community	urban	77	77	203	184	
1739	Japan	2006	Iwata kids health study	Community	urban	10	10	417	391	
1740	Japan	2006	National Health and Nutrition Survey	National	both	5+	5+	3,522	4,165	
1741	Japan	2006	Niigata Study	Community	urban	78	78	199	194	
1742	Japan	2007	Fukuroi kids health study	Community	urban	13-14	13-14	395	372	
1743	Japan	2007	Iwata kids health study	Community	urban	10	10	439	394	
1744	Japan	2007	National Health and Nutrition Survey	National	both	5+	5+	3,520	4,154	
1745	Japan	2007	Niigata Study	Community	urban	79	79	183	192	
1746	Japan	2008	Resident in Kanazawa City age 40+	Community	urban	40+	40+	6,562	11,944	
1747	Japan	2008	Fukuroi kids health study	Community	urban	13-14	13-14	381	346	
1748	Japan	2008	Iwata kids health study	Community	urban	10	10	406	417	
1749	Japan	2008	MEXT School Health Statistics	National	both	5-17	5-17	326,401	326,957	
1750	Japan	2008	National Health and Nutrition Survey	National	both	5+	5+	3,518	4,190	
1751	Japan	2008	Niigata Study	Community	urban	80	80	174	180	
1752	Japan	2009	Fukuroi kids health study	Community	urban	13-14	13-14	388	357	
1753	Japan	2009	MEXT School Health Statistics	National	both	5-17	5-17	326,523	327,097	
1754	Japan	2009	National Health and Nutrition Survey	National	both	5+	5+	3,486	4,197	
1755	Japan	2010	Fukuroi kids health study	Community	urban	13-14	13-14	360	387	
1756	Japan	2010	MEXT School Health Statistics	National	both	5-17	5-17	326,508	326,401	
1757	Japan	2010	National Health and Nutrition Survey	National	both	5+	5+	3,218	3,822	
1758	Japan	2011	Fukuroi kids health study	Community	urban	13-14	13-14	402	369	
1759	Japan	2011	MEXT School Health Statistics	National	both	5-17	5-17	305,267	306,382	
1760	Japan	2011	National Health and Nutrition Survey	National	both	5+	5+	3,020	3,586	
1761	Japan	2011	The Tokyo Health Service Association Database	Community	urban	20+	20+	82,453	54,028	
1762	Japan	2012	Fukuroi kids health study	Community	urban	13-14	13-14	432	353	
1763	Japan	2012	MEXT School Health Statistics	National	both	5-17	5-17	326,524	326,572	
1764	Japan	2012	National Health and Nutrition Survey	National	both	5+	5+	11,298	13,674	
1765	Japan	2012-2016	The Nagahama study	Community	rural	35-80	35-80	3,206	6,620	
1766	Japan	2013	Awaji Child Health Study	Community	urban	10-14	10-14	198	203	
1767	Japan	2013	Fukuroi kids health study	Community	urban	13-14	13-14	387	404	
1768	Japan	2013	MEXT School Health Statistics	National	both	5-17	5-17	327,923	327,577	
1769	Japan	2013	National Health and Nutrition Survey	National	both	5+	5+	3,198	3,637	
1770	Japan	2014	Awaji Child Health Study	Community	urban	10-14	10-14	229	218	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1771	Japan	2014	MEXT School Health Statistics	National	both	5-17	5-17	327,062	326,884	
1772	Japan	2014	National Health and Nutrition Survey	National	both	5+	5+	3,208	3,657	
1773	Japan	2014-2015	Nagaoka Health Screening	Community	both	20-89	20-89	4,938	4,298	
1774	Japan	2015	Awaji Child Health Study	Community	urban	10-14	10-14	230	228	
1775	Japan	2015	MEXT School Health Statistics	National	both	5-17	5-17	326,382	327,210	
1776	Japan	2015	National Health and Nutrition Survey	National	both	5+	5+	2,914	3,457	
1777	Japan	2016	MEXT School Health Statistics	National	both	5-17	5-17	334,731	334,444	
1778	Japan	2016	National Health and Nutrition Survey	National	both	5+	5+	9,814	11,638	
1779	Japan	2017	MEXT School Health Statistics	National	both	5-17	5-17	333,182	333,722	
1780	Japan	2017	National Health and Nutrition Survey	National	both	5+	5+	2,662	3,057	
1781	Japan	2017	The Tokyo Health Service Association Database	Community	urban	20+	20+	63,713	47,577	
1782	Japan	2017-2018	The Hisayama Study	Community	rural	40+	40+	1,510	1,947	
1783	Japan	2018	MEXT School Health Statistics	National	both	5-17	5-17	337,022	336,953	
1784	Japan	2018	National Health and Nutrition Survey	National	both	5+	5+	2,790	3,144	
1785	Japan	2019	MEXT School Health Statistics	National	both	5-17	5-17	332,231	333,546	
1786	Japan	2019	National Health and Nutrition Survey	National	both	5+	5+	2,277	2,606	
1787	Japan	2020	MEXT School Health Statistics	National	both	5-17	5-17	333,405	333,857	
1788	Jordan	1994-1996	Ajlouni, Int J Obes Relat Metab Disord 22(7), 1998	Subnational	both	25+	25+	1,047	1,787	
1789	Jordan	1997	DHS	National	both		20-49		3,002	
1790	Jordan	2002	DHS	National	both		20-49		4,839	
1791	Jordan	2004	Khader et al., Metab Syndr Relat Disord 6(2):113-20, 2008	Community	both	25+	25-59	394	548	
1792	Jordan	2004	Behavioural Risk Factor Surveillence Survey	National	rural	18+	18+	236	473	
1793	Jordan	2007	Behavioural Risk Factor Surveillence Survey	National	both	18+	18+	332	433	
1794	Jordan	2007	DHS	National	both		20-49		4,451	
1795	Jordan	2009	DHS	National	both		20-49		4,054	
1796	Jordan	2009	Metablic abnomalities and vitamin D study	National	both	7+	7+	1,601	3,863	
1797	Jordan	2012	DHS	National	both		20-49		6,357	
1798	Jordan	2015-2016	Zayed et al., BMC Public Health 16(1):1040, 2016	Subnational	rural	6-15	6-17	407	288	
1799	Jordan	2015-2016	Zayed et al., BMC Public Health 16(1):1040, 2016	Subnational	urban	6-15	6-17	565	974	
1800	Jordan	2016-2017	National Cardiovascular Diseases and Diabetes Study (NCDDS)	National	both	18+	18+	1,187	2,745	
1801	Jordan	2017-2018	DHS	National	both		15-49		6,261	
1802	Jordan	2018-2019	Anthropometric Indices of Obesity as Predictors of High Blood Pressure among School Children	Community	urban	10-14	10-14	284	504	
1803	Jordan	2019	Jordan National Micronutrient and Nutrition Survey (15-49 women)	National	both		15-49		621	
1804	Jordan	2019	STEPS	National	both	18-69	18-69	2,009	3,084	
1805	Kazakhstan	1985	Balakhmetova et l., Ter Arkh 63(1):17-20, 1991	Community	urban	20-54		2,886		
1806	Kazakhstan	1995	DHS	National	both		15-49		3,542	
1807	Kazakhstan	1999	DHS	National	both		15-49		2,227	
1808	Kazakhstan	2011-2012	Household Health Survey	National	both	15+	15+	4,578	6,044	
1809	Kazakhstan	2015	Almaty STEPS	Subnational	both	18-69	18-69	381	1,136	
1810	Kazakhstan	2015	Shymkent STEPS	Subnational	both	18-69	18-69	400	793	
1811	Kazakhstan	2015-2016	Aktobe STEPS	Subnational	both	18-69	18-69	348	1,144	
1812	Kazakhstan	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	8-10	8-10	2,755	2,683	
1813	Kazakhstan	2018-2019	Early diagnosis of metabolic syndrome in children and adolescents of Semey Region	Subnational	both	6-18	6-18	1,008	963	
1814	Kazakhstan	2019	A health status assessment of a population of Karaganda urban region	Community	urban	18+	18+	324	670	
1815	Kazakhstan	2020	Childhood Obesity Surveillance Initiative 5	National	both	6-9	6-9	3,396	3,379	
1816	Kazakhstan	2021	Prevalence of NCD Risk Factors in Kazakhstan	Subnational	both	18-69	18-69	800	809	17
1817	Kenya	1985	INTERSALT	Community	rural	20-59	20-59	90	86	
1818	Kenya	1993	DHS	National	both		20-49		3,113	
1819	Kenya	1998	DHS	National	both		20-49		3,009	
1820	Kenya	2003	DHS	National	both		15-49		7,189	
1821	Kenya	2008-2009	DHS	National	both		15-49		7,827	
1822	Kenya	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	262	301	
1823	Kenya	2014	DHS	National	both		15-49		13,469	
1824	Kenya	2015	STEPS	National	both	18-69	18-69	1,750	2,511	
1825	Kenya	2018	Assessing the gaps in healthcare and determining the feasibility for the setup of a social enterprise - Viwandani Lown Community Health Center, Kenya	Community	urban	19-73	19-73	153	143	
1826	Kenya	2022	DHS	National	both		15-49		15,656	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1827	Kiribati	1981	Epidemiological survey of Kiribati	Subnational	rural	20+	20+	473	532	
1828	Kiribati	1981	Epidemiological survey of Kiribati	Subnational	urban	20+	20+	939	906	
1829	Kiribati	2004	STEPS	National	both	15-64	15-64	779	939	
1830	Kiribati	2011	Global School-based Student Health Survey	National	both		13		156	
1831	Kiribati	2015-2016	STEPS	National	both	18-69	18-69	557	694	
1832	Kuwait	1980-1981	al-Isa, Ann Nutr Metab 41(5):307-14, 1997	Community	both	18+		959		
1833	Kuwait	1993-1994	al-Isa, Ann Nutr Metab 41(5):307-14, 1997	Community	both	18+		1,730		
1834	Kuwait	1995-1996	Abdella et al., Diabetes Res and Clin Pract 42(3):187-196, 1998	Subnational	both	20-84	20-84	1,099	1,892	
1835	Kuwait	1998	Abiaka et al., Biol Trace Elem Res 91(1):33-43, 2003	National	both	15-80	15-80	178	233	
1836	Kuwait	2001	Kuwait Nutrition Surveillance System	National	urban	20+	20+	822	1,686	
1837	Kuwait	2001	Kuwait Nutrition Surveillance System	National	urban	5-19	5-19	4,520	5,389	
1838	Kuwait	2002	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,694	2,368	
1839	Kuwait	2002	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,517	5,239	
1840	Kuwait	2003	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,285	1,192	
1841	Kuwait	2003	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,179	5,132	
1842	Kuwait	2004	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,209	1,748	
1843	Kuwait	2004	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,021	4,880	
1844	Kuwait	2005	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,493	1,642	
1845	Kuwait	2005	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	4,520	5,389	
1846	Kuwait	2006	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,290	1,661	
1847	Kuwait	2006	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,259	5,066	
1848	Kuwait	2006	STEPS	National	both	20-64	20-64	918	1,298	
1849	Kuwait	2007	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,711	1,706	
1850	Kuwait	2007	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,481	5,502	
1851	Kuwait	2008	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,604	1,669	
1852	Kuwait	2008	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,757	5,595	
1853	Kuwait	2008-2009	National Nutrition Program for the State of Kuwait	National	both	5+	5+	772	830	
1854	Kuwait	2008-2010	Gulf Cooperation Council World Health Survey	National	both	18+	18+	1,598	1,782	
1855	Kuwait	2009	Kuwait Nutrition Surveillance System	National	both	20+	20+	1,331	1,496	
1856	Kuwait	2009	Kuwait Nutrition Surveillance System	National	both	5-19	5-19	5,358	5,574	
1857	Kuwait	2011	Global School-based Student Health Survey	National	both	13-17	13-17	1,265	1,274	
1858	Kuwait	2011-2014	Kuwait Diabetes Epidemiology Program	National	both	18-82	18-82	3,007	2,242	
1859	Kuwait	2014	STEPS	National	both	18-69	18-69	1,382	2,212	
1860	Kuwait	2015	Global School-based Student Health Survey	National	both	13-17	13-17	1,363	1,553	
1861	Kyrgyzstan	1993	Kyrgyzstan Multipurpose Poverty Survey	National	both	5+	5+	3,512	3,786	
1862	Kyrgyzstan	1997	DHS	National	both		15-49		3,570	
1863	Kyrgyzstan	2012	DHS	National	both		15-49		7,516	
1864	Kyrgyzstan	2013	STEPS	National	both	25-64	25-64	942	1,600	
1865	Kyrgyzstan	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-9	6-9	3,945	3,905	
1866	Lao PDR	2006	Multiple Indicator Cluster Survey 3	National	both		15-49		807	
1867	Lao PDR	2008	STEPS	Community	both	25-64	25-64	1,568	2,353	
1868	Lao PDR	2013	STEPS	National	both	18-64	18-64	984	1,461	
1869	Latvia	1997	Nutrition and Lifestyle in the Baltic Republics, WHO, 1997	National	both	19-50	19-50	703	732	
1870	Latvia	2008	Childhood Obesity Surveillance Initiative 1	National	both	7-8	7-8	2,283	2,101	
1871	Latvia	2008-2009	Cardiovascular risk factor study	National	both	25-74	25-74	1,362	2,398	
1872	Latvia	2010	Childhood Obesity Surveillance Initiative 2	National	both	7-8	7-8	2,093	2,053	
1873	Latvia	2012	Childhood Obesity Surveillance Initiative 3	National	both	6-7	6-7	1,804	1,677	
1874	Latvia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-9	7-9	2,952	2,991	
1875	Latvia	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-9	6-9	3,420	3,441	
1876	Lebanon	1997	Obesity in Lebanon: National Survey	National	both	5+	5+	871	1,164	
1877	Lebanon	2008-2009	STEPS	National	both	5+	5+	1,721	1,886	
1878	Lebanon	2017	STEPS	National	both	18-69	18-69	729	983	
1879	Lesotho	1993	National survey on iodine, vitamin A and iron status of women and children in Lesotho	National	both		20-65		792	
1880	Lesotho	2004-2005	DHS	National	both		15-49		3,206	
1881	Lesotho	2009-2010	DHS	National	both	15-59	15-49	3,216	3,781	
1882	Lesotho	2012	STEPS	National	both	25-64	25-64	726	1,442	
1883	Lesotho	2014	DHS	National	both	15-59	15-49	2,860	3,244	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1884	Liberia	2006-2007	DHS	National	both		15-49		6,419	
1885	Liberia	2011	STEPS	National	both	25-64	25-64	998	1,254	
1886	Liberia	2013	DHS	National	both	15-49	15-49	4,235	4,718	
1887	Liberia	2019	DHS	National	both		15-49		3,793	
1888	Liberia	2022	STEPS	National	both	18-69	18-69	1,528	2,361	
1889	Libya	1998-1999	Kadiki et al., Diabetes Metab 27(6):647-54, 2001	Community	both	15+	15+	228	398	
1890	Libya	2007	Global School-based Student Health Survey	National	both	12-15	12-15	697	995	
1891	Libya	2009	STEPS	National	both	25-64	25-64	1,678	1,564	
1892	Lithuania	1983-1985	MONICA, Kaunas	Community	urban	35-64	35-64	728	735	
1893	Lithuania	1986-1987	MONICA, Kaunas	Community	urban	35-64	35-64	894	868	
1894	Lithuania	1987	Countrywide Integrated Noncommunicable Diseases Intervention Programme survey	Subnational	rural	25-64	25-64	1,220	1,434	
1895	Lithuania	1992-1993	MONICA, Kaunas	Community	urban	35-64	35-64	610	621	
1896	Lithuania	1992-1993	Countrywide Integrated Noncommunicable Diseases Intervention Programme survey	Subnational	rural	25-64	25-64	617	798	
1897	Lithuania	1997	Pomerleau et al., Public Health Nutrition 3(1):3-10, 2000	National	both	19+	19+	966	1,130	
1898	Lithuania	1998-1999	Countrywide Integrated Noncommunicable Diseases Intervention Programme survey	Subnational	rural	25-64	25-64	816	1,021	
1899	Lithuania	2001-2002	MONICA4	Community	urban	35-64	35-64	625	776	
1900	Lithuania	2002	Pomerleau, 2002	National	both	24-70	24-70	977	928	
1901	Lithuania	2006-2007	Countrywide Integrated Noncommunicable Diseases Intervention Programme survey	Subnational	rural	25-64	25-64	718	972	
1902	Lithuania	2006-2008	Health, Alcohol and Psychosocial Factors In Eastern Europe	Community	urban	45-72	45-72	3,214	3,857	
1903	Lithuania	2008	Childhood Obesity Surveillance Initiative 1	National	both	7-8	7-8	2,532	2,344	
1904	Lithuania	2010	Childhood Obesity Surveillance Initiative 2	National	both	7-9	7-9	3,306	3,414	
1905	Lithuania	2010-2012	Prevalence and risk factors of high blood pressure in 12-15-year-old Lithuanian children and adolescents (Study 1, 2010-2012)	Community	both	12-15	12-15	3,494	3,963	
1906	Lithuania	2012-2013	Prevalence and risk factors of high blood pressure in 12-15-year-old Lithuanian children and adolescents (Study 2, 2012-2013)	Community	both	12-15	12-15	962	985	
1907	Lithuania	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-8	7-8	1,890	1,895	
1908	Lithuania	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	1,924	1,876	
1909	Lithuania	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	1,649	1,585	
1910	Luxembourg	2007-2009	Observation of cardiovascular risk factors in Luxembourg (ORISCAV-LUX)	National	both	18-69	18-69	696	735	
1911	Luxembourg	2013-2015	European Health Examination Survey in Luxembourg	National	both	25-64	25-64	721	785	
1912	Luxembourg	2016-2018	Observation of cardiovascular risk factors in Luxembourg (ORISCAV-LUX2)	Community	both	25-79	25-79	670	763	
1913	Madagascar	1997	Mauny et al., Ann Trop Med Parasitol 97(6):645-54, 2003	Community	both	15+	15+	248	283	
1914	Madagascar	1997	DHS	National	both		20-49		2,253	
1915	Madagascar	2003-2004	DHS	National	both		15-49		7,155	
1916	Madagascar	2005	STEPS	Subnational	both	25-64	25-64	2,596	2,494	
1917	Madagascar	2008-2009	DHS	National	both		15-49		7,869	
1918	Madagascar	2021	DHS	National	both		15-49		8,888	
1919	Malawi	1992	DHS	National	both		20-49		2,102	
1920	Malawi	1996	Chilima et al., Eur J Clin Nutr 52(9):643-9, 1998	Community	rural	55-94	55-94	86	185	
1921	Malawi	2000	DHS	National	both		15-49		11,491	
1922	Malawi	2004	DHS	National	both		15-49		9,751	
1923	Malawi	2009	National Micronutrient Survey	National	both	6-12	6-49	344	932	
1924	Malawi	2009	STEPS	National	both	25-64	25-64	1,666	3,189	
1925	Malawi	2010	DHS	National	both		15-49		7,118	
1926	Malawi	2013-2017	NCD Survey Malawi Epidemiology and Intervention Research Unit	Community	rural	18+	18+	5,849	7,507	
1927	Malawi	2013-2017	NCD Survey Malawi Epidemiology and Intervention Research Unit	Community	urban	18+	18+	5,802	10,291	
1928	Malawi	2015-2016	DHS	National	both		15-49		7,415	
1929	Malawi	2017	STEPS	National	both	18-69	18-69	1,478	2,534	
1930	Malaysia	1996	National Health and Morbidity Survey (NHMS)	National	both	18+	18+	14,520	16,244	
1931	Malaysia	2002-2003	Malaysian Adult Nutrition Survey	National	both	18-59	18-59	3,303	3,395	
1932	Malaysia	2004	Rampal et al., Public Health 122(1):11-8, 2008	National	both	15+	15+	7,028	9,527	
1933	Malaysia	2005	STEPS	National	both	25-64	25-64	1,286	1,286	
1934	Malaysia	2006	National Health and Morbidity Survey (NHMS)	National	both	5+	5+	22,970	25,508	
1935	Malaysia	2008	National Iodine Deficiency Disorder (IDD) Survey	National	both	7-10	7-10	9,388	8,659	
1936	Malaysia	2008	Metabolic Syndrome Study in Malaysia	National	rural	18+	18+	753	1,368	
1937	Malaysia	2008	Metabolic Syndrome Study in Malaysia	National	urban	18+	18+	769	1,446	
1938	Malaysia	2010-2011	SEANUTS	National	both	5-12	5-12	1,306	1,352	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1939	Malaysia	2011	National Health and Morbidity Survey (NHMS)	National	both	5+	5+	8,033	8,780	
1940	Malaysia	2012	Malaysian School-Based Health Survey	National	both	9-17	9-17	20,254	19,652	
1941	Malaysia	2012-2013	Petaling District	Subnational	urban	12-17	12-17	882	1,364	
1942	Malaysia	2013-2014	Batang Padang District	Subnational	both	12-17	12-17	2,928	3,319	
1943	Malaysia	2014	Malaysian Adult Nutrition Survey	National	both	18-59	18-59	1,328	1,495	
1944	Malaysia	2015	National Health and Morbidity Survey (NHMS)	National	both	5+	5+	12,144	12,871	
1945	Malaysia	2019	National Health and Morbidity Survey (NHMS)	National	both	5+	5+	6,155	6,848	
1946	Maldives	2001	Multiple Indicator Cluster Survey	National	both		15-50		1,145	
1947	Maldives	2004	STEPS	Subnational	urban	25-64	25-64	933	1,086	
1948	Maldives	2009	DHS	National	both		20-49		5,139	
1949	Maldives	2009	Global School-based Student Health Survey	National	both	13-17		806		
1950	Maldives	2011	STEPS	Subnational	urban	15-64	15-64	660	1,060	
1951	Maldives	2014	Global School-based Student Health Survey	National	both	13-17		931		
1952	Maldives	2016-2017	DHS	National	both	15-49	15-49	3,831	6,839	
1953	Maldives	2020-2021	STEPS	National	both	15-69	15-69	790	1,884	
1954	Mali	1995-1996	DHS	National	both		20-49		3,789	
1955	Mali	1997	Programme Intégré de Développement de Bafoulabé	Community	rural	15-45	15-45	425	716	
1956	Mali	1999-2000	Bafoulabe Iodine Study	Community	rural		15-45		365	
1957	Mali	2001	DHS	National	both		15-49		10,526	
1958	Mali	2006	DHS	National	both		15-49		12,512	
1959	Mali	2007	STEPS	Subnational	both	15-64	15-64	1,036	1,494	
1960	Mali	2012-2013	DHS	National	both		15-49		4,646	
1961	Mali	2013	Santé Nutritionnelle à Assise Comunautaire dans la région de Kayes (SNACK)	Subnational	rural		20-68		4,595	
1962	Mali	2013	STEPS	Subnational	both	15-65	15-65	525	949	
1963	Mali	2018	DHS	National	both		15-49		4,576	
1964	Malta	1984	MONICA, Malta	Community	both	25-64	25-64	948	929	
1965	Malta	1986	INTERSALT	Community	rural	20-59	20-59	100	100	
1966	Malta	2008	Childhood Obesity Surveillance Initiative 1	National	both	6	6	1,084	1,031	
1967	Malta	2010	Childhood Obesity Surveillance Initiative 2	National	both	6	6	1,151	1,170	
1968	Malta	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-8	7-8	1,757	1,693	
1969	Malta	2014-2016	SAHHTEK - The University of Malta Health and Wellbeing Study	National	both	18-70	18-70	834	1,024	
1970	Malta	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	2,056	1,905	
1971	Malta	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	2,085	1,999	
1972	Marshall Islands	2002	STEPS	National	both	15-64	15-64	772	1,195	
1973	Marshall Islands	2017-2018	STEPS	National	both	18+	18+	1,317	1,490	
1974	Mauritania	2000-2001	DHS	National	both		15-49		2,635	
1975	Mauritania	2006	STEPS	Community	urban	15-64	15-64	1,132	1,300	
1976	Mauritania	2019-2021	DHS	National	both		15-49		6,820	
1977	Mauritius	1987	Mauritius Noncommunicable Disease Survey	National	both	25-74	25-74	2,347	2,653	
1978	Mauritius	1992	Mauritius Noncommunicable Disease Survey	National	both	25-74	25-74	2,985	3,477	
1979	Mauritius	1992	Rodrigues, Mauritius (1992)	Community	rural	25-64	25-64	736	770	
1980	Mauritius	1998	Mauritius Noncommunicable Disease Survey	National	both	25-74	25-74	2,566	3,248	
1981	Mauritius	1999	Rodrigues, Mauritius (1999)	Community	rural	20+	20+	974	1,292	
1982	Mauritius	2009	Mauritius Noncommunicable Disease Survey	National	both	19-74	19-74	2,859	3,391	
1983	Mauritius	2011	Global School-based Student Health Survey	National	both	13-17	13-17	859	1,043	
1984	Mauritius	2011	Global School-based Student Health Survey-Rodrigues	Subnational	both	13-17	13-17	425	546	
1985	Mauritius	2015	Mauritius Noncommunicable Disease Survey	National	both	20-74	20-74	1,615	1,944	
1986	Mauritius	2015	Mauritius Noncommunicable Disease Survey 1998 Follow Up	National	both	20+	20+	873	1,164	
1987	Mauritius	2017	Global School-based Student Health Survey	National	both	13-17	13-17	1,358	1,525	
1988	Mauritius	2019	Global School-based Student Health Survey	Subnational	rural	12-17	12-17	1,116	1,289	
1989	Mexico	1988-1989	Encuesta Nacional de Nutricion	National	both		12-49		16,434	
1990	Mexico	1992-1993	Encuesta Nacional de Enfermedades Cronicas	National	urban	20-69	20-69	6,040	8,298	
1991	Mexico	1996	Sanchez-Castillo et al., Eur J Clin Nutr 55(10):833-40, 2001	Community	rural	18+	18+	104	149	
1992	Mexico	1998-1999	Encuesta Nacional de Nutricion	National	both		12-49		17,892	
1993	Mexico	1998-2004	Mexico City Prospective Study	Community	urban	35-84	35-84	51,768	105,313	
1994	Mexico	1999	National Survey on School Children	National	both	5-10	5-10	4,898	5,031	
1995	Mexico	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	359	548	3

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
1996	Mexico	2000	Encuesta Nacional de Salud	National	both	10+	10+	22,554	39,204	
1997	Mexico	2001	The Mexican Health and Aging Study	National	both	50+	50+	1,030	1,224	
1998	Mexico	2002	Encuesta Nacional Sobre Niveles de vida de los Hogares	National	both	5+	5+	11,606	13,614	
1999	Mexico	2003	The Mexican Health and Aging Study	National	both	50+	50+	893	1,162	
2000	Mexico	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	833	894	
2001	Mexico	2005	Encuesta Nacional Sobre Niveles de vida de los Hogares	National	both	5+	5+	11,696	13,211	
2002	Mexico	2006	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	27,848	34,909	
2003	Mexico	2006	PREVENIMSS National Coverage Surveys	National	urban	20+	20+	8,727	11,335	
2004	Mexico	2009-2010	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	793	1,234	
2005	Mexico	2009-2012	Encuesta Nacional Sobre Niveles de vida de los Hogares	National	both	5+	5+	12,408	14,385	
2006	Mexico	2010	PREVENIMSS National Coverage Surveys	National	urban	20+	20+	6,238	6,003	
2007	Mexico	2011-2012	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	31,293	36,834	
2008	Mexico	2012	The Mexican Health and Aging Study	National	both	50+	50+	786	1,106	
2009	Mexico	2014	WHO Study on global AGEing and adult health (SAGE), Wave 2	National	both	18+	18+	1,658	2,417	
2010	Mexico	2016	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	5,659	8,424	
2011	Mexico	2016	Cognitive Aging Linked to MHAS (Mex-Cog)	National	both	55+	55+	786	1,141	18
2012	Mexico	2018-2019	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	11,581	13,420	
2013	Mexico	2020	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	5,593	7,459	
2014	Mexico	2021	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	5,798	7,949	
2015	Mexico	2022	Encuesta Nacional de Salud y Nutrición	National	both	5+	5+	5,441	7,550	
2016	Micronesia	2002	STEPS	Subnational	both	25-64	25-64	591	893	
2017	Micronesia	2006	STEPS	Subnational	both	15-64	15-64	918	1,553	
2018	Micronesia	2008	STEPS	Subnational	both	25-64	25-64	875	1,266	
2019	Micronesia	2009	STEPS, Kosrae	Subnational	both	15-64	15-64	208	413	
2020	Micronesia	2009	STEPS, Yap	Subnational	both	15-64	15-64	405	521	
2021	Micronesia	2016	STEPS	Subnational	both	18-69	18-69	516	818	
2022	Moldova	2005	DHS	National	both		15-49		7,076	
2023	Moldova	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-8	7-8	1,931	1,751	
2024	Moldova	2013	STEPS	National	both	18-69	18-69	1,712	2,777	
2025	Moldova	2021	STEPS	National	both	18-69	18-69	1,721	2,252	
2026	Mongolia	1999	National Nutrition Survey	National	both	35-65	35-65	907	1,317	
2027	Mongolia	2004	National Nutrition Survey	National	both	15-74	15-74	248	360	
2028	Mongolia	2005	STEPS	National	both	15-64	15-64	1,669	1,717	
2029	Mongolia	2009	STEPS	National	both	15-64	15-64	2,197	3,117	
2030	Mongolia	2013	Global School-based Student Health Survey	National	both	13-17	13-17	2,095	2,360	
2031	Mongolia	2013	STEPS	National	both	15-64	15-64	2,698	3,167	
2032	Mongolia	2019	STEPS	National	both	15-69	15-69	2,926	3,543	
2033	Montenegro	1978	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		86		1
2034	Montenegro	1979	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		7,229		1
2035	Montenegro	1980	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		11,208		
2036	Montenegro	1981	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		11,372		
2037	Montenegro	1982	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		5,502		
2038	Montenegro	1983	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		9,448		
2039	Montenegro	1984	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		10,320		
2040	Montenegro	1985	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		9,722		
2041	Montenegro	1986	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		9,961		
2042	Montenegro	1987	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		10,230		
2043	Montenegro	1988	Anthropometric Characteristics of Montenegrin Recruiters	National	both	17-28		86		
2044	Montenegro	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-8	6-8	1,802	1,623	
2045	Montenegro	2016	Anthropometric parameters as an indicator of obesity at adolescents in Montenegro	National	both	14-18	14-18	678	771	
2046	Montenegro	2018-2019	Initiative for monitoring obesity of children aged 6 to 9 in Montenegro and Slovenia	National	both	6-9	6-9	1,111	999	
2047	Montenegro	2019	Body composition of high school students in Montenegro and its relationship with their eating habits	National	both	18-20	18-20	504	497	
2048	Montenegro	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-8	6-8	1,729	1,626	
2049	Montenegro	2019	Initiative for monitoring obesity of children aged 11 to 12 in Montenegro	National	both	11-12	11-12	666	619	
2050	Montenegro	2019	Initiative for monitoring obesity of children aged 5 to 6 in Montenegro and Slovenia	National	both	5-6	5-6	231	214	
2051	Montenegro	2020-2021	Initiative for monitoring obesity of school children aged 9 to 10 in Montenegro and Slovenia	National	both	9-10	9-10	694	666	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2052	Montenegro	2021-2022	Determining the differences in the levels of anthropometric characteristics of students in the first grades of elementary schools in Podgorica and Niksic	Subnational	urban	6-8	6-8	397	346	
2053	Montenegro	2022	Determining the anthropometric characteristics of final grade elementary school students in Montenegro - Bijelo Polje	Community	both	14-15	14-15	15	9	
2054	Montenegro	2022	Determining the anthropometric characteristics of final grade elementary school students in Montenegro - Herceg Novi	Community	both	14-15	14-15	25	23	
2055	Montenegro	2022	Determining the anthropometric characteristics of final grade elementary school students in Montenegro - Nikšić	Community	both	14-15	14-15	97	52	
2056	Montenegro	2022	Determining the anthropometric characteristics of final grade elementary school students in Montenegro - Podgorica	Community	both	14-15	14-15	66	59	
2057	Morocco	1992	DHS	National	both		20-49		2,804	
2058	Morocco	2000	National Survey 2000	National	both	20+	20+	755	1,047	
2059	Morocco	2003-2004	DHS	National	both		15-49		15,944	
2060	Morocco	2017	STEPS	National	both	18+	18+	1,871	3,390	
2061	Morocco	2019-2020	National Nutrition Survey	National	both	6-12	6-12	574	591	
2062	Mozambique	1997	DHS	National	both		20-49		2,824	
2063	Mozambique	2000	Growth of adolescents in Mozambique	Community	urban	9-17	9-17	690	727	
2064	Mozambique	2003	DHS	National	both		15-49		10,535	
2065	Mozambique	2005	STEPS	National	both	25-64	25-64	1,276	1,689	
2066	Mozambique	2011	DHS	National	both		15-49		12,201	
2067	Mozambique	2014-2015	STEPS	National	both	15-64	15-64	1,147	1,684	
2068	Mozambique	2017-2018	Examining lifestyle behaviours and weight status of primary schoolchildren in Mozambique	Community	rural	9-11	9-11	146	158	
2069	Mozambique	2017-2018	Examining lifestyle behaviours and weight status of primary schoolchildren in Mozambique	Community	urban	9-11	9-11	140	170	
2070	Myanmar	2003-2004	STEPS	Subnational	both	25-74	25-74	1,990	2,449	
2071	Myanmar	2009	STEPS	National	both	15-64	15-64	2,826	4,421	
2072	Myanmar	2011	Underweight prevalence among young adults from rural areas, Salin Township, Magwe Region	Community	rural	15-35	15-35	156	233	
2073	Myanmar	2013-2014	STEPS, Yangon	Subnational	both	25-74	25-74	745	740	
2074	Myanmar	2014	STEPS	National	both	25-64	25-64	2,947	5,444	
2075	Myanmar	2015-2016	DHS	National	both		15-49		12,163	
2076	Namibia	1992	DHS	National	both		20-49		2,062	
2077	Namibia	2005	STEPS	National	both	25-64	25-64	1,390	1,778	
2078	Namibia	2006-2007	DHS	National	both		15-49		8,968	
2079	Namibia	2009	Okambilimbili Survey	Community	urban	5+	5+	962	1,167	
2080	Namibia	2013	DHS	National	both		15-64		5,111	
2081	Nauru	1982	Trends in the prevalence and incidence of non-insulin-dependent diabetes mellitus and impaired glucose tolerance	National	both	20+	20+	701	773	
2082	Nauru	1987	Trends in the prevalence and incidence of non-insulin-dependent diabetes mellitus and impaired glucose tolerance	National	both	20+	20+	555	667	
2083	Nauru	1994	Trends in the prevalence and incidence of non-insulin-dependent diabetes mellitus and impaired glucose tolerance	National	both	25+	25+	647	731	
2084	Nauru	2004	STEPS	National	both	15-64	15-64	1,082	1,149	
2085	Nauru	2006	STEPS	National	both	16-65	16-65	255	236	
2086	Nauru	2011	Global School-based Student Health Survey	National	both		13-17		259	
2087	Nauru	2015	STEPS	National	both	18-69	18-69	505	540	
2088	Nepal	1996	DHS	National	both		20-49		3,068	
2089	Nepal	1997	Ohno et al., Asia Pac J Public Health 18(3):20-9, 2006	Community	rural	17-75	17-75	36	41	
2090	Nepal	2001	DHS	National	both		20-49		7,216	
2091	Nepal	2003	STEPS	Subnational	both	25-64	25-64	1,010	996	
2092	Nepal	2005	STEPS	Subnational	both	15-64	15-64	3,634	3,998	
2093	Nepal	2006	DHS	National	both		15-49		10,117	
2094	Nepal	2006-2011	Early detection and management of Kidney disease, Hypertension, Diabetes and Cardiovascular disease (KHDC Nepal), Tarahara	Community	rural	18+	18+	1,175	2,350	
2095	Nepal	2006-2011	Early detection and management of Kidney disease, Hypertension, Diabetes and Cardiovascular disease (KHDC Nepal), Damak	Community	urban	18+	18+	1,095	1,576	
2096	Nepal	2006-2011	Early detection and management of Kidney disease, Hypertension, Diabetes and Cardiovascular disease (KHDC Nepal), Dharan	Community	urban	18+	18+	4,130	6,126	
2097	Nepal	2007-2008	STEPS	National	both	15-64	15-64	1,889	2,348	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2098	Nepal	2011	DHS	National	both		15-49		5,848	
2099	Nepal	2012-2013	STEPS	National	both	15-69	15-69	1,316	2,753	
2100	Nepal	2015	Community based intervention for prevention and control of non-communicable diseases risk factors (CIPCON) baseline survey, Dhankuta	Subnational	rural	15-69	15-69	555	781	
2101	Nepal	2015	Community based intervention for prevention and control of non-communicable diseases risk factors (CIPCON) baseline survey, Ilam	Subnational	rural	15-69	15-69	546	721	
2102	Nepal	2016	DHS	National	both	15-49	15-49	4,035	6,165	
2103	Nepal	2016-2018	The Population Based Prevalence of Selected Non-Communicable Diseases In Nepal	National	both	20+	20+	4,907	7,529	
2104	Nepal	2019	STEPS	National	both	15-69	15-69	1,996	3,521	
2105	Netherlands	1985	INTERSALT	Community	urban	20-59	20-59	100	99	
2106	Netherlands	1985	Zutphen Elderly Study	Community	urban	65-85		886		
2107	Netherlands	1987-1991	Doetinchem Cohort Study	Subnational	urban	20-59	20-59	2,995	3,317	
2108	Netherlands	1989-1993	The Rotterdam Study, first subcohort	Community	urban	55+	55+	2,807	4,103	
2109	Netherlands	1990	Zutphen Elderly Study	Community	urban	69-90		552		
2110	Netherlands	1992-1993	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	55-85	55-85	1,266	1,308	19
2111	Netherlands	1993-1995	The Rotterdam Study, first subcohort	Community	urban	56+	56+	2,214	3,105	
2112	Netherlands	1993-1997	EPIC Bilthoven	Community	urban	20-59	20-59	9,941	12,021	
2113	Netherlands	1993-1997	EPIC Utrecht	Community	both		49-70		17,335	
2114	Netherlands	1995-1996	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	65-88	65-88	714	764	19
2115	Netherlands	1997-1999	The Rotterdam Study, first subcohort	Community	urban	61+	61+	1,718	2,361	
2116	Netherlands	1998-1999	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	61-91	61-91	604	743	19
2117	Netherlands	1998-2001	Regenboog Project	National	both	12-89	12-89	2,714	2,643	
2118	Netherlands	2000-2001	The Rotterdam Study, second subcohort	Community	urban	55+	55+	1,210	1,468	
2119	Netherlands	2001-2002	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	64-94	64-94	577	690	19
2120	Netherlands	2001-2003	Surinamese in the Netherlands: Study on Ethnicity and Health (SUNSET)	Community	urban	35-60	35-60	251	257	
2121	Netherlands	2002-2003	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	54-65	54-65	431	482	19
2122	Netherlands	2002-2004	The Rotterdam Study, first subcohort	Community	urban	64+	64+	1,206	1,708	
2123	Netherlands	2003-2007	Doetinchem Cohort Study	Subnational	urban	36-75	36-75	2,135	2,368	
2124	Netherlands	2004-2005	The Rotterdam Study, second subcohort	Community	urban	58+	58+	964	1,244	
2125	Netherlands	2004-2006	Prevention and Incidence of Asthma and Mite Allergy (PIAMA)	National	both	7-9	7-9	1,110	1,104	
2126	Netherlands	2005-2006	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	57-97	57-97	789	958	19
2127	Netherlands	2006-2008	The Rotterdam Study, third subcohort	Community	urban	45+	45+	1,547	2,029	
2128	Netherlands	2008-2009	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	60-100	60-100	642	789	19
2129	Netherlands	2008-2011	Prevention and Incidence of Asthma and Mite Allergy (PIAMA)	National	both	12-13	12-13	739	769	
2130	Netherlands	2008-2011	Amsterdam Born Children and their Development Study (ABCD)	Community	both	5-7	5-7	1,540	1,528	
2131	Netherlands	2009-2010	Measuring the Netherlands (NL de Maat)	Subnational	both	30-70	30-70	1,781	2,014	
2132	Netherlands	2009-2011	The Rotterdam Study, first subcohort	Community	urban	72+	72+	690	1,006	
2133	Netherlands	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	National	both	10-12	10-12	404	399	
2134	Netherlands	2011-2012	The Rotterdam Study, second subcohort	Community	urban	65+	65+	735	934	
2135	Netherlands	2011-2012	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	63-104	63-104	532	653	19
2136	Netherlands	2011-2013	GECKO Drenthe Onderzoek	Subnational	rural	5-7	5-7	1,139	1,133	
2137	Netherlands	2011-2015	Healthy Life in an Urban Setting (HELIUS)	Community	urban	18-71	18-71	2,088	2,473	
2138	Netherlands	2012-2013	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	55-65	55-65	426	448	19, 20
2139	Netherlands	2012-2014	Prevention and Incidence of Asthma and Mite Allergy (PIAMA)	National	both	15-17	15-17	386	414	
2140	Netherlands	2012-2014	The Rotterdam Study, third subcohort	Community	urban	52+	52+	1,256	1,639	
2141	Netherlands	2012-2016	Amsterdam Born Children and their Development Study (ABCD)	Community	both	9-12	9-12	1,120	1,136	
2142	Netherlands	2015-2016	The Longitudinal Aging Study Amsterdam (LASA)	Subnational	both	58+	58+	759	857	19
2143	Netherlands	2016-2018	GECKO Drenthe Onderzoek	Subnational	rural	8-12	8-12	1,083	1,114	
2144	New Zealand	1982	MONICA, Auckland	Community	urban	35-64	35-64	1,019	568	
2145	New Zealand	1989	The Life in New Zealand Survey	National	both	15+	15+	1,418	1,571	
2146	New Zealand	1990-1993	Williams, N Z Med J 113(1114):308-11, 2000	Community	both	18-21	18-21	932	859	
2147	New Zealand	1993-1994	MONICA, Auckland	Community	urban	35-64	35-64	723	674	
2148	New Zealand	1996-1997	National Nutrition Survey	National	both	15+	15+	1,857	2,522	
2149	New Zealand	2002	National Children's Nutrition Survey	National	both	5-14	5-14	1,564	1,485	
2150	New Zealand	2002-2003	New Zealand Health Survey	National	both	15+	15+	4,594	6,729	
2151	New Zealand	2006-2007	New Zealand Health Survey	National	both	5+	5+	6,766	8,029	
2152	New Zealand	2008-2009	New Zealand Adult Nutrition Survey	National	both	15+	15+	2,003	2,500	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2153	New Zealand	2011-2012	New Zealand Health Survey	National	both	5+	5+	5,782	7,220	
2154	New Zealand	2012-2013	New Zealand Health Survey	National	both	5+	5+	6,412	7,932	
2155	New Zealand	2013-2014	New Zealand Health Survey	National	both	5+	5+	6,966	8,309	
2156	New Zealand	2014-2015	New Zealand Health Survey	National	both	5+	5+	7,124	8,437	
2157	New Zealand	2015-2016	New Zealand Health Survey	National	both	5+	5+	7,204	8,401	
2158	New Zealand	2016-2017	New Zealand Health Survey	National	both	5+	5+	6,944	8,275	
2159	New Zealand	2017-2018	New Zealand Health Survey	National	both	5+	5+	7,116	8,399	
2160	New Zealand	2018-2019	New Zealand Health Survey	National	both	5+	5+	6,809	8,461	
2161	New Zealand	2019-2020	New Zealand Health Survey	National	both	5+	5+	4,842	5,975	
2162	New Zealand	2020-2021	New Zealand Health Survey	National	both	5+	5+	4,595	5,488	
2163	Nicaragua	1997-1998	DHS	National	both		15-49		12,257	
2164	Nicaragua	2001	DHS	National	both		15-49		11,940	
2165	Nicaragua	2003-2004	CAMDI	Community	urban	20+	20+	773	916	
2166	Nicaragua	2003-2005	Sistema Integrado de Vigilancia de Intervenciones Nutricionales (SIVIN)	National	both		15-50		1,115	
2167	Nicaragua	2006-2007	Encuesta Nicaraguense de Demografia y Salud	National	both		15-49		13,216	
2168	Nicaragua	2011-2012	Encuesta Nicaraguense de Demografia y Salud	National	both		15-49		14,318	
2169	Niger	1992	DHS	National	both		20-49		2,993	
2170	Niger	1998	DHS	National	both		20-49		2,958	
2171	Niger	2006	DHS	National	both		15-49		4,151	
2172	Niger	2007	STEPS	National	both	15-64	15-64	1,430	1,215	
2173	Niger	2012	DHS	National	both		15-49		4,429	
2174	Niger	2021	STEPS	National	both	18-69	18-69	2,270	3,059	
2175	Nigeria	1990	Non-communicable diseases National Survey	National	rural	15+	15+	3,618	3,681	
2176	Nigeria	1990	Non-communicable diseases National Survey	National	urban	15+	15+	1,616	1,644	
2177	Nigeria	1991-1994	Cooper et al., Am J Public Health 87(2):160-68, 1997	Community	both	20-100	20-100	910	1,080	
2178	Nigeria	1999	DHS	National	both		20-49		2,004	
2179	Nigeria	1999-2009	Prostate cancer dietary risk factors study	Subnational	both	35+		627		
2180	Nigeria	2003	DHS	National	both		15-49		6,605	
2181	Nigeria	2006	Senbanjo et al., West Afr J Med 30(6):425-31, 2011	Community	urban	5-19	5-19	296	274	
2182	Nigeria	2007	Ibadan Study of Ageing	Subnational	both	60+	60+	642	914	
2183	Nigeria	2007	Southeast Nigeria kidney disease study	Community	rural	25-64	25-64	168	442	
2184	Nigeria	2008	DHS	National	both		15-49		28,973	
2185	Nigeria	2008	Ibadan Study of Ageing	Subnational	both	61+	61+	453	656	
2186	Nigeria	2009	Ibadan Study of Ageing	Subnational	both	62+	62+	420	619	
2187	Nigeria	2009	Community Health Plan - Kwara Central Survey	Community	rural	5+	5+	2,264	2,354	
2188	Nigeria	2009-2011	Anthropometric indices in Calabar	Community	urban	15-79	15-79	383	333	
2189	Nigeria	2010	Nnewi obesity study	Community	urban	19-85	19-85	774	746	
2190	Nigeria	2010-2011	Nigeria built environment	Subnational	urban	20-65	20-65	725	1,093	
2191	Nigeria	2011	Community Health Plan - Kwara Central Survey	Community	rural	5+	5+	791	853	
2192	Nigeria	2012	Neighbourhood walkability and sedentary lifesytle	Community	urban	60+	60+	212	141	
2193	Nigeria	2013	DHS	National	both		15-49		33,943	
2194	Nigeria	2013	Community Health Plan - Kwara Central Survey	Community	rural	5+	5+	714	754	
2195	Nigeria	2017	ARISE Network Adolescent Health Study (Ibadan)	Community	urban	10-19	10-19	336	407	
2196	Nigeria	2017-2019	Removing the Mask on Hypertension (REMAH)	National	both	18+	18+	1,806	2,353	
2197	Nigeria	2018	Hypertension Prevalence, Awareness, Treatment and Control in Rural Area, Nigeria	Community	rural	18+	18+	189	202	
2198	Niue	2010	Global School-based Student Health Survey	National	both	13-17	13-17	63	38	
2199	Niue	2011	STEPS	National	both	15+	15+	407	478	
2200	Niue	2019	Global School-based Student Health Survey	National	both	12-17	12-17	51	64	
2201	North Macedonia	1999	Multiple Indicator Cluster Survey	National	both		15-45		1,038	
2202	North Macedonia	2009	Annual assessment of nutritional status of school children aged 7 years	National	both	7	7	1,087	982	
2203	North Macedonia	2010	Childhood Obesity Surveillance Initiative 2	National	both	7	7	1,427	1,311	
2204	North Macedonia	2013	Childhood Obesity Surveillance Initiative 3	National	both	6-7	6-7	1,655	1,511	
2205	North Macedonia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	1,809	1,727	
2206	North Macedonia	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	1,579	1,611	
2207	Norway	1979-1980	The Tromsø Study: Tromsø 2	Community	both	20-54	20-49	8,312	7,823	
2208	Norway	1984-1986	HUNT1 study	Subnational	rural	20+	20+	36,514	37,811	
2209	Norway	1986-1987	The Tromsø Study: Tromsø 3	Community	both	20-61	20-56	10,374	9,804	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2210	Norway	1992-1993	The Hordaland Homocysteine Study 1925-1927 birth cohort	Subnational	both	65-67	65-67	2,123	2,630	
2211	Norway	1992-1993	The Hordaland Homocysteine Study 1928-1949 birth cohort	Subnational	urban	43-64	43-64	335	348	
2212	Norway	1992-1993	The Hordaland Homocysteine Study 1950-1952 birth cohort	Subnational	both	40-42	40-42	6,103	6,475	
2213	Norway	1994-1995	The Tromsø Study: Tromsø 4	Community	both	25+	25+	12,782	13,836	
2214	Norway	1995-1997	HUNT2 study	Subnational	rural	20+	20+	30,184	34,058	
2215	Norway	1995-1997	YoungHUNT1 Study	Subnational	rural	13-19	13-19	4,144	4,202	
2216	Norway	1997-1998	The Hordaland Health Study (HUSK) 1925-1927 birth cohort	Subnational	both	70-74	70-74	1,467	1,848	
2217	Norway	1997-1998	The Hordaland Health Study (HUSK) 1950-1951 birth cohort	Subnational	both	46-49	46-49	1,658	2,058	
2218	Norway	1997-1998	The Hordaland Health Study (HUSK) 1953-1957 birth cohort	Subnational	both	39-46	39-46	8,526	9,878	
2219	Norway	1999-2000	European Youth Heart Study	Community	urban	9-15	9-15	364	369	
2220	Norway	2000-2001	YoungHUNT2 Study	Subnational	rural	13-19	13-19	769	902	
2221	Norway	2000-2003	The Oslo cohort (HUBRO), the Oppland and Hedmark cohort (OPPHED), and the Troms and Finnmark cohort (TROFINN) of Cohort of Norway (CONOR)	Subnational	both	30-76	30-76	16,825	20,592	
2222	Norway	2001-2002	The Tromsø Study: Tromsø 5, Tromsø Study Panel	Community	both	30-89	30-89	2,525	3,579	
2223	Norway	2005-2006	Physical Activity among Norwegian Children and Adolescents	National	both	8-16	8-16	1,186	1,055	
2224	Norway	2006-2008	HUNT3 study	Subnational	rural	19+	19+	22,856	27,553	
2225	Norway	2006-2008	YoungHUNT3 Study	Subnational	rural	13-18	13-18	3,750	3,700	
2226	Norway	2007-2008	The Tromsø Study: Tromsø 6	Community	both	30-87	30-87	6,048	6,889	
2227	Norway	2008	Childhood Obesity Surveillance Initiative 1	National	both	8	8	1,435	1,399	
2228	Norway	2009-2010	Trondheim Early Secure Study (TESS)	Community	urban	6	6	328	322	
2229	Norway	2010	Childhood Obesity Surveillance Initiative 2	National	both	8	8	1,335	1,286	
2230	Norway	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	Subnational	urban	10-13	10-13	458	491	
2231	Norway	2011-2012	Trondheim Early Secure Study (TESS)	Community	urban	8	8	331	344	
2232	Norway	2012	Childhood Obesity Surveillance Initiative 3	National	both	8	8	1,492	1,381	
2233	Norway	2013-2014	Trondheim Early Secure Study (TESS)	Community	urban	10	10	332	360	
2234	Norway	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	1,690	1,645	
2235	Norway	2015-2016	Trondheim Early Secure Study (TESS)	Community	urban	12	12	310	333	
2236	Norway	2017-2018	Trondheim Early Secure Study (TESS)	Community	urban	14	14	289	322	
2237	Norway	2017-2019	HUNT4 study	Community	rural	19+	19+	24,270	29,256	
2238	Norway	2017-2019	YoungHUNT4 Study	Community	rural	13-18	13-18	3,452	3,747	
2239	Norway	2018-2020	The Hordaland Health Study (HUSK) 1950-1951 birth cohort	Subnational	both	67-70	67-70	986	1,192	
2240	Norway	2019-2021	Trondheim Early Secure Study (TESS)	Community	urban	16	16	287	341	
2241	Oman	1991	The 1991 National Diabetes Survey of Oman	National	both	20+	20+	2,024	2,868	
2242	Oman	2000	Oman National Health survey	National	both	20+	20+	3,069	3,331	
2243	Oman	2001	Nizwa Healthy Lifestyle Project	Community	urban	20+	20+	707	726	
2244	Oman	2006	STEPS	Community	urban	20-59	20-59	540	732	
2245	Oman	2008	Gulf Cooperation Council World Health Survey	National	both	18+	18+	2,389	2,112	
2246	Oman	2010	Global School-based Student Health Survey	National	both	13-17	13-17	251	300	
2247	Oman	2015	Global School-based Student Health Survey	National	both	13-17	13-17	1,330	1,551	
2248	Oman	2017	STEPS	National	both	18+	18+	3,334	2,948	
2249	Pakistan	1990-1994	MHS	Community	urban	18+	18+	432	478	
2250	Pakistan	1990-1994	National Health Survey of Pakistan 1990-1994	National	both	5+	5+	7,110	7,405	
2251	Pakistan	1999	Shah et al., Trop Med Int Health 9(4):526-32, 2004	Community	both	18+	18+	1,391	2,754	
2252	Pakistan	2004-2005	COBRA-1	Community	urban	40+	40+	1,500	1,635	
2253	Pakistan	2005	STEPS	National	both	25-65	25-65	787	1,071	
2254	Pakistan	2011	National Nutrition Survey	National	both	5-49	5-49	21,461	48,503	
2255	Pakistan	2012-2013	DHS	National	both		20-49		3,968	
2256	Pakistan	2014	STEPS	Subnational	both	18-69	18-69	2,964	3,674	
2257	Pakistan	2016-2017	National Diabetes Survey of Pakistan	National	both	20+	20+	3,771	4,647	
2258	Pakistan	2017-2018	DHS	National	both		15-49		3,637	
2259	Pakistan	2018-2019	National Nutrition Survey	National	both	5-19	5-49	11,888	127,307	
2260	Palau	2010	School Health Screening	National	both	5-17	5-17	537	511	
2261	Palau	2011	School Health Screening	National	both	5-17	5-17	613	599	
2262	Palau	2011-2013	STEPS	National	both	25-64	25-64	1,031	1,124	
2263	Palau	2012	School Health Screening	National	both	5-17	5-17	548	596	
2264	Palau	2013	School Health Screening	National	both	5-17	5-17	570	576	
2265	Palau	2014	School Health Screening	National	both	5-17	5-17	576	558	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2266	Palau	2015	School Health Screening	National	both	5-17	5-17	522	565	
2267	Palau	2016	School Health Screening	National	both	5-17	5-17	569	563	
2268	Palau	2016	STEPS	National	both	18+	18+	713	717	
2269	Palau	2017	School Health Screening	National	both	5-17	5-17	484	522	
2270	Palau	2018	School Health Screening	National	both	5-17	5-17	598	554	
2271	Palau	2019	School Health Screening	National	both	5-17	5-17	504	561	
2272	Palau	2020	School Health Screening	National	both	5-17	5-17	591	568	
2273	Palau	2021	School Health Screening	National	both	5-17	5-17	600	598	
2274	Palau	2022	School Health Screening	National	both	5-17	5-17	525	515	
2275	Panama	2003	Encuesta de Niveles de Vida	National	both	5+	5+	10,808	11,133	
2276	Panama	2010-2011	Prevalencia de factores de riesgo asociados a enfermedad cardiovascular 2010-2011	Subnational	both	18+	18+	1,067	2,469	
2277	Panama	2018	Global School-based Student Health Survey	National	both	13-17	13-17	1,121	1,384	
2278	Panama	2019	Encuesta Nacional de Salud de Panama (ENSPA)	National	both	15+	15+	4,288	10,851	
2279	Papua New Guinea	1985-1986	INTERSALT	Community	rural	20-59	20-59	88	74	
2280	Papua New Guinea	1991	Dowse et al., Med J Aust 160:767-74, 1994	Subnational	both	25-88	25-88	836	1,012	
2281	Papua New Guinea	2007	STEPS	National	both	15-64	15-64	1,401	1,440	
2282	Paraguay	2011	Primera Encuesta Nacional de Factores de Riesgo de Enfermedades No Transmisibles en la Poblacion General	National	both	15-75	15-75	931	1,574	
2283	Paraguay	2017	Global School-based Student Health Survey	National	both	12-16	12-16	1,119	1,231	
2284	Peru	1991-1992	DHS	National	both		15-49		4,887	
2285	Peru	1996	DHS	National	both		20-49		10,125	
2286	Peru	2000	DHS	National	both		15-49		25,508	
2287	Peru	2003	Factores de Riesgo de Enfermedades No Transmisibles	Community	urban	16+	16+	327	503	
2288	Peru	2004	Factores de Riesgo de Enfermedades No Transmisibles	Community	urban	15+	15+	218	445	
2289	Peru	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	769	876	
2290	Peru	2004-2005	Encuesta Nacional de Indicadores Nutricionales, Bioquímicos, Socioeconómicos y Culturales Relacionados con las Enfermedades Crónicas Degenerativas	National	both	20+	20+	2,087	2,095	
2291	Peru	2004-2006	DHS	National	both		15-49		5,798	
2292	Peru	2005	Factores de Riesgo de Enfermedades No Transmisibles	Community	urban	15+	15+	209	550	
2293	Peru	2006	Factores de Riesgo de Enfermedades No Transmisibles	Community	urban	15+	15+	662	1,101	
2294	Peru	2007-2008	Monitoreo de Indicadores Nutricionales en la ENAHO 2007-2008	National	both	5+	5+	15,041	16,282	
2295	Peru	2007-2008	DHS	National	both		15-49		20,918	
2296	Peru	2007-2008	PERU MIGRANT Study	Community	both	30+	30+	464	522	
2297	Peru	2007-2010	Monitoreo Nacional de Indicadores Nutricionales	National	both		12-49		3,804	
2298	Peru	2009	DHS	National	both		15-49		23,034	
2299	Peru	2009-2011	Monitoreo de Indicadores Nutricionales en la ENAHO 2009-2010	National	both	5+	5+	27,753	31,269	
2300	Peru	2009-2012	CRONICAS Cohort Study	Subnational	both	35+	35+	1,557	1,660	
2301	Peru	2010	DHS	National	both		15-49		22,425	
2302	Peru	2010	Global School-based Student Health Survey	National	both	13-17	13-17	1,267	1,306	
2303	Peru	2010-2013	CRONICAS Cohort Study	Subnational	both	35+	35+	1,379	1,468	
2304	Peru	2011	DHS	National	both		15-49		22,215	
2305	Peru	2011-2012	Monitoreo de Indicadores Nutricionales en la ENAHO 2011	National	both	5+	5+	7,424	8,424	
2306	Peru	2012	DHS	National	both		15-49		23,724	
2307	Peru	2012-2013	PERU MIGRANT Study	Community	both	35+	35+	339	427	
2308	Peru	2013	DHS	National	both	15+	15+	2,932	23,784	
2309	Peru	2013	Clinical functional and sociofamilial profiles of the elderly from a community in a district of Lima, Peru	Community	urban	60+	60+	185	309	
2310	Peru	2013-2014	CRONICAS Cohort Study	Subnational	both	36+	36+	1,292	1,361	
2311	Peru	2014	DHS	National	both	15+	15+	12,670	28,554	
2312	Peru	2014	Launching a salt substitute to reduce blood pressure at the population level: a cluster randomized stepped wedge trial in Peru	Community	both	18+	18+	1,149	1,166	
2313	Peru	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	603	627	
2314	Peru	2015	DHS	National	both	15+	15+	14,744	38,415	
2315	Peru	2015-2016	PERU MIGRANT Study	Community	both	38+	38+	324	414	
2316	Peru	2016	DHS	National	both	15+	15+	14,035	35,998	
2317	Peru	2016-2017	Screening of T2DM	Community	urban	30-70	30-70	798	809	
2318	Peru	2017	DHS	National	both	15+	15+	14,340	37,386	
2319	Peru	2017-2018	Vigilancia Alimentario Nutricional por Etapas de Vida (VIANEV) 2017-2018	National	both	18-59	18-59	465	618	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2320	Peru	2018	DHS	National	both	15+	15+	14,600	39,575	
2321	Peru	2019	DHS	National	both	15+	15+	14,200	37,943	
2322	Peru	2020	DHS	National	both	15+	15+	9,926	25,781	
2323	Peru	2021	DHS	National	both	15+	15+	13,515	36,250	
2324	Peru	2022	DHS	National	both	15+	15+	13,673	35,914	
2325	Philippines	1983-1984	Cebu Longitudinal Health and Nutrition Survey Baseline 2-Month Follow-up	Community	both		15-50		2,866	
2326	Philippines	1983-1984	Cebu Longitudinal Health and Nutrition Survey Baseline 4-Month Follow-up	Community	both		15-50		2,728	
2327	Philippines	1983-1984	Cebu Longitudinal Health and Nutrition Survey Baseline 6-Month Follow-up	Community	both		15-50		2,601	
2328	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 8-Month Follow-up	Community	both		15-50		2,473	
2329	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 10-Month Follow-up	Community	both		15-50		2,348	
2330	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 12-Month Follow-up	Community	both		15-50		2,263	
2331	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 14-Month Follow-up	Community	both		15-50		2,193	
2332	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 16-Month Follow-up	Community	both		15-50		2,129	
2333	Philippines	1984-1985	Cebu Longitudinal Health and Nutrition Survey Baseline 18-Month Follow-up	Community	both		15-50		2,079	
2334	Philippines	1985-1986	Cebu Longitudinal Health and Nutrition Survey Baseline 20-Month Follow-up	Community	both		15-50		2,047	
2335	Philippines	1985-1986	Cebu Longitudinal Health and Nutrition Survey Baseline 22-Month Follow-up	Community	both		15-50		2,017	
2336	Philippines	1985-1986	Cebu Longitudinal Health and Nutrition Survey Baseline 24-Month Follow-up	Community	both		15-50		2,022	
2337	Philippines	1988	INCLEN	Community	rural	35-65		274		
2338	Philippines	1991-1992	Cebu Longitudinal Health and Nutrition Survey 1991 Child Follow-up	Community	both	8	8	1,202	1,076	
2339	Philippines	1991-1992	Cebu Longitudinal Health and Nutrition Survey 1991 Mother Follow-up	Community	both		22-55		2,195	
2340	Philippines	1993	4th National Nutrition Survey	National	both	20-70	20-70	4,383	4,754	
2341	Philippines	1993	National Safe Motherhood Survey	National	both		15-49		7,181	
2342	Philippines	1994-1995	Cebu Longitudinal Health and Nutrition Survey 1994-1995 Mother Follow-up	Community	both		15-59		2,692	
2343	Philippines	1998	5th National Nutrition Survey	National	both	20-60	20-60	1,323	1,340	
2344	Philippines	1998-1999	Cebu Longitudinal Health and Nutrition Survey 1998-1999 Child Follow-up	Community	both	14-16	14-16	1,102	999	
2345	Philippines	1998-1999	Cebu Longitudinal Health and Nutrition Survey 1998-1999 Mother Follow-up	Community	both		15-59		1,911	
2346	Philippines	2002	Cebu Longitudinal Health and Nutrition Survey 2002 Child Follow-up	Community	both	17-19	17-19	1,087	907	
2347	Philippines	2002	Cebu Longitudinal Health and Nutrition Survey 2002 Mother Follow-up	Community	both		32-66		2,080	
2348	Philippines	2003	Global School-based Student Health Survey	National	both		13		291	
2349	Philippines	2003	6th National Nutrition Survey	National	both	5+	5+	10,686	11,131	
2350	Philippines	2005	Cebu Longitudinal Health and Nutrition Survey 2005 Child Follow-up	Community	both	20-22	20-22	1,006	831	
2351	Philippines	2005	Cebu Longitudinal Health and Nutrition Survey 2005 Mother Follow-up	Community	both		35-69		2,001	
2352	Philippines	2007	Cebu Longitudinal Health and Nutrition Survey 2007 Child Follow-up	Community	both	23-24	23-24	937	751	
2353	Philippines	2007	Cebu Longitudinal Health and Nutrition Survey 2007 Mother Follow-up	Community	both		38-71		1,925	
2354	Philippines	2007	Global School-based Student Health Survey	National	both		13		254	
2355	Philippines	2008	7th National Nutrition Survey	National	both	5+	5+	64,001	63,616	
2356	Philippines	2009	Cebu Longitudinal Health and Nutrition Survey 2009 Child Follow-up	Community	both	24-26	24-26	864	718	
2357	Philippines	2011	Global School-based Student Health Survey	National	both		13		540	
2358	Philippines	2011	2011 Updating of Nutritional Status of Filipino Children and Other Population Groups	National	both	5+	5+	63,654	66,866	
2359	Philippines	2013-2014	8th National Nutrition Survey	National	both	5+	5+	57,432	61,620	
2360	Philippines	2015	Global School-based Student Health Survey	National	both		13-17		3,730	
2361	Philippines	2015	2015 Updating of Nutritional Status of Filipino Children and Other Population Groups	National	both	5+	5+	69,309	73,250	
2362	Philippines	2019	Global School-based Student Health Survey	National	both	12-16	12-16	3,571	4,286	
2363	Poland	1983-1984	MONICA, Tarnobrzeg Voivodship	Community	rural	35-64	35-64	1,236	1,441	
2364	Poland	1983-1985	MONICA, Warsaw	Community	urban	35-64	35-64	1,297	1,327	
2365	Poland	1986	Poland Conscripts 10% Sample Cohort	National	both	18-19		29,421		
2366	Poland	1986	INTERSALT, Krakow	Community	urban	20-59	20-59	100	100	
2367	Poland	1986	INTERSALT, Warsaw	Community	urban	20-59	20-59	100	100	
2368	Poland	1987-1988	MONICA, Tarnobrzeg Voivodship	Community	rural	35-64	35-64	616	672	
2369	Poland	1988	Fourth National Survey	Subnational	both	7-19	7-19	12,345	10,371	
2370	Poland	1988-1989	MONICA, Warsaw	Community	urban	35-64	35-64	705	713	
2371	Poland	1989-1990	Polish Program CINDI (CINDI Lodz 1989-1990)	Community	urban	25-64	25-64	831	957	
2372	Poland	1992-1993	MONICA, Tarnobrzeg Voivodship	Community	rural	35-64	35-64	618	692	
2373	Poland	1993	MONICA, Warsaw	Community	urban	35-64	35-64	751	763	
2374	Poland	1995	Poland Conscripts 10% Sample Cohort	National	both	18-19		31,043		
2375	Poland	1995-1996	Polish Program CINDI (CINDI Lodz 1995)	Community	urban	17-64	17-64	997	1,459	
2376	Poland	1997	Wroclaw survey in adolescents	Community	both	12-17	12-17	2,198	2,141	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2377	Poland	2000	The health status, risk factors of chronic diseases and health behaviors of residents of Torun (CINDI Torun 2000)	Community	urban	16-83	16-83	989	1,054	
2378	Poland	2000	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,003		
2379	Poland	2000-2001	Household Food Consumption and Anthropometric Survey	National	both	5+	5+	1,766	2,107	
2380	Poland	2001	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,420		
2381	Poland	2001	Poland Conscripts 10% Sample Cohort	National	both	18-19		31,213		
2382	Poland	2001-2002	The health status, risk factors of chronic diseases and health behaviors of residents of Lodz (CINDI Lodz 2001)	Community	urban	18-64	18-64	1,000	840	
2383	Poland	2001-2002	Young Men Cardiovascular Association Study	Community	urban	16+		1,156		21
2384	Poland	2002	The health status, risk factors of chronic diseases and health behaviors of residents of Lodz - seniors (CINDI Lodz 2002)	Community	urban	65+	65+	285	532	
2385	Poland	2002	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,544		
2386	Poland	2002	NATPOL	National	both	18+	18+	1,018	1,301	
2387	Poland	2002-2005	Health, Alcohol and Psychosocial Factors In Eastern Europe	Community	urban	45-70	45-70	4,502	4,752	
2388	Poland	2003	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,633		
2389	Poland	2003	The European Male Ageing Study	Community	both	40+		406		
2390	Poland	2003-2005	National Multicenter Health Survey in Poland. Project WOBASZ	National	both	20-74	20-74	6,245	6,910	
2391	Poland	2003-2006	Mogielica Human Ecology Study Site	Community	rural	18+	18+	119	321	
2392	Poland	2004	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,538		
2393	Poland	2004	LIPIDOGRAM2004 Study - National epidemiological study of lipid disorders and selected risk factors of cardiovascular disease in primary health care in Poland	National	both	30+	30+	6,673	9,920	
2394	Poland	2005	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,308		
2395	Poland	2006	The health, risk factors for chronic diseases, attitudes and behaviors of health residents of Torun (CINDI Torun 2006)	Community	urban	15-65	15-65	790	1,147	
2396	Poland	2006	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,701		
2397	Poland	2006	LIPIDOGRAM2006 Study - National epidemiological study of lipid disorders and selected risk factors of cardiovascular disease in primary health care in Poland	National	both	32+	32+	6,441	10,640	
2398	Poland	2006-2007	National Multicenter Health Survey in Poland. Project WOBASZ Senior	National	both	75+	75+	541	533	
2399	Poland	2007	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,612		
2400	Poland	2007-2009	Elaboration of the reference range of arterial blood pressure for the population of children and adolescents in Poland - PL0080 OLAF - Primary	National	both	6-16	6-16	6,497	6,603	
2401	Poland	2007-2009	Elaboration of the reference range of arterial blood pressure for the population of children and adolescents in Poland - PL0080 OLAF - Secondary	National	both	16-18	16-18	1,852	2,520	
2402	Poland	2007-2010	Mogielica Human Ecology Study Site	Community	rural	18+	18+	133	290	
2403	Poland	2007-2011	Medical, psychological and socioeconomic aspects of aging in Poland	National	both	55+	55+	2,682	2,507	
2404	Poland	2008	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,435		
2405	Poland	2008	The European Male Ageing Study	Community	both	40+		310		
2406	Poland	2009	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,405		
2407	Poland	2009-2010	Poland Conscripts 10% Sample Cohort	National	both	18-19		9,208		
2408	Poland	2010	Binkowska-Bury et al., Neuro Endocrinol Lett 34(8):814-20, 2013	Subnational	both	19-20		3,317		
2409	Poland	2010-2012	Blood pressure references for Polish preschool children - the OLA study	National	both	5-6	5-6	926	904	
2410	Poland	2011	NATPOL	National	both	18-79	18-79	1,158	1,235	
2411	Poland	2011-2014	Mogielica Human Ecology Study Site	Community	rural	18+	18+	142	418	
2412	Poland	2012-2013	Fifth National Survey	Subnational	both	6-19	6-19	3,091	2,686	
2413	Poland	2013-2014	National Multicenter Health Survey in Poland. Project WOBASZ II	National	both	20+	20+	2,626	3,198	
2414	Poland	2014	Prevalence of risk factors for obesity and hypertension among Polish children and adolescents	Subnational	both	7-18	7-18	284	283	
2415	Poland	2014-2017	The impact of physical activity and selected perinatal risk factors on the occurrence of overweight and obesity and hypertension in children	Subnational	both	5-15	5-15	516	454	
2416	Poland	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	8	8	1,675	1,664	
2417	Poland	2015-2016	LIPIDOGRAM2015 & LIPIDOGEN2015 Study - National epidemiological study of lipid disorders and selected risk factors of cardiovascular disease in primary health care in Poland	National	both	18+	18+	5,034	8,690	
2418	Poland	2016	Body fat in Polish adolescents	Community	urban	11-13	11-13	76	82	
2419	Poland	2016-2017	Erasmus plus KA2, Healthyland	Community	urban	6	6	25	25	
2420	Poland	2016-2017	The occurrence of overweight and obesity in children from different place of residence	Subnational	both	7-13	7-13	164	151	
2421	Poland	2016-2020	The prevalence of overweight and obesity and the assessment of body balance among children in a rural area in Poland	Subnational	rural	7-15	7-15	580	557	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2422	Poland	2017	Multivariate assessment of the occurrence of noncommunicable diseases and their risk factors among preschool children	Community	urban	5-7	5-7	226	206	
2423	Poland	2017	Preferences for sweet and fatty taste in children and their mothers in association with weight status	Subnational	both	8-15	8-15	138	150	
2424	Poland	2017	Risk factors for obesity among Polish adolescents	Community	both	14-19	14-19	40	38	
2425	Poland	2017-2018	Erasmus plus KA2, Healthyland	Community	urban	5-6	5-6	24	26	
2426	Poland	2018	Childhood Obesity Surveillance Initiative 5	National	both	8	8	1,387	1,303	
2427	Poland	2018	Mogielica Human Ecology Study Site	Community	rural	18+	18+	30	95	
2428	Poland	2018	Multivariate assessment of the occurrence of noncommunicable diseases and their risk factors among preschool children	Community	urban	5-7	5-7	393	385	
2429	Poland	2018-2020	Child of Kraków 2020	Community	urban	5-18	5-18	1,382	1,487	
2430	Poland	2019	Multivariate assessment of the occurrence of noncommunicable diseases and their risk factors among preschool children	Community	urban	5-7	5-7	395	375	
2431	Poland	2019-2020	Assessment of the olfactory and taste functions of children with type 1 diabetes	Community	rural	10-15	10-15	54	46	
2432	Poland	2019-2020	Child health status and risk factors	Subnational	both	6-17	6-17	371	329	
2433	Portugal	1980-1982	Growth of children from the countryside of Portugal	Community	both	6-15	6-15	1,349	1,316	
2434	Portugal	1985	Body-Mass Index of Portuguese Conscripts	National	both	18-20		29,420		
2435	Portugal	1986	Body-Mass Index of Portuguese Conscripts	National	both	18-20		70,504		
2436	Portugal	1986	INTERSALT	Community	rural	20-59	20-59	99	99	
2437	Portugal	1987	Body-Mass Index of Portuguese Conscripts	National	both	18-20		68,079		
2438	Portugal	1988	Body-Mass Index of Portuguese Conscripts	National	both	18-20		67,573		
2439	Portugal	1989	Body-Mass Index of Portuguese Conscripts	National	both	18-20		68,827		
2440	Portugal	1990	Body-Mass Index of Portuguese Conscripts	National	both	18-20		44,359		
2441	Portugal	1991	Body-Mass Index of Portuguese Conscripts	National	both	18-20		19,552		
2442	Portugal	1992	Body-Mass Index of Portuguese Conscripts	National	both	18-20		52,393		
2443	Portugal	1993	Body-Mass Index of Portuguese Conscripts	National	both	18-20		59,780		
2444	Portugal	1994	Body-Mass Index of Portuguese Conscripts	National	both	18-20		55,511		
2445	Portugal	1995	Body-Mass Index of Portuguese Conscripts	National	both	18-20		68,221		
2446	Portugal	1996	Body-Mass Index of Portuguese Conscripts	National	both	18-21		106,097		
2447	Portugal	1997	Body-Mass Index of Portuguese Conscripts	National	both	18-21		61,215		
2448	Portugal	1998	Body-Mass Index of Portuguese Conscripts	National	both	18-21		41,027		
2449	Portugal	1998-2000	European Youth Heart Study	Community	both	9-16	9-16	554	535	
2450	Portugal	1999	Body-Mass Index of Portuguese Conscripts	National	both	18-21		54,187		
2451	Portugal	1999-2003	EPIPorto study	Community	urban	18+	18+	932	1,507	
2452	Portugal	2000	Body-Mass Index of Portuguese Conscripts	National	both	18-21		53,326		
2453	Portugal	2003-2004	EPITeen - Epidemiological Health Investigation of Teenagers in Porto	Community	urban	13-14	13-14	981	1,048	
2454	Portugal	2003-2005	Estudo de Prevalência da Obesidade e Consumos Alimentares em Portugal	National	both	18-64	18-64	3,796	4,320	
2455	Portugal	2004	Growth of adolescents in Coimbra	Community	both	9-16	9-16	265	408	
2456	Portugal	2004	Growth of adolescents in Gouveia	Community	rural	10-19	10-19	238	246	
2457	Portugal	2007	Growth of adolescents in Tondela	Community	rural	6-19	6-19	314	312	
2458	Portugal	2007-2008	EPITeen - Epidemiological Health Investigation of Teenagers in Porto	Community	urban	16-17	16-17	1,186	1,251	
2459	Portugal	2007-2008	European Youth Heart Study	Community	both	8-17	8-17	315	311	
2460	Portugal	2007-2008	Primary schools health promotion	Community	urban	6-12	6-12	224	238	
2461	Portugal	2007-2009	Portuguese National Survey of Physical Activity and Physical Fitness	National	both	9+	9+	14,914	18,025	
2462	Portugal	2007-2010	Promoção do Exercício e Saúde no Sedentarismo e Obesidade da Adolescência (PESSOA Program)	Community	urban	9-16	9-16	1,931	1,813	
2463	Portugal	2007-2010	The Midland Adolescent Lifestyle Study	Subnational	both	12-16	12-16	196	235	
2464	Portugal	2008	Azorean Physical Activity and Health Study II	Subnational	urban	15-18	15-18	608	893	
2465	Portugal	2008	Childhood Obesity Surveillance Initiative 1	National	both	6-8	6-8	1,801	1,792	
2466	Portugal	2008-2013	Preschool Physical Activity, Body Composition and Lifestyle Study (PRESTYLE)	Community	urban	5-6	5-6	651	607	
2467	Portugal	2009	Bracara Study	Community	urban	8-14	8-14	398	336	
2468	Portugal	2009-2010	Portuguese Prevelance Study of Obesity in Childhood	National	both	5-10	5-10	6,804	7,099	
2469	Portugal	2010	Childhood Obesity Surveillance Initiative 2	National	both	6-8	6-8	1,830	1,826	
2470	Portugal	2010-2012	Exercise for Elderly	Community	urban	60-84	60-84	48	104	
2471	Portugal	2010-2012	Promoção do Exercício e Saúde no Sedentarismo e Obesidade da Adolescência (PESSOA Program)	Community	urban	9-14	9-14	287	275	
2472	Portugal	2011-2012	The association of childhood obesity with asthma and rhinitis symptoms in 6-8 years old children living in the Coimbra district, Portugal: the role of environmental, family and socioeconomic factors	Community	both	6-8	6-8	480	504	
2473	Portugal	2011-2013	EPITeen - Epidemiological Health Investigation of Teenagers in Porto	Community	urban	20-23	20-23	854	895	
2474	Portugal	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	358	419	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2475	Portugal	2011-2013	Environmental Support for Leisure and Active Transport	Subnational	urban	10-15	10-15	294	340	
2476	Portugal	2011-2014	Longitudinal Analysis of Biomarkers and Environmental Determinants of Physical activity (LABMED Study)	Subnational	urban	12-18	12-18	531	460	
2477	Portugal	2013	Childhood Obesity Surveillance Initiative 3	National	both	6-8	6-8	2,951	2,982	
2478	Portugal	2013	Childhood obesity in Lousao	Community	rural	5-14	5-14	444	418	
2479	Portugal	2013-2014	Cultural, social, economic, and environmental factors that can influence children's sport participation and obesity levels	Community	urban	6-10	6-10	385	408	
2480	Portugal	2015	Inquérito Nacional de Saúde com Exame Físico (INSEF)	National	both	25-74	25-74	2,248	2,639	
2481	Portugal	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-8	6-8	3,346	3,399	
2482	Portugal	2016-2017	Overweight and obesity and their associated factors among early adolescence school children in urban and rural Portugal	National	rural	10-12	10-12	38	33	
2483	Portugal	2016-2017	Portuguese Prevalence Study of Obesity in Childhood	Subnational	both	5-10	5-10	3,572	3,522	
2484	Portugal	2018-2019	Childhood Obesity Surveillance Initiative 5	National	both	6-8	6-8	3,626	3,429	
2485	Puerto Rico	2002-2003	Puerto Rican Elderly: Health Conditions	National	both	60+	60+	1,914	2,850	22
2486	Puerto Rico	2005-2007	Perez et al., Ethn Dis 18(4):434-41, 2008	Community	urban	15-84	15-84	275	529	
2487	Puerto Rico	2006-2007	Puerto Rican Elderly: Health Conditions	National	both	60+	60+	1,056	1,669	22
2488	Puerto Rico	2010-2013	HPV Infection in a Population-Based Sample of Puerto Rican Women	Subnational	both		16-64		563	
2489	Qatar	2006	World Health Survey	National	both	18+	18+	1,859	2,018	
2490	Qatar	2011	Global School-based Student Health Survey	National	both	13	13	102	126	
2491	Qatar	2012	STEPS	National	both	18-64	18-64	1,034	1,353	
2492	Romania	1986-1987	MONICA, Bucharest	Community	urban	25-64	25-64	702	873	
2493	Romania	1997	Somatometria	National	both	25-75	25-75	3,142	4,063	
2494	Romania	1999	Romania physical development rural data	National	rural	5-18	5-18	20,452	20,043	
2495	Romania	1999	Romania physical development urban data	National	urban	5-18	5-18	21,423	23,605	
2496	Romania	2006-2008	Hypertension in Romanian Children and Adolescents: A Cross-Sectional Survey	Subnational	both	5-17	5-17	2,313	2,339	
2497	Romania	2008	Healthy traditions for healthy children	Community	rural	5-11	5-11	74	69	
2498	Romania	2008-2009	Healthy traditions for healthy children	Community	urban	7-11	7-11	562	525	
2499	Romania	2009-2011	Study on children in Dolj County, South Romania	Subnational	both	5-21	5-21	746	672	
2500	Romania	2010-2013	Healthy traditions for healthy children	Community	urban	5-11	5-11	1,306	1,362	
2501	Romania	2011-2012	SEPHAR II (Study for the Evaluation of Prevalence of Hypertension and Cardiovascular Risk in Romania - 2nd edition	National	both	18-80	18-80	927	1,023	
2502	Romania	2012	Healthy traditions for healthy children	Community	rural	5-10	5-10	98	75	
2503	Romania	2012-2014	PREDATORR	National	both	20-79	20-79	1,284	1,431	
2504	Romania	2013	Childhood Obesity Surveillance Initiative 3	National	both	8	8	2,175	2,173	
2505	Romania	2013	Healthy traditions for healthy children	Subnational	rural	6-10	6-10	121	107	
2506	Romania	2013-2014	Auxological evaluation of school children in Mures County	Subnational	both	6-14	6-14	936	957	
2507	Romania	2014	Timis County Study	Community	urban	6-19	6-19	237	205	
2508	Romania	2014-2015	Healthy traditions for healthy children	Subnational	rural	5-11	5-11	599	554	
2509	Romania	2014-2015	Healthy traditions for healthy children	Community	urban	5-10	5-10	393	427	
2510	Romania	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-9	7-9	3,699	3,595	
2511	Romania	2015-2016	SEPHAR III (Study for the Evaluation of Prevalence of Hypertension and Cardiovascular Risk in Romania - 3rd edition	National	both	18-80	18-80	936	1,034	
2512	Romania	2016	Healthy traditions for healthy children	Community	rural	5-11	5-11	352	313	
2513	Romania	2016	Healthy traditions for healthy children	Community	urban	5-11	5-11	259	255	
2514	Romania	2016-2017	Erasmus plus KA2, Healthyland	Community	urban	5-6	5-6	14	16	
2515	Romania	2017	Healthy traditions for healthy children	Community	rural	5-11	5-11	226	231	
2516	Romania	2017	Healthy traditions for healthy children	Community	urban	5-11	5-11	582	588	
2517	Romania	2017-2018	Erasmus plus KA2, Healthyland	Community	urban	5-7	5-7	31	34	
2518	Romania	2018	Healthy traditions for healthy children	Community	rural	5-11	5-11	456	404	
2519	Romania	2018	Healthy traditions for healthy children	Community	urban	5-11	5-11	679	681	
2520	Romania	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-9	7-9	5,234	5,142	
2521	Romania	2019	Healthy traditions for healthy children	Community	rural	5-11	5-11	78	92	
2522	Romania	2019	Healthy traditions for healthy children	Community	urban	5-11	5-11	353	340	
2523	Romania	2019	Resita preschool measurements	Community	urban	5-8	5-8	232	236	
2524	Romania	2022	Healthy traditions for healthy children	Community	rural	5-11	5-11	232	210	
2525	Romania	2022	Healthy traditions for healthy children	Community	urban	5-11	5-11	1,163	982	
2526	Russian Federation	1984-1985	Novosibirsk cohort semi-MONICA	Community	urban	23-63		1,603		
2527	Russian Federation	1984-1986	MONICA, Moscow (control)	Community	urban	35-64	35-64	774	642	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2528	Russian Federation	1984-1986	MONICA, Moscow, Leninsky district	Community	urban	35-64	35-64	553	622	
2529	Russian Federation	1984-1986	MONICA, Moscow, Cheremushkinsky district	Community	urban	35-64	35-64	580	579	
2530	Russian Federation	1985	MONICA, Novosibirsk (intervention)	Community	urban	25-64	25-64	797	818	
2531	Russian Federation	1985-1986	MONICA, Novosibirsk, Kirowsky district	Community	urban	25-64	25-64	758	774	
2532	Russian Federation	1985-1986	MONICA, Novosibirsk, Leninsky district	Community	urban	25-64	25-64	624	624	
2533	Russian Federation	1986	INTERSALT	Community	urban	20-59	20-59	97	97	
2534	Russian Federation	1988	MONICA, Novosibirsk (intervention)	Community	urban	25-64	25-64	837	852	
2535	Russian Federation	1988-1989	MONICA, Moscow (control)	Community	urban	35-64	35-64	620	581	
2536	Russian Federation	1988-1989	MONICA, Moscow, Leninsky district	Community	urban	35-64	35-64	597	612	
2537	Russian Federation	1988-1989	MONICA, Novosibirsk, Kirowsky district	Community	urban	25-64	25-64	871	705	
2538	Russian Federation	1992	CINDI	Community	rural	25-64	25-64	377	453	
2539	Russian Federation	1992	Russian Karelia Survey in Pitkaranta	Community	both	25-64	25-64	380	455	
2540	Russian Federation	1992-1993	Russia Longitudinal Monitoring Survey- Higher School of Economics Round II	National	both	5+	5+	4,764	6,348	
2541	Russian Federation	1992-1995	MONICA, Moscow (control)	Community	urban	35-64	35-64	556	527	
2542	Russian Federation	1992-1995	MONICA, Moscow, Leninsky district	Community	urban	35-64	35-64	538	858	
2543	Russian Federation	1993	Russia Longitudinal Monitoring Survey- Higher School of Economics Round III	National	both	5+	5+	6,009	7,685	
2544	Russian Federation	1993-1994	Russia Longitudinal Monitoring Survey- Higher School of Economics Round IV	National	both	5+	5+	5,519	7,094	
2545	Russian Federation	1994	Russia Longitudinal Monitoring Survey- Higher School of Economics Round V	National	both	5+	5+	4,726	5,788	
2546	Russian Federation	1994-1995	MONICA, Novosibirsk (intervention)	Community	urban	25-64	25-64	820	860	
2547	Russian Federation	1995	MONICA, Novosibirsk, Kirowsky district	Community	urban	25-64	25-64	771	787	
2548	Russian Federation	1995	Russia Longitudinal Monitoring Survey- Higher School of Economics Round VI	National	both	5+	5+	4,463	5,509	
2549	Russian Federation	1996	Russia Longitudinal Monitoring Survey- Higher School of Economics Round VII	National	both	5+	5+	4,261	5,300	
2550	Russian Federation	1997	Russian Karelia Survey in Pitkaranta	Community	both	25-64	25-64	309	440	
2551	Russian Federation	1998-1999	Russia Longitudinal Monitoring Survey- Higher School of Economics Round VIII	National	both	5+	5+	4,053	5,073	
2552	Russian Federation	2000	Russia Longitudinal Monitoring Survey- Higher School of Economics Round IX	National	both	5+	5+	3,787	4,807	
2553	Russian Federation	2001	Russia Longitudinal Monitoring Survey- Higher School of Economics Round X	National	both	5+	5+	3,842	5,037	
2554	Russian Federation	2002	Russian Karelia Survey in Pitkaranta	Community	both	25-64	25-64	251	334	
2555	Russian Federation	2002	Russia Longitudinal Monitoring Survey- Higher School of Economics Round XI	National	both	5+	5+	3,819	4,951	
2556	Russian Federation	2002-2005	Health, Alcohol and Psychosocial Factors In Eastern Europe	Community	urban	45-70	45-70	4,240	5,069	
2557	Russian Federation	2003	Russia Longitudinal Monitoring Survey- Higher School of Economics Round XII	National	both	5+	5+	3,745	4,875	
2558	Russian Federation	2003	School Children Moscow	Community	urban	7-8	7-8	133	112	
2559	Russian Federation	2004	Russia Longitudinal Monitoring Survey- Higher School of Economics Round XIII	National	both	5+	5+	3,688	4,839	
2560	Russian Federation	2004	School Children Moscow	Community	urban	8-9	8-9	180	185	
2561	Russian Federation	2005	Russia Longitudinal Monitoring Survey- Higher School of Economics Round XIV	National	both	5+	5+	3,427	4,534	
2562	Russian Federation	2005	School Children Moscow	Community	urban	9-10	9-10	178	191	
2563	Russian Federation	2006	School Children Moscow	Community	urban	10-11	10-11	163	195	
2564	Russian Federation	2007	Russian Karelia Survey in Pitkaranta	Community	both	25-64	25-64	176	276	
2565	Russian Federation	2007	School Children Moscow	Community	urban	11-12	11-12	143	167	
2566	Russian Federation	2007-2010	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	1,195	2,148	
2567	Russian Federation	2008	School Children Moscow	Community	urban	12-13	12-13	111	141	
2568	Russian Federation	2009	School Children Moscow	Community	urban	13-14	13-14	124	140	
2569	Russian Federation	2010	School Children Moscow	Community	urban	14-15	14-15	116	137	
2570	Russian Federation	2011	School Children Moscow	Community	urban	15-16	15-16	117	125	
2571	Russian Federation	2012	School Children Moscow	Community	urban	16-17	16-17	87	108	
2572	Russian Federation	2012-2014	Epidemiology of Cardiovascular Diseases in Different Regions of Russia (ESSE-RF)	National	both	25-64	25-64	8,308	13,458	
2573	Russian Federation	2015-2016	Childhood Obesity Surveillance Initiative 4 - Moscow	Community	urban	6-8	6-8	1,499	1,529	
2574	Russian Federation	2015-2017	Ural Eye and Medical Study (UEMS)	Subnational	rural	40+	40+	1,530	1,870	
2575	Russian Federation	2015-2017	Ural Eye and Medical Study (UEMS)	Community	urban	40+	40+	1,050	1,449	
2576	Russian Federation	2017	Epidemiology of Cardiovascular Diseases in Different Regions of Russia - 2 (ESSE-RF-2)	Subnational	both	25-64	25-64	2,979	3,670	
2577	Russian Federation	2017-2020	Ural Very Old Study	Community	both	85+	85+	194	516	
2578	Russian Federation	2019-2020	Childhood Obesity Surveillance Initiative 5 - Moscow	Community	urban	6-7	6-7	1,201	1,202	
2579	Russian Federation	2019-2021	Ural Children Eye Study	Community	urban	6-18	6-18	1,950	2,052	
2580	Russian Federation	2020	Childhood Obesity Surveillance Initiative 5 - Ekaterinburg	Community	urban	7	7	1,310	1,376	
2581	Russian Federation	2021	School Children Moscow	Community	urban	7-18	7-18	1,591	1,435	
2582	Rwanda	2000	DHS	National	both		15-49		9,175	
2583	Rwanda	2005	DHS	National	both		15-49		5,211	
2584	Rwanda	2010	DHS	National	both	15-59	15-49	6,472	6,572	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2585	Rwanda	2012	STEPS	National	both	15-64	15-64	2,644	4,243	
2586	Rwanda	2014-2015	DHS	National	both	15-59	15-49	6,366	6,313	
2587	Rwanda	2019-2020	DHS	National	both		15-49		6,885	
2588	Rwanda	2021-2022	STEPS	National	both	18-69	18-69	2,126	3,383	
2589	Saint Kitts and Nevis	2007	STEPS	Subnational	both	25-64	25-64	510	852	
2590	Saint Kitts and Nevis	2011	Global School-based Student Health Survey	National	both	13-17	13-17	650	814	
2591	Saint Lucia	1981	Population Study of Blood Pressure and Associated Factors in St Lucia, West Indies	National	both	15+	15+	168	191	
2592	Saint Lucia	1991-1994	Cooper et al., Am J Public Health 87(2):160-68, 1997	Community	urban	25-100	25-100	491	593	
2593	Saint Lucia	2012	STEPS	National	both	25-64	25-64	665	1,097	
2594	Saint Lucia	2019-2020	STEPS	National	both	18-69	18-69	1,242	1,567	
2595	Saint Vincent and the Grenadines	2013-2014	STEPS	National	both	18-69	18-69	1,524	1,897	
2596	Saint Vincent and the Grenadines	2018	Global School-based Student Health Survey	National	both	13-17	13-17	737	839	
2597	Samoa	1979-1982	McGarvey, Am J Clin Nutr 53(6 Suppl):1586S-1594S, 1991	National	both	5+	5+	469	501	
2598	Samoa	1991	Non-Communicable Disease Risk Factor (NCDRF)	Subnational	rural	25+	25+	465	496	
2599	Samoa	1991	Non-Communicable Disease Risk Factor (NCDRF)	Subnational	urban	25+	25+	330	444	
2600	Samoa	1991	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	25+	25+	347	381	
2601	Samoa	1993	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	27+	27+	285	336	
2602	Samoa	1995	McGarvey, Pac Health Dialog 8(1):157-62, 2001	National	both	29+	29+	156	157	
2603	Samoa	2002	STEPS	National	both	25-64	25-64	1,181	1,334	
2604	Samoa	2010	Samoan Genome-Wide Association Study	National	both	24-65	24-65	1,402	2,061	23
2605	Samoa	2013	STEPS	National	both	18-64	18-64	605	918	
2606	Sao Tome and Principe	2008-2009	DHS	National	both	15-59	15-49	2,173	2,238	
2607	Sao Tome and Principe	2009	STEPS	National	both	25-64	25-64	998	1,286	
2608	Sao Tome and Principe	2019	STEPS	National	both	18-69	18-69	953	1,336	
2609	Saudi Arabia	1985-1988	National Nutrition Survey	National	both	5-75	5-75	2,311	3,057	
2610	Saudi Arabia	1989-1994	National Nutrition Survey	National	both	18-40	18-40	2,481	3,294	
2611	Saudi Arabia	1990-1993	National Epidemiological Household Survey	National	both	15-60	15-60	4,882	4,509	
2612	Saudi Arabia	1990-1993	Saudi National Survey	National	both	30-70	30-70	1,612	1,648	
2613	Saudi Arabia	1992-1995	Saudi Health Information Survey	National	both	14-50	14-50	4,830	7,707	
2614	Saudi Arabia	1995	National Household Survey	National	both	20-70	20-70	7,121	7,073	
2615	Saudi Arabia	1995-2000	National Epidemiological Health Survey	National	both	30-70	30-70	8,215	9,008	
2616	Saudi Arabia	2004-2005	Al-Baghli et al., Saudi Med J 29(9):1319-25, 2008	Subnational	both	30+	30+	97,254	97,254	
2617	Saudi Arabia	2005	El Mouzan et al., Ann Saudi Med 30(3):203-208, 2010	National	both	5-18	5-18	9,853	9,519	
2618	Saudi Arabia	2005	STEPS	National	both	15-64	15-64	2,245	2,345	
2619	Saudi Arabia	2007	Gulf Cooperation Council World Health Survey	National	both	18+	18+	4,854	3,610	
2620	Saudi Arabia	2009-2010	Arab Teens Lifestyle Study (ATLS)	Subnational	urban	14-19	14-19	1,384	1,479	
2621	Saudi Arabia	2011-2012	Jeeluna Study- National Assessment of the Health Needs of Adolescents in Saudi Arabia	National	both	12-19	12-19	6,234	5,790	
2622	Saudi Arabia	2011-2013	Jeddah City Study	Community	urban	5+	5+	957	867	
2623	Saudi Arabia	2013	Saudi Health Information Survey	National	both	15+	15+	5,088	5,249	
2624	Senegal	1984	Maire et al., Rev Epidemiol Sante Publique 40:252-58, 1992	National	rural		16-45		1,628	
2625	Senegal	1986	Astagneau et al., J Hypertens 10(9):1095-101, 1992	Community	urban	15+	15+	651	707	
2626	Senegal	1986	Maire et al., Rev Epidemiol Sante Publique 40:252-58, 1992	Community	urban		16-45		616	
2627	Senegal	1992-1993	DHS	National	both		20-49		2,713	
2628	Senegal	2003	Perceptions of healthy and desirable body size in urban Senegalese women	Community	urban		20-50		287	
2629	Senegal	2005	DHS	National	both		15-49		4,166	
2630	Senegal	2010-2011	DHS	National	both	15-59	15-49	4,715	5,497	
2631	Senegal	2010-2012	Biocultural determinants of overweight and obesity in the context of nutrition transition in Senegal: a holistic anthropological approach	Subnational	both	18+	18+	280	307	
2632	Senegal	2015	Les maladies chroniques au Sénégal: Une écologie de la santé comparative entre Dakar et Widou Thiengoly	Community	both	20+	20+	734	765	
2633	Senegal	2015	STEPS	National	both	18-70	18-70	1,865	3,270	
2634	Serbia	1984	MONICA, Novi Sad	Community	urban	25-64	25-64	798	777	
2635	Serbia	1988-1989	MONICA, Novi Sad	Community	urban	25-64	25-64	778	791	
2636	Serbia	1990	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-8	6-8	7	8	
2637	Serbia	1990-1991	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-9	6-9	20	12	
2638	Serbia	1991-1992	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-9	6-9	83	82	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2639	Serbia	1992-1993	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-7	6-7	99	113	
2640	Serbia	1993-1994	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-11	6-11	111	96	
2641	Serbia	1994-1995	MONICA, Novi Sad	Community	urban	25-64	25-64	600	670	
2642	Serbia	1994-1995	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-11	6-11	1,064	1,003	
2643	Serbia	1995-1996	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-13	6-13	1,276	1,224	
2644	Serbia	1996-1997	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	5-13	5-13	2,700	2,602	
2645	Serbia	1997-1998	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-13	6-13	1,088	1,047	
2646	Serbia	1998	Yugoslav study of precursors of atherosclerosis in schoolchildren	National	both	9-10	9-10	266	216	
2647	Serbia	1998-1999	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-16	6-16	944	910	
2648	Serbia	1999-2000	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	6-12	6-12	567	521	
2649	Serbia	2000	Health Status, Health Needs and Utilization of Health Care of the Population of Serbia	National	both	7+	7+	5,079	6,189	
2650	Serbia	2000-2001	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	9-18	9-18	2,386	2,285	
2651	Serbia	2001-2002	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	9-18	9-18	2,042	2,105	
2652	Serbia	2002-2003	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	5-18	5-18	3,040	2,516	
2653	Serbia	2003	Yugoslav study of precursors of atherosclerosis in schoolchildren	National	both	14-15	14-15	157	136	
2654	Serbia	2003-2004	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	5-18	5-18	3,242	2,915	
2655	Serbia	2004-2005	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	5-18	5-18	3,592	3,324	
2656	Serbia	2005	Longitudinal monitoring of growth and nutritional status of children in North Backa Region of Serbia	Community	both	8-13	8-13	666	652	
2657	Serbia	2006	The 2006 National Health Survey for the Population of Serbia	National	both	7+	7+	7,888	8,558	
2658	Serbia	2013	The 2013 National Health Survey for the Population of Serbia	National	both	7+	7+	7,205	8,137	
2659	Serbia	2013-2014	Stay Fit for Lifelong Health; the Prevalence of Lifestyle Health Conditions in Serbian Population	National	urban	18-65	18-65	1,337	297	
2660	Serbia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-8	6-8	2,475	2,386	
2661	Serbia	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-9	7-9	1,697	1,504	
2662	Seychelles	1989	Seychelles Heart Survey I	National	both	25-64	25-64	513	568	
2663	Seychelles	1994	Seychelles Heart Survey II	National	both	25-64	25-64	499	563	
2664	Seychelles	1998	School Screening Program	National	both	5-16	5-16	1,521	1,391	
2665	Seychelles	1999	School Screening Program	National	both	5-16	5-16	2,638	2,764	
2666	Seychelles	2000	School Screening Program	National	both	5-16	5-16	1,767	1,820	
2667	Seychelles	2001	School Screening Program	National	both	5-16	5-16	2,558	2,551	
2668	Seychelles	2002	School Screening Program	National	both	5-16	5-16	2,445	2,502	
2669	Seychelles	2003	School Screening Program	National	both	5-20	5-20	3,383	3,461	
2670	Seychelles	2004	Seychelles Heart Survey III	National	both	25-64	25-64	568	687	
2671	Seychelles	2004	School Screening Program	National	both	5-16	5-16	2,339	2,298	
2672	Seychelles	2005	School Screening Program	National	both	5-15	5-15	2,678	2,733	
2673	Seychelles	2006	School Screening Program	National	both	5-15	5-15	2,657	2,600	
2674	Seychelles	2007	Global School-based Student Health Survey	National	both	13-17	13-17	385	467	
2675	Seychelles	2011	School Screening Program	National	both	5-15	5-15	2,233	2,205	
2676	Seychelles	2012	School Screening Program	National	both	5-15	5-15	2,261	2,290	
2677	Seychelles	2013	School Screening Program	National	both	5-15	5-15	1,921	2,069	
2678	Seychelles	2013-2014	Seychelles Heart Survey IV	National	both	25-64	25-64	531	699	
2679	Seychelles	2014	School Screening Program	National	both	5-15	5-15	2,083	2,170	
2680	Seychelles	2015	Global School-based Student Health Survey	National	both	13-17	13-17	770	888	
2681	Seychelles	2015	School Screening Program	National	both	5-15	5-15	1,963	1,984	
2682	Seychelles	2016	School Screening Program	National	both	5-15	5-15	1,737	1,858	
2683	Seychelles	2017	School Screening Program	National	both	5-15	5-15	1,497	1,570	
2684	Seychelles	2018	School Screening Program	National	both	8-15	8-15	1,712	1,669	
2685	Seychelles	2019	School Screening Program	National	both	8-15	8-15	1,606	1,665	
2686	Seychelles	2020	School Screening Program	National	both	8-15	8-15	1,349	1,467	
2687	Seychelles	2022	School Screening Program	National	both	8-15	8-15	1,465	1,480	
2688	Sierra Leone	2008	DHS	National	both		15-49		3,274	
2689	Sierra Leone	2009	STEPS	National	both	25-64	25-64	2,200	2,319	
2690	Sierra Leone	2013	DHS	National	both	15-59	15-49	7,037	7,459	
2691	Sierra Leone	2019	DHS	National	both	15-59	15-49	6,440	7,046	
2692	Singapore	1982-1985	Thyroid Heart Study	National	both	18+	18+	1,030	990	
2693	Singapore	1992	National Health Survey 1992	National	both	18-64	18-64	1,743	1,704	
2694	Singapore	1993-1995	NUH Heart Study	National	both	26-89	26-89	498	484	
2695	Singapore	1998	National Health Survey 1998	National	both	18-69	18-69	2,283	2,264	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2696	Singapore	2003-2005	Singapore Longitudinal Ageing Study - Cohort 1; SLAS-1	Community	both	55+	55+	1,029	1,759	
2697	Singapore	2004	National Health Survey 2004	National	both	18-74	18-74	2,059	2,094	
2698	Singapore	2004-2007	Singapore Cardiovascular Cohort Study and Singapore Prospective Study Program	National	both	24+	24+	2,471	2,686	
2699	Singapore	2008-2013	Singapore Longitudinal Ageing Study - Cohort 2; SLAS-2	Community	both	55+	55+	1,138	1,883	
2700	Singapore	2009	Social Isolation, Health and Lifestyles Survey (SIHLS) 2009	National	both	60+	60+	2,038	2,382	
2701	Singapore	2009-2011	The Singapore Chinese Eye Study	Community	both	40-80	40-80	1,652	1,679	
2702	Singapore	2012-2013	Singapore Health Study	National	both	18-79	18-79	954	1,021	24
2703	Singapore	2014-2015	Singapore Health 2	National	both	18-79	18-79	775	973	24
2704	Singapore	2015-2017	The Singapore Chinese Eye Study Follow-Up	Community	both	50+	50+	1,278	1,348	
2705	Singapore	2016-2017	Transitions in Health, Employment, Social Engagement and Inter-generational Transfers in Singapore Study	National	both	60+	60+	1,723	2,131	
2706	Slovakia	1985	Effects of somatic development and environmental factors on blood pressure in children	Community	urban	5-7	5-7	412	388	
2707	Slovakia	1993	Countrywide Integrated Noncommunicable Diseases Intervention Programme	National	both	15-64	15-64	876	1,293	
2708	Slovakia	1998	Countrywide Integrated Noncommunicable Diseases Intervention Programme	National	both	15-64	15-64	923	1,122	
2709	Slovakia	2001	National Anthropological Survey	National	both	5-6	5-6	896	815	
2710	Slovakia	2001	National Anthropological Survey	National	both	6-18	6-18	10,881	10,667	
2711	Slovakia	2003	Countrywide Integrated Noncommunicable Diseases Intervention Programme	National	both	15-64	15-64	664	905	
2712	Slovakia	2008	Countrywide Integrated Noncommunicable Diseases Intervention Programme	National	both	15-64	15-64	412	584	
2713	Slovakia	2011	National Anthropological Survey	National	both	7-18	7-18	9,064	9,028	
2714	Slovakia	2011-2012	European Health Examination Survey	National	both	18-64	18-64	884	1,080	
2715	Slovakia	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7	7	1,390	1,379	
2716	Slovakia	2018	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	2,975	3,004	
2717	Slovenia	1982	The SLOFIT monitoring system	National	both	6-19	6-19	16,381	17,183	
2718	Slovenia	1983	Analysis of Children's Development in Slovenia (ACDSi)	National	both	7-14	7-14	1,580	1,576	
2719	Slovenia	1983	The SLOFIT monitoring system	National	both	6-19	6-19	16,365	17,435	
2720	Slovenia	1984	The SLOFIT monitoring system	National	both	6-19	6-19	21,438	22,933	
2721	Slovenia	1985	The SLOFIT monitoring system	National	both	6-19	6-19	22,496	23,043	
2722	Slovenia	1986	The SLOFIT monitoring system	National	both	6-19	6-19	22,891	23,009	
2723	Slovenia	1987	The SLOFIT monitoring system	National	both	6-19	6-19	49,089	48,784	
2724	Slovenia	1988	The SLOFIT monitoring system	National	both	6-19	6-19	85,444	83,390	
2725	Slovenia	1989	The SLOFIT monitoring system	National	both	6-19	6-19	106,538	106,639	
2726	Slovenia	1990	The SLOFIT monitoring system	National	both	6-19	6-19	129,317	128,572	
2727	Slovenia	1991	The SLOFIT monitoring system	National	both	6-19	6-19	130,726	129,842	
2728	Slovenia	1992	The SLOFIT monitoring system	National	both	6-19	6-19	135,239	134,853	
2729	Slovenia	1993	Analysis of Children's Development in Slovenia (ACDSi)	National	both	6-14	6-14	1,674	1,678	
2730	Slovenia	1993	The SLOFIT monitoring system	National	both	6-19	6-19	143,182	141,966	
2731	Slovenia	1994	Analysis of Children's Development in Slovenia (ACDSi)	National	both	14-18	14-18	683	696	
2732	Slovenia	1994	The SLOFIT monitoring system	National	both	6-19	6-19	145,348	143,290	
2733	Slovenia	1995	The SLOFIT monitoring system	National	both	6-19	6-19	142,245	140,692	
2734	Slovenia	1996	The SLOFIT monitoring system	National	both	6-19	6-19	140,714	138,120	
2735	Slovenia	1997	The SLOFIT monitoring system	National	both	6-19	6-19	127,551	120,331	
2736	Slovenia	1998	The SLOFIT monitoring system	National	both	6-19	6-19	126,342	121,549	
2737	Slovenia	1999	The SLOFIT monitoring system	National	both	6-19	6-19	122,655	119,408	
2738	Slovenia	2000	The SLOFIT monitoring system	National	both	6-19	6-19	121,918	116,281	
2739	Slovenia	2001	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	1,079	953	
2740	Slovenia	2001	The SLOFIT monitoring system	National	both	6-19	6-19	118,997	114,606	
2741	Slovenia	2002	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	34,539	34,384	
2742	Slovenia	2002	The SLOFIT monitoring system	National	both	6-19	6-19	114,716	110,691	
2743	Slovenia	2003	Analysis of Children's Development in Slovenia (ACDSi)	National	both	5-14	5-14	2,061	1,939	
2744	Slovenia	2003	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	32,472	34,448	
2745	Slovenia	2003	The SLOFIT monitoring system	National	both	6-19	6-19	117,278	112,944	
2746	Slovenia	2004	Analysis of Children's Development in Slovenia (ACDSi)	National	both	14-19	14-19	950	712	
2747	Slovenia	2004	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	33,872	35,277	
2748	Slovenia	2004	The SLOFIT monitoring system	National	both	6-19	6-19	117,768	112,575	
2749	Slovenia	2005	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	27,146	26,180	
2750	Slovenia	2005	The SLOFIT monitoring system	National	both	6-19	6-19	114,966	109,542	
2751	Slovenia	2006	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	23,887	21,665	
2752	Slovenia	2006	The SLOFIT monitoring system	National	both	6-19	6-19	109,877	102,838	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2753	Slovenia	2007	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	17,832	15,634	
2754	Slovenia	2007	The SLOFIT monitoring system	National	both	6-19	6-19	103,105	100,364	
2755	Slovenia	2008	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	14,764	13,726	
2756	Slovenia	2008	The SLOFIT monitoring system	National	both	6-19	6-19	103,735	98,070	
2757	Slovenia	2009	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	13,172	11,454	
2758	Slovenia	2009	The SLOFIT monitoring system	National	both	6-19	6-19	103,669	98,891	
2759	Slovenia	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	National	both	10-12	10-12	548	579	
2760	Slovenia	2010	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	13,752	12,605	
2761	Slovenia	2010	The SLOFIT monitoring system	National	both	6-19	6-19	101,163	96,686	
2762	Slovenia	2011	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	12,835	11,953	
2763	Slovenia	2011	The SLOFIT monitoring system	National	both	6-19	6-19	100,802	96,309	
2764	Slovenia	2012	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	13,881	14,178	
2765	Slovenia	2012	The SLOFIT monitoring system	National	both	6-19	6-19	101,172	95,917	
2766	Slovenia	2013	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	10,590	12,118	
2767	Slovenia	2013	The SLOFIT monitoring system	National	both	6-19	6-19	99,191	95,666	
2768	Slovenia	2013-2014	Analysis of Children's Development in Slovenia (ACDSi)	National	both	6-15	6-15	1,665	1,627	
2769	Slovenia	2014	Analysis of Children's Development in Slovenia (ACDSi)	National	both	14-19	14-19	703	724	
2770	Slovenia	2014	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	10,448	12,467	
2771	Slovenia	2014	The SLOFIT monitoring system	National	both	6-21	6-21	102,790	97,859	
2772	Slovenia	2015	National Programme of Primary CVD Prevention in Slovenia	National	both	35-65	45-70	6,877	7,387	
2773	Slovenia	2015	The SLOFIT monitoring system	National	both	6-19	6-19	103,568	99,293	
2774	Slovenia	2016	The SLOFIT monitoring system	National	both	6-19	6-19	107,421	102,174	
2775	Slovenia	2017	The SLOFIT monitoring system	National	both	6-19	6-19	108,780	104,582	
2776	Slovenia	2018	The SLOFIT monitoring system	National	both	6-19	6-19	110,213	105,861	
2777	Slovenia	2019	The SLOFIT monitoring system	National	both	6-19	6-19	99,445	94,791	
2778	Slovenia	2020	The SLOfit monitoring system	Community	both	15-19	15-19	879	816	
2779	Slovenia	2020	The SLOfit monitoring system	National	both	6-14	6-14	34,382	32,921	
2780	Slovenia	2021	The SLOfit monitoring system	Community	both	15-19	15-19	6,724	5,950	
2781	Slovenia	2021	The SLOfit monitoring system	National	both	6-14	6-14	82,486	78,808	
2782	Slovenia	2022	The SLOfit monitoring system	National	both	6-19	6-19	100,788	98,820	
2783	Slovenia	2023	The SLOfit monitoring system	National	both	6-19	6-19	102,628	97,936	5
2784	Solomon Islands	2004	A genetic-ecological study of the risk factors for lifestyle-related diseases in Oceanian populations	Community	rural	18+	18+	106	109	
2785	Solomon Islands	2004	A genetic-ecological study of the risk factors for lifestyle-related diseases in Oceanian populations	Community	urban	18+	18+	91	95	
2786	Solomon Islands	2006	STEPS	Subnational	both	15-64	15-64	1,031	1,375	
2787	Solomon Islands	2009-2010	Furusawa et al., N Z Med J 124(1333):17-28, 2011	Subnational	rural	5+	5+	256	317	
2788	Solomon Islands	2009-2010	Furusawa et al., N Z Med J 124(1333):17-28, 2011	Subnational	urban	5-70	5-70	78	118	
2789	Solomon Islands	2015	STEPS	National	both	18-69	18-69	816	978	
2790	Solomon Islands	2017-2018	Impact of sea-level rise and relocation projects on health, ecology, and society in Oceania	Community	both	5+	5+	147	321	
2791	Somalia	2016	The prevalence of selected risk factors for non-communicable diseases in Hargeisa, Somaliland: a cross-sectional study	Community	urban	20-69	20-69	145	955	
2792	South Africa	1989	Temple et al., Ethn Dis 11(3):431-7, 2001	Community	both	15+	15+	457	614	
2793	South Africa	1990	Steyn et al., East Afr Med J 75(1):35-40, 1998	Community	urban	15-64	15-64	292	373	
2794	South Africa	1996	Temple et al., Ethn Dis 11(3):431-7, 2001	Community	both	15+	15+	302	406	
2795	South Africa	1996	Ellisras Longitudinal Study	Community	rural	5-10	5-10	583	535	
2796	South Africa	1997	Ellisras Longitudinal Study	Community	rural	5-11	5-11	1,046	968	
2797	South Africa	1998	DHS	National	both	15+	15+	5,645	7,757	
2798	South Africa	1998	Ellisras Longitudinal Study	Community	rural	5-12	5-12	958	856	
2799	South Africa	1999	Ellisras Longitudinal Study	Community	rural	5-13	5-13	991	917	
2800	South Africa	2000	Ellisras Longitudinal Study	Community	rural	5-14	5-14	936	877	
2801	South Africa	2000-2001	Transition and Health during Urbanisation of South Africans: Children	Subnational	both	9-15	9-15	606	639	
2802	South Africa	2001	Ellisras Longitudinal Study	Community	rural	6-15	6-15	962	904	
2803	South Africa	2002	Ellisras Longitudinal Study	Community	rural	7-16	7-16	890	823	
2804	South Africa	2002	The 1st South African National Youth Risk Behaviour Survey	National	both	14-18	14-18	3,609	4,139	
2805	South Africa	2002-2003	SASPI	Community	rural	35+	35+	80	275	
2806	South Africa	2003	DHS	National	both	15+	15+	3,200	4,497	
2807	South Africa	2003	Ellisras Longitudinal Study	Community	rural	8-17	8-17	911	858	
2808	South Africa	2003-2004	Africa Centre Biomeasure Survey	Community	rural	25-49	25-49	778	1,693	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2809	South Africa	2004-2006	Li et al., Curationis 30(4):79-87, 2007	Community	both	18-40	18-40	334	270	
2810	South Africa	2007-2008	WHO Study on global AGEing and adult health (SAGE)	National	both	50+	50+	1,541	2,059	
2811	South Africa	2007-2008	Cardiometabolic risk profile of South African Learners	Subnational	both	10-16	10-16	496	776	
2812	South Africa	2008	National Income Dynamics Study Wave I	National	both	5+	5+	8,131	10,624	
2813	South Africa	2008	The 2nd South African National Youth Risk Behaviour Survey	National	both	14-18	14-18	3,910	4,201	
2814	South Africa	2008-2009	Cape Town Bellville South Cohort Study - Baseline evaluation I	Community	urban	35-65	35-65	142	499	
2815	South Africa	2010	Africa Centre Biomeasure Survey	Community	rural	15+	15+	2,933	6,364	
2816	South Africa	2010-2011	National Income Dynamics Study Wave II	National	both	5+	5+	8,383	10,996	
2817	South Africa	2011-2012	South Africa National Health and Nutrition Examination Survey	National	both	5+	5+	3,717	5,640	
2818	South Africa	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	222	327	
2819	South Africa	2012	National Income Dynamics Study Wave III	National	both	5+	5+	10,956	14,118	
2820	South Africa	2014-2015	Health and Aging in Africa: A Longitudinal Study of an INDEPTH Community in South Africa (HAALSI)	Community	rural	40+	40+	2,141	2,502	
2821	South Africa	2014-2015	National Income Dynamics Study Wave IV	National	both	5+	5+	13,548	16,775	
2822	South Africa	2016	DHS	National	both	15-59	15-49	2,807	3,263	
2823	South Africa	2017	National Income Dynamics Study Wave V	National	both	5+	5+	13,996	17,688	
2824	South Africa	2017-2019	The Exercise, Arterial Modulation and Nutrition in Youth South Africa (ExAMIN Youth SA) Study	Subnational	urban	5-9	5-9	483	575	
2825	South Africa	2018-2020	Vukuzazi Study	Community	both	15+	15+	5,735	11,836	
2826	South Korea	1986	INTERSALT	Community	urban	20-59	20-59	100	98	
2827	South Korea	1990	Korean National Blood Pressure Survey	National	both	30+	30+	9,734	12,619	
2828	South Korea	1992-1993	Park et al., Diabetes Res Clin Pract 34 Suppl:S65-72, 1996	Subnational	both	30-89	30+	1,077	1,392	
2829	South Korea	1997-1998	National Anthropometric Survey in Korean Children and Adolescents	National	both	5-19	5-19	29,318	26,469	
2830	South Korea	1998	Korea National Health and Nutrition Examination Survey	National	both	10+	10+	4,514	5,193	
2831	South Korea	1999	The South Korean Consciption Database	National	both	19		401,721		
2832	South Korea	2000	The South Korean Consciption Database	National	both	19		402,758		
2833	South Korea	2001	Kim et al., Br J Psychiatry 185:102-7, 2004	Community	both	65+	65+	300	432	
2834	South Korea	2001	The South Korean Consciption Database	National	both	19		398,653		
2835	South Korea	2001	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	4,150	4,815	
2836	South Korea	2002	The South Korean Consciption Database	National	both	19		367,024		
2837	South Korea	2002-2003	Korean National Health Insurance	National	both	40+	40+	2,993,634	2,483,306	
2838	South Korea	2003	The South Korean Consciption Database	National	both	19		329,626		
2839	South Korea	2004	The South Korean Consciption Database	National	both	19		323,001		
2840	South Korea	2004-2005	Korean National Health Insurance	National	both	40+	40+	3,604,097	3,261,164	
2841	South Korea	2005	The South Korean Consciption Database	National	both	19		313,378		
2842	South Korea	2005	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,183	3,896	
2843	South Korea	2005	National Anthropometric Survey in Korean Children and Adolescents	National	both	5-19	5-19	41,727	39,200	
2844	South Korea	2006	The South Korean Consciption Database	National	both	19		302,587		
2845	South Korea	2006-2007	Korean National Health Insurance	National	both	40+	40+	4,569,655	4,613,826	
2846	South Korea	2007	The South Korean Consciption Database	National	both	19		312,795		
2847	South Korea	2007	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	1,753	2,174	
2848	South Korea	2007-2012	JS High-School Study	Community	rural	14-17	14-17	553	508	
2849	South Korea	2008	The South Korean Consciption Database	National	both	19		312,919		
2850	South Korea	2008	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,849	4,824	
2851	South Korea	2008-2009	Korean National Health Insurance	National	both	40+	40+	5,763,909	6,089,441	
2852	South Korea	2009	The South Korean Consciption Database	National	both	19		324,818		
2853	South Korea	2009	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	4,288	5,182	
2854	South Korea	2009	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	103,997	89,881	
2855	South Korea	2010	The South Korean Consciption Database	National	both	19		347,249		
2856	South Korea	2010	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,583	4,312	
2857	South Korea	2010	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	99,865	86,167	
2858	South Korea	2010-2011	Korean National Health Insurance	National	both	40+	40+	6,671,572	7,127,111	
2859	South Korea	2011	The South Korean Consciption Database	National	both	19		364,982		
2860	South Korea	2011	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,363	4,193	
2861	South Korea	2011	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	97,363	83,046	
2862	South Korea	2012	The South Korean Consciption Database	National	both	19		361,009		
2863	South Korea	2012	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,194	4,029	
2864	South Korea	2012	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	45,066	42,005	
2865	South Korea	2012-2013	Korean National Health Insurance	National	both	40+	40+	7,256,898	7,782,621	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2866	South Korea	2013	The South Korean Consciption Database	National	both	19		363,914		
2867	South Korea	2013	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,211	3,934	
2868	South Korea	2013	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	43,667	40,776	
2869	South Korea	2014	The South Korean Consciption Database	National	both	19		363,597		
2870	South Korea	2014	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	2,966	3,769	
2871	South Korea	2014	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	42,570	39,987	
2872	South Korea	2014-2015	Korean National Health Insurance	National	both	40+	40+	7,869,485	8,354,998	
2873	South Korea	2015	The South Korean Consciption Database	National	both	19		350,518		
2874	South Korea	2015	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,022	3,640	
2875	South Korea	2015	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	43,141	41,645	
2876	South Korea	2016	The South Korean Consciption Database	National	both	19		339,410		
2877	South Korea	2016	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,288	4,042	
2878	South Korea	2016	Korea National School Health Examination Survey (KNSHES)	National	both	6-18	6-18	42,242	40,631	
2879	South Korea	2016-2017	Korean National Health Insurance	National	both	40+	40+	8,534,031	9,071,978	
2880	South Korea	2017	The South Korean Consciption Database	National	both	19		323,457		
2881	South Korea	2017	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,341	3,986	
2882	South Korea	2018	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,277	3,985	
2883	South Korea	2018-2019	Korean National Health Insurance	National	both	40+	40+	9,307,694	9,938,357	
2884	South Korea	2019	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,377	3,992	
2885	South Korea	2020	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	3,144	3,610	
2886	South Korea	2021	Korea National Health and Nutrition Examination Survey	National	both	5+	5+	2,907	3,546	
2887	South Sudan	2017	Prevalence of hypertension and associated cardiovascular risk factors among adults aged 18-69 years in Juba City, South Sudan	Community	urban	18-69	18-69	365	464	
2888	Spain	1985	INTERSALT, Manresa	Community	urban	20-59	20-59	100	100	
2889	Spain	1986	INTERSALT, Torrejo	Community	urban	20-59	20-59	100	100	
2890	Spain	1986-1988	MONICA, Catalonia	Subnational	both	25-64	25-64	1,251	1,271	
2891	Spain	1989	Cardiovascular Risk Factors Study in Catalonia	Subnational	both	15+	15+	330	371	
2892	Spain	1989-1994	SEEDO	Subnational	both	25-60	25-60	2,533	2,855	
2893	Spain	1990	Banegas et al., Hypertension 32(6):998-1002, 1998	National	both	35-65	35-65	810	1,203	
2894	Spain	1990-1992	MONICA, Catalonia	Subnational	both	25-64	25-64	1,719	1,191	
2895	Spain	1990-2000	SEEDO	Subnational	both	25-60	25-60	4,707	5,178	
2896	Spain	1991-1993	Encuesta de Factores de Riesgo Cardiovascular en la Región de Murcia (Cardiovascular Risk Factors Survey)	Subnational	both	18-69	18-69	1,512	1,562	
2897	Spain	1992	CINDI	Subnational	both	25-64	25-64	1,194	1,454	
2898	Spain	1992	ENCAT	Community	both	15-80	15-80	786	952	
2899	Spain	1994-1995	Encuesta de Nutrición y Salud Comunidad Valenciana 1994-95 (ENCV)	Subnational	urban	15+	15+	830	959	
2900	Spain	1994-1996	MONICA, Catalonia	Subnational	both	25-64	25-64	1,800	1,628	
2901	Spain	1996	Guía Study	Community	urban	30+	30+	305	384	
2902	Spain	1996-2002	Castells et al., J Epidemiol Community Health 60(4):316-21, 2006	Community	urban		50-69		26,963	
2903	Spain	1997	Soriguer et al., Eur J Epidemiol 19(1):33-40, 2004	Community	rural	18-65	18-65	613	613	
2904	Spain	1998-2000	EnKID study	National	both	5-24	5-24	1,452	1,730	
2905	Spain	1999-2000	ENIB	Community	both	20-60	20-60	498	702	
2906	Spain	1999-2000	Factores de riesgo en las islas Baleares: Estudio CORSAIB	Subnational	both	35-74	35-74	802	857	
2907	Spain	2000-2001	Regidor et al., J Hum Hypertens 20(1):73-82, 2006	National	both	60+	60+	1,318	2,281	
2908	Spain	2000-2001	EUREYE Study	Subnational	both	65+	65+	274	324	
2909	Spain	2000-2005	CDC of the Canary Islands	Subnational	both	18-75	18-75	2,878	3,719	
2910	Spain	2001-2002	Catalan Health Interview Survey	Subnational	both	18-74	18-74	597	745	
2911	Spain	2001-2003	DIabetes, Nutrición y Obesidad en la población adulta de la Región de Murcia (DINO)	Subnational	both	20+	20+	715	828	
2912	Spain	2002-2003	ENCAT	Community	both	15-80	15-80	712	813	
2913	Spain	2003	The European Male Ageing Study	Community	both	40+		405		
2914	Spain	2003-2005	Registre Gironi del Cor (REGICOR)	Subnational	both	35-79	35-79	2,951	3,266	
2915	Spain	2004	Vioque J et al., Obesity 16(3):664-70, 2008	Community	urban	24+	24+	87	115	
2916	Spain	2004	Cardiovascular Risk Study in Castilla y León (RECCyL)	Subnational	both	15+	15+	1,903	2,077	
2917	Spain	2004-2006	PREVICTUS	National	both	60+	60+	3,193	3,640	
2918	Spain	2006-2007	HELENA	Community	urban	12-17	12-17	188	193	
2919	Spain	2006-2008	Biblioni Mdel et al., Br J Nutr 103(1):99-106, 2010	Community	both	12-17	12-17	571	652	
2920	Spain	2007-2009	Harmonizing Equation of Risk in Mediterraneon countries EXtremadura (HERMEX)	Subnational	both	25-79	25-79	1,298	1,498	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2921	Spain	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	474	468	
2922	Spain	2008	The European Male Ageing Study	Community	both	40+		272		
2923	Spain	2008-2010	Study on Nutrition and Cardiovascular Risk in Spain	National	both	18+	18+	5,756	6,397	
2924	Spain	2009	Cardiovascular Risk Study in Castilla y León (RECCyL)	Subnational	both	20+	20+	1,315	1,590	
2925	Spain	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	Subnational	urban	10-12	10-12	479	520	
2926	Spain	2010-2011	ALimentación, Actividad Física, Desarrollo INfantil y Obesidad (ALADINO); Childhood Obesity Surveillance Initiative 2	National	both	6-9	6-9	3,837	3,817	
2927	Spain	2012	Effects of a lifestyle intervention on the prevention of childhood obesity: a community-based model	Subnational	urban	8-12	8-12	1,171	1,081	
2928	Spain	2012-2013	Brain Development and Air Pollution Ultrafine Particles in School Children-BREATHE Project	Subnational	urban	7-12	7-12	1,338	1,325	
2929	Spain	2012-2013	INfancia y Medio Ambiente (Childhood and Environment) Project - Menorca	Subnational	both	14-15	14-15	162	165	
2930	Spain	2012-2013	Infancia y Medio Ambiente (Childhood and Environment) Birth Cohort study - Sabadell	Subnational	urban	5-7	5-7	280	260	25
2931	Spain	2012-2013	INfancia y Medio Ambiente (Childhood and Environment) Project - Valencia	Subnational	both	7-8	7-8	229	232	
2932	Spain	2013	ANIBES Study	National	both	9-75	9-75	1,160	1,125	
2933	Spain	2013	ALimentación, Actividad Física, Desarrollo INfantil y Obesidad (ALADINO); Childhood Obesity Surveillance Initiative 3	National	both	7-8	7-8	1,682	1,744	
2934	Spain	2013-2014	Effects of a lifestyle intervention on the prevention of childhood obesity: a community-based model	Subnational	urban	9-13	9-13	1,086	1,004	
2935	Spain	2013-2015	INfancia y Medio Ambiente (Childhood and Environment) Project - Valencia	Subnational	both	8-9	8-9	225	218	
2936	Spain	2013-2016	Infancia y Medio Ambiente (Childhood and Environment) Birth Cohort study - Sabadell	Subnational	urban	7-10	7-10	253	236	25
2937	Spain	2014	Cardiovascular Risk Study in Castilla y León (RECCyL)	Subnational	both	20+	20+	1,215	1,475	
2938	Spain	2015	Study on Nutrition and Cardiovascular Risk in Spain (ENRICA)	National	both	65+	65+	711	770	
2939	Spain	2015-2016	ALimentación, Actividad Física, Desarrollo INfantil y Obesidad (ALADINO); Childhood Obesity Surveillance Initiative 4	National	both	6-9	6-9	5,532	5,367	
2940	Spain	2015-2016	INfancia y Medio Ambiente (Childhood and Environment) Project - Gipuzkoa	Subnational	both	7-8	7-8	195	195	
2941	Spain	2015-2017	INfancia y Medio Ambiente (Childhood and Environment) Project - Valencia	Subnational	both	9-12	9-12	197	218	
2942	Spain	2016-2017	Estudio de Nutrición y Riesgo Cardiovascular en España (ENRICA)-Seniors cohort	Subnational	urban	65-94	65-94	1,340	1,478	
2943	Spain	2016-2018	Infancia y Medio Ambiente (Childhood and Environment) Birth Cohort study - Sabadell	Subnational	urban	9-12	9-12	256	239	25
2944	Spain	2017-2019	Urban environment and childhood obesity in Catalonia (ECHOCAT)	Community	urban	9-12	9-12	870	977	
2945	Spain	2018	Childhood obesity cohort study of Sant Boi de Llobregat (SANTBOISA study)	Community	urban	5-10	5-10	299	266	
2946	Spain	2018-2019	INfancia y Medio Ambiente (Childhood and Environment) Project - Gipuzkoa	Subnational	both	10-11	10-11	174	204	
2947	Spain	2019	ALimentación, Actividad Física, Desarrollo INfantil y Obesidad (ALADINO); Childhood Obesity Surveillance Initiative 5	National	both	6-9	6-9	8,512	8,151	
2948	Spain	2019	Estudio de Nutrición y Riesgo Cardiovascular en España (ENRICA)-Seniors cohort	Subnational	urban	65-95	65-95	834	815	
2949	Spain	2019	Physical Activity, Sedentarism and Obesity of Spanish youth - PASOS study	National	both	8-16	8-16	1,804	1,921	
2950	Spain	2021	INfancia y Medio Ambiente (Childhood and Environment) Project - Gipuzkoa	Subnational	both	13-15	13-15	121	148	
2951	Sri Lanka	2003	Wijewardene et al., Ceylon Med J 50:62-70, 2005	Subnational	both	30-65	30-65	275	296	
2952	Sri Lanka	2003	Wijewardene et al., Ceylon Med J 50:62-70, 2005	Subnational	both	30-65	30-65	139	192	
2953	Sri Lanka	2003	Wijewardene et al., Ceylon Med J 50:62-70, 2005	Subnational	both	30-65	30-65	1,891	2,410	
2954	Sri Lanka	2003	Wijewardene et al., Ceylon Med J 50:62-70, 2005	Subnational	both	30-65	30-65	387	457	
2955	Sri Lanka	2005-2006	Sri Lanka Diabetes, Cardiovascular study (SLDCS)	National	both	18+	18+	1,773	2,714	
2956	Sri Lanka	2006	STEPS	National	both	15-64	15-64	6,140	6,213	
2957	Sri Lanka	2006-2007	DHS	National	both		15-49		12,539	
2958	Sri Lanka	2014	STEPS	National	both	18-69	18-69	1,863	2,893	
2959	Sri Lanka	2016	Global School-based Student Health Survey	National	both	13-17	13-17	671	923	
2960	Sri Lanka	2021	STEPS	National	both	18-69	18-69	2,172	3,458	
2961	State of Palestine	1996	Stene et al., Eur J Clin Nutr 55(9):805-11, 2001	Community	rural	30-65	30-65	208	269	
2962	State of Palestine	1996-1998	Ramallah study	Community	rural	15-64	15-64	206	482	
2963	State of Palestine	1996-1998	Ramallah study	Community	urban	15-64	15-64	182	493	
2964	State of Palestine	1999-2000	The First National Health and Nutrition Survey	National	both	18-64	18-64	1,736	1,869	
2965	State of Palestine	2010	Global School-based Student Health Survey	National	both	13-17	13-17	1,822	1,865	
2966	State of Palestine	2010	STEPS	National	both	15-64	15-64	2,578	4,052	
2967	State of Palestine	2013	Palestine Micronutrient Survey	National	both	15-18	15-18	1,201	1,166	
2968	State of Palestine	2022	STEPS	National	both	18-69	18-69	1,677	3,637	
2969	Sudan	2005	STEPS	Subnational	both	25-64	25-64	626	881	
2970	Sudan	2016	STEPS	National	both	18-69	18-69	2,661	4,544	
2971	Sudan	2018	Prevalence and associated factors of hypertension among adults in Gadarif in eastern Sudan: a community-based study	Community	urban	18+	18+	178	421	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
2972	Suriname	2013-2015	The Healthy Life in Suriname Study (HELISUR)	Subnational	urban	18-70	18-70	424	722	
2973	Sweden	1977	The Swedish Conscription Database	National	both	17-19		47,898		1
2974	Sweden	1978	The Swedish Conscription Database	National	both	17-19		11,486		1
2975	Sweden	1979	The Swedish Conscription Database	National	both	17-19		37,487		1
2976	Sweden	1979-1980	1973 Birth Cohort	National	both	6	6	451	439	
2977	Sweden	1980	BMI Epidemiology Study	Community	urban	9		324		
2978	Sweden	1980	The Swedish Conscription Database	National	both	17-18		49,630		
2979	Sweden	1980-1981	1973 Birth Cohort	National	both	7	7	1,422	1,323	
2980	Sweden	1980-1981	Population Study of Women in Gothenburg	Community	urban		50-72		1,153	
2981	Sweden	1980-1985	Uppsala Longitudinal Study of Adult Men	Community	both	55-64		1,846		26
2982	Sweden	1981	The Swedish Conscription Database	National	both	17-18		52,282		
2983	Sweden	1981-1982	1973 Birth Cohort	National	both	8	8	890	869	
2984	Sweden	1982	The Swedish Conscription Database	National	both	17-18		54,288		
2985	Sweden	1982-1983	1973 Birth Cohort	National	both	9	9	670	635	
2986	Sweden	1983	BMI Epidemiology Study	Community	urban	7		103		
2987	Sweden	1983	The Swedish Conscription Database	National	both	17-18		52,895		
2988	Sweden	1983-1984	1973 Birth Cohort	National	both	10	10	1,448	1,340	
2989	Sweden	1984	BMI Epidemiology Study	Community	urban	8		407		
2990	Sweden	1984	The Swedish Conscription Database	National	both	17-18		36,273		
2991	Sweden	1984-1985	1973 Birth Cohort	National	both	11	11	487	498	
2992	Sweden	1985	BMI Epidemiology Study	Community	urban	9		357		
2993	Sweden	1985	MONICA Gothenburg	Community	urban	25-64	25-64	666	702	
2994	Sweden	1985	The Swedish Conscription Database	National	both	17-18		14,918		
2995	Sweden	1985-1986	1973 Birth Cohort	National	both	12	12	1,238	1,158	
2996	Sweden	1985-1989	Västerbotten Intervention Project	Subnational	both	25-64	25-64	1,676	1,554	
2997	Sweden	1985-1996	EPIC Umea	Subnational	both	24-72	24-72	12,359	13,217	
2998	Sweden	1986	MONICA Northern Sweden	Subnational	both	25-64	25-64	822	798	
2999	Sweden	1986	The Swedish Conscription Database	National	both	17-18		48,454		
3000	Sweden	1986-1987	1973 Birth Cohort	National	both	13	13	709	729	
3001	Sweden	1986-1987	1981 Birth Cohort	National	both	5	5	935	958	
3002	Sweden	1987	The Swedish Conscription Database	National	both	17-18		49,306		
3003	Sweden	1987-1988	1973 Birth Cohort	National	both	14	14	1,405	1,294	
3004	Sweden	1987-1988	1981 Birth Cohort	National	both	6	6	808	780	
3005	Sweden	1988	BMI Epidemiology Study	Community	urban	7		65		
3006	Sweden	1988	The Swedish Conscription Database	National	both	17-18		47,923		
3007	Sweden	1988-1989	1973 Birth Cohort	National	both	15	15	964	929	
3008	Sweden	1988-1989	1981 Birth Cohort	National	both	7	7	1,508	1,489	
3009	Sweden	1989	BMI Epidemiology Study	Community	urban	8		407		
3010	Sweden	1989	The Swedish Conscription Database	National	both	17-18		48,117		
3011	Sweden	1989-1990	1973 Birth Cohort	National	both	16	16	912	785	
3012	Sweden	1989-1990	1981 Birth Cohort	National	both	8	8	1,497	1,511	
3013	Sweden	1990	BMI Epidemiology Study	Community	urban	9		379		
3014	Sweden	1990	MONICA Northern Sweden	Subnational	both	25-64	25-64	773	806	
3015	Sweden	1990	MONICA Gothenburg	Community	urban	25-64	25-64	775	775	
3016	Sweden	1990	The Swedish Conscription Database	National	both	17-18		48,882		
3017	Sweden	1990-1991	1973 Birth Cohort	National	both	17	17	881	588	
3018	Sweden	1990-1991	1981 Birth Cohort	National	both	9	9	1,091	1,108	
3019	Sweden	1990-1992	Västerbotten Intervention Project	Subnational	both	25-64	25-64	7,263	7,804	
3020	Sweden	1991	The Swedish Conscription Database	National	both	17-18		49,150		
3021	Sweden	1991-1992	1981 Birth Cohort	National	both	10	10	1,405	1,415	
3022	Sweden	1991-1995	Uppsala Longitudinal Study of Adult Men	Community	both	69-74		1,215		26
3023	Sweden	1991-1996	Malmö Diet and Cancer	Community	urban	45-73	45-73	12,096	18,293	
3024	Sweden	1992	1973 Birth Cohort	National	both	18	18	1,290	390	
3025	Sweden	1992	The Swedish Conscription Database	National	both	17-18		47,275		
3026	Sweden	1992-1993	1981 Birth Cohort	National	both	11	11	785	785	
3027	Sweden	1992-1993	Population Study of Women in Gothenburg	Community	urban		62-84		802	
3028	Sweden	1993	BMI Epidemiology Study	Community	urban	7		125		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3029	Sweden	1993	The Swedish Conscription Database	National	both	17-18		46,245		
3030	Sweden	1993-1994	1981 Birth Cohort	National	both	12	12	1,318	1,378	
3031	Sweden	1993-1995	Västerbotten Intervention Project	Subnational	both	25-64	25-64	9,804	10,727	
3032	Sweden	1994	BMI Epidemiology Study	Community	urban	8		376		
3033	Sweden	1994	Nilson et al., Scand J Prim Health Care 18(2):111-112, 2000	Community	urban	56-65	56-65	170	217	
3034	Sweden	1994	MONICA Northern Sweden	Subnational	both	25-74	25-74	940	961	
3035	Sweden	1994	The Swedish Conscription Database	National	both	17-18		43,648		
3036	Sweden	1994-1995	1981 Birth Cohort	National	both	13	13	924	954	
3037	Sweden	1994-1996	Kungsholmen Project	Community	urban	75+	75+	160	160	
3038	Sweden	1995	BMI Epidemiology Study	Community	urban	9		293		
3039	Sweden	1995	MONICA Gothenburg	Community	urban	25-64	25-64	745	867	
3040	Sweden	1995	The Swedish Conscription Database	National	both	17-18		43,674		
3041	Sweden	1995-1996	1981 Birth Cohort	National	both	14	14	1,202	1,266	
3042	Sweden	1996	The Swedish Conscription Database	National	both	17-18		43,794		
3043	Sweden	1996-1997	1981 Birth Cohort	National	both	15	15	1,143	1,134	
3044	Sweden	1996-1998	Västerbotten Intervention Project	Subnational	both	25-64	25-64	8,327	8,893	
3045	Sweden	1997	The Swedish Conscription Database	National	both	17-18		37,078		
3046	Sweden	1997-1998	1981 Birth Cohort	National	both	16	16	819	862	
3047	Sweden	1997-2001	Uppsala Longitudinal Study of Adult Men	Community	both	73-80		783		26
3048	Sweden	1998	BMI Epidemiology Study	Community	urban	7		707		
3049	Sweden	1998	The Swedish Conscription Database	National	both	17-18		42,564		
3050	Sweden	1998-1999	1981 Birth Cohort	National	both	17	17	406	171	
3051	Sweden	1998-1999	European Youth Heart Study	Subnational	urban	8-16	8-16	525	602	
3052	Sweden	1998-2001	The Kalixanda study	Community	both	20+	20+	508	483	
3053	Sweden	1999	1981 Birth Cohort	National	both	18	18	831	23	
3054	Sweden	1999	BMI Epidemiology Study	Community	urban	8		980		
3055	Sweden	1999	MONICA Northern Sweden	Subnational	both	25-74	25-74	889	920	
3056	Sweden	1999	The Swedish Conscription Database	National	both	17-18		37,852		
3057	Sweden	1999-2003	Västerbotten Intervention Project	Subnational	both	25-64	25-64	6,354	6,384	
3058	Sweden	2000	BMI Epidemiology Study	Community	urban	9		860		
3059	Sweden	2000	The Swedish Conscription Database	National	both	17-18		31,328		
3060	Sweden	2000-2001	H70 Study	Community	urban	70	70	242	270	
3061	Sweden	2000-2002	The COMPASS study	Community	urban	14-16	14-16	1,718	1,597	
3062	Sweden	2001	The Swedish Conscription Database	National	both	17-18		29,809		
3063	Sweden	2001-2004	Swedish INTERGENE Cohort Study	Subnational	both	24-76	24-76	1,694	1,906	
3064	Sweden	2001-2004	PIVUS Study	Community	both	70	70	1,521	1,527	
3065	Sweden	2002	The Swedish Conscription Database	National	both	17-18		24,580		
3066	Sweden	2003	BMI Epidemiology Study	Community	urban	7		15		
3067	Sweden	2003	The European Male Ageing Study	Community	both	40+		396		
3068	Sweden	2003	The Swedish Conscription Database	National	both	17-18		29,198		
3069	Sweden	2003-2004	Welin et al., BMC Public Health 8:403, 2008	Community	urban	50	50	595	655	
3070	Sweden	2003-2004	Welin et al., BMC Public Health 8:403, 2008	Community	urban	60		667		
3071	Sweden	2003-2005	Uppsala Longitudinal Study of Adult Men	Community	both	80-83		512		26
3072	Sweden	2004	BMI Epidemiology Study	Community	urban	8		285		
3073	Sweden	2004	MONICA Northern Sweden	Subnational	both	26-75	26-75	926	964	
3074	Sweden	2004	The Swedish Conscription Database	National	both	17-18		27,857		
3075	Sweden	2004-2005	European Youth Heart Study	Subnational	urban	15-21	15-21	196	262	
3076	Sweden	2004-2005	Population Study of Women in Gothenburg	Community	urban		38-50		494	
3077	Sweden	2005	BMI Epidemiology Study	Community	urban	9		301		
3078	Sweden	2005	The Swedish Conscription Database	National	both	17-18		25,836		
3079	Sweden	2005-2006	H70 Study	Community	urban	75	75	320	422	
3080	Sweden	2006-2007	HELENA	Community	urban	12-17	12-17	132	208	
3081	Sweden	2007	BMI Epidemiology Study	Community	urban	7		1,327		
3082	Sweden	2007-2009	PIVUS Study	Community	both	75	75	1,221	1,257	
3083	Sweden	2007-2010	Identification and prevention of Dietary- and lifestyle-induced health EFfects In Children and infantS (IDEFICS)	Community	urban	5-9	5-9	557	557	
3084	Sweden	2008	BMI Epidemiology Study	Community	urban	7-8		2,501		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3085	Sweden	2008	Childhood Obesity Surveillance Initiative 1	National	both	7-9	7-9	2,374	2,189	
3086	Sweden	2008	The European Male Ageing Study	Community	both	40+		353		
3087	Sweden	2008-2009	Uppsala Longitudinal Study of Adult Men	Community	both	84-88		293		26
3088	Sweden	2009	BMI Epidemiology Study	Community	urban	7-9		3,706		
3089	Sweden	2009	MONICA Northern Sweden	Subnational	both	25-74	25-74	849	857	
3090	Sweden	2010	BMI Epidemiology Study	Community	urban	8-9		2,425		
3091	Sweden	2011	BMI Epidemiology Study	Community	urban	9		1,412		
3092	Sweden	2011-2014	EpiHealth	National	both	45-75	45-75	4,731	6,054	
3093	Sweden	2011-2014	PIVUS Study	Community	both	80	80	909	903	
3094	Sweden	2012	BMI Epidemiology Study	Community	urban	7		1,551		
3095	Sweden	2013	BMI Epidemiology Study	Community	urban	7-8		2,875		
3096	Sweden	2013-2015	Uppsala Longitudinal Study of Adult Men	Community	both	89-94		119		26
3097	Sweden	2014	BMI Epidemiology Study	Community	urban	7-9		4,251		
3098	Sweden	2014	MONICA Northern Sweden	Subnational	both	25-74	25-74	753	795	
3099	Sweden	2014-2016	Swedish INTERGENE Cohort Study	Subnational	urban	37-88	37-88	602	653	
3100	Sweden	2015	BMI Epidemiology Study	Community	urban	8-9		1,917		
3101	Sweden	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-9	6-9	4,070	3,798	
3102	Sweden	2016	BMI Epidemiology Study	Community	urban	9		35		
3103	Sweden	2016-2017	Population Study of Women in Gothenburg	Community	urban		38-50		570	
3104	Sweden	2019	Childhood Obesity Surveillance Initiative 5	National	both	6-9	6-9	31,642	30,002	
3105	Switzerland	1984-1986	The Swiss MONICA Study Wave I	Subnational	both	25-74	25-74	1,744	1,689	
3106	Switzerland	1988-1989	The Swiss MONICA Study Wave II	Subnational	both	25-74	25-74	1,778	1,684	
3107	Switzerland	1992-1993	The Swiss MONICA Study Wave III	Subnational	both	25-74	25-74	1,577	1,672	
3108	Switzerland	2002	Prevalence of overweight and obesity in 6-12-year old children in Switzerland	National	both	6-12	6-12	1,196	1,235	
3109	Switzerland	2003-2006	Cohorte Lausannoise	Community	urban	35-75	35-75	3,186	3,536	
3110	Switzerland	2004	The Swiss Conscription Database	National	both	18-20		20,491		
3111	Switzerland	2005	The Swiss Conscription Database	National	both	18-20		32,131		
3112	Switzerland	2005	Kinder- und Jugendsportstudie (KISS)	Subnational	both	6-13	6-13	239	256	
3113	Switzerland	2005-2006	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,477	4,103	27
3114	Switzerland	2005-2006	Chiolero et al., J Hypertens 25(11):2209-17, 2007	Subnational	both	10-14	10-14	2,621	2,586	
3115	Switzerland	2006	The Swiss Conscription Database	National	both	18-20		34,530		
3116	Switzerland	2006	Kinder- und Jugendsportstudie (KISS)	Subnational	both	7-14	7-14	100	105	
3117	Switzerland	2006-2007	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,061	3,896	27
3118	Switzerland	2007	The Swiss Conscription Database	National	both	18-20		36,194		
3119	Switzerland	2007	Prevalence of overweight and obesity in 6-12-year old children in Switzerland	National	both	6-12	6-12	1,082	1,136	
3120	Switzerland	2007-2008	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,067	4,009	27
3121	Switzerland	2007-2012	Bus Santé Study	Subnational	urban	20-80	20-80	1,884	1,911	
3122	Switzerland	2008	The Swiss Conscription Database	National	both	18-20		34,497		
3123	Switzerland	2008-2009	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	3,998	3,847	27
3124	Switzerland	2008-2010	BMI Monitoring for Switzerland - Study 2	Subnational	both	6	6	1,048	1,110	
3125	Switzerland	2009	The Swiss Conscription Database	National	both	18-20		34,896		
3126	Switzerland	2009	Kinder- und Jugendsportstudie (KISS)	Subnational	both	10-17	10-17	44	65	
3127	Switzerland	2009-2010	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,051	3,913	27
3128	Switzerland	2009-2012	Cohorte Lausannoise	Community	urban	40-75	40-75	2,176	2,494	
3129	Switzerland	2010	The Swiss Conscription Database	National	both	18-20		37,214		
3130	Switzerland	2010	EuropeaN Energy balance Research to prevent excessive weight Gain among Youth - The ENERGY-project	Subnational	both	10-12	10-12	287	270	
3131	Switzerland	2010-2011	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,092	3,734	27
3132	Switzerland	2010-2013	BMI Monitoring for Switzerland - Study 2	Subnational	both	5-11	5-11	9,735	9,346	
3133	Switzerland	2011	The Swiss Conscription Database	National	both	18-20		38,108		
3134	Switzerland	2011-2012	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,085	3,940	27
3135	Switzerland	2012	The Swiss Conscription Database	National	both	18-20		36,938		
3136	Switzerland	2012	Prevalence of overweight and obesity in 6-12-year old children in Switzerland	National	both	6-12	6-12	1,499	1,464	
3137	Switzerland	2012-2013	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,224	4,042	27
3138	Switzerland	2013	The Swiss Conscription Database	National	both	18-20		32,890		
3139	Switzerland	2013-2014	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,333	4,073	27
3140	Switzerland	2013-2016	Bus Santé Study	Subnational	urban	20-74	20-74	2,022	2,186	
3141	Switzerland	2014	The Swiss Conscription Database	National	both	18-20		32,691		

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3142	Switzerland	2014-2015	National Nutrition Survey menuCH	National	both	18-75	18-75	937	1,107	
3143	Switzerland	2014-2015	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	4,657	4,625	27
3144	Switzerland	2014-2016	BMI Monitoring for Switzerland - Study 2	Subnational	both	5-11	5-11	7,759	7,343	
3145	Switzerland	2014-2017	Cohorte Lausannoise	Community	urban	45-87	45-87	2,008	2,473	
3146	Switzerland	2015	The Swiss Conscription Database	National	both	18-20		32,616		
3147	Switzerland	2015-2016	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	3,326	3,058	27
3148	Switzerland	2016	The Swiss Conscription Database	National	both	18-20		26,716		
3149	Switzerland	2016-2017	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	3,457	3,121	27
3150	Switzerland	2017	The Swiss Conscription Database	National	both	18-20		25,509		
3151	Switzerland	2017-2018	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	6,044	5,788	27
3152	Switzerland	2017-2018	National Studie Gesundheit und Ernährung von Primarschülern (CHildHNS)	National	both	6-12	6-12	1,135	1,144	
3153	Switzerland	2018	The Swiss Conscription Database	National	both	18-20		20,906		
3154	Switzerland	2018-2019	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	6,693	6,370	27
3155	Switzerland	2018-2020	BMI Monitoring for Switzerland - Study 2	Subnational	both	5-11	5-11	9,161	8,694	
3156	Switzerland	2018-2021	Cohorte Lausannoise	Community	urban	49-90	49-90	1,600	1,946	
3157	Switzerland	2019	The Swiss Conscription Database	National	both	18-20		18,529		
3158	Switzerland	2019-2020	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	5,873	5,453	27
3159	Switzerland	2020	The Swiss Conscription Database	National	both	18-20		12,531		
3160	Switzerland	2020-2021	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	5,697	5,586	27
3161	Switzerland	2021	The Swiss Conscription Database	National	both	18-20		4,384		
3162	Switzerland	2021-2022	BMI Monitoring for Switzerland - Study 1	Community	urban	5-11	5-11	5,458	5,291	27
3163	Switzerland	2022	The Swiss Conscription Database	National	both	18-20		4,732		
3164	Syrian Arab Republic	2002	National Survey on non-communicable diseases and factors affecting their development	National	both	15-64	15-64	3,155	4,045	
3165	Taiwan	1985	INTERSALT	Community	rural	20-59	20-59	89	92	
3166	Taiwan	1989-1991	Chiu et al., J Gerontol A Biol Sci Med Sci 55(11):M684-90, 2000	Subnational	both	65+	65+	1,322	1,308	
3167	Taiwan	1993-1994	The Kinmen Neurological Disorders Survey	Community	urban	50+	50+	672	593	
3168	Taiwan	1993-1996	Nutrition and Health Survey in Taiwan	National	both	5+	5+	2,959	3,216	
3169	Taiwan	1999-2000	Nutrition and Health Survey in Taiwan	National	both	65+	65+	1,271	1,202	
3170	Taiwan	2000	Social Environment and Biomarkers of Aging Study	National	both	50+	50+	590	433	
3171	Taiwan	2001-2002	Nutrition and Health Survey in Taiwan	National	both	6-12	6-12	1,334	1,139	
3172	Taiwan	2004-2005	Taichung Community Health Study (TCHS)	Community	urban	40+	40+	1,147	1,212	
3173	Taiwan	2005-2008	Nutrition and Health Survey in Taiwan	National	both	19+	19+	1,311	1,355	
3174	Taiwan	2006	Social Environment and Biomarkers of Aging Study	National	both	53+	53+	548	476	
3175	Taiwan	2007	Taiwanese Survey on Hypertension, Hyperglycemia and Hyperlipidemia	National	both	20+	20+	2,155	2,469	
3176	Taiwan	2010	Nutrition and Health Survey in Taiwan	National	both	13-15	13-15	852	927	
3177	Taiwan	2011	Nutrition and Health Survey in Taiwan	National	both	16-18	16-18	580	591	
3178	Taiwan	2012	Global School-based Student Health Survey	National	both	13-17	13-17	2,998	2,927	
3179	Taiwan	2012	Nutrition and Health Survey in Taiwan	National	both	7-12	7-12	510	499	
3180	Taiwan	2013-2016	Nutrition and Health Survey in Taiwan	National	both	5+	5+	2,556	2,672	
3181	Taiwan	2019	Global School-based Student Health Survey	National	both	15-17	15-17	1,701	1,854	
3182	Tajikistan	2003	Micronutrient Status Survey	National	both		15-49		2,044	
3183	Tajikistan	2012	DHS	National	both		15-49		8,930	
3184	Tajikistan	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7	7	1,438	1,457	
3185	Tajikistan	2016	STEPS	National	both	18-69	18-69	1,091	1,553	
3186	Tajikistan	2017	DHS	National	both		15-49		9,922	
3187	Tajikistan	2019	Childhood Obesity Surveillance Initiative 5	National	both	7-8	7-8	1,809	1,622	
3188	Tanzania	1991-1992	DHS	National	both		20-49		4,039	
3189	Tanzania	1996	DHS	National	both		20-49		3,512	
3190	Tanzania	1996-1997	Aspray et al., Trans R Soc Trop Med Hyg 94:637-44, 2000	Community	rural	15+	15+	251	324	
3191	Tanzania	1996-1997	Aspray et al., Trans R Soc Trop Med Hyg 94:637-44, 2000	Community	urban	15+	15+	117	118	
3192	Tanzania	1998-1999	Bovet et al., Int J Epidemiol 31(1):240-7, 2002	Community	urban	25-64	25-64	3,593	5,646	
3193	Tanzania	2004-2005	DHS	National	both		15-49		9,160	
3194	Tanzania	2009	Ilembula School Study	Community	rural	8-9	8-9	151	150	
3195	Tanzania	2010	DHS	National	both		15-49		9,099	
3196	Tanzania	2011	STEPS	Subnational	both	25-64	25-64	1,008	1,517	
3197	Tanzania	2012	STEPS	National	both	25-64	25-64	2,581	2,827	
3198	Tanzania	2014	Dar es Salaam Urban Cohort Hypertension Study	Community	urban	40+	40+	965	1,266	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3199	Tanzania	2015-2016	DHS	National	both		15-49		12,036	
3200	Tanzania	2017	ARISE Network Adolescent Health Study (Dodoma)	Community	rural	10-19	10-19	471	585	
3201	Thailand	1987	INCLEN	Community	rural	35-65		244		
3202	Thailand	1989	INCLEN	Community	rural	35-65		209		
3203	Thailand	1989	INCLEN	Community	urban	35-65		207		
3204	Thailand	1991	Thailand National Health Examination Survey I	National	both	5+	5+	8,698	11,027	
3205	Thailand	1995	The Fourth National Nutrition Survey of Thailand- 1995	National	both	20-60	20-60	1,405	3,631	
3206	Thailand	1997	Thailand National Health Examination Survey II	National	both	5-59	5-59	4,117	4,876	
3207	Thailand	2000	InterASIA	National	both	35+	35+	2,092	3,211	
3208	Thailand	2003	Socio Fitness of Thai Children	National	rural	6-12	6-12	1,180	1,023	
3209	Thailand	2003	Socio Fitness of Thai Children	National	urban	6-12	6-12	2,010	1,722	
3210	Thailand	2003	The Fifth National Food and Nutrition Survey of Thailand	National	both	19-74	19-74	1,960	3,366	
3211	Thailand	2004	Thailand National Health Examination Survey III	National	both	15+	15+	18,819	20,143	
3212	Thailand	2009	Thailand National Health Examination Survey IV	National	both	18+	18+	12,700	13,502	
3213	Thailand	2011	SEANUTS	National	both	5-12	5-12	922	939	
3214	Thailand	2013-2014	The Metabolic Syndrome and Health Behaviours in School Children Aged 13-16 Years in Ubon Ratchathani	Community	both	13-17	13-17	98	278	
3215	Thailand	2014	Thailand National Health Examination Survey V (18+)	National	both	18+	18+	6,172	8,571	
3216	Thailand	2014	Thailand National Health Examination Survey V (10-18)	National	rural	10+	10+	875	872	
3217	Thailand	2014	Thailand National Health Examination Survey V (10-18)	National	urban	10+	10+	657	705	
3218	Thailand	2015	Global School-based Student Health Survey	National	both	12-17	12-17	2,240	3,106	
3219	Thailand	2019-2020	Thailand National Health Examination Survey VI	National	both	10+	10+	10,709	14,154	
3220	Thailand	2021	Global School-based Student Health Survey	National	both	12-16	12-17	1,911	2,703	
3221	Timor-Leste	2009-2010	DHS	National	both		15-49		11,983	
3222	Timor-Leste	2009-2010	Timor-Leste Eye Health Survey	Subnational	both	40+	40+	245	247	
3223	Timor-Leste	2013	Child measurements in Ossu and in Natarbora, Timor Leste	Subnational	rural	5-19	5-19	245	239	
3224	Timor-Leste	2014	STEPS	National	both	18-69	18-69	1,048	1,437	
3225	Timor-Leste	2016	DHS	National	both	15-59	15-49	4,556	11,823	
3226	Timor-Leste	2018	Child measurements in Ossu and in Natarbora, Timor Leste - Harvest season	Subnational	rural	5-19	5-19	234	246	
3227	Timor-Leste	2018	Child measurements in Ossu and in Natarbora, Timor Leste - Post rainy season	Subnational	rural	5-19	5-19	97	132	
3228	Togo	1998	DHS	National	both		20-49		3,114	
3229	Togo	2010	STEPS	National	both	15-64	15-64	2,063	2,095	
3230	Togo	2013-2014	DHS	National	both		15-49		4,398	
3231	Togo	2014	Impact evaluation of a cash transfer program in North Togo	Subnational	rural		20-65		3,588	
3232	Togo	2021-2022	STEPS	National	both	18-69	18-69	1,585	2,165	
3233	Tokelau	2005	STEPS	National	both	15-64	15-64	270	296	
3234	Tokelau	2014	STEPS	National	both	18-64	18-64	261	276	
3235	Tonga	2004	STEPS	National	both	15-64	15-64	403	552	
3236	Tonga	2005-2007	Pacific Obesity Prevention in Communities - Maālahi Youth Project	Subnational	rural	11-19	11-19	1,206	1,445	
3237	Tonga	2007-2008	Pacific Obesity Prevention in Communities - Maālahi Youth Project	Subnational	rural	13-22	13-22	434	579	
3238	Tonga	2010	Global School-based Student Health Survey	National	both	13-17	13-17	926	1,069	
3239	Tonga	2011	STEPS	National	both	15-64	15-64	878	1,401	
3240	Tonga	2017	Global School-based Student Health Survey	National	both	12-17	12-17	1,254	1,452	
3241	Tonga	2017	STEPS	National	both	18-69	18-69	1,260	2,327	
3242	Trinidad and Tobago	1985	INTERSALT	Community	urban	20-59	20-59	84	92	
3243	Trinidad and Tobago	1999	Child Health Survey	National	both	5-9	5-9	3,060	3,272	
3244	Trinidad and Tobago	2001	Adult Survey	National	rural	25+	25+	198	267	
3245	Trinidad and Tobago	2003	Child Health Survey	National	both	5-9	5-9	1,832	1,974	
3246	Trinidad and Tobago	2003	National Survey of Senior School Health	National	both	15-16	15-16	828	1,112	
3247	Trinidad and Tobago	2011	STEPS	National	both	15-64	15-64	1,112	1,608	
3248	Trinidad and Tobago	2013-2014	National Eye Survey	National	both	40+	40+	1,077	1,396	
3249	Tunisia	1996-1997	Ariana Healthy Project 1997	Community	both	35-65	35-65	2,645	2,701	
3250	Tunisia	1996-1997	Tunisian National Nutrition Survey 1996-1997	National	both	5+	5+	2,724	4,125	
3251	Tunisia	2005	Aounallah et al., Public Health 12(1):98, 2012	National	both	15-19	15-19	1,290	1,566	
3252	Tunisia	2005	Tunisian National Survey 2005 (TAHINA)	National	both	35-71	35-71	3,265	4,313	
3253	Tunisia	2009-2010	ObeMaghreb	Subnational	urban	5-49	5-49	1,841	1,601	
3254	Türkiye	1990	Turkish Adult Risk Factor Study	National	both	20+	20+	1,338	1,369	
3255	Türkiye	1993	DHS	National	both		20-49		2,294	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3256	Türkiye	1995	Turkish Adult Risk Factor Study	National	both	25+	25+	855	878	
3257	Türkiye	1998	DHS	National	both		20-49		2,210	
3258	Türkiye	1998	Turkish Adult Risk Factor Study	National	both	28+	28+	877	909	
3259	Türkiye	1998-1999	Erem et al., Diabetes Res Clin Pract 54(3):203-08, 2001	Community	urban	20+	20+	1,324	1,322	
3260	Türkiye	2000	Manisa Demographic and Health Survey	Subnational	urban		15-49		1,420	
3261	Türkiye	2000	Turkish Adult Risk Factor Study	National	both	30+	30+	890	938	
3262	Türkiye	2000-2002	The Healthy Nutrition for Healthy Heart Study	National	both	25-84	25-84	4,718	10,631	
3263	Türkiye	2001	Yumuk et al., Diabetes Res Clin Pract 70(2):151-58, 2005	Community	urban	20+	20+	1,042	1,789	
3264	Türkiye	2001-2002	Turkish Adult Risk Factor Study	National	both	32+	32+	1,098	1,209	
3265	Türkiye	2002	Onal et al., Blood Press 13(1):31-6, 2004	Subnational	urban	25+	25+	67	355	
3266	Türkiye	2003	DHS	National	both		20-49		2,934	
3267	Türkiye	2003	Prevalence, awareness, treatment and control of hypertension in Turkey in 2003	National	both	18+	18+	1,988	2,847	
3268	Türkiye	2003-2004	Turkish Adult Risk Factor Study	National	both	34+	34+	1,097	1,130	
3269	Türkiye	2003-2005	Prevalence of prehypertension and associated risk factors among Turkish adults: Trabzon Hypertension Study	Subnational	both	20+	20+	2,208	2,601	
3270	Türkiye	2004	Nationally Representative Cross-sectional Survey	National	both	20+	20+	2,110	2,154	
3271	Türkiye	2005-2006	Turkish Adult Risk Factor Study	National	both	35+	35+	965	1,029	
3272	Türkiye	2007	National Household survey	National	both	20-85	20-85	2,263	1,842	
3273	Türkiye	2007-2008	Turkish Adult Risk Factor Study	National	both	37+	37+	1,048	1,070	
3274	Türkiye	2007-2009	Balcova Heart Study	Community	urban	30+	30+	4,274	8,609	
3275	Türkiye	2008	DHS	National	both		15-49		6,167	
3276	Türkiye	2009-2010	Turkish Adult Risk Factor Study	National	both	39+	39+	462	501	
3277	Türkiye	2009-2012	Prevalence of diabetes and associated risk factors among adult population in Trabzon city	Subnational	both	20+	20+	1,562	2,115	
3278	Türkiye	2011	Chronic Diseases and Risk Factors Survey in Turkey	National	both	15+	15+	8,060	8,923	
3279	Türkiye	2012-2013	Turkish Adult Risk Factor Study	National	both	37+	37+	1,012	1,087	
3280	Türkiye	2013	Childhood Obesity Surveillance Initiative 3	National	both	7-8	7-8	2,483	2,475	
3281	Türkiye	2013	DHS	National	both		15-49		8,270	
3282	Türkiye	2014-2015	Turkish Adult Risk Factor Study	National	both	44+	44+	437	484	
3283	Türkiye	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	6-7	6-7	5,479	5,336	
3284	Türkiye	2016-2017	Erasmus plus KA2, Healthyland	Community	urban	6	6	29	22	
3285	Türkiye	2017	STEPS	National	both	15+	15+	2,306	3,426	
3286	Türkiye	2017-2018	Erasmus plus KA2, Healthyland	Community	urban	6	6	50	50	
3287	Türkiye	2018	DHS	National	both		15-49		6,464	
3288	Turkmenistan	2000	DHS	National	both		15-49		2,084	
3289	Turkmenistan	2013	STEPS	National	both	18-64	18-64	1,879	2,741	
3290	Turkmenistan	2015-2016	Childhood Obesity Surveillance Initiative 4	National	both	7-8	7-8	1,952	1,956	
3291	Turkmenistan	2018	STEPS	National	both	18-69	18-69	1,713	2,236	
3292	Tuvalu	2013	Global School-based Student Health Survey	National	both	13-17	13-17	210	215	
3293	Tuvalu	2015	STEPS	National	both	18-69	18-69	478	550	
3294	Uganda	1995	DHS	National	both		20-49		2,831	
3295	Uganda	2000-2001	DHS	National	both		15-49		5,829	
3296	Uganda	2006	DHS	National	both	15-54	15-49	2,475	2,538	
3297	Uganda	2011	DHS	National	both	15-54	15-49	2,361	2,501	
3298	Uganda	2011-2012	The Prevalence and Distribution of Non-communicable Diseases and their Risk Factors in Kasese District, Uganda	Subnational	both	25-79	25-79	277	221	
3299	Uganda	2011-2013	Gulu Health and Demographic Surveillance Site (HDSS)	Community	rural	5+	5+	3,938	4,820	
3300	Uganda	2012	Prevalence, awareness and control of hypertension in Uganda	Subnational	both	15+	15+	1,619	2,740	
3301	Uganda	2014	STEPS	National	both	18-69	18-69	1,560	2,120	
3302	Uganda	2014-2015	Gulu Health and Demographic Surveillance Site (HDSS)	Community	rural	15-24	15-24	671	517	
3303	Uganda	2016	DHS	National	both	15-54	15-54	5,191	5,415	
3304	Uganda	2018-2019	Scaling up Packages of Intervention for Cardiovascular disease prevention in selected sites in Europe and Sub-Saharan Africa (SPICES)	Subnational	both	25-70	25-70	1,740	2,479	
3305	Uganda	2023	STEPS	National	both	18-69	18-69	1,425	2,061	5
3306	Ukraine	2002	National Micronutrient Survey	National	both		15-50		816	
3307	Ukraine	2006-2007	Physical Development of School Children Ukraine	Community	rural	6-17	6-17	1,226	1,336	
3308	Ukraine	2007-2008	Physical Development of School Children Ukraine	Community	urban	6-17	6-17	1,224	1,126	
3309	Ukraine	2012	Epidemiological aspects of obesity and systemic hypertension among school children of Western Ukraine	Community	urban	10-17	10-17	271	257	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3310	Ukraine	2013-2014	The prevalence of underweight, overweight and obesity in children and adolescents from Ukraine	National	both	6-18	6-18	6,596	7,143	
3311	Ukraine	2018	Prevalence of obesity in Ukrainian children and adolescents	National	both	7-17	7-17	4,471	4,667	
3312	Ukraine	2018-2020	Physical development of children 3-6 years old - Kyiv	Community	urban	5-6	5-6	407	334	
3313	Ukraine	2019	Prevalence of obesity in Ukrainian children and adolescents	National	both	7-17	7-17	4,245	4,760	
3314	Ukraine	2019	STEPS	National	both	18-69	18-69	1,569	2,600	
3315	United Arab Emirates	1989-1990	El Mugamer et al., J Trop Med Hyg 98(6):407-15, 1995	Community	both	20+	20+	122	199	
3316	United Arab Emirates	1999-2000	Emirates National Diabetes and Coronary Artery Disease Risk Factor Study	National	both	20-80	20-80	2,822	3,743	
3317	United Arab Emirates	2000-2001	Carter et al., J Health Popul Nutr 22(1):75-83, 2004	Community	both		20-79		521	
3318	United Arab Emirates	2005	Global School-based Student Health Survey	National	both	12-15	12-15	5,595	6,268	
3319	United Arab Emirates	2009	Gulf Cooperation Council World Health Survey	National	both	18+	18+	605	645	
3320	United Arab Emirates	2010	Global School-based Student Health Survey	National	both	13-17	13-17	948	1,257	
3321	United Arab Emirates	2016	Global School-based Student Health Survey	National	both	12-17	12-17	2,323	2,674	
3322	United Arab Emirates	2017-2018	STEPS	National	both	18+	18+	2,148	2,323	
3323	United Kingdom	1980	British Cohort Study 1970	National	both	10	10	6,252	5,907	
3324	United Kingdom	1982	MRC National Survey of Health and Development	National	both	36-37	36-37	1,632	1,648	
3325	United Kingdom	1983-1984	MONICA, Belfast	Subnational	both	25-64	25-64	1,158	1,183	
3326	United Kingdom	1984-1986	Scottish Heart Health Survey	Subnational	both	40-59	40-59	4,364	4,465	
3327	United Kingdom	1985	INTERSALT, Birmingham	Community	urban	20-59	20-59	100	100	
3328	United Kingdom	1985	INTERSALT, South Wales	Community	urban	20-59	20-59	100	99	
3329	United Kingdom	1985-1986	INTERSALT, Belfast	Community	urban	20-59	20-59	99	100	
3330	United Kingdom	1986	British Cohort Study 1970	National	both	16	16	2,773	2,950	
3331	United Kingdom	1986-1987	Dietary and Nutritional Survey of British Adults 1986-1987	National	both	16-64	16-64	1,158	1,161	
3332	United Kingdom	1986-1987	MONICA, Belfast	Subnational	both	25-64	25-64	1,155	1,185	
3333	United Kingdom	1987-1988	Edinburgh Artery Study	Community	urban	54-75	54-75	808	783	
3334	United Kingdom	1989	MRC National Survey of Health and Development	National	both	42-44	42-44	1,617	1,608	
3335	United Kingdom	1991	National Child Development Study (1958 British Cohort Study)	National	both	33	33	5,426	5,605	
3336	United Kingdom	1991-1992	Health Survey for England	National	both	16+	16+	3,114	3,430	
3337	United Kingdom	1991-1992	MONICA, Belfast	Subnational	both	25-64	25-64	998	996	
3338	United Kingdom	1992	MONICA, Glasgow	Community	urban	25-64	25-64	696	775	
3339	United Kingdom	1992-1993	Whickham Survey	Community	urban	35+	35+	676	784	
3340	United Kingdom	1992-1994	Edinburgh Artery Study	Community	urban	60-81	60-81	580	582	
3341	United Kingdom	1993	Health Survey for England	National	both	16+	16+	7,461	8,297	
3342	United Kingdom	1993-1997	EPIC Norfolk	Subnational	both	40-79	40-79	11,574	13,995	
3343	United Kingdom	1994	Health Survey for England	National	both	16+	16+	6,825	7,939	
3344	United Kingdom	1994-1995	Hertfordshire Ageing Study	Subnational	both	63-73	63-73	411	304	
3345	United Kingdom	1994-1995	National Diet and Nutrition Survey (NDNS)	National	both	65+	65+	701	687	
3346	United Kingdom	1995	Health Survey for England	National	both	5+	5+	8,038	9,027	
3347	United Kingdom	1995	MONICA, Glasgow	Community	urban	25-64	25-64	855	958	
3348	United Kingdom	1995	Scottish Health Survey (SHeS)	Subnational	both	16-64	16-64	3,303	4,005	
3349	United Kingdom	1996	British Cohort Study 1970	National	both	26	26	81	78	
3350	United Kingdom	1996	Health Survey for England	National	both	5+	5+	8,469	9,461	
3351	United Kingdom	1997	Health Survey for England	National	both	5+	5+	6,285	6,841	
3352	United Kingdom	1997	National Diet and Nutrition Survey (NDNS)	National	both	5-18	5-18	933	896	
3353	United Kingdom	1997-1999	INTERMAP, West Bromwich	Community	urban	40-59	40-59	141	138	
3354	United Kingdom	1998	Health Survey for England	National	both	5+	5+	7,980	9,047	
3355	United Kingdom	1998	Scottish Health Survey (SHeS)	Subnational	both	5-74	5-74	5,047	5,908	
3356	United Kingdom	1998-1999	INTERMAP, Belfast	Community	urban	40-59	40-59	125	97	
3357	United Kingdom	1998-1999	Avon Longitudinal Study of Parents and Children	Community	both	7	7	3,693	3,567	
3358	United Kingdom	1998-1999	SportsLinx	Community	urban	9-10	9-10	1,429	1,364	
3359	United Kingdom	1998-2000	The British Regional Heart Study	National	urban	60-79		4,138		
3360	United Kingdom	1999	Health Survey for England	National	both	5+	5+	3,880	4,304	
3361	United Kingdom	1999	MRC National Survey of Health and Development	National	both	53-54	53-54	1,452	1,496	
3362	United Kingdom	1999-2000	Avon Longitudinal Study of Parents and Children	Community	both	8	8	3,048	3,017	
3363	United Kingdom	1999-2000	SportsLinx	Community	urban	9-10	9-10	1,469	1,439	
3364	United Kingdom	1999-2001	British Women's Heart and Health Study	National	both		60-79		3,678	28
3365	United Kingdom	1999-2001	Edinburgh Artery Study	Community	urban	66-87	66-87	373	404	
3366	United Kingdom	1999-2004	Hertfordshire Cohort Study	Subnational	both	59-73	59-73	1,571	1,416	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3367	United Kingdom	2000	Health Survey for England	National	both	5+	5+	4,073	4,607	
3368	United Kingdom	2000-2001	Avon Longitudinal Study of Parents and Children	Community	both	9	9	3,360	3,411	
3369	United Kingdom	2000-2001	National Diet and Nutrition Survey (NDNS)	National	both	19-64	19-64	807	973	
3370	United Kingdom	2000-2001	SportsLinx	Community	urban	9-10	9-10	1,166	1,154	
3371	United Kingdom	2001	Health Survey for England	National	both	5+	5+	7,463	8,657	
3372	United Kingdom	2001-2002	Avon Longitudinal Study of Parents and Children	Community	both	10	10	3,298	3,338	
3373	United Kingdom	2001-2002	SportsLinx	Community	urban	9-10	9-10	866	743	
3374	United Kingdom	2002	Health Survey for England	National	both	5+	5+	6,797	7,578	
3375	United Kingdom	2002-2003	Avon Longitudinal Study of Parents and Children	Community	both	11	11	3,132	3,207	
3376	United Kingdom	2002-2003	SportsLinx	Community	urban	9-10	9-10	725	749	
3377	United Kingdom	2003	The European Male Ageing Study	Community	both	40+		394		
3378	United Kingdom	2003	Health Survey for England	National	both	5+	5+	7,136	8,268	
3379	United Kingdom	2003	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	3,988	4,687	
3380	United Kingdom	2003-2004	SportsLinx	Community	urban	9-10	9-10	1,906	1,931	
3381	United Kingdom	2003-2005	Hertfordshire Ageing Study	Subnational	both	72-82	72-82	171	119	
3382	United Kingdom	2004	Health Survey for England	National	both	5+	5+	2,975	3,608	
3383	United Kingdom	2004-2005	Avon Longitudinal Study of Parents and Children	Community	both	13	13	2,939	3,016	
3384	United Kingdom	2004-2005	English Longitudinal Study of Ageing Wave 2 2004-2005	National	both	52+	52+	3,259	3,966	
3385	United Kingdom	2004-2005	SportsLinx	Community	urban	9-10	9-10	1,724	1,712	
3386	United Kingdom	2005	Health Survey for England	National	both	5+	5+	4,839	5,503	
3387	United Kingdom	2005-2006	Avon Longitudinal Study of Parents and Children	Community	both	14	14	2,699	2,761	
3388	United Kingdom	2005-2006	SportsLinx	Community	urban	9-10	9-10	1,455	1,409	
3389	United Kingdom	2006	Health Survey for England	National	both	5+	5+	8,005	8,912	
3390	United Kingdom	2006	Millennium Cohort Study	National	both	5-6	5-6	6,258	5,999	
3391	United Kingdom	2006-2007	Avon Longitudinal Study of Parents and Children	Community	both	15	15	2,289	2,537	
3392	United Kingdom	2006-2007	National Child Measurement Programme	National	both	5-11	5-11	380,586	358,276	29
3393	United Kingdom	2006-2007	SportsLinx	Community	urban	9-10	9-10	1,759	1,683	
3394	United Kingdom	2006-2010	MRC National Survey of Health and Development	National	both	60-65	60-65	1,061	1,156	
3395	United Kingdom	2007	Health Survey for England	National	both	5+	5+	5,354	5,708	
3396	United Kingdom	2007	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	782	751	
3397	United Kingdom	2007-2008	National Child Measurement Programme	National	both	5-11	5-11	396,795	374,775	29
3398	United Kingdom	2007-2008	SportsLinx	Community	urban	9-10	9-10	1,852	1,815	
3399	United Kingdom	2008	The European Male Ageing Study	Community	both	40+		301		
3400	United Kingdom	2008	Health Survey for England	National	both	5+	5+	8,317	9,472	
3401	United Kingdom	2008	Millennium Cohort Study	National	both	6-8	6-8	6,961	6,836	
3402	United Kingdom	2008	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,970	3,533	
3403	United Kingdom	2008	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	737	624	
3404	United Kingdom	2008-2009	English Longitudinal Study of Ageing Wave 4 2008-2009	National	both	50+	50+	3,540	4,296	
3405	United Kingdom	2008-2009	National Child Measurement Programme	National	both	5-11	5-11	398,496	377,146	29
3406	United Kingdom	2008-2009	SportsLinx	Community	urban	9-10	9-10	1,824	1,854	
3407	United Kingdom	2008-2012	National Diet and Nutrition Survey (NDNS)	National	both	5+	5+	2,580	3,094	
3408	United Kingdom	2009	Health Survey for England	National	both	5+	5+	3,242	3,384	
3409	United Kingdom	2009	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	3,621	4,168	
3410	United Kingdom	2009	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	907	857	
3411	United Kingdom	2009-2010	Avon Longitudinal Study of Parents and Children	Community	both	18	18	1,950	2,486	
3412	United Kingdom	2009-2010	National Child Measurement Programme	National	both	5-11	5-11	398,272	377,960	29
3413	United Kingdom	2009-2010	SportsLinx	Community	urban	9-10	9-10	1,493	1,429	
3414	United Kingdom	2010	Health Survey for England	National	both	5+	5+	4,959	5,547	
3415	United Kingdom	2010	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	3,206	3,767	
3416	United Kingdom	2010	Understanding Society: the UK Household Longitudinal Study	National	both	16+	16+	6,507	8,422	
3417	United Kingdom	2010	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	892	859	
3418	United Kingdom	2010-2011	National Child Measurement Programme	National	both	5-11	5-11	393,146	373,472	29
3419	United Kingdom	2010-2011	SportsLinx	Community	urban	9-10	9-10	1,332	1,252	
3420	United Kingdom	2010-2012	The British Regional Heart Study	National	urban	72-91		1,676		
3421	United Kingdom	2011	British Household Panel Survey	National	both	16+	16+	1,917	2,391	
3422	United Kingdom	2011	Health Survey for England	National	both	5+	5+	3,680	4,404	
3423	United Kingdom	2011	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	3,253	3,862	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3424	United Kingdom	2011	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	949	836	
3425	United Kingdom	2011-2012	National Child Measurement Programme	National	both	5-11	5-11	390,383	373,067	29
3426	United Kingdom	2011-2012	SportsLinx	Community	urban	9-10	9-10	1,286	1,330	
3427	United Kingdom	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	237	287	
3428	United Kingdom	2012	Health Survey for England	National	both	5+	5+	3,648	4,278	
3429	United Kingdom	2012	Millennium Cohort Study	National	both	10-12	10-12	6,574	6,451	
3430	United Kingdom	2012	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,378	2,734	
3431	United Kingdom	2012	Welsh Health Survey (WHS)	Subnational	both	5-15	5-15	804	712	
3432	United Kingdom	2012-2013	English Longitudinal Study of Ageing Wave 6 2012-2013	National	both	50+	50+	3,257	4,015	
3433	United Kingdom	2012-2013	National Child Measurement Programme	National	both	5-11	5-11	396,700	377,109	29
3434	United Kingdom	2013	Health Survey for England	National	both	5+	5+	3,910	4,577	
3435	United Kingdom	2013	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,340	2,747	
3436	United Kingdom	2013-2014	National Child Measurement Programme	National	both	5-11	5-11	407,631	389,421	29
3437	United Kingdom	2013-2014	National Diet and Nutrition Survey (NDNS)	National	both	5+	5+	940	1,194	
3438	United Kingdom	2013-2014	Swan-Linx Project	Community	both	9-11	9-11	329	333	
3439	United Kingdom	2014	Health Survey for England	National	both	5+	5+	3,712	4,332	
3440	United Kingdom	2014	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,248	2,675	
3441	United Kingdom	2014-2015	National Child Measurement Programme	National	both	5-11	5-11	412,685	395,006	29
3442	United Kingdom	2015	Health Survey for England	National	both	5+	5+	4,837	5,491	
3443	United Kingdom	2015	Millennium Cohort Study	National	both	13-15	13-15	5,635	5,474	
3444	United Kingdom	2015	MRC National Survey of Health and Development	National	both	69-70	69-70	1,040	1,082	
3445	United Kingdom	2015	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,264	2,530	
3446	United Kingdom	2015	Swan-Linx Project	Community	both	9-11	9-11	420	395	
3447	United Kingdom	2015-2016	National Child Measurement Programme	National	both	5-11	5-11	427,039	410,085	29
3448	United Kingdom	2015-2016	National Diet and Nutrition Survey (NDNS)	National	both	5+	5+	1,021	1,188	
3449	United Kingdom	2015-2018	British Cohort Study 1970	National	both	45-48	45-48	3,587	3,826	
3450	United Kingdom	2016	Health Survey for England	National	both	18+	18+	2,851	3,489	
3451	United Kingdom	2016	Scottish Health Survey (SHeS)	Subnational	both	5+	5+	2,041	2,395	
3452	United Kingdom	2016	Swan-Linx Project	Community	both	9-11	9-11	604	653	
3453	United Kingdom	2016-2017	National Child Measurement Programme	National	both	5-11	5-11	430,101	412,604	29
3454	United Kingdom	2016-2019	National Diet and Nutrition Survey (NDNS)	National	both	5+	5+	1,322	1,588	
3455	United Kingdom	2017	Health Survey for England	National	both	18+	18+	2,841	3,564	
3456	United Kingdom	2017	Scottish Health Survey	Subnational	both	5+	5+	1,734	2,056	
3457	United Kingdom	2017-2018	National Child Measurement Programme	National	both	5-11	5-11	444,135	426,632	29
3458	United Kingdom	2018	Health Survey for England	National	both	5+	5+	3,581	4,268	
3459	United Kingdom	2018	Scottish Health Survey	Subnational	both	5+	5+	2,192	2,546	
3460	United Kingdom	2018-2019	National Child Measurement Programme	National	both	5-11	5-11	449,768	433,526	29
3461	United Kingdom	2019	Health Survey for England	National	both	5+	5+	3,622	4,212	
3462	United Kingdom	2019	Scottish Health Survey	Subnational	both	5+	5+	2,309	2,661	
3463	United States of America	1976-1980	US NHANES II	National	both	5-74	5-74	6,952	7,508	1
3464	United States of America	1979-1980	MONICA, Stanford	Subnational	urban	25-64	25-64	703	806	30
3465	United States of America	1980-1982	The Minnesota Heart Survey	Community	both	25-75	25-75	1,611	1,837	
3466	United States of America	1981-1982	The Bogalusa Heart Study	Community	rural	5-17	5-17	1,630	1,641	
3467	United States of America	1983-1985	The Bogalusa Heart Study	Community	rural	5-17	5-17	1,227	1,301	
3468	United States of America	1985-1986	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	18-30	18-30	2,321	2,775	
3469	United States of America	1985-1986	INTERSALT, Chicago	Community	urban	20-59	20-59	97	99	
3470	United States of America	1985-1986	MONICA, Stanford	Subnational	urban	25-64	25-64	713	848	30
3471	United States of America	1985-1987	The Minnesota Heart Survey	Community	both	25-75	25-75	5,220	2,421	
3472	United States of America	1986	INTERSALT, Goodman	Community	urban	20-59	20-59	192	192	
3473	United States of America	1987-1988	The Bogalusa Heart Study	Community	rural	5-17	5-17	1,646	1,588	
3474	United States of America	1987-1988	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	20-32	20-32	2,082	2,506	
3475	United States of America	1987-1989	Atherosclerosis Risk in Communities Study	Subnational	both	44-66	44-66	5,041	6,213	
3476	United States of America	1988-1994	US NHANES III	National	both	5+	5+	11,389	12,256	
3477	United States of America	1989-1990	Cardiovascular Health Study	Subnational	both	65+	65+	2,458	3,318	
3478	United States of America	1989-1990	MONICA, Stanford	Subnational	urban	25-64	25-64	720	842	30
3479	United States of America	1990-1991	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	23-35	23-35	1,945	2,382	
3480	United States of America	1990-1991	Cardiovascular Health Study	Subnational	both	65+	65+	2,070	2,707	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3481	United States of America	1990-1992	Atherosclerosis Risk in Communities Study	Subnational	both	46-70	46-70	4,537	5,624	
3482	United States of America	1991-1992	Cardiovascular Health Study	Subnational	both	65+	65+	1,919	2,563	
3483	United States of America	1992-1993	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	25-37	25-37	1,823	2,163	
3484	United States of America	1992-1993	Cardiovascular Health Study	Subnational	both	65+	65+	1,985	2,764	
3485	United States of America	1992-1994	The Bogalusa Heart Study	Community	rural	5-17	5-17	1,525	1,593	
3486	United States of America	1993-1994	Cardiovascular Health Study	Subnational	both	65+	65+	1,751	2,471	
3487	United States of America	1993-1995	Atherosclerosis Risk in Communities Study	Subnational	both	48-73	48-73	4,000	5,015	
3488	United States of America	1993-1998	Women's Health Initiative - Observational Study	National	both		50-79		92,691	
3489	United States of America	1994-1995	Cardiovascular Health Study	Subnational	both	66+	66+	1,617	2,354	
3490	United States of America	1995-1996	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	28-40	28-40	1,739	2,145	
3491	United States of America	1995-1996	Cardiovascular Health Study	Subnational	both	66+	66+	1,478	2,194	
3492	United States of America	1996	National Longitudinal Study of Adolescent Health Wave II	National	both	11-21	11-21	2,287	2,459	31
3493	United States of America	1996-1997	Cardiovascular Health Study	Subnational	both	67+	67+	1,356	2,043	
3494	United States of America	1996-1997	INTERMAP, Baltimore	Community	urban	40-59	40-59	146	134	
3495	United States of America	1996-1997	INTERMAP, Jackson	Community	urban	40-59	40-59	132	134	
3496	United States of America	1996-1997	INTERMAP, Pittsburgh	Community	urban	40-59	40-59	132	128	
3497	United States of America	1996-1997	Study of Women's Health Across the Nation	Subnational	both		40-55		3,200	32
3498	United States of America	1996-1998	Atherosclerosis Risk in Communities Study	Subnational	both	50-75	50-75	3,550	4,485	
3499	United States of America	1996-1998	INTERMAP, Minneapolis	Community	urban	40-59	40-59	130	130	
3500	United States of America	1997-1998	INTERMAP, Chicago	Community	urban	40-59	40-59	156	159	
3501	United States of America	1997-1998	INTERMAP, Corpus Christi	Community	urban	40-59	40-59	271	276	
3502	United States of America	1997-1998	Cardiovascular Health Study	Subnational	both	68+	68+	1,172	1,801	
3503	United States of America	1997-1999	Study of Women's Health Across the Nation	Subnational	both		40-55		2,761	32
3504	United States of America	1998-1999	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	541	461	
3505	United States of America	1998-1999	Cardiovascular Health Study	Subnational	both	69+	69+	1,092	1,684	
3506	United States of America	1998-2000	Study of Women's Health Across the Nation	Subnational	both		40-55		2,596	32
3507	United States of America	1999	Early Childhood Longitudinal Study	National	both	5-7	5-7	2,540	2,495	
3508	United States of America	1999-2000	US NHANES 1999-2000	National	both	5+	5+	3,809	3,791	
3509	United States of America	1999-2001	Study of Women's Health Across the Nation	Subnational	both		40-56		2,507	32
3510	United States of America	2000	Early Childhood Longitudinal Study	National	both	6-8	6-8	7,950	7,598	
3511	United States of America	2000-2001	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	639	569	
3512	United States of America	2000-2001	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	33-45	33-45	1,570	1,949	
3513	United States of America	2000-2002	Study of Women's Health Across the Nation	Subnational	both		40-57		2,441	32
3514	United States of America	2001	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	1,732	1,631	
3515	United States of America	2001-2002	National Longitudinal Study of Adolescent Health Wave III	National	both	18-28	18-28	2,139	2,443	31
3516	United States of America	2001-2002	US NHANES 2001-2002	National	both	5+	5+	4,045	4,006	
3517	United States of America	2002	Early Childhood Longitudinal Study	National	both	8-9	8-9	7,043	6,821	
3518	United States of America	2002-2003	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	2,635	2,594	
3519	United States of America	2003-2004	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,581	4,061	
3520	United States of America	2003-2004	US NHANES 2003-2004	National	both	5+	5+	3,938	3,838	
3521	United States of America	2004	Early Childhood Longitudinal Study	National	both	10-11	10-11	5,342	5,335	
3522	United States of America	2004	Health and Retirement Study	National	both	24+	24+	240	260	
3523	United States of America	2004-2005	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,340	4,277	
3524	United States of America	2005-2006	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	327	270	
3525	United States of America	2005-2006	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,859	4,205	
3526	United States of America	2005-2006	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	38-50	38-50	1,528	2,000	
3527	United States of America	2005-2006	Cardiovascular Health Study	Subnational	both	70+	70+	375	684	
3528	United States of America	2005-2006	US NHANES 2005-2006	National	both	5+	5+	3,984	3,835	
3529	United States of America	2005-2006	National Social Life Health and Aging Project	National	both	57-85	57-85	1,355	1,435	33
3530	United States of America	2006	Health and Retirement Study	National	both	53+	53+	2,809	3,788	
3531	United States of America	2006-2007	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	843	798	
3532	United States of America	2006-2007	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,039	3,418	
3533	United States of America	2007	Early Childhood Longitudinal Study	National	both	13-14	13-14	4,256	4,251	
3534	United States of America	2007-2008	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	3,873	3,975	
3535	United States of America	2007-2008	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,046	3,634	
3536	United States of America	2007-2008	US NHANES 2007-2008	National	both	5+	5+	4,086	4,038	
3537	United States of America	2008	Health and Retirement Study	National	both	55+	55+	2,469	3,448	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3538	United States of America	2008-2009	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	4,907	5,178	
3539	United States of America	2008-2009	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	4,152	3,593	
3540	United States of America	2008-2009	National Longitudinal Study of Adolescent Health Wave IV	National	both	24-34	24-34	2,317	2,725	31
3541	United States of America	2009-2010	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	5,217	5,562	
3542	United States of America	2009-2010	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	3,990	3,513	
3543	United States of America	2009-2010	US NHANES 2009-2010	National	both	5+	5+	4,291	4,332	
3544	United States of America	2010	Early Childhood Longitudinal Study	National	both	5-6	5-6	7,811	7,391	
3545	United States of America	2010-2011	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	4,994	5,286	
3546	United States of America	2010-2011	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	3,313	2,819	
3547	United States of America	2010-2011	Coronary Artery Risk Development in Young Adults (CARDIA)	Subnational	urban	43-55	43-55	1,513	1,976	
3548	United States of America	2010-2011	Health and Retirement Study	National	both	57+	57+	2,533	3,465	
3549	United States of America	2010-2011	National Social Life Health and Aging Project	National	both	61-91	61-91	1,440	1,640	33
3550	United States of America	2011	Early Childhood Longitudinal Study - Fall	National	both	5-7	5-7	2,722	2,493	
3551	United States of America	2011	Early Childhood Longitudinal Study - Spring	National	both	5-7	5-7	8,729	8,373	
3552	United States of America	2011-2012	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	4,122	4,412	
3553	United States of America	2011-2012	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	2,644	2,112	
3554	United States of America	2011-2012	US NHANES 2011-2012	National	both	5+	5+	3,951	3,887	
3555	United States of America	2011-2013	Atherosclerosis Risk in Communities Study	Subnational	both	67-90	67-90	1,787	2,431	
3556	United States of America	2011-2013	International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)	Community	urban	9-11	9-11	281	368	
3557	United States of America	2012	Early Childhood Longitudinal Study - Fall	National	both	6-8	6-8	2,446	2,262	
3558	United States of America	2012	Early Childhood Longitudinal Study - Spring	National	both	6-8	6-8	7,667	7,358	
3559	United States of America	2012	Health and Retirement Study	National	both	59+	59+	2,294	3,095	
3560	United States of America	2012-2013	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	4,565	5,184	
3561	United States of America	2012-2013	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	2,796	2,332	
3562	United States of America	2013	Early Childhood Longitudinal Study	National	both	7-9	7-9	6,975	6,705	
3563	United States of America	2013-2014	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	4,994	5,415	
3564	United States of America	2013-2014	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	2,408	1,987	
3565	United States of America	2013-2014	US NHANES 2013-2014	National	both	5+	5+	4,105	4,225	
3566	United States of America	2014	Early Childhood Longitudinal Study	National	both	8-10	8-10	6,458	6,158	
3567	United States of America	2014	Health and Retirement Study	National	both	61+	61+	2,152	2,972	
3568	United States of America	2014-2015	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 2nd Grade	Subnational	both	7-9	7-9	5,182	5,495	
3569	United States of America	2014-2015	Coronary Artery Risk Detection in Appalachian Communities (CARDIAC), 5th Grade	Subnational	both	10-12	10-12	2,286	1,889	
3570	United States of America	2015	Early Childhood Longitudinal Study	National	both	9-11	9-11	5,954	5,679	
3571	United States of America	2015-2016	US NHANES 2015-2016	National	both	5+	5+	3,959	4,091	
3572	United States of America	2015-2016	National Social Life Health and Aging Project	Community	both	57-96	57-96	1,577	1,895	34
3573	United States of America	2016	Early Childhood Longitudinal Study	National	both	10-12	10-12	5,625	5,337	
3574	United States of America	2016-2018	Health and Retirement Study	National	both	63+	63+	1,638	2,321	
3575	United States of America	2017-2018	US NHANES 2017-2018	National	both	5+	5+	3,642	3,784	
3576	United States of America	2018-2019	Health and Retirement Study	National	both	65+	65+	1,424	2,034	
3577	United States of America	2019-2020	US NHANES 2019-2020	Subnational	both	5+	5+	2,396	2,354	35
3578	Uruguay	1999-2000	The Survey on Health, Well-Being, and Aging in Latin America and the Caribbean (SABE)	Community	urban	60+	60+	492	828	3
3579	Uruguay	2004	CUiiDARTE Project	National	urban	5-8	5-8	127	149	
3580	Uruguay	2005	CUiiDARTE Project	National	urban	6-10	6-10	105	105	
3581	Uruguay	2006	STEPS	National	urban	25-64	25-64	261	641	
3582	Uruguay	2009-2010	CUiiDARTE Project	National	urban	10-14	10-14	117	129	
3583	Uruguay	2011-2012	CESCAS Study	Community	urban	35-74	35-74	640	900	
3584	Uruguay	2012	Global School-based Student Health Survey	National	both		13-15		1,377	
3585	Uruguay	2012-2016	Genotype, Phenotype and Environment of Hypertension in Uruguay (GEFA-HT-UY)	Community	urban	19+	19+	124	189	
3586	Uruguay	2013	STEPS	National	urban	15-64	15-64	821	1,400	
3587	Uruguay	2015	CUiiDARTE Project	National	urban	17-20	17-20	135	142	
3588	Uruguay	2016-2017	CUiiDARTE Project	Community	urban	5-6	5-6	395	375	
3589	Uruguay	2018	Evaluation of the School Feeding Program and monitoring of the nutritional status of children in public and private schools in Uruguay	National	both	5-11	5-11	1,447	1,538	
3590	Uruguay	2019	Global School-based Student Health Survey	National	both	13-16	13-16	901	1,022	
3591	Uzbekistan	1996	DHS	National	both		15-49		4,082	
3592	Uzbekistan	2002	DHS	National	both	15-59	15-49	2,331	5,275	
3593	Uzbekistan	2014	STEPS	National	both	18-64	18-64	1,533	2,164	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3594	Uzbekistan	2015-2016	Epidemiology of Diabetes and Prediabetes in Uzbekistan Screening Results	Subnational	both	35+	35+	714	1,511	
3595	Uzbekistan	2019	STEPS	National	both	18-69	18-69	1,462	2,226	
3596	Vanuatu	1996	Second National Nutrition Survey	National	both		15-50		1,353	
3597	Vanuatu	1998	Vanuatu Non-comunicable Disease Survey	National	both	20-60	20-60	533	730	
3598	Vanuatu	2005	STEPS	Subnational	both	15-60	15-60	626	759	
3599	Vanuatu	2011	STEPS	National	both	25-64	25-64	2,251	2,183	
3600	Venezuela	1998-2001	Maracaibo aging study Santa lucia cohort	Community	urban	55-100	55-100	760	1,526	
3601	Venezuela	1999-2001	Florez et al., Diabetes Res Clin Pract 69(1):63-77, 2005	Subnational	both	15+	15+	1,134	2,599	
3602	Venezuela	2000	Diaz et al., Invest Clin 46(2):111-19, 2005	Community	urban	60+	60+	42	59	
3603	Venezuela	2004-2005	CArdiovascular Risk factors Multiple Evaluation in Latin America (CARMELA)	Community	urban	25-64	25-64	713	1,123	
3604	Venezuela	2005-2006	Brajkovich et al., Rev Ven Endoc Metab 4(3):31-32, 2006	Community	urban	20-65	20-65	205	439	
3605	Venezuela	2007-2008	Venezuelan Study of Metabolic Syndrome, Obesity and Lifestyle (VEMSOLS)	Community	urban	20+	20+	107	230	
3606	Venezuela	2008-2009	Venezuelan Study of Metabolic Syndrome, Obesity and Lifestyle (VEMSOLS)	Community	rural	20+	20+	51	89	
3607	Venezuela	2010-2011	Cardiometabolic risk factors in schoolchildren and adolescents of Mérida, Venezuela (CREDEFAR)	Community	urban	9-18	9-18	443	475	
3608	Venezuela	2010-2011	Venezuelan Study of Metabolic Syndrome, Obesity and Lifestyle (VEMSOLS)	Community	urban	20+	20+	66	193	
3609	Venezuela	2014-2015	Latin American Study of Nutrition and Health (ELANS)	National	urban	15-65	15-65	552	580	
3610	Venezuela	2014-2017	Maracaibo aging study Santa Rosa cohort	Community	urban	37-100	37-100	115	292	
3611	Venezuela	2015-2017	Cardio-Metabolic Health Venezuelan Study (EVESCAM)	National	both	20+	20+	1,056	2,346	
3612	Venezuela	2018-2020	Cardio-metabolic Health Venezuelan Study (EVESCAM) follow-up	National	both	22+	22+	355	892	
3613	Viet Nam	1981-1985	National Nutrition Survey	Subnational	rural	18+	18+	4,815	7,985	
3614	Viet Nam	1987-1989	General Nutrition Survey	National	both	15-70	15-70	13,776	17,271	
3615	Viet Nam	1992-1993	Living Standard Survey	National	both	5+	5+	9,418	10,209	
3616	Viet Nam	1997-1998	Living Standard Survey	National	both	5+	5+	12,052	13,118	
3617	Viet Nam	2000	National Nutrition Survey	National	both	20+	20+	8,985	9,464	
3618	Viet Nam	2001-2002	Viet Nam National Health Survey 2001-2002	National	both	5+	5+	66,723	71,616	
3619	Viet Nam	2001-2003	The National Epidemiological Survey on Hypertension and Its Risk Factors (North)	Subnational	both	25-74	25-74	2,386	3,604	
3620	Viet Nam	2003-2004	The Survey on Heart Failure and Its Risk Factors	Subnational	both	25-74	25-74	1,853	2,636	
3621	Viet Nam	2004	Cuong et al., Eur J Clin Nutr 61(5):673-81, 2007	Community	urban	20-60	20-60	717	771	
3622	Viet Nam	2004	The Hypertension Management Programme in Rural Communes (Hanoi)	Community	rural	25-74	25-74	855	1,288	
3623	Viet Nam	2005	STEPS Bavi district	Subnational	rural	25-64	25-64	987	997	
3624	Viet Nam	2005	National Adult Overweight Survey	National	both	25-64	25-64	8,474	8,725	
3625	Viet Nam	2005	The Survey on Non-Communicable Disease Risk Factors	Subnational	both	25-74	25-74	1,136	1,220	
3626	Viet Nam	2005	Non-communicable disease risk factors in Ho Chi Minh City	Community	urban	25-64	25-64	908	1,063	
3627	Viet Nam	2006	The Hypertension Management Programme in Rural Communes (Bavi)	Community	rural	25-74	25-74	395	643	
3628	Viet Nam	2006	Qualitative and quantitative assessment of nutritional status and lifestyles of Vietnamese adolescents	Subnational	rural	15-17	15-17	252	363	
3629	Viet Nam	2006	Qualitative and quantitative assessment of nutritional status and lifestyles of Vietnamese adolescents	Subnational	urban	15-17	15-17	254	334	
3630	Viet Nam	2006-2008	The National Epidemiological Survey on Hypertension and Its Risk Factors (South)	Subnational	both	25-74	25-74	1,310	2,078	
3631	Viet Nam	2007	The Hypertension Management Programme in Rural Communes (Phu Phuong)	Community	rural	25-74	25-74	364	616	
3632	Viet Nam	2008-2009	The Survey on Diabetes and Its Risk Factors	Subnational	both	25+	25+	830	1,446	
3633	Viet Nam	2009	The Hypertension Management Programme in Rural Communes (Phu Cuong)	Community	rural	25-74	25-74	362	677	
3634	Viet Nam	2009	STEPS	National	both	25-64	25-64	6,703	7,776	
3635	Viet Nam	2009-2010	Vietnam National Nutrition Survey 2009-2010	National	both	5+	5+	16,036	16,619	
3636	Viet Nam	2011	SEANUTS	National	both	5-11	5-11	975	980	
3637	Viet Nam	2012	National Survey of Diabetes in Vietnam	National	both	30-69	30-69	5,319	5,855	
3638	Viet Nam	2013	Global School-based Student Health Survey	National	both	13-17	13-17	1,368	1,578	
3639	Viet Nam	2015	STEPS	National	both	18-69	18-69	1,316	1,722	
3640	Viet Nam	2019	Global School-based Student Health Survey	National	both	13-18	13-18	3,572	4,117	
3641	Viet Nam	2021	STEPS	National	both	18+	18+	1,837	1,886	
3642	Yemen	1997	DHS	National	both		15-49		5,123	
3643	Yemen	2005-2006	Yemen Household Budget Survey 2005-2006	National	both	5+	5+	3,290	3,307	
3644	Yemen	2007-2009	Hypertension and Diabetes in Yemen (HYDY)	National	rural	6-70	6-70	3,023	3,065	
3645	Yemen	2007-2009	Hypertension and Diabetes in Yemen (HYDY)	National	urban	6-70	6-70	2,996	3,077	
3646	Yemen	2013	DHS	National	both		15-49		22,527	
3647	Zambia	1992	DHS	National	both		20-49		2,829	
3648	Zambia	1996	DHS	National	both		20-49		3,485	
3649	Zambia	2001-2002	DHS	National	both		15-49		6,732	
3650	Zambia	2003	Kelly et al., Am J Clin Nut 88(4):1010-17, 2008	Community	urban	15-74	15-84	132	217	

	Country	Study years	Survey/Study name/Citation	Level of representative-ness	Rural, urban, or both	Age range as in NCD-RisC database		Sample size		Notes
						Male	Female	Male	Female	
3651	Zambia	2007	DHS	National	both		15-49		6,378	
3652	Zambia	2008	STEPS	Subnational	urban	25+	25+	626	1,214	
3653	Zambia	2013-2014	DHS	National	both		15-49		14,837	
3654	Zambia	2017	STEPS	National	both	18-69	18-69	1,565	2,439	
3655	Zimbabwe	1985-1986	INTERSALT	Community	urban	20-59	20-59	100	95	
3656	Zimbabwe	1991	Zinyowera et al., Cent Afr J Med 40(2):33-8, 1994	Community	both	18+	18+	775	734	
3657	Zimbabwe	1994	DHS	National	both		20-49		1,776	
3658	Zimbabwe	1995	Mufunda et al., J Hum Hypertens 14(1):65-73, 2000	Community	urban	25+	25+	384	391	
3659	Zimbabwe	1999	DHS	National	both		15-49		5,169	
3660	Zimbabwe	2005	STEPS	National	both	25+	25+	569	1,808	
3661	Zimbabwe	2005-2006	DHS	National	both		15-49		8,186	
3662	Zimbabwe	2010-2011	DHS	National	both	15-54	15-49	7,383	8,329	
3663	Zimbabwe	2015	DHS	National	both	15-54	15-49	8,386	9,396	

1. National studies for the 3 years prior to 1980 were assigned to 1980 so that they inform the estimates in countries with slightly earlier national data.

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3. The bibliographic citation for this data source is: Pelaez, Martha, Alberto Palloni, Cecilia Albala, Juan C. Alfonso, Roberto Ham-Chande, Anselm Hennis, Maria Lucia Lebrao, Esther Lesn-Diaz, Edith Pantelides, and Omar Prats. SABE - SURVEY ON HEALTH, WELL-BEING, AND AGING IN LATIN AMERICA AND THE CARIBBEAN, 2000 [Computer file]. ICPSR version. Washington, D.C.: Pan American Health Organization/World Health Organization (PAHO/WHO) [producers], 2004. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2005.

4. Sciensano, OD Public health and surveillance (2020). Health Interview Survey 2018 [Data file and code book]. Conditionally obtainable from the Sciensano website: https://www.sciensano.be/en/node/55737/health-interview-survey-microdata-request-procedure.

5. National studies from 2023 were assigned to 2022 so that they inform the estimates in countries with slightly later national data.

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7. The bibliographic citations for this data source are: Zeng, Yi, Vaupel, James, Xiao, Zhenyu, Liu, Yuzhi, and Zhang, Chunyuan. Chinese Longitudinal Healthy Longevity Survey (CLHLS), 1998-2014. Inter-university Consortium for Political and Social Research [distributor], 2017-04-11. https://doi.org/10.3886/ICPSR36692.v1; Center for Healthy Aging and Development Studies, 2020, "The Chinese Longitudinal Healthy Longevity Survey (CLHLS)-Longitudinal Data (1998-2018)", https://doi.org/10.18170/DVN/WBO7LK, Peking University Open Research Data Platform, V2.

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10. Data have been provided by the Study of Health in Pomerania (SHIP) from the University Medicine Greifswald.

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12. The bibliographic citation for this data source is: Desai, Sonalde, Vanneman, Reeve, and National Council of Applied Economic Research, New Delhi. India Human Development Survey (IHDS), 2005. Inter-university Consortium for Political and Social Research [distributor], 2018-08-08. https://doi.org/10.3886/ICPSR22626.v12.

13. The CARRS Study was funded in part by the National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH), Department of Health and Human Services, under Contract No. HHSN268200900026C, the United Health Group, Minneapolis, MN, USA, and by the by the National Heart, Lung, And Blood Institute of the National Institutes of Health under Award Number P01HL154996.

14. The bibliographic citation for this data source is: Desai, Sonalde, Reeve Vanneman and National Council of Applied Economic Research. India Human Development Survey-II (IHDS-II), 2011-12. Inter-university Consortium for Political and Social Research [distributor], 2018-08-08. https://doi.org/10.3886/ICPSR36151.v6.

15. Accessed via the Irish Social Science Data Archive - www.ucd.ie/issda.

16. The Older Persons in Jamaica Study was funded by the National Health Fund, Jamaica.

17. The study was supported by the grant of the Ministry of Healthcare of the Republic of Kazakhstan National Programme for the Introduction of Personalized and Preventive Medicine in The Republic of Kazakhstan (2021-2023) (Grant number OR12165486).

18. The MHAS Cognitive Aging Ancillary Study (Mex-Cog) is sponsored by the National Institutes of Health/National Institute on Aging (NIH R01AG051158). Data files and documentation are public use and available at www.MHASweb.org.

19. The Longitudinal Aging Study Amsterdam is supported by a grant from the Netherlands Ministry of Health Welfare and Sports, Directorate of Long-Term Care.

20. The data collection [in 2012-2013 and 2013-2014] was financially supported by the Netherlands Organization for Scientific Research (NWO) in the framework of the project New Cohorts of young old in the 21st century (file number 480-10-014).
21. The bibliographic citation for this data source is: Am J Hypertens 2009 Jan;22(1):100-5 and Atherosclerosis. 2009 Mar;203(1):257-62.
22. The bibliographic citation for this data source is: Palloni, Alberto, Ana Luisa Davila, and Melba Sanchez-Ayendez. Puerto Rican Elderly: Health Conditions (PREHCO) Project, 2002-2003, 2006-2007. ICPSR34596-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research[distributor], 2013-09-13. doi:10.3886/ICPSR34596.v1.
23. Dr Take Naseri (Ministry of Health, Samoa), and Muagututia Sefuiva Reupena (Lutia I Puava Ae Mapu I Fagalele) contributed to the GWAS studies in Samoa.
24. The SH2012 and SH2 studies are supported by infrastructure funding from the Singapore Ministry of Health (Population Health Metrics Population Health Metrics and Analytics PHMA), National University of Singapore and National University Health System, Singapore.
25. Data used for this research was provided by the INMA - INfancia y Medio Ambiente [Environment and Childhood] Project (www.proyectoinma.org), which is supported in part by funds. This study was funded by grants from Instituto de Salud Carlos III (Red INMA G03/176 and CB06/02/0041), Spanish Ministry of Health (FIS-97/1102, FIS-07/0252, FIS-PS09/00362, 97/0588, 00/0021-2, PI061756, PS0901958, PI14/00677 incl.FEDER funds, FIS-PS09/00090, PI041436, FIS-PI042018, FIS-PI06/0867, PI081151 incl. FEDER funds, FIS-PI09/02311 and FIS-PI13/02187, and FIS-FEDER 03/1615, 04/1509, 04/1112, 04/1931, 05/1079, 05/1052, 06/1213, 07/0314, 09/02647, 11/01007, 11/0178, 11/02591, 11/02038, PI12/01890 incl. FEDER funds, 13/1944, 13/2032, FIS-PI13/02429, 14/0891, 14/1687 and CP13/00054 incl. FEDER funds), Spanish Ministry of Economy and Competitiveness (SAF2012-32991 incl. FEDER funds), CIBERESP, Generalitat de Catalunya-CIRIT 1999SGR 00241, Generalitat de Catalunya-AGAUR (2009 SGR 501, 2014 SGR 822), the Conselleria de Sanitat Generalitat Valenciana, Department of Health of the Basque Government (2005111093, 2009111069 and 2013111089), the Provincial Government of Gipuzkoa (DFG06/004 and DFG08/001), Fundació La Caixa (97/009-00 and 00/077-00), Beca de la IV convocatoria de Ayudas a la Investigación en Enfermedades Neurodegenerativas de La Caixa, Fundació La marató de TV3 (090430), Obra Social Cajastur/Fundación Liberbank, Universidad de Oviedo, the EU Commission (QLK4-1999-01422, QLK4-CT-2000-00263, QLK4-2002-00603, CONTAMED FP7-ENV-212502, FP7-ENV-2011 cod 282957, HEALTH.2010.2.4.5-1, 261357, 308333, 603794), Agence Nationale de Securite Sanitaire de l'Alimentation de l'Environnement et du Travail (1262C0010), Consejería de Salud de la Junta de Andalucía (grant number 183/07) and Annual agreements with municipalities in the study area (Zumarraga, Urretxu, Legazpi, Azkoitia y Azpeitia y Beasain).
26. The ULSAM study was supported by Uppsala University and Uppsala University Hospital.
27. The Swiss BMI Monitoring Study was supported by the Health Service of the town of Berne, Basel Health Service for Children and Adolescents, and the School-Medical Service of the town of Zurich.
28. The British Women's Heart and Health Study is supported by the British Heart Foundation (PG/13/66/30442). British Women's Heart and Health Study data are available to bona fide researchers for research purposes. Please refer to the BWHHS data sharing policy at http://www.ucl.ac.uk/british-womens-heart-health-study.
29. NHS Digital was the data source for National Child Measurement Programme data.
30. Prof Stephen Fortmann contributed data from the Stanford Five-City Project.
31. This research uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 17 other agencies. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth@unc.edu). No direct support was received from grant P01-HD31921 for this analysis.
32. The bibliographic citation for this data source is: Sutton-Tyrrell, Kim, Faith Selzer, MaryFran Sowers, Robert Neer, Lynda Powell, Ellen Gold, Gail Greendale, Gerson Weiss, Karen Matthews, and Sonja McKinlay. Study of Women's Health Across the Nation (SWAN), 1996-1997: Baseline Dataset. ICPSR28762-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research[distributor], 2014-02-04. http://doi.org/10.3886/ICPSR28762.v2.
33. The bibliographic citation for this data source is: Waite, Linda J., Kathleen Cagney, William Dale, Elbert Huang, Edward O. Laumann, Martha McClintock, Colm A. O'Muircheartaigh, L. Phillip Schumm, and Benjamin Cornwell. National Social Life, Health, and Aging Project (NSHAP): Wave 2 and Partner Data Collection. ICPSR34921-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2014-04-29. https://doi.org/10.3886/ICPSR34921.v1.
34. The bibliographic citation for this data source is: Waite, Linda J., Cagney, Kathleen A., Dale, William, Hawkley, Louise C., Huang, Elbert S., Lauderdale, Diane S., . Schumm, L. Philip. National Social Life, Health, and Aging Project (NSHAP): Round 3 and COVID-19 Study, [United States], 2015-2016, 2020-2021. Inter-university Consortium for Political and Social Research [distributor], 2021-12-13. https://doi.org/10.3886/ICPSR36873.v5.
35. Due the COVID-19 pandemic the NHANES 2019-2020 cycle was not completed. As a result the data are not nationally representative and considered subnational.

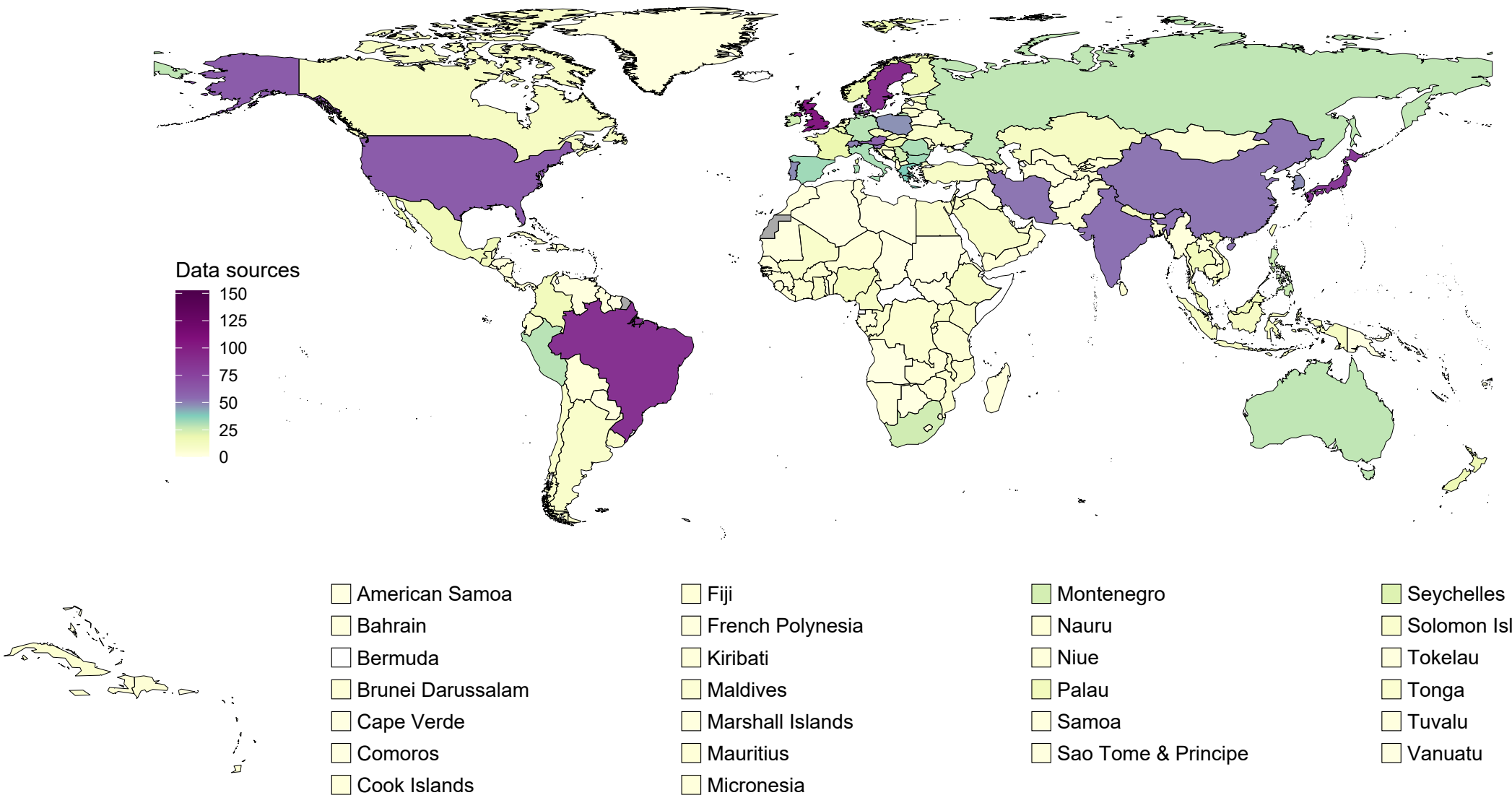
Appendix Table 2. List of analysis regions and "super-regions", and countries in each region.

Super-region	Region
Central and eastern Europe	**Central Europe**: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia
	Eastern Europe: Belarus, Estonia, Latvia, Lithuania, Moldova, Russian Federation, Ukraine
Central Asia, Middle East and north Africa	**Central Asia**: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan
	Middle East and north Africa: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Tunisia, Türkiye, United Arab Emirates, Yemen
High-income western	**High-income English-speaking countries***: Australia, Canada, Ireland, New Zealand, United Kingdom, United States of America
	Northwestern Europe: Austria, Belgium, Denmark, Finland, Germany, Greenland, Iceland, Luxembourg, Netherlands, Norway, Sweden, Switzerland
	Southwestern Europe: Andorra, Cyprus, France, Greece, Israel, Italy, Malta, Portugal, Spain
Latin America and the Caribbean	**Andean Latin America**: Bolivia, Ecuador, Peru
	The Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago
	Central Latin America: Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Venezuela
	Southern Latin America: Argentina, Brazil, Chile, Paraguay, Uruguay
Oceania	**Melanesia:** Fiji, Papua New Guinea, Solomon Islands, Vanuatu
	Polynesia and Micronesia: American Samoa, Cook Islands, French Polynesia, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Tokelau, Tonga, Tuvalu
South Asia	**South Asia**: Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka
East and southeast Asia and the Pacific	**East Asia and the Pacific**: China, Japan, Singapore, South Korea, Taiwan
	Southeast Asia: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Maldives, Myanmar, North Korea, Philippines, Thailand, Timor-Leste, Viet Nam
Sub-Saharan Africa	**Central and southern Africa**: Angola, Botswana, Central African Republic, Congo, DR Congo, Equatorial Guinea, Gabon, Namibia
	East Africa: Burundi, Comoros, Djibouti, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Rwanda, Somalia, South Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe
	West Africa: Benin, Burkina Faso, Cabo Verde, Cameroon, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo
	Other sub-Saharan Africa: Mauritius, Seychelles, South Africa

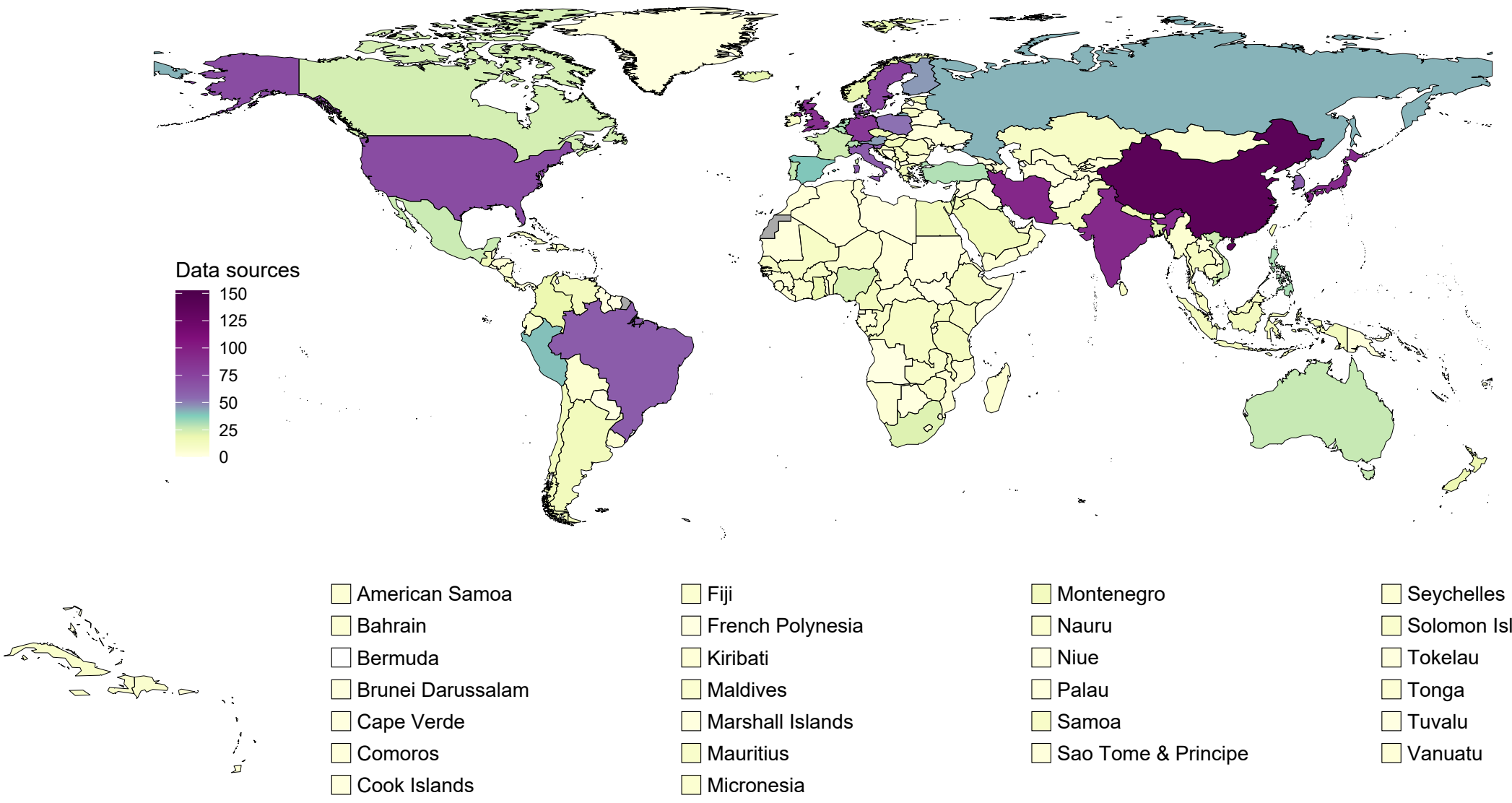
* Although high-income English-speaking countries are geographically separated, they experienced similar trends in cardiometabolic risk factors and outcomes.[1-5,20,52-54] They were therefore grouped together so that the statistical model shares information amongst them more than it does with other countries that are geographically closer but epidemiologically more distinct.

Appendix Figure 1. Number of data sources used in this analysis, by country.

School-aged children and adolescents

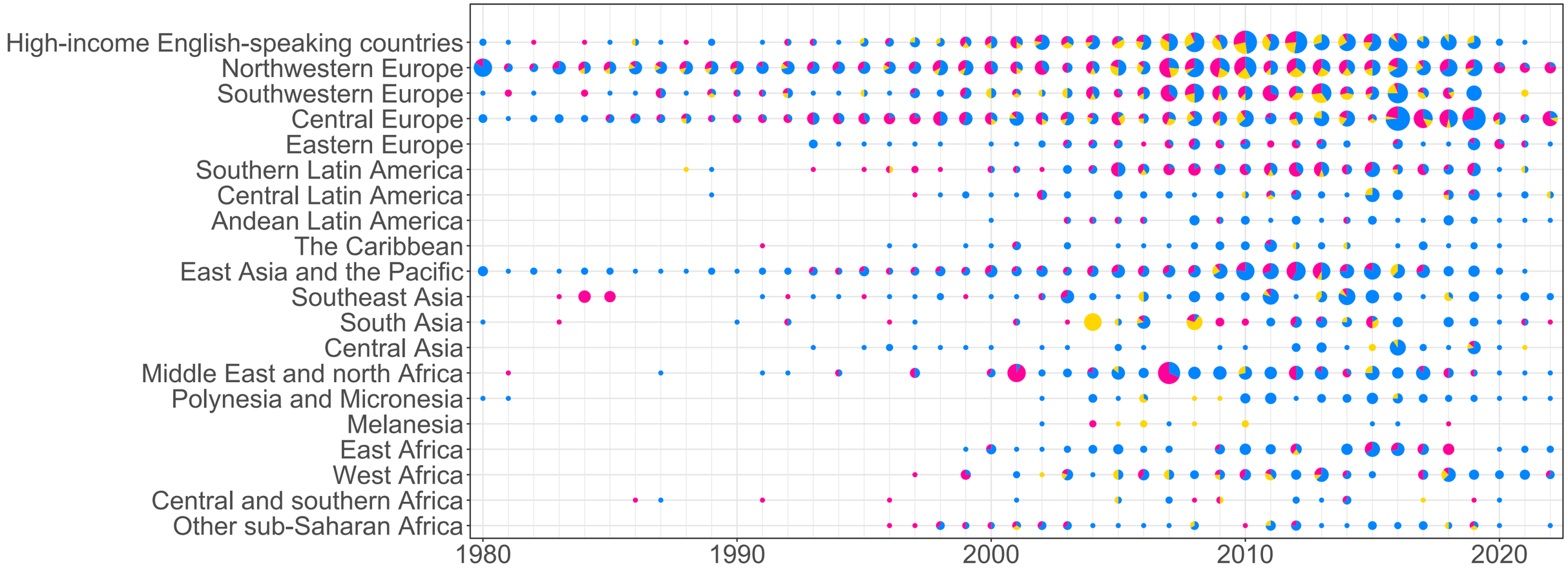


Adults

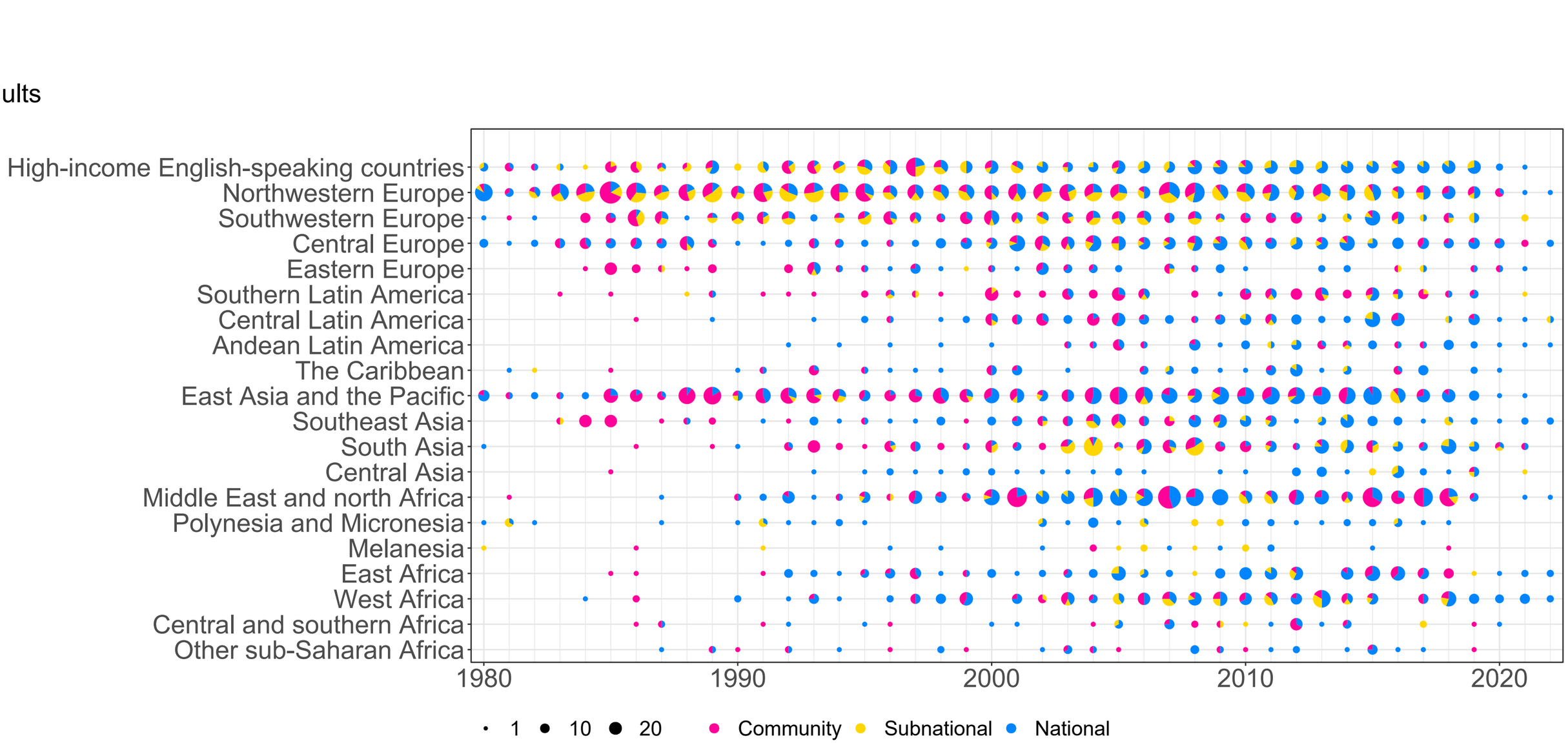


Appendix Figure 2. Number of data sources used in this analysis, by region and year. The size of each circle shows the number of data sources for each region and year, and the colours indicate the relative count of national, subnational and community data sources.

School-aged children and adolescents



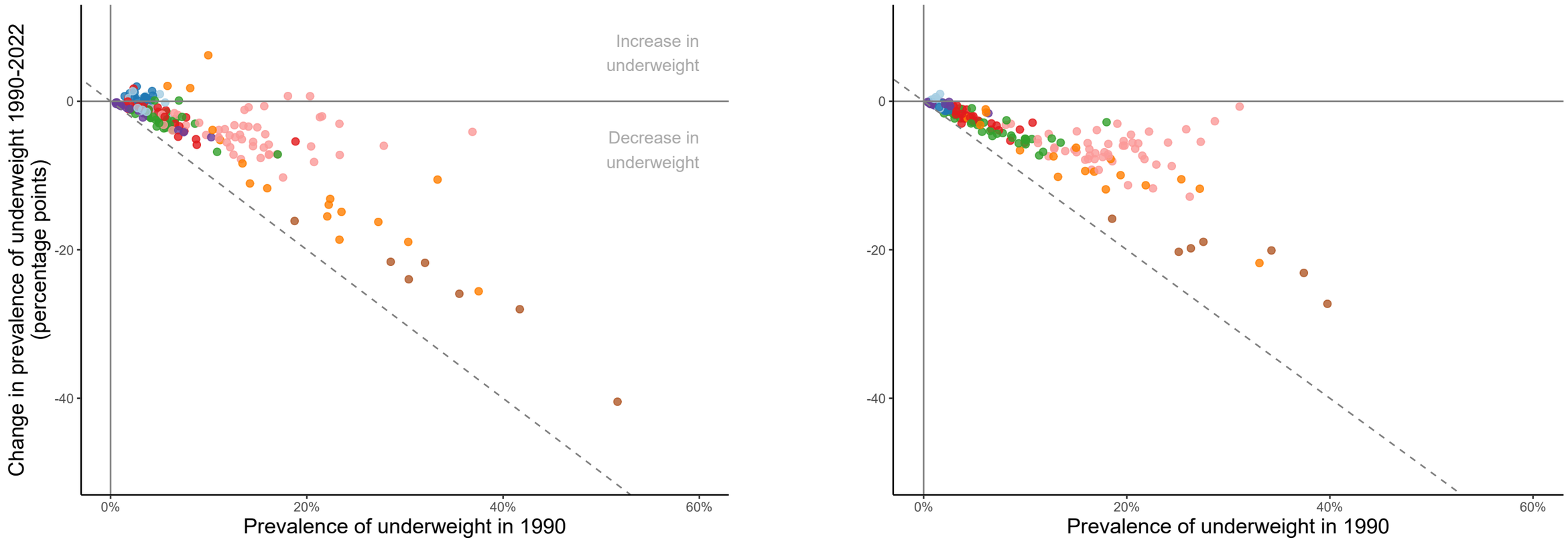
Adults



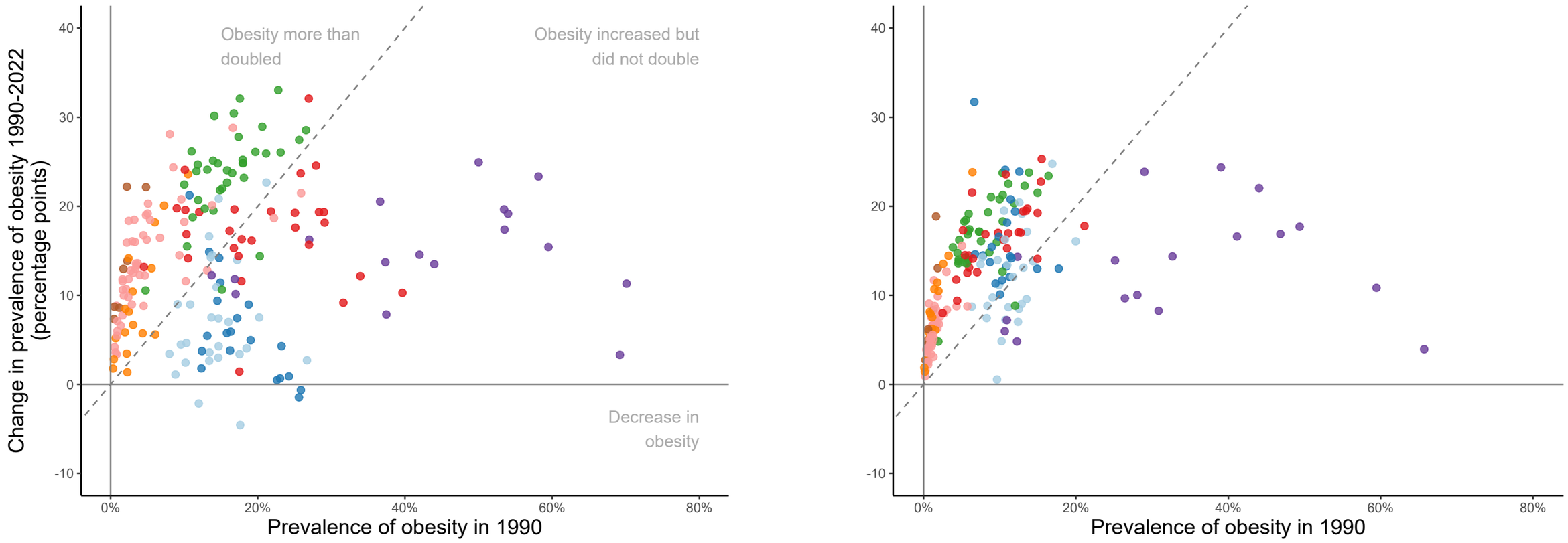
Appendix Figure 3. Change in age-standardised prevalence of underweight and obesity, for adults.

(A) Change in underweight from 1990 to 2022 in relation to underweight in 1990. (B) Change in obesity from 1990 to 2022 in relation to obesity in 1990. (C) Change in obesity in relation to change in underweight from 1990 to 2022. The sloped solid line intersecting the origin delineates regions where an increase (above the line) or a decrease (below) in the combined prevalence of underweight and obesity took place, and the dashed parallel lines indicate ten percentage point intervals in change of combined prevalence.

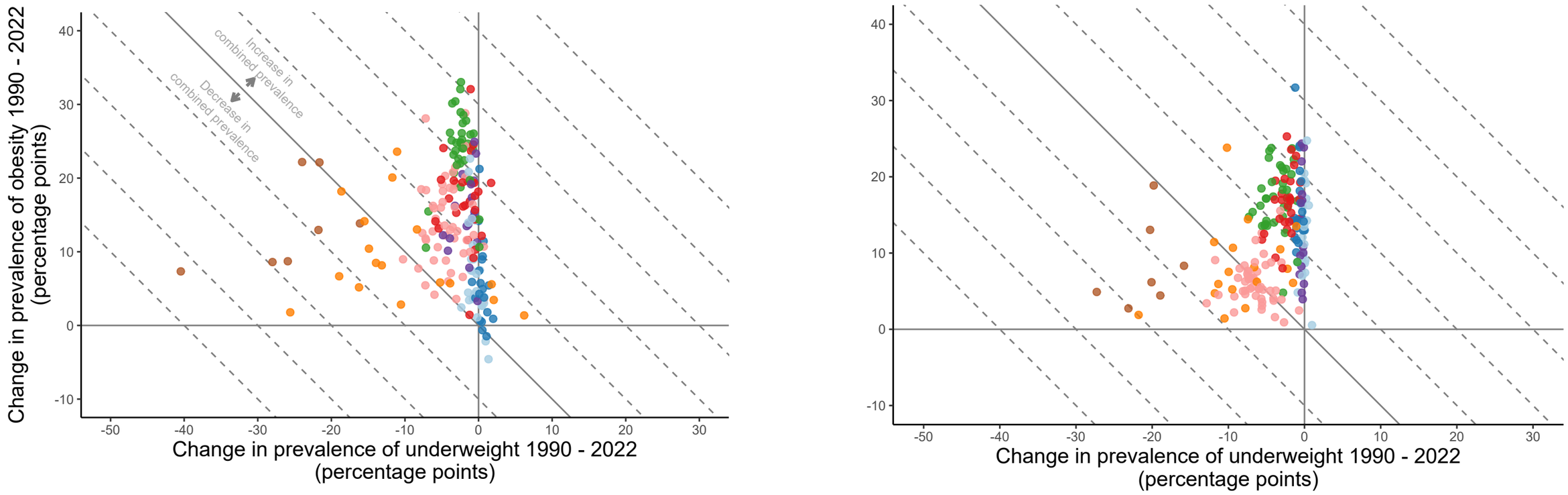
A



B



C

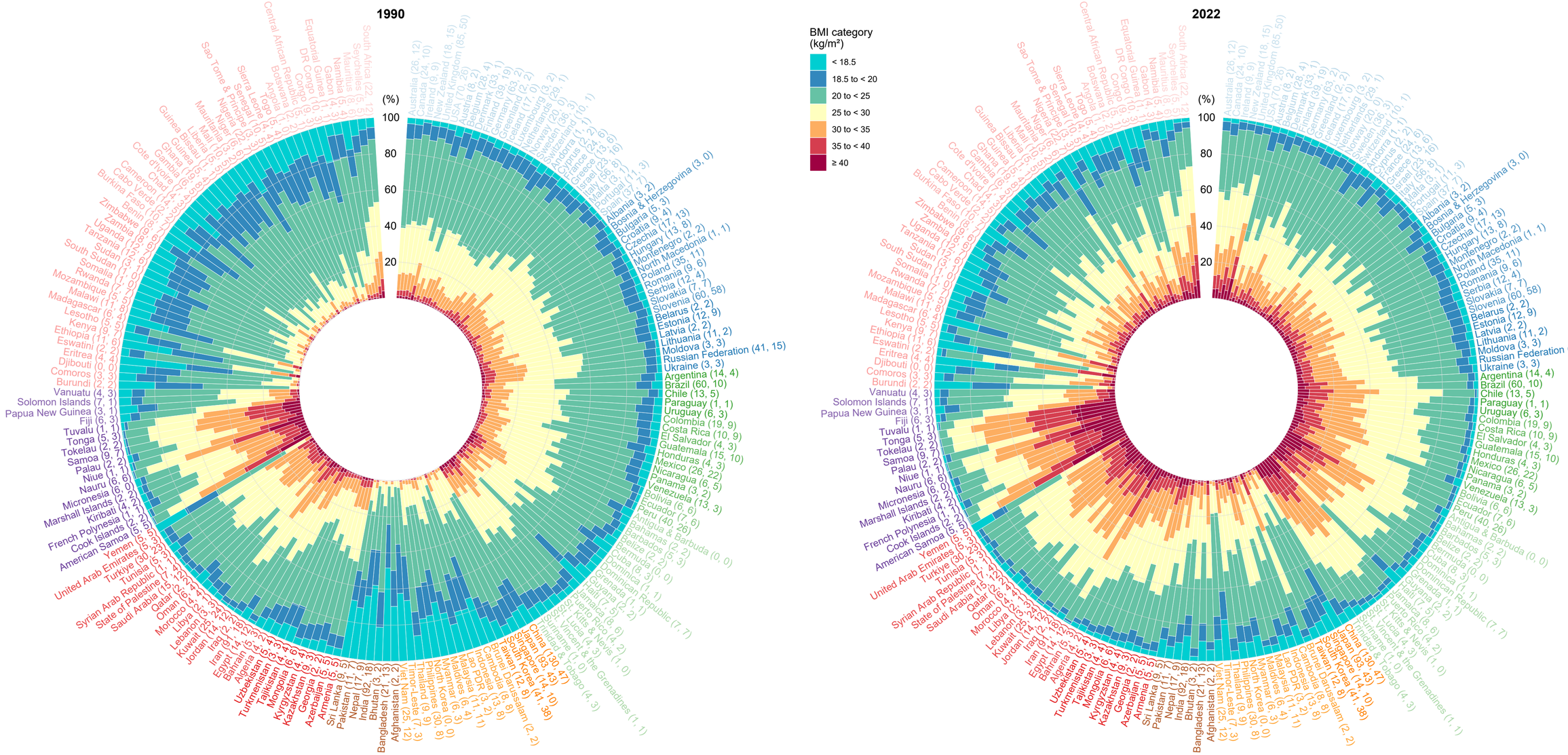


High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

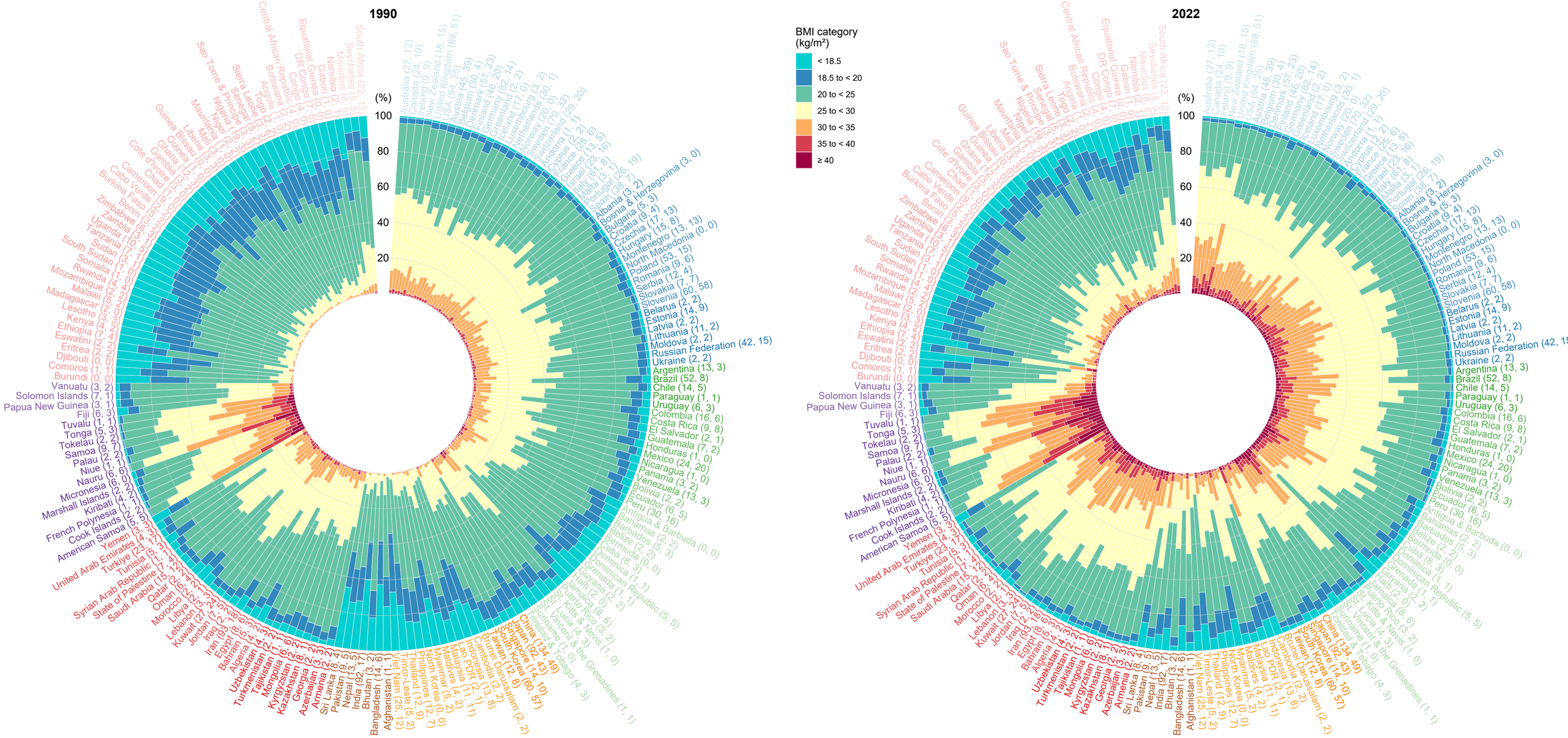
Appendix Figure 4. Age-standardised prevalence of all BMI categories in 1990 and 2022, for adults.

Country names are coloured by region. The numbers in brackets after each country's name show the total number of data sources and the number of nationally representative data sources, respectively. Countries are ordered alphabetically within each region.

Women


1990
2022
(%)
100
80
60
40
20
BMI category (kg/m²)
< 18.5
18.5 to < 20
20 to < 25
25 to < 30
30 to < 35
35 to < 40
≥ 40
High-income English-speaking countries
Northwestern Europe
Southwestern Europe
Central Europe
Eastern Europe
Southern Latin America
Central Latin America
Andean Latin America
The Caribbean
East Asia and the Pacific
Southeast Asia
South Asia
Central Asia
Middle East and north Africa
Polynesia and Micronesia
Melanesia
East Africa
West Africa
Central and southern Africa
Other sub-Saharan Africa

Men

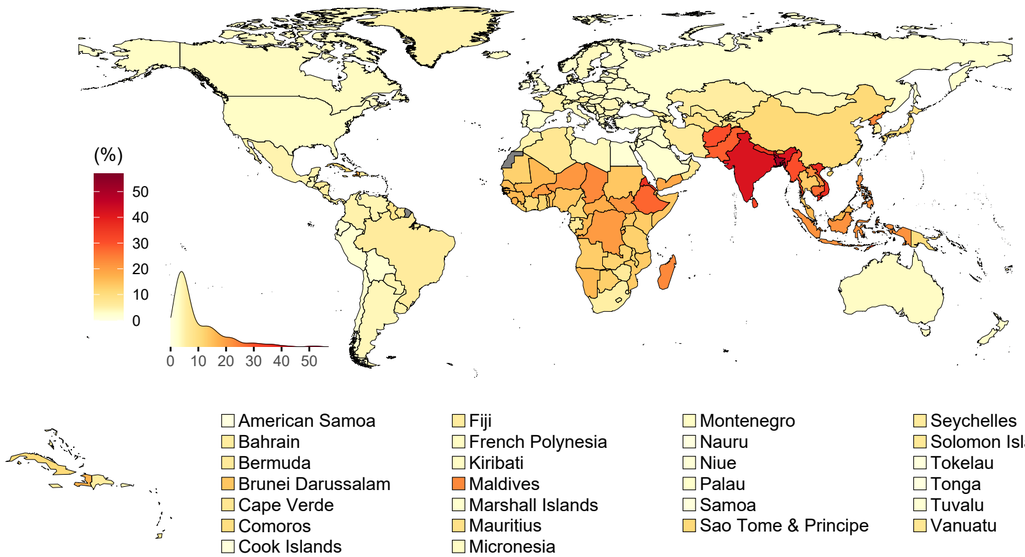


High-income English-speaking countries
Northwestern Europe
Southwestern Europe
Central Europe
Eastern Europe
Southern Latin America
Central Latin America
Andean Latin America
The Caribbean
East Asia and the Pacific
Southeast Asia
South Asia
Central Asia
Middle East and north Africa
Polynesia and Micronesia
Melanesia
East Africa
West Africa
Central and southern Africa
Other sub-Saharan Africa

Appendix Figure 5. Age-standardised prevalence of underweight in 1990 and 2022, its change from 1990 to 2022, and posterior probability that the prevalence increased from 1990 to 2022, for adults.

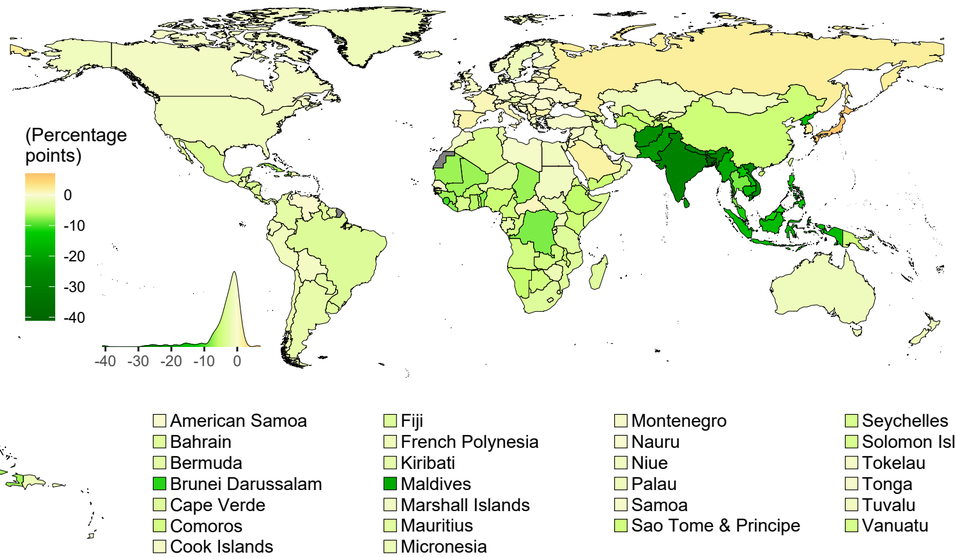
Women

1990



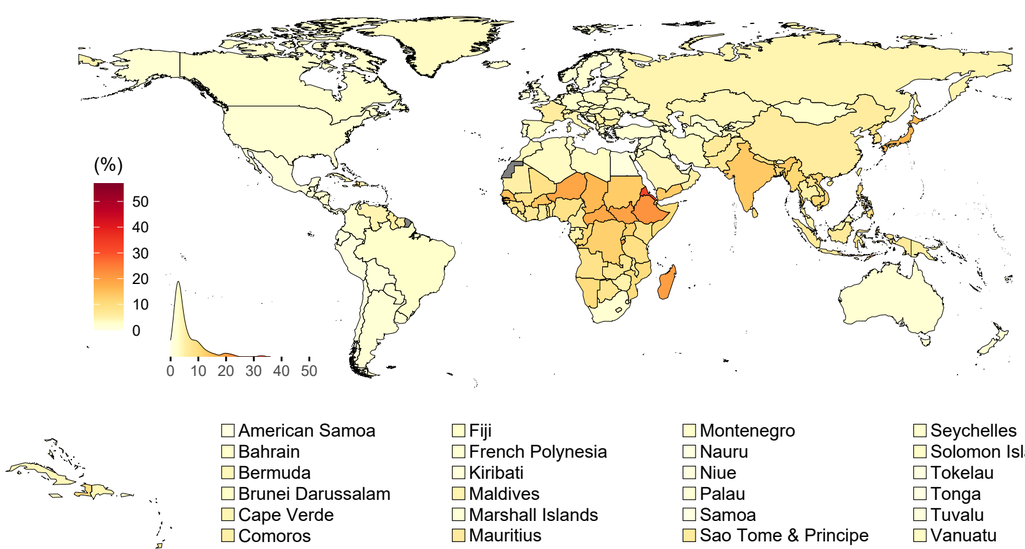
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Change from 1990 to 2022



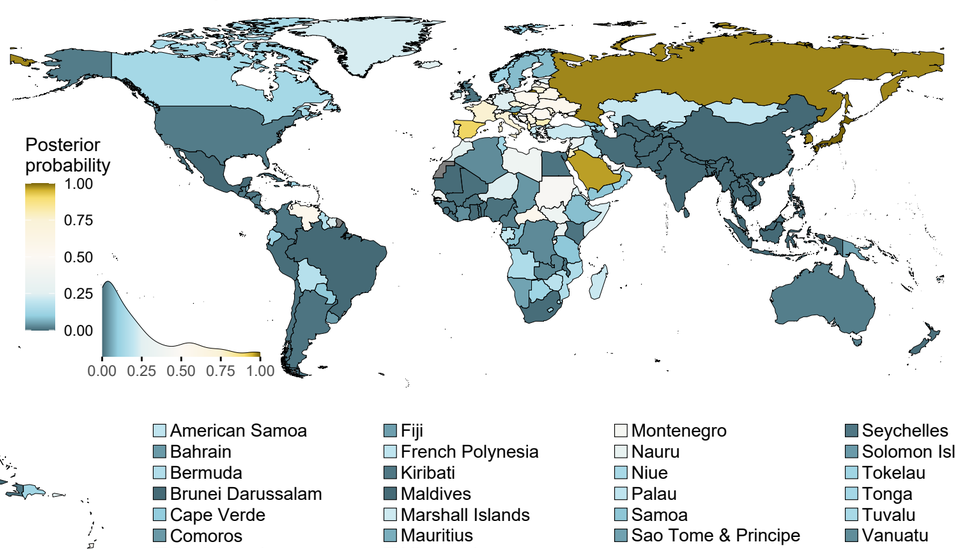
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

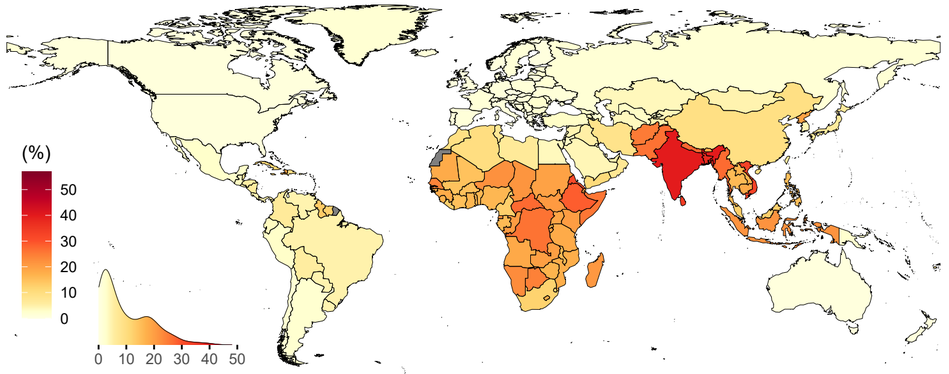
Posterior probability of an increase from 1990 to 2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

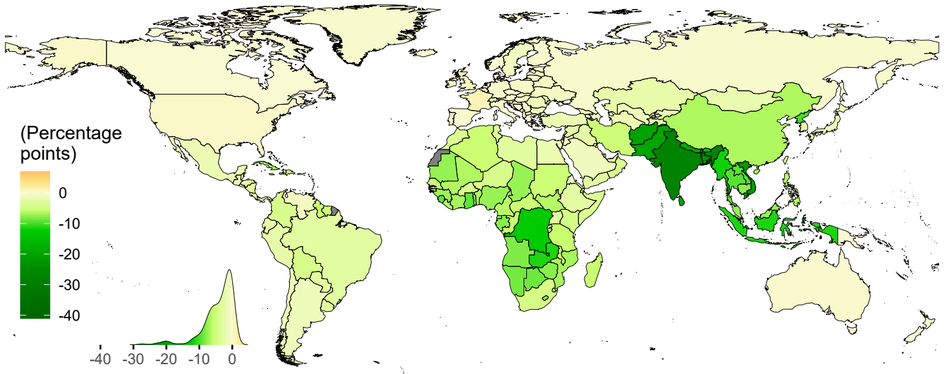
Men

1990



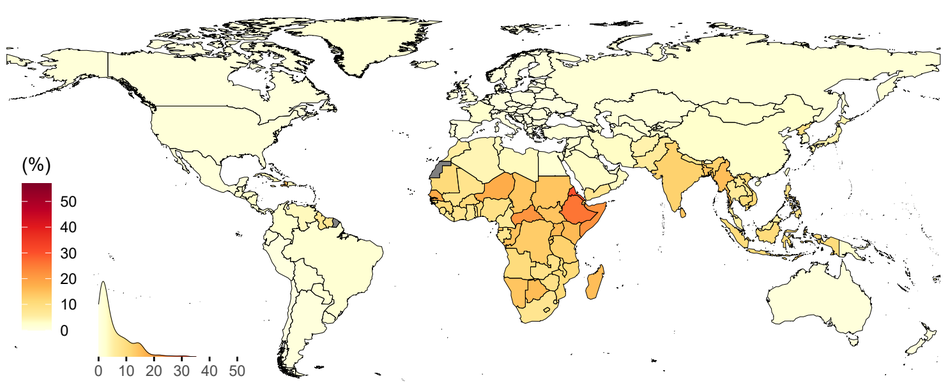
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



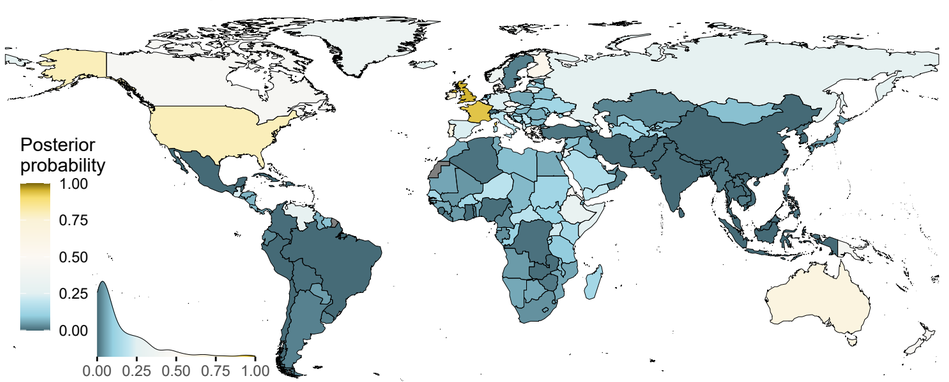
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Posterior probability of an increase from 1990 to 2022

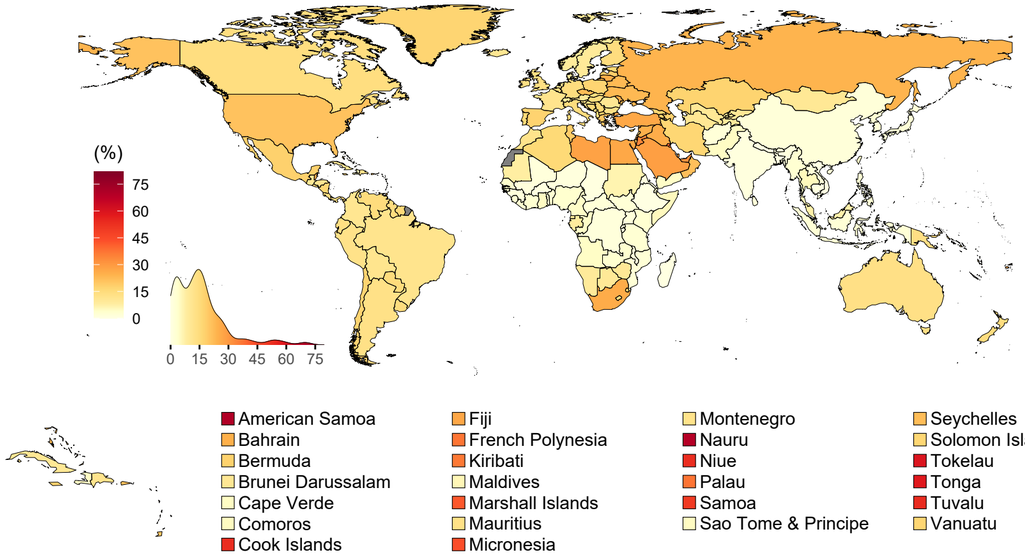


American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Appendix Figure 6. Age-standardised prevalence of obesity in 1990 and 2022, its change from 1990 to 2022, and posterior probability that the prevalence increased from 1990 to 2022, for adults.

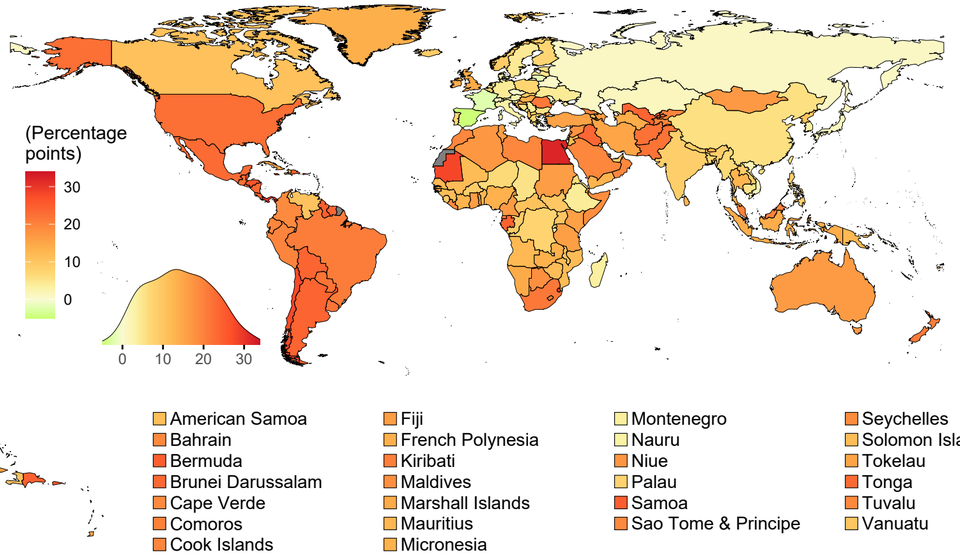
Women

1990



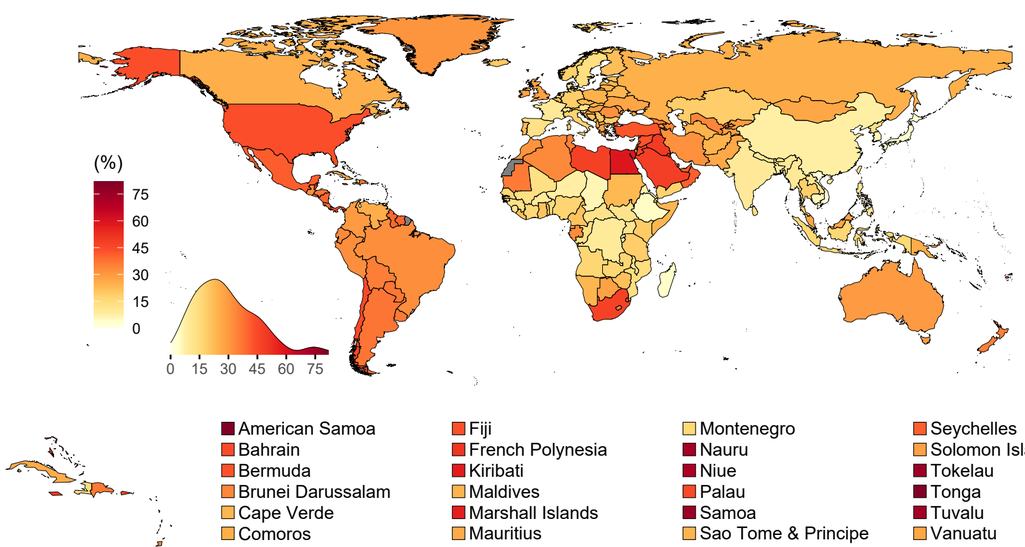
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



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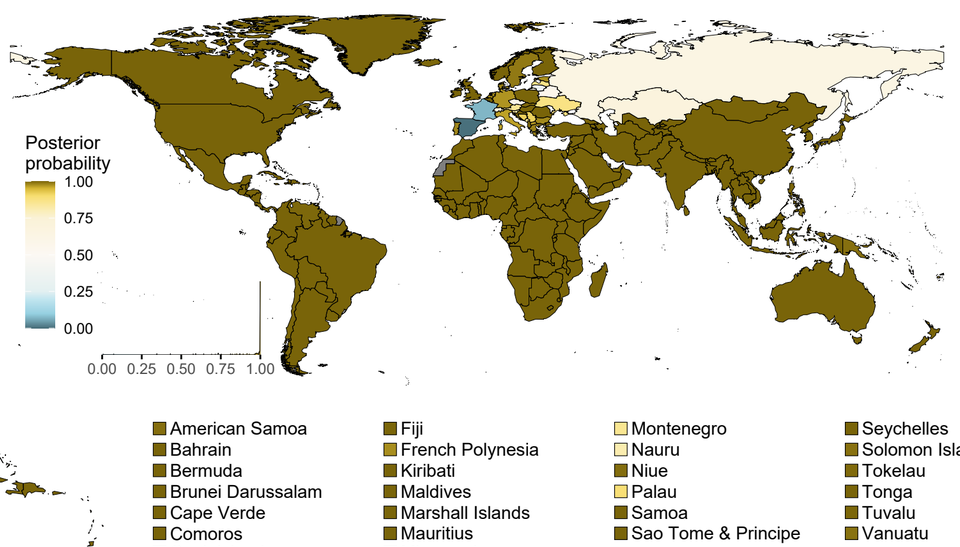
Posterior probability of an increase from 1990 to 2022



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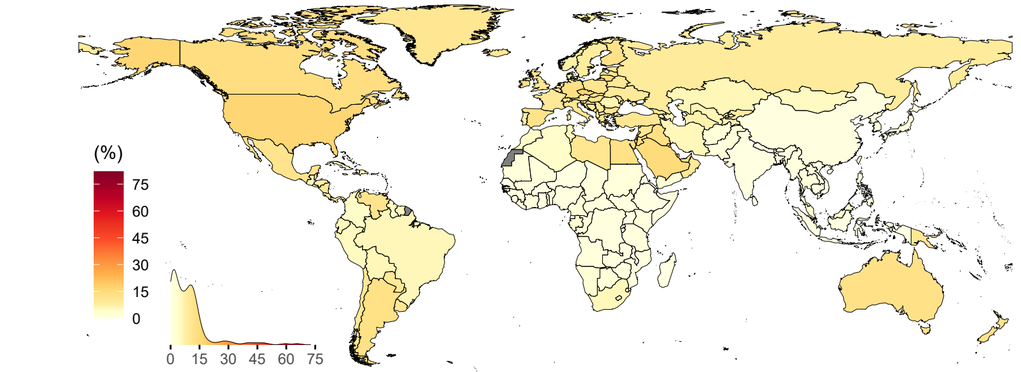
Men

1990



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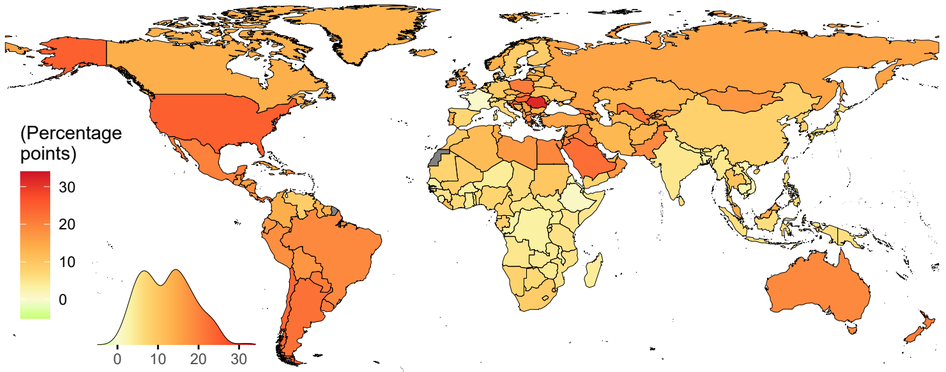
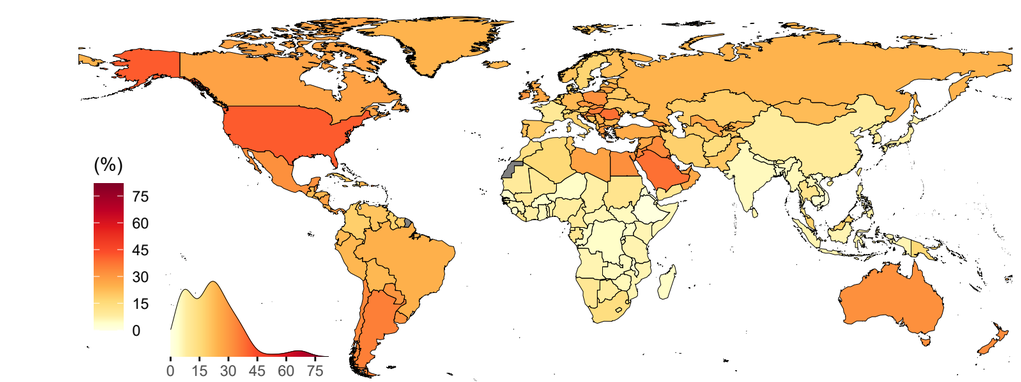
Change from 1990 to 2022



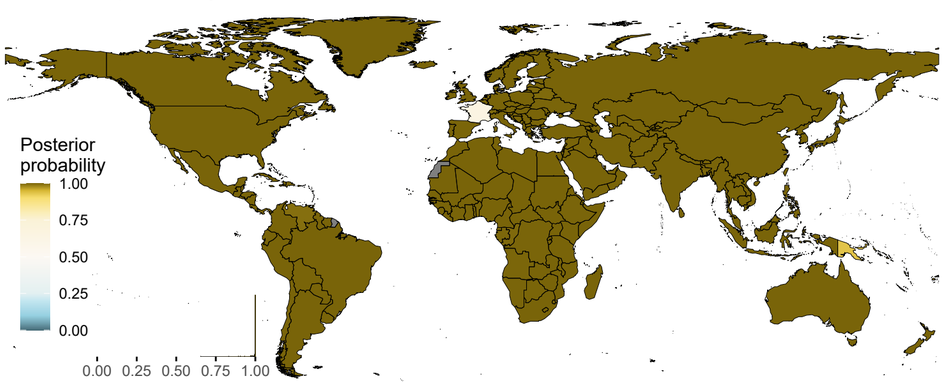
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Posterior probability of an increase from 1990 to 2022

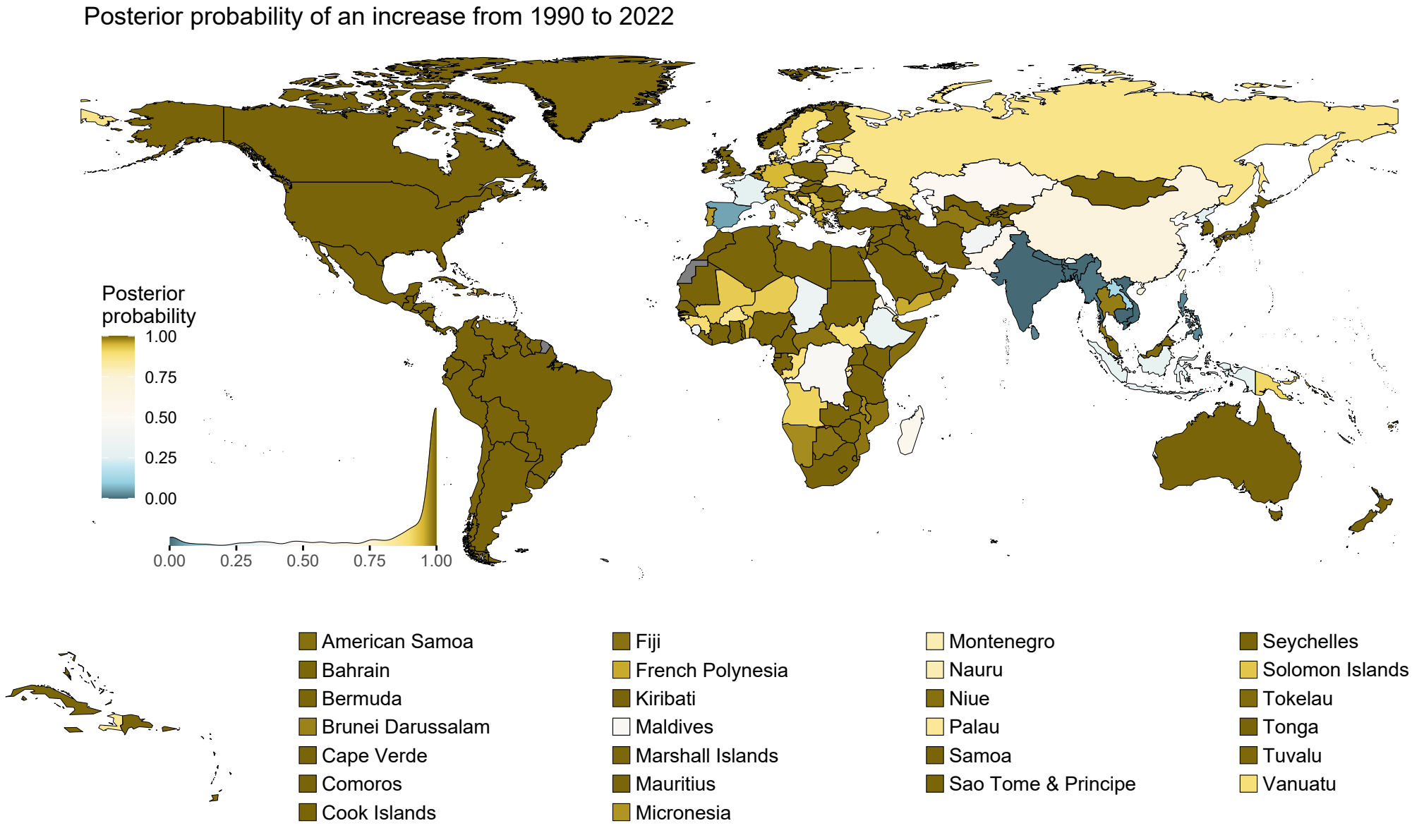


American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

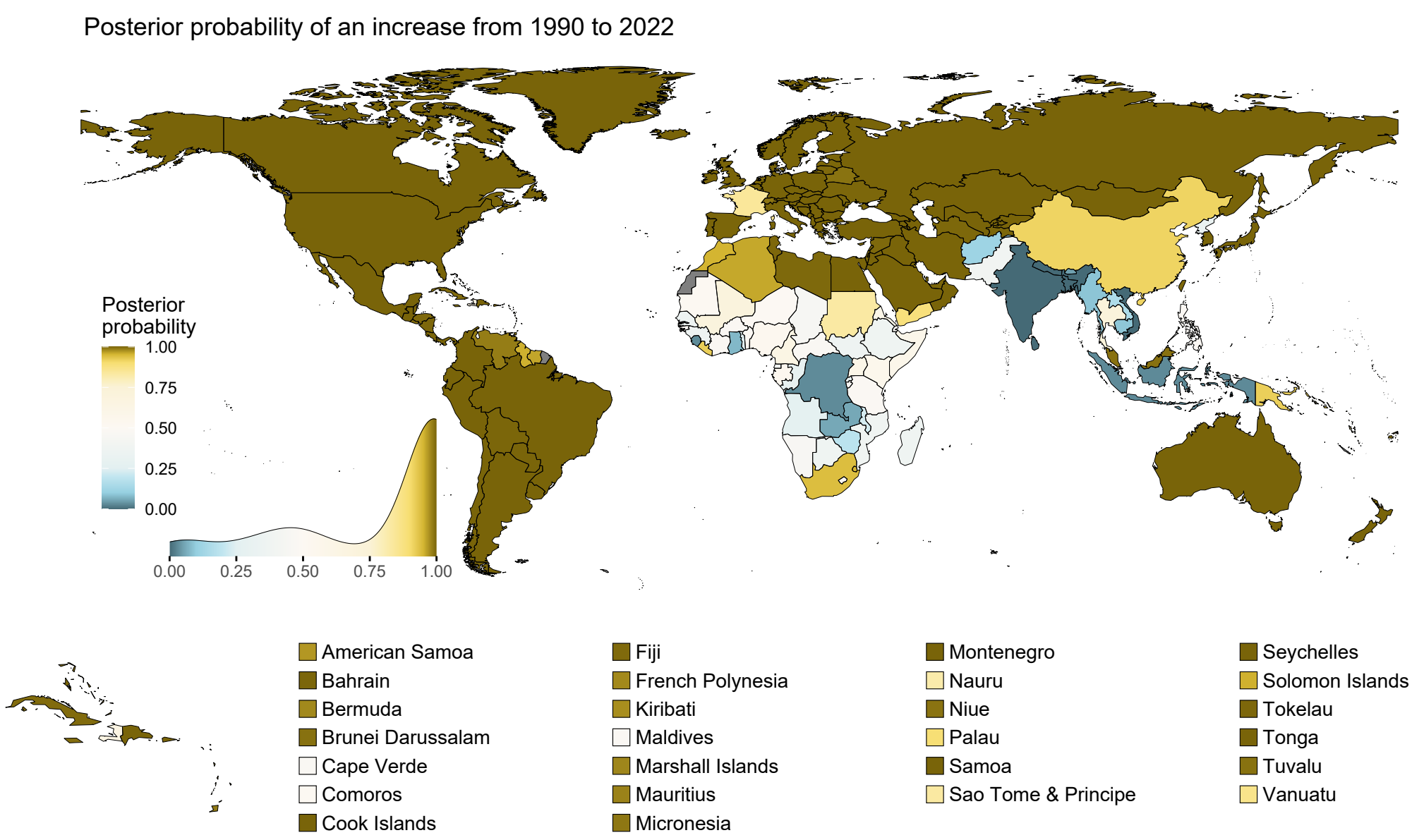
Appendix Figure 7. Posterior probability that age-standardised combined prevalence of underweight and obesity increased from 1990 to 2022, for adults.

If an increase in the prevalence of the combined prevalence is statistically indistinguishable from a decrease, the PP is 0.5. PPs closer to 1 indicate more certainty of an increase in the prevalence of the combined prevalence, those towards 0 indicate more certainty of a decrease, and those closer to 0.5 indicate less certainty of an increase or decrease.

Women

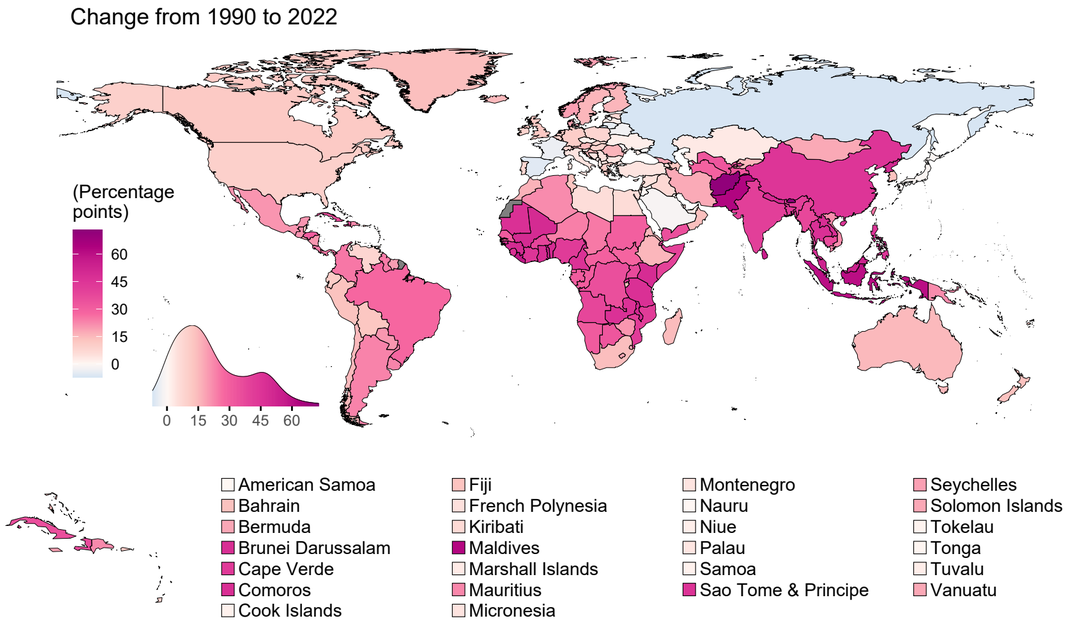

Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00
0.25
0.50
0.75
1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

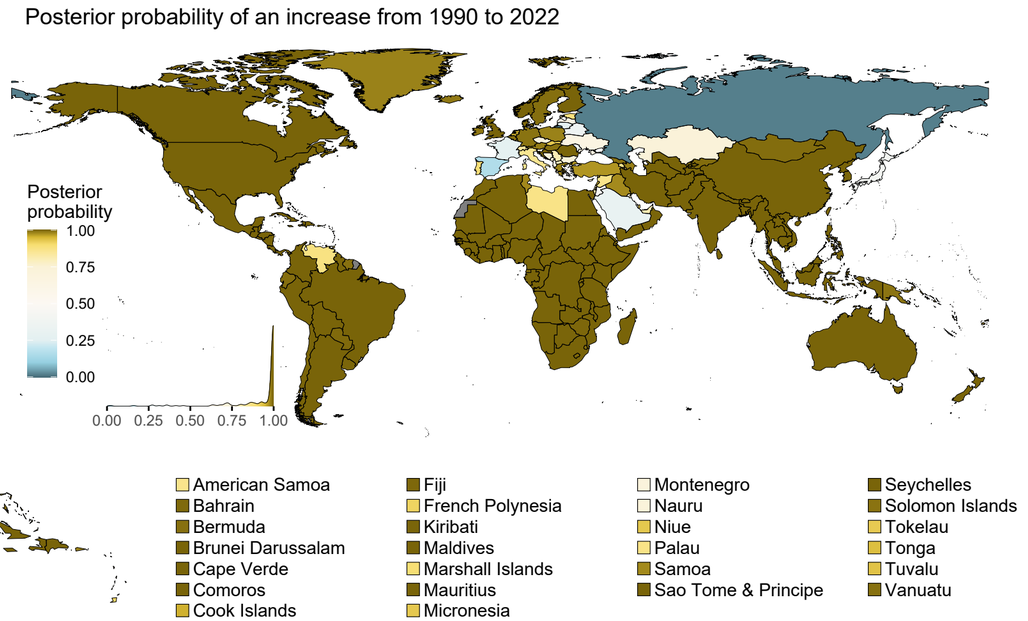
Men


Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00
0.25
0.50
0.75
1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

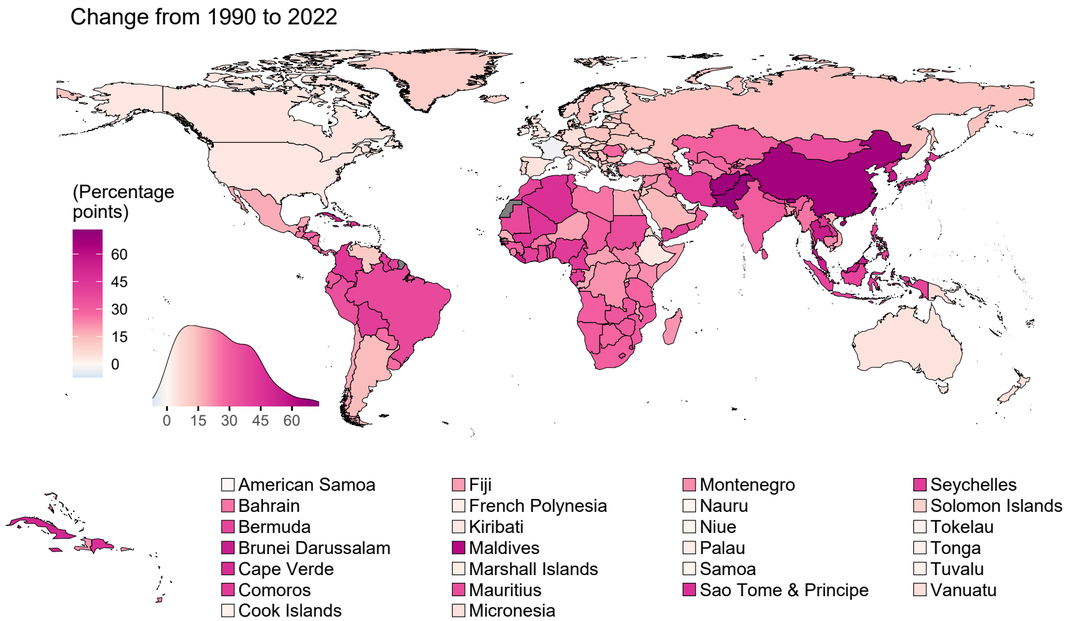
Appendix Figure 8. Change in age-standardised proportion of double burden composed of obesity and posterior probability that the proportion increased from 1990 to 2022, for adults.

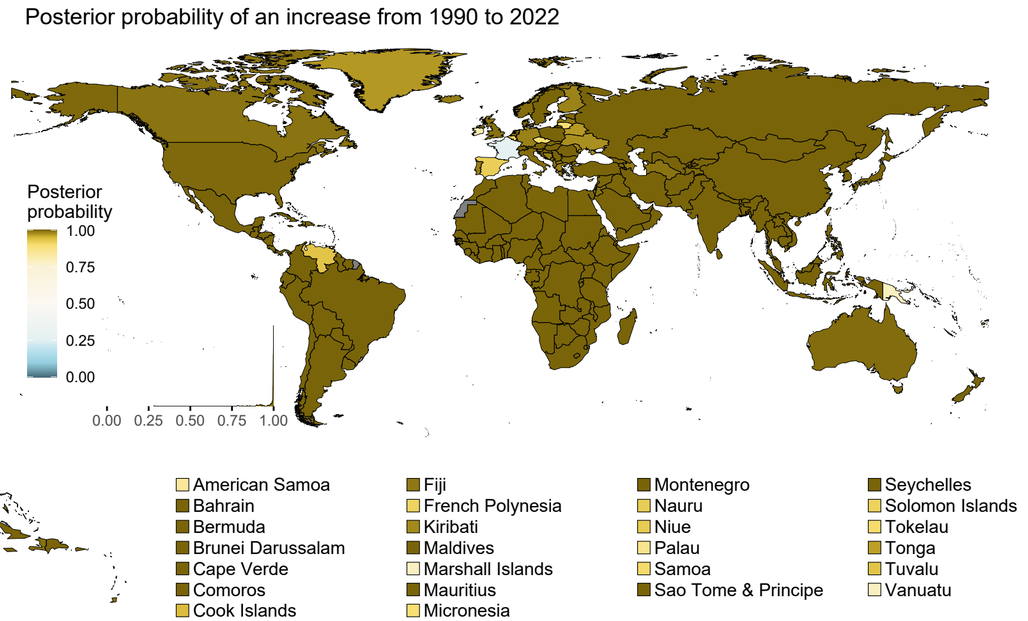
Women


Change from 1990 to 2022
(Percentage points)
60
45
30
15
0
0 15 30 45 60
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu


Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00 0.25 0.50 0.75 1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Men


Change from 1990 to 2022
(Percentage points)
60
45
30
15
0
0 15 30 45 60
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

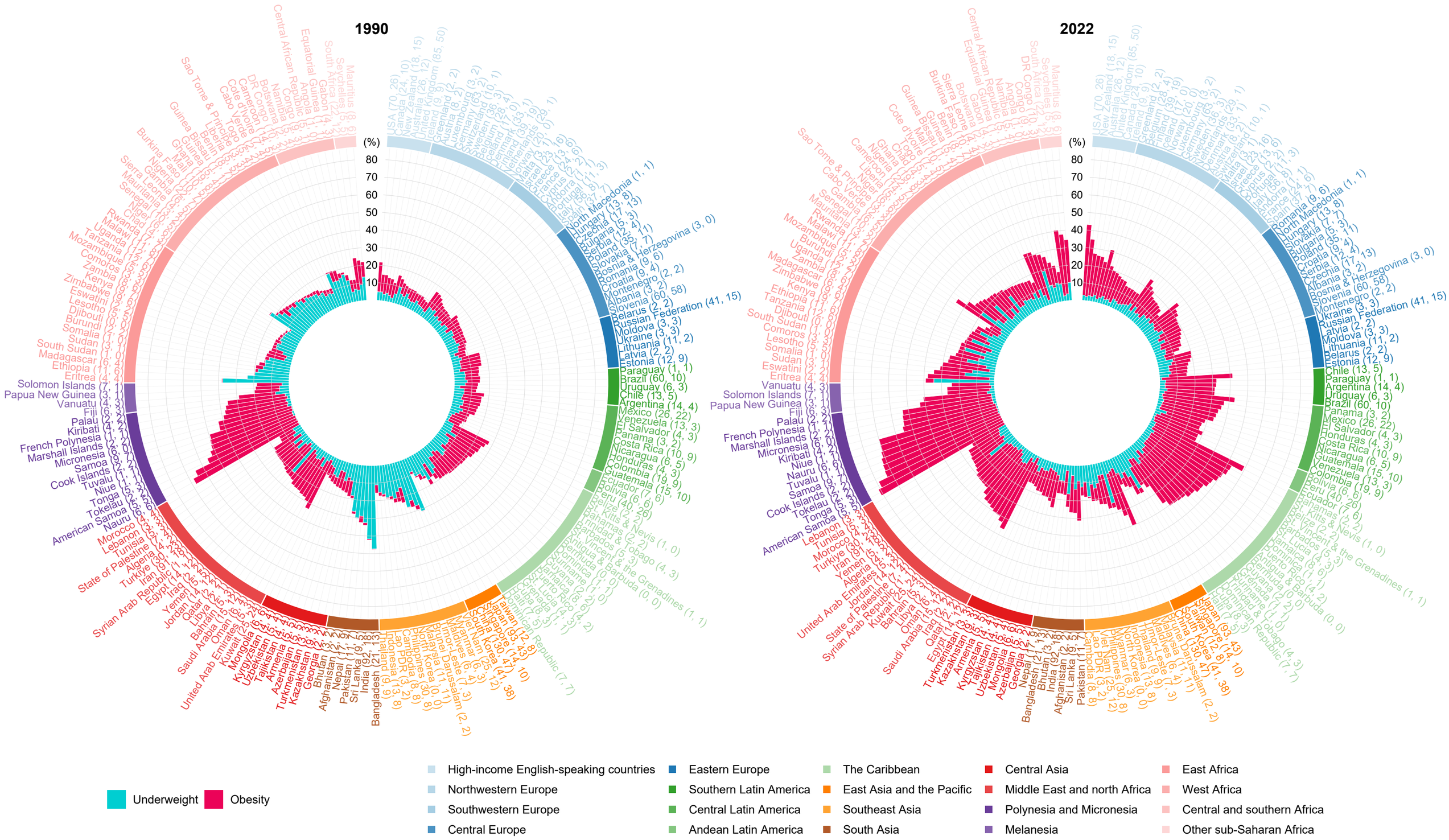

Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00 0.25 0.50 0.75 1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

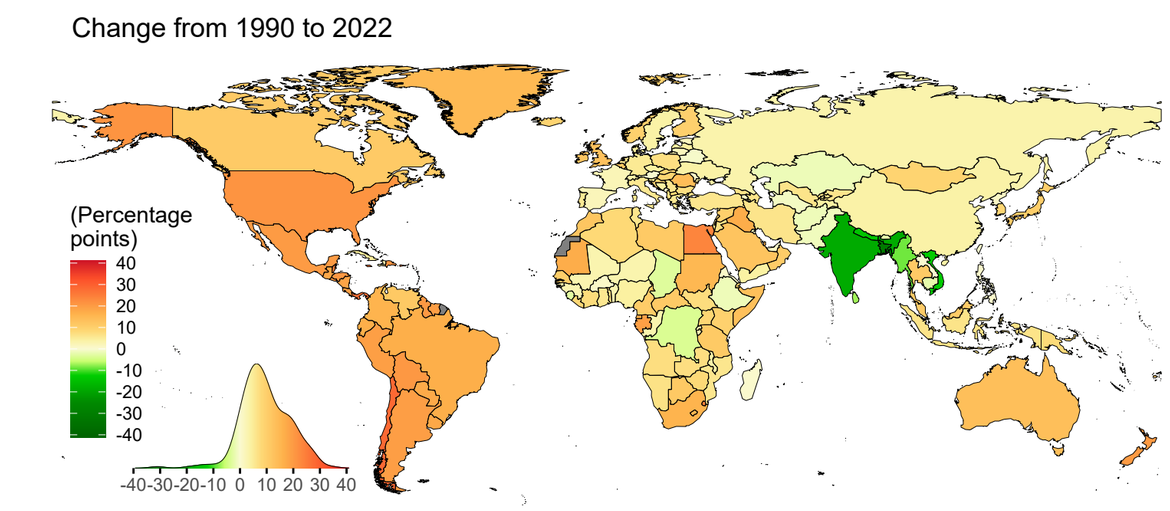
Appendix Figure 9. Combined prevalence of underweight and obesity for adults, by age group.

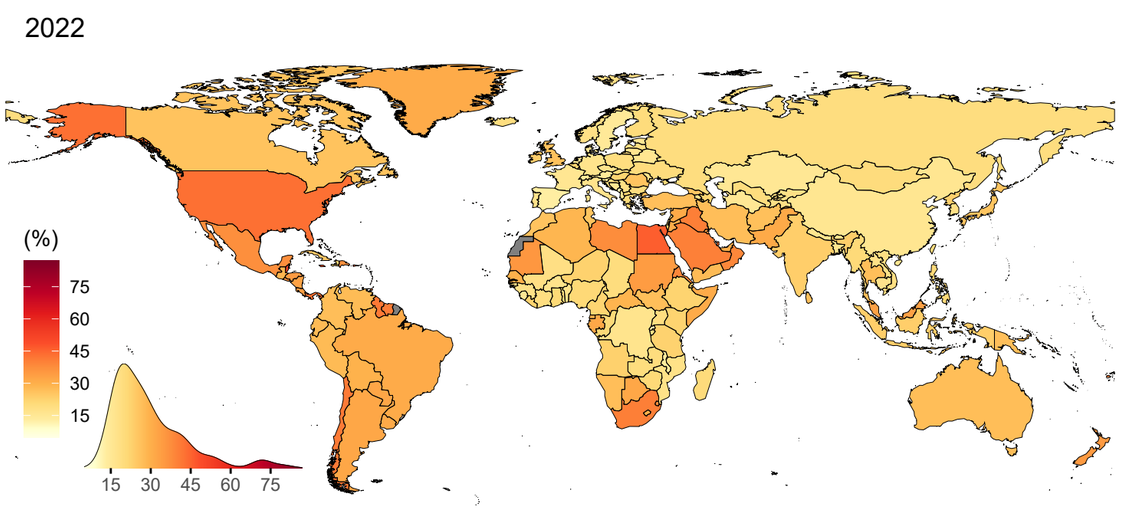
The circular bar plots show the burden of underweight and obesity in 1990 and 2022. The lengths of the blue and red bars show the age-standardised prevalence of underweight and obesity respectively, and their sum shows the age-standardised combined prevalence. Country names are coloured by region. The numbers in brackets after each country's name show the total number of data sources and the number of nationally representative data sources, respectively. Countries are ordered by decreasing combined prevalence within each region. The maps show the change in combined prevalence of underweight and obesity from 1990 to 2022, and its level in 2022. The density plot alongside each map shows the smoothed distribution of estimates across countries.

Prevalence was age-standardised within each age group presented.

Women, 20-39 years



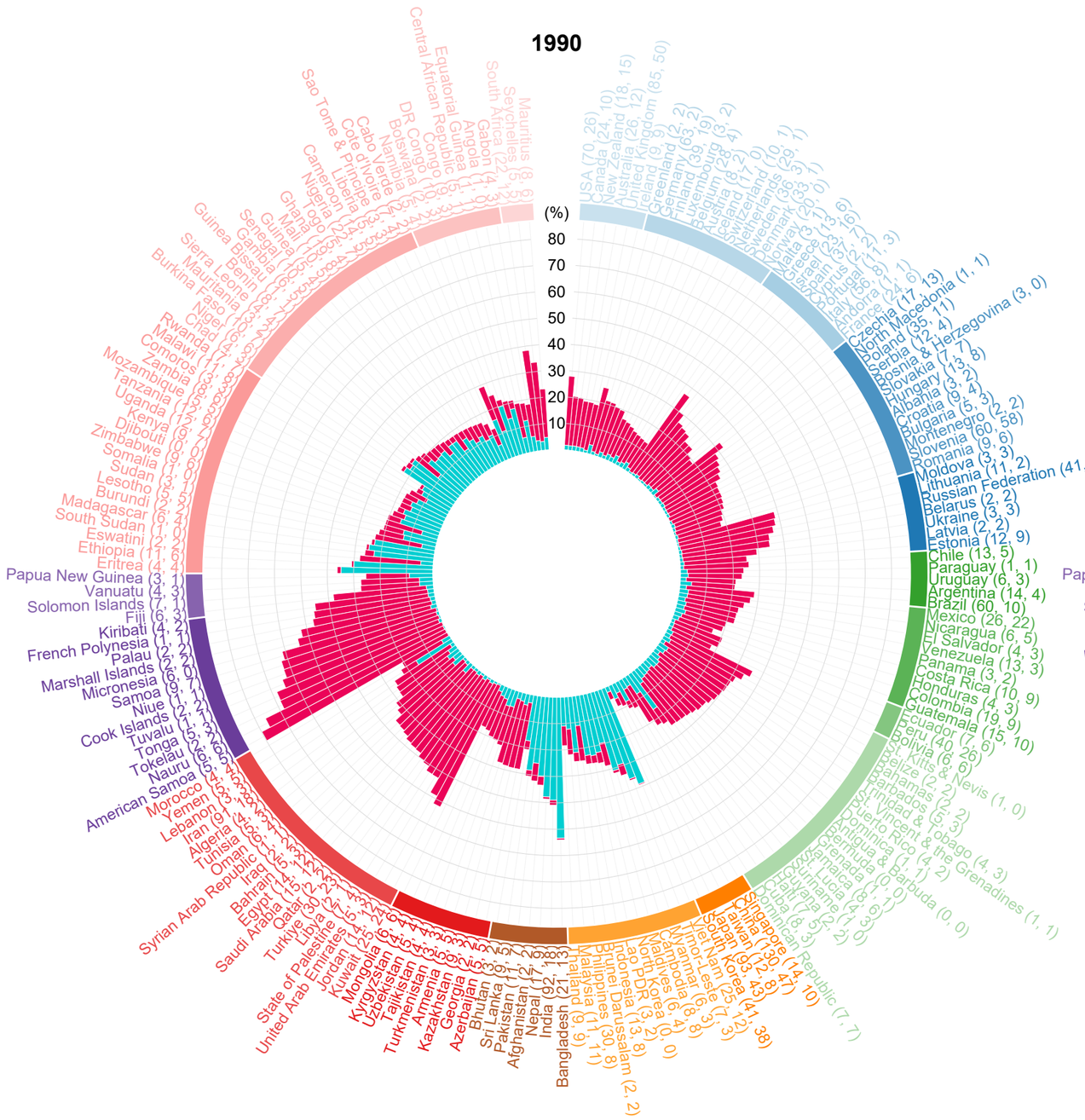


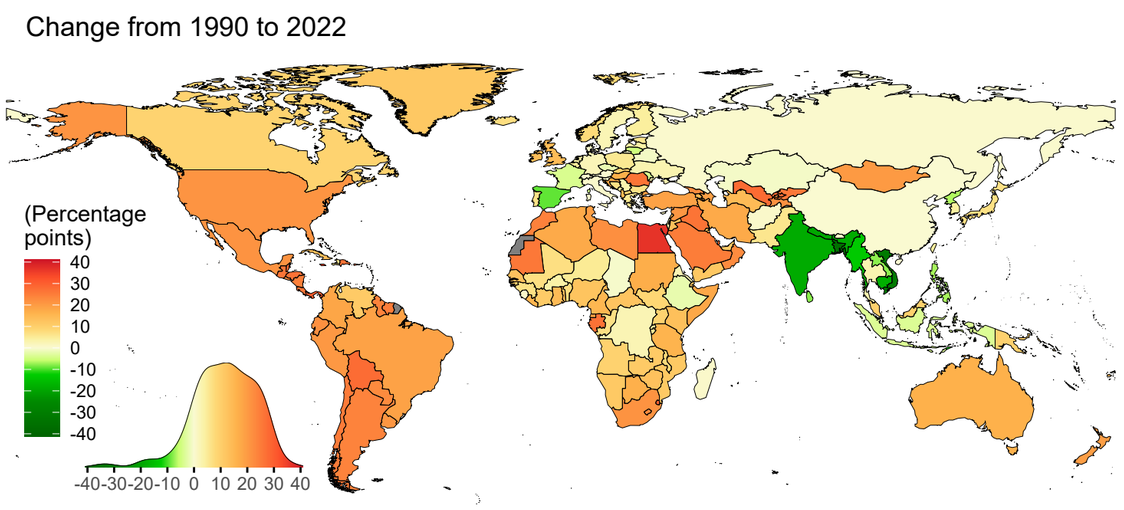


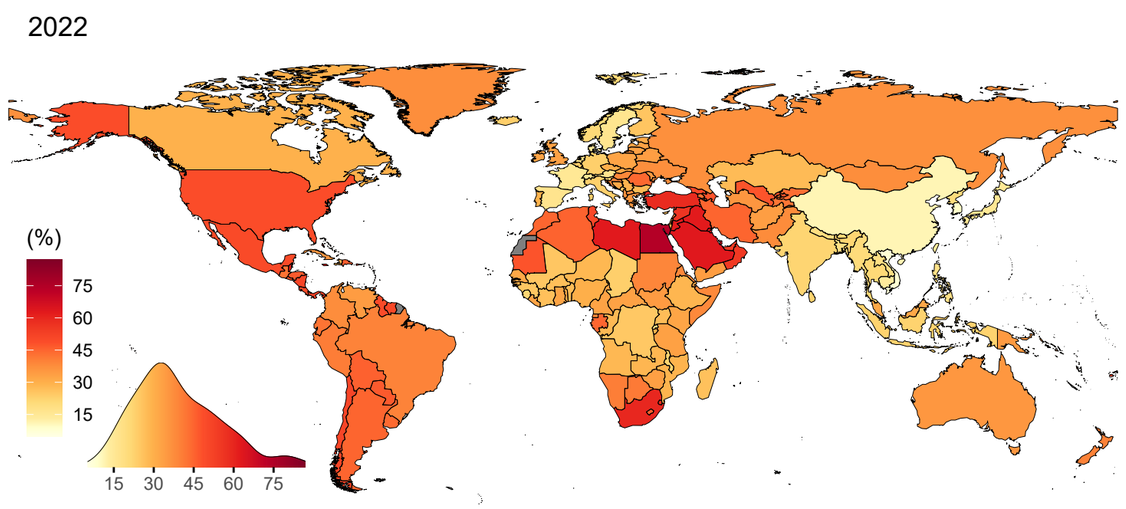
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Women, 40-64 years







American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
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Montenegro
Nauru
Niue
Palau
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
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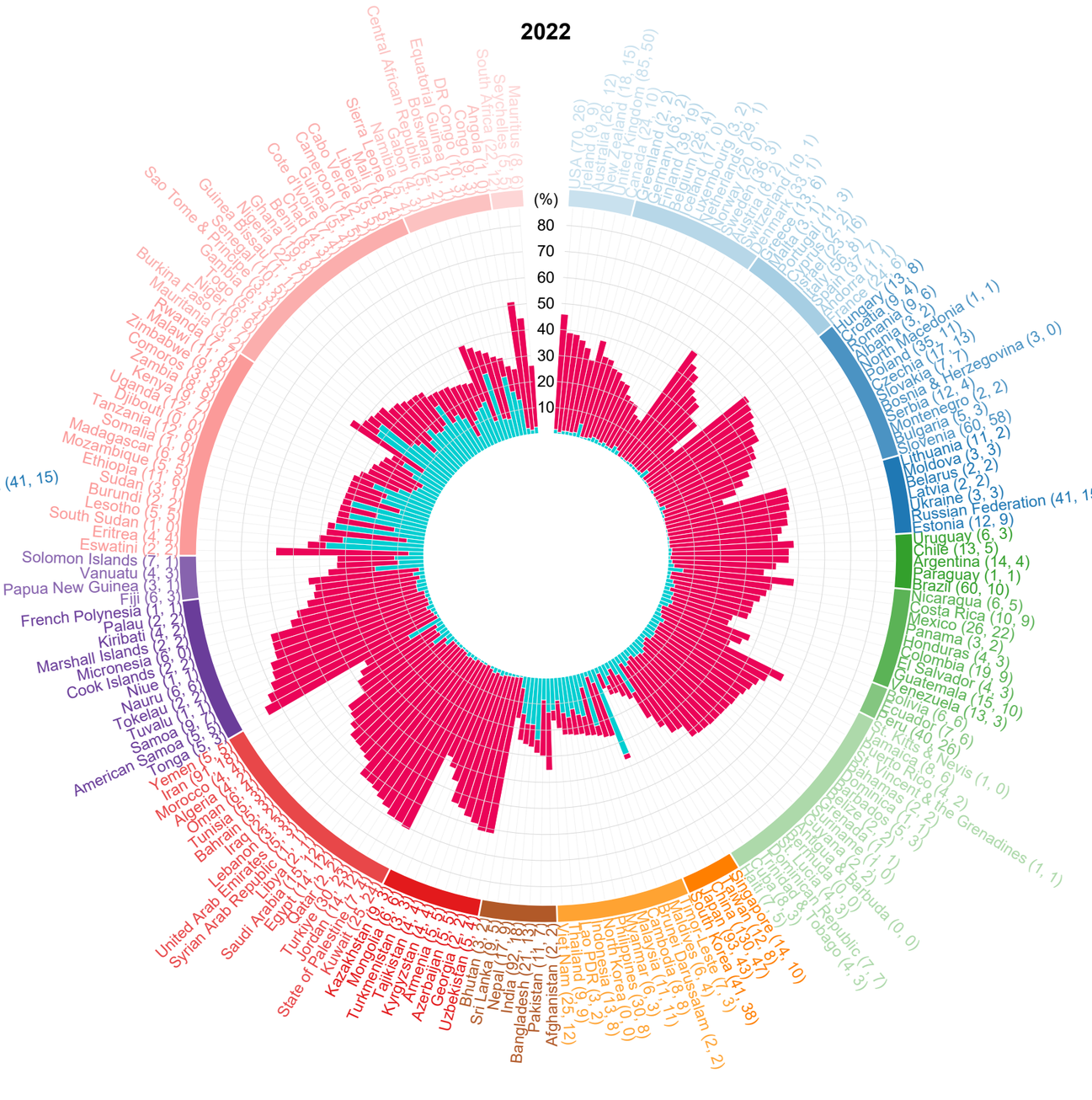
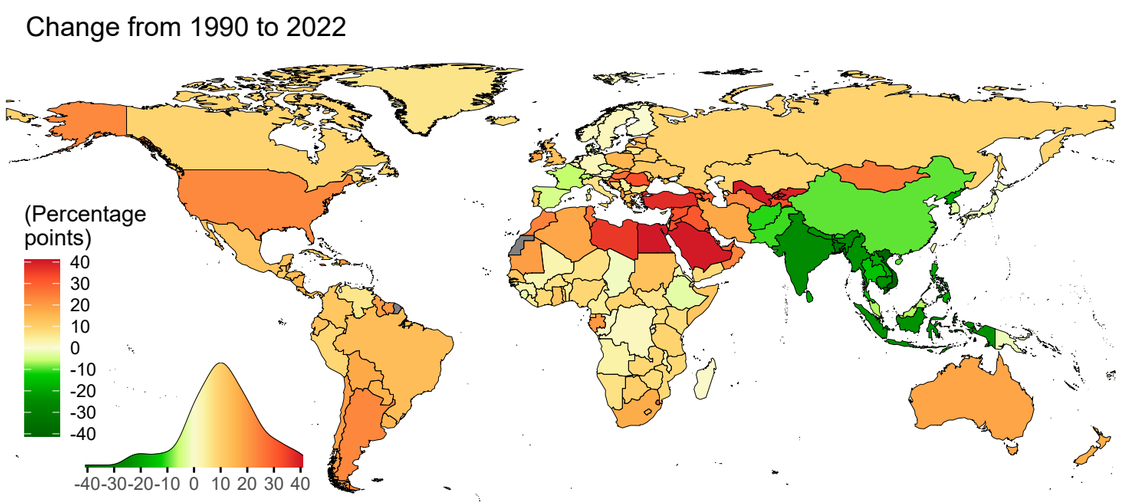
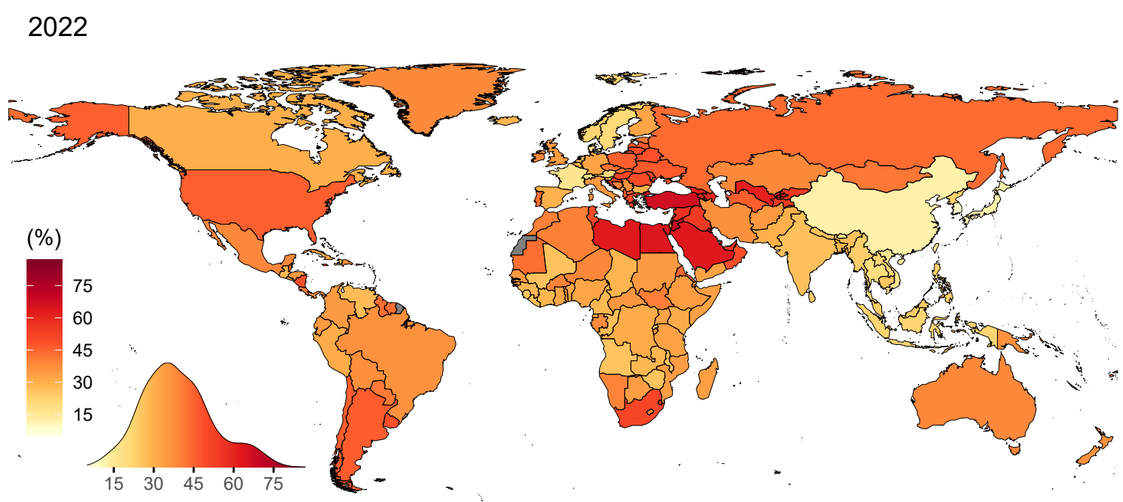
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Women, 65+ years







American Samoa
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Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
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Seychelles
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Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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Cape Verde
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Cook Islands
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French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
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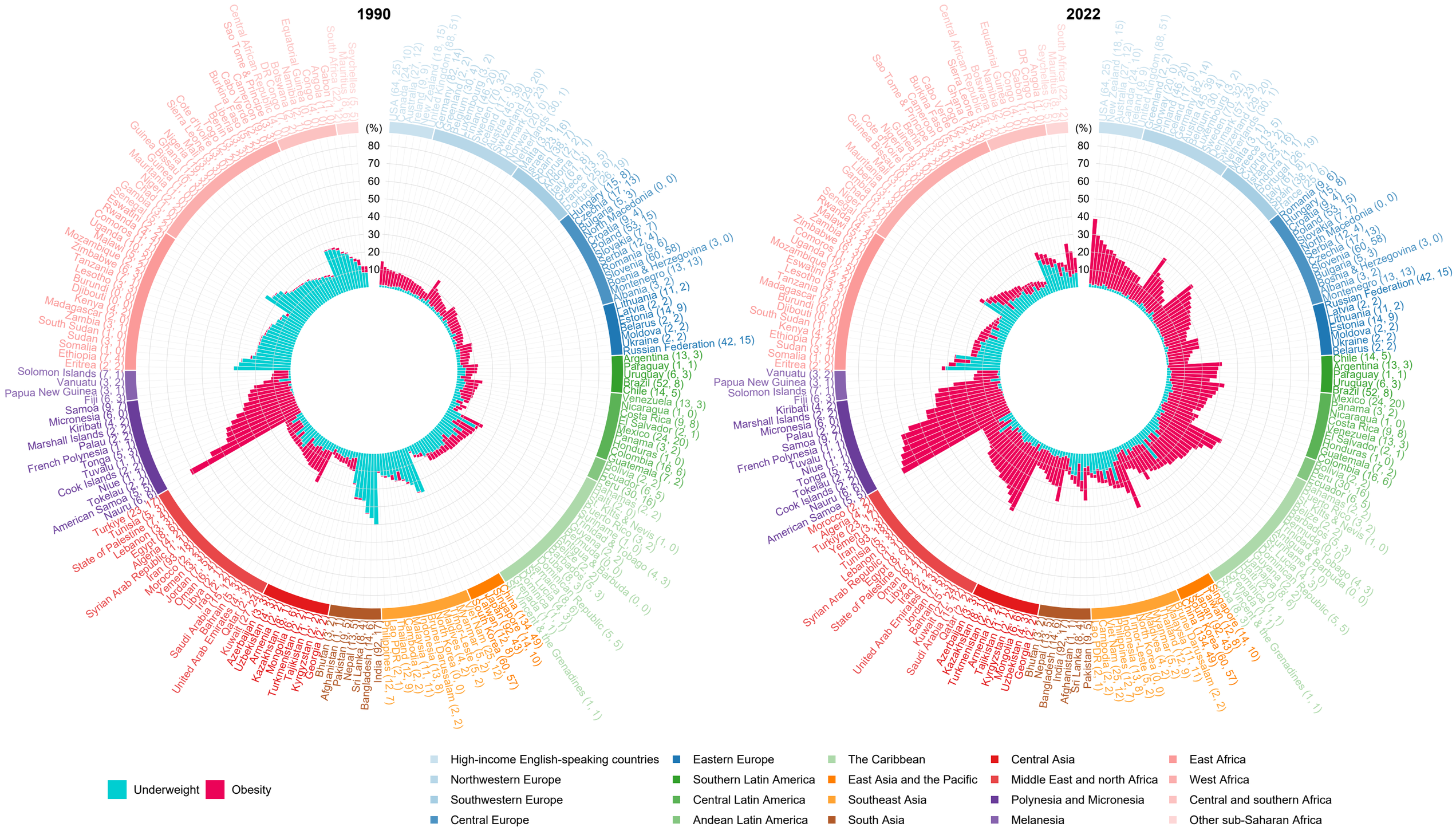
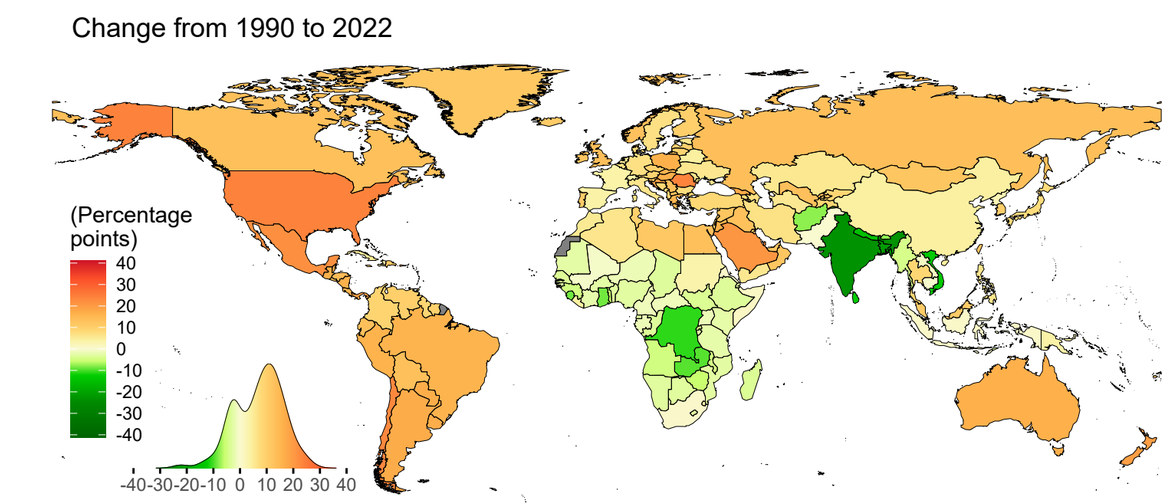
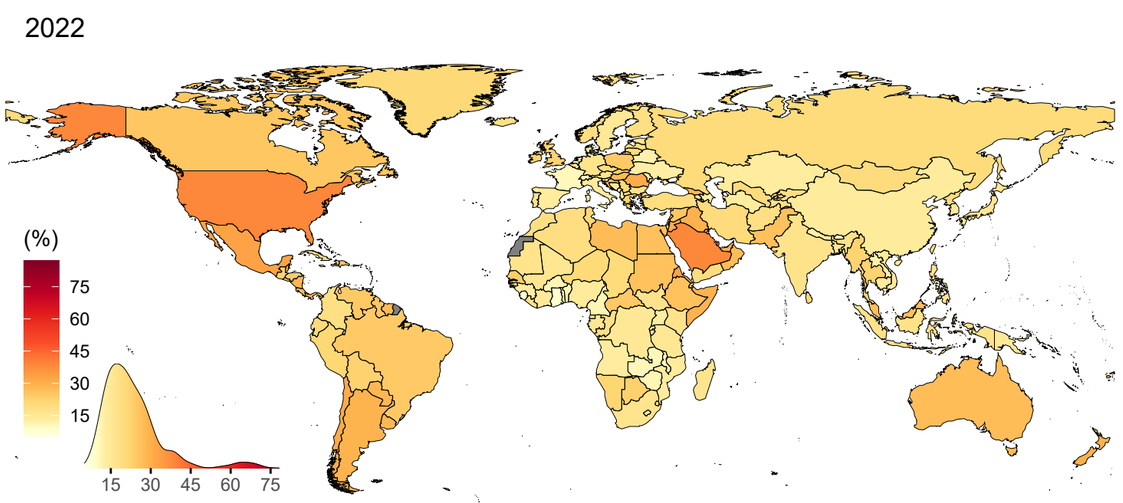
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Men, 20-39 years







American Samoa
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Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
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Mauritius
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Nauru
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Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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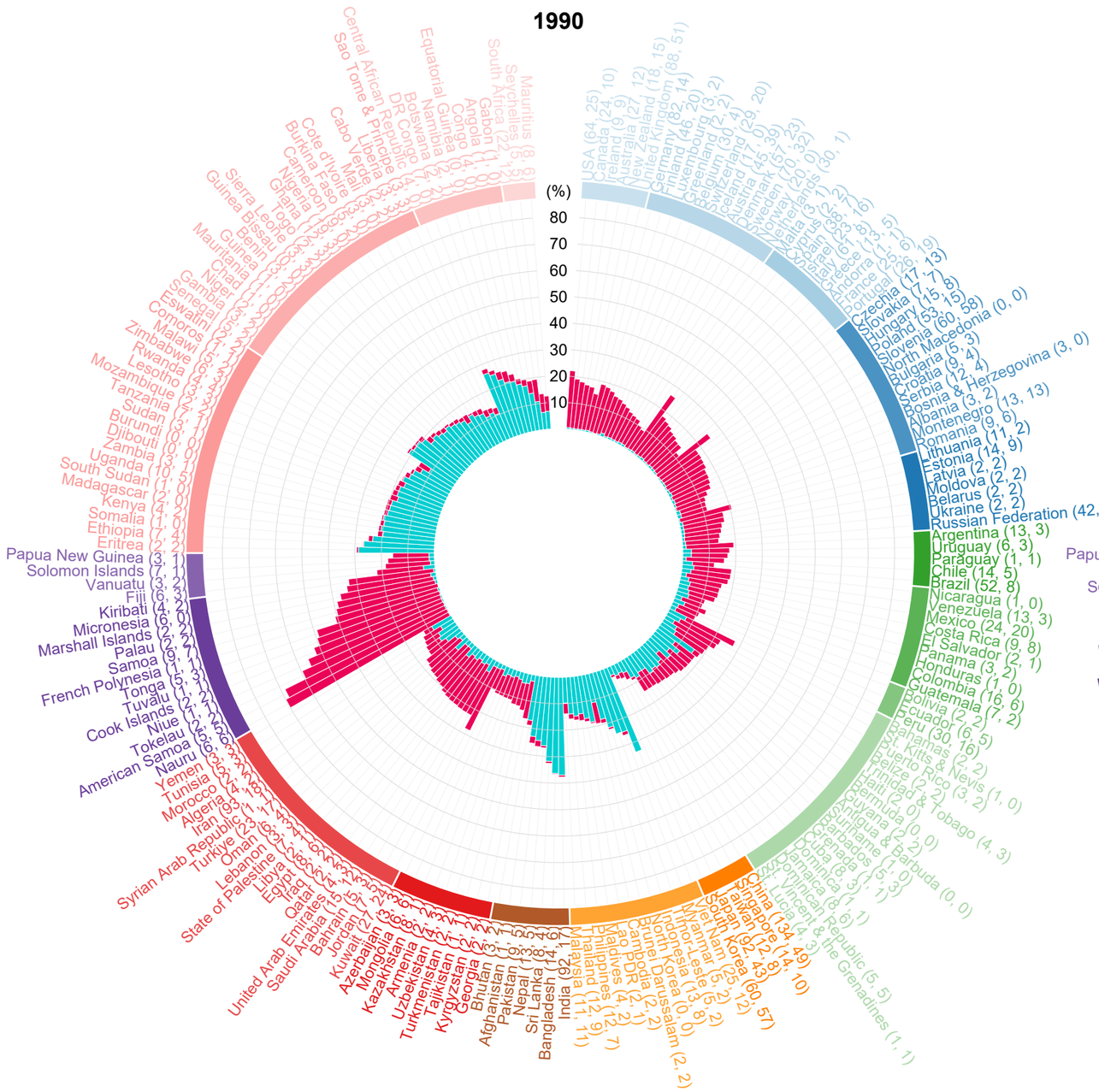
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

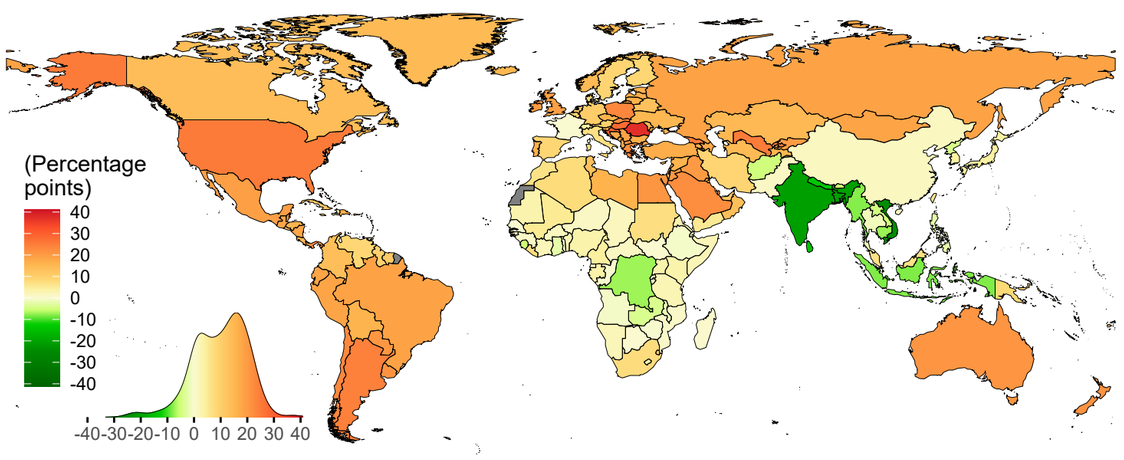
Men, 40-64 years



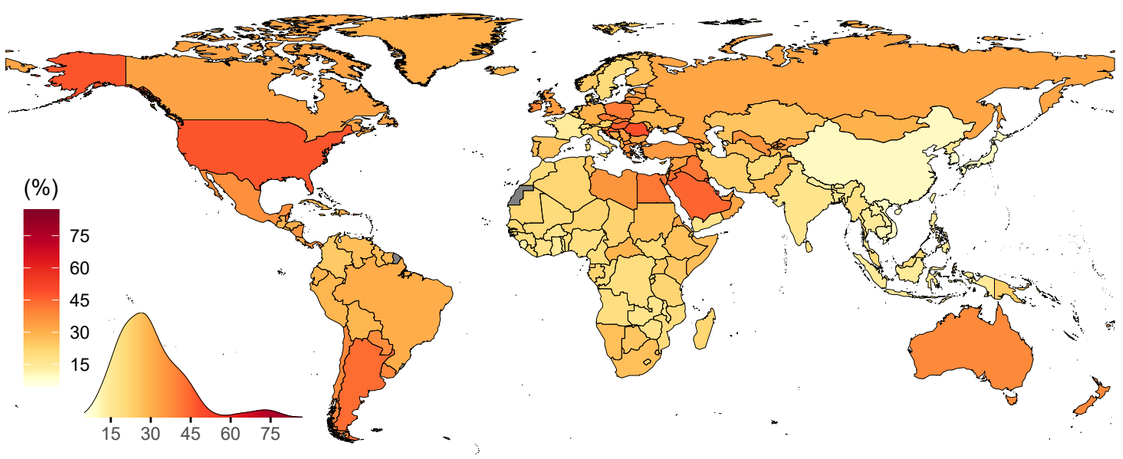
Underweight Obesity

High-income English-speaking countries
Northwestern Europe
Southwestern Europe
Central Europe
Eastern Europe
Southern Latin America
Central Latin America
Andean Latin America
The Caribbean
East Asia and the Pacific
Southeast Asia
South Asia
Central Asia
Middle East and north Africa
Polynesia and Micronesia
Melanesia
East Africa
West Africa
Central and southern Africa
Other sub-Saharan Africa

Change from 1990 to 2022

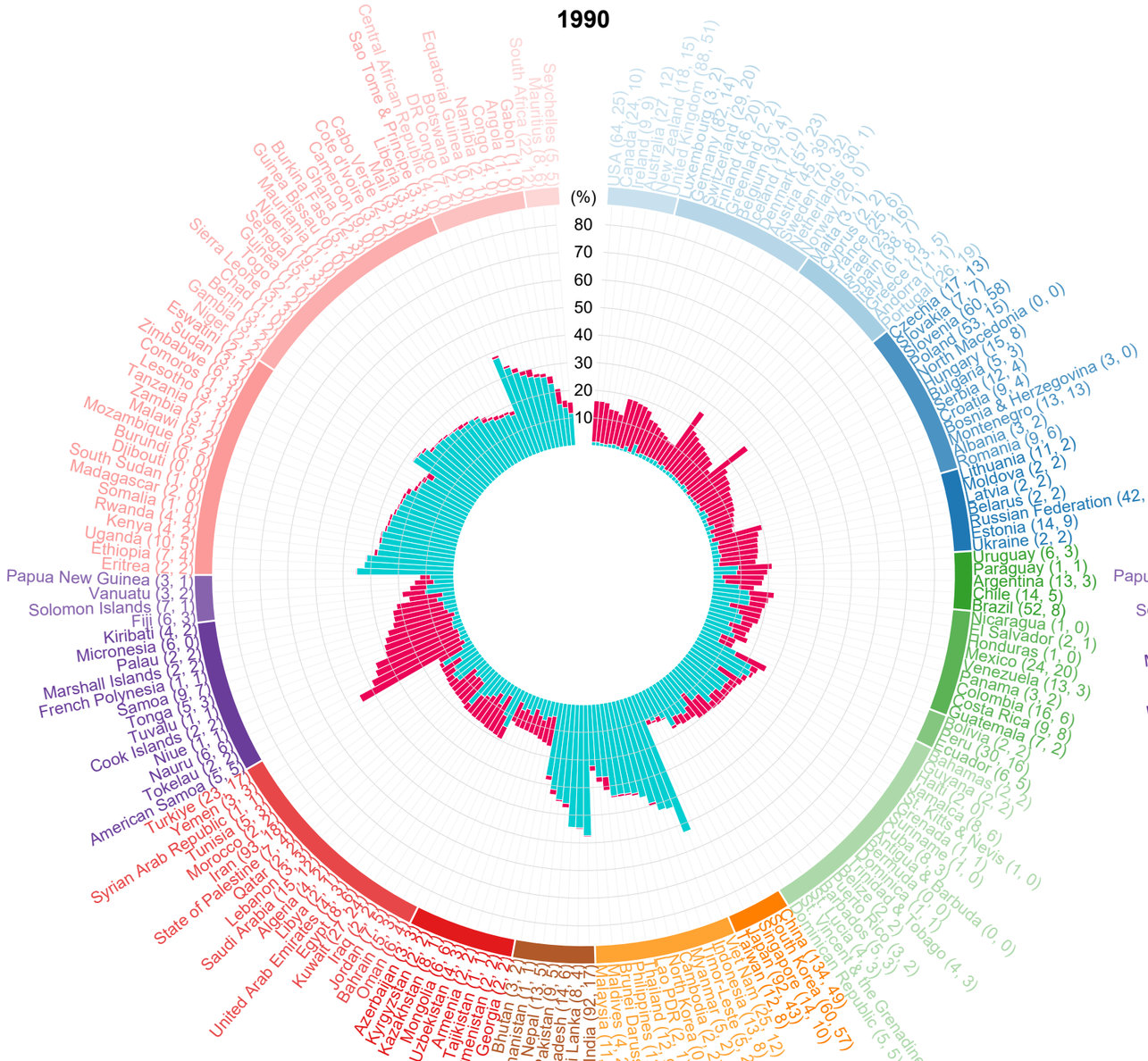


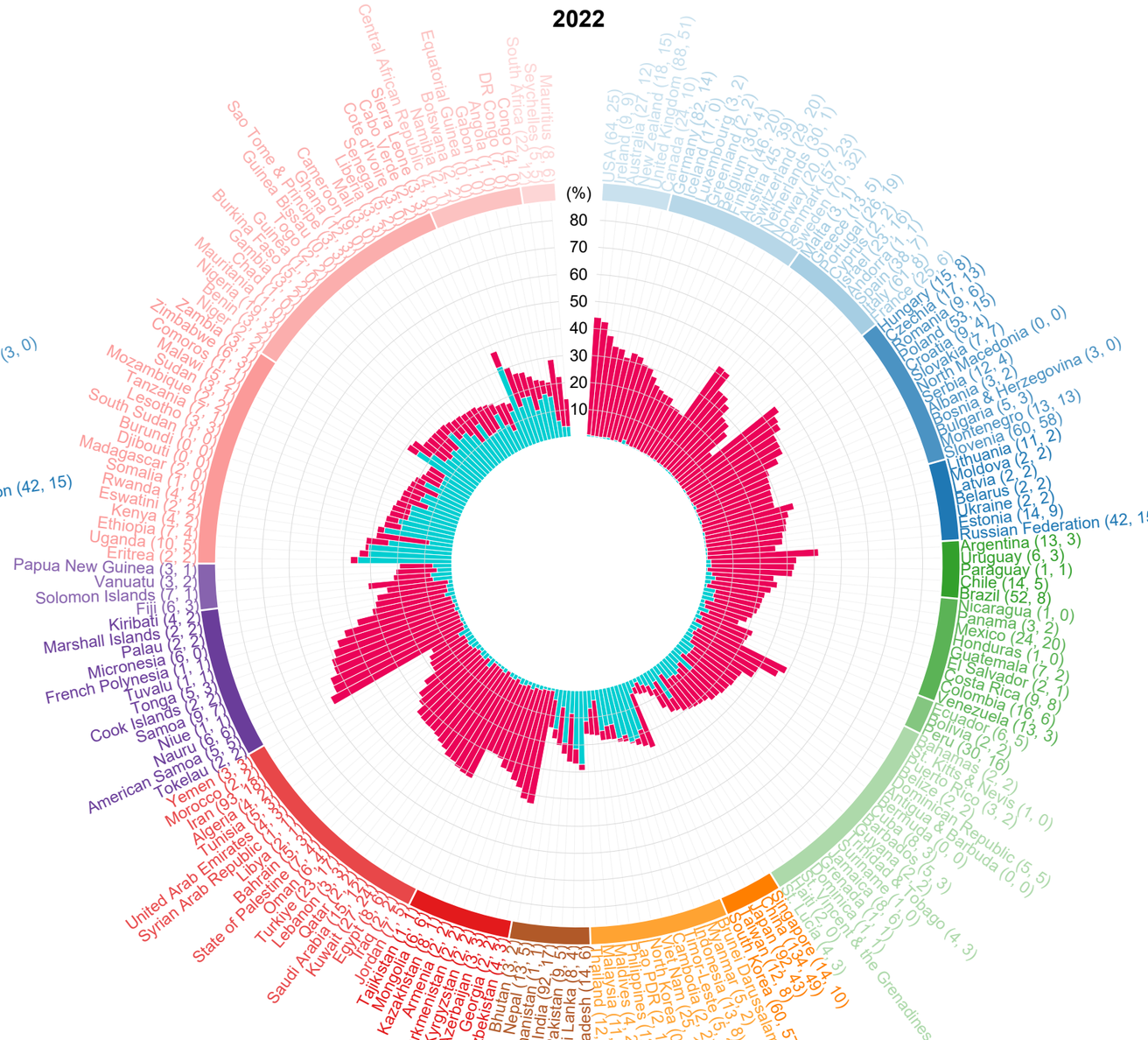
2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Men, 65+ years

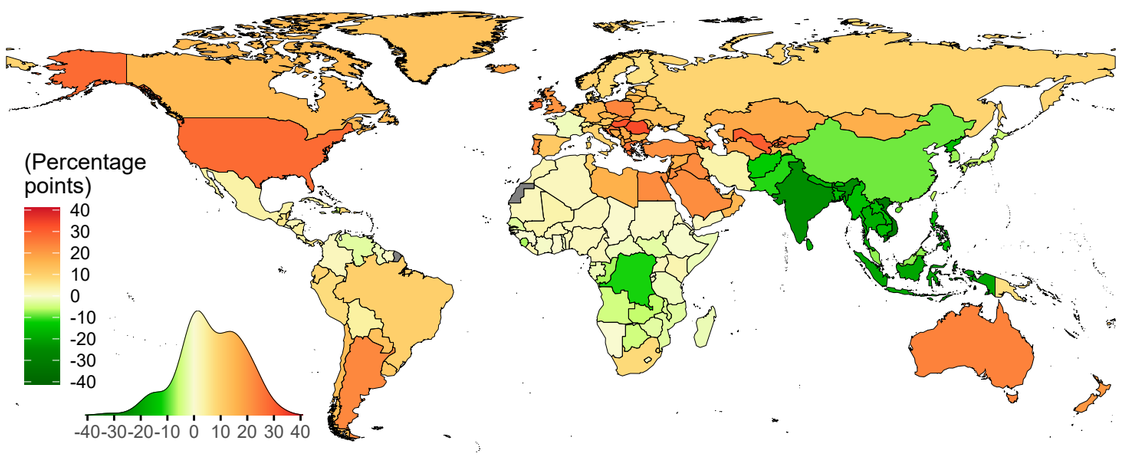




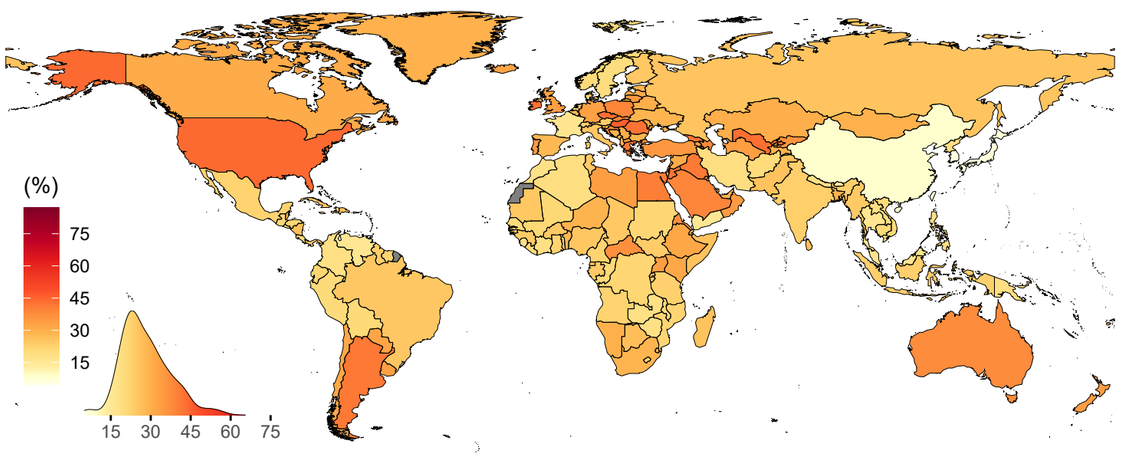
Underweight
Obesity

- High-income English-speaking countries
- Northwestern Europe
- Southwestern Europe
- Central Europe
- Eastern Europe
- Southern Latin America
- Central Latin America
- Andean Latin America
- The Caribbean
- East Asia and the Pacific
- Southeast Asia
- South Asia
- Central Asia
- Middle East and north Africa
- Polynesia and Micronesia
- Melanesia
- East Africa
- West Africa
- Central and southern Africa
- Other sub-Saharan Africa

Change from 1990 to 2022



2022



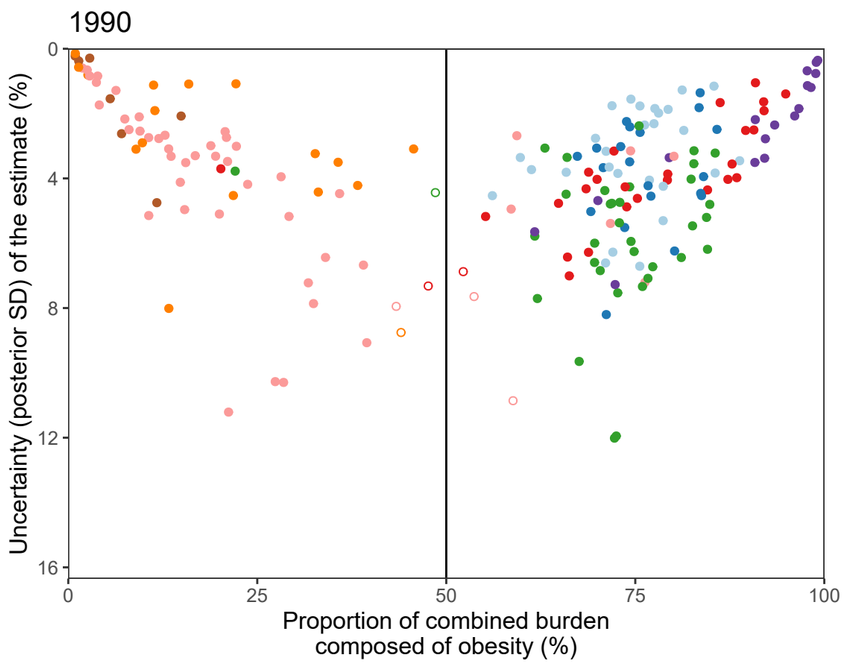
- American Samoa
- Bahrain
- Bermuda
- Brunei Darussalam
- Cape Verde
- Comoros
- Cook Islands
- Fiji
- French Polynesia
- Kiribati
- Maldives
- Marshall Islands
- Mauritius
- Micronesia
- Montenegro
- Nauru
- Niue
- Palau
- Samoa
- Sao Tome & Principe
- Seychelles
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu

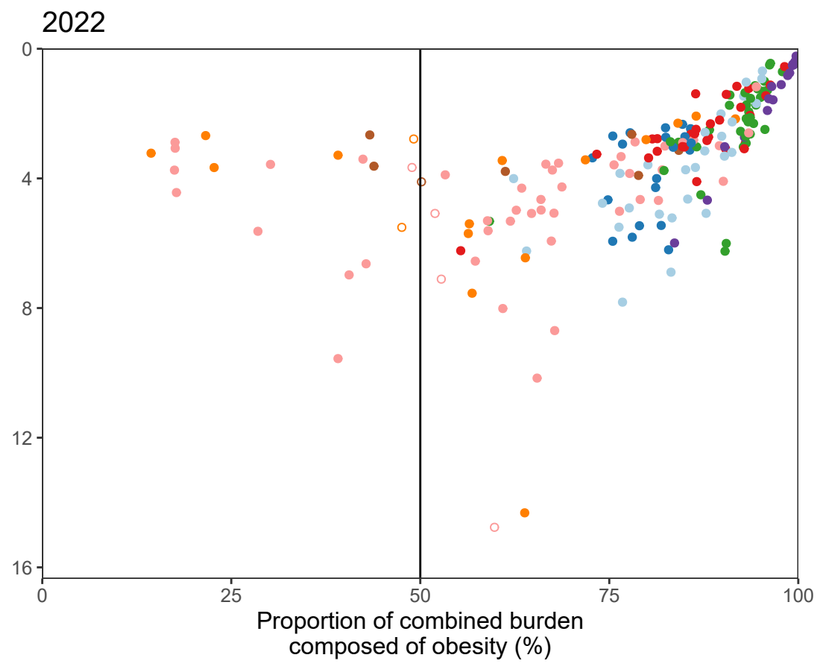
- American Samoa
- Bahrain
- Bermuda
- Brunei Darussalam
- Cape Verde
- Comoros
- Cook Islands
- Fiji
- French Polynesia
- Kiribati
- Maldives
- Marshall Islands
- Mauritius
- Micronesia
- Montenegro
- Nauru
- Niue
- Palau
- Samoa
- Sao Tome & Principe
- Seychelles
- Solomon Islands
- Tokelau
- Tonga
- Tuvalu
- Vanuatu

Appendix Figure 10. Age-standardised proportion of the combined burden of underweight and obesity composed of obesity in 1990 and 2022, in relation to the uncertainty of the proportion measured by posterior standard deviation, for adults.

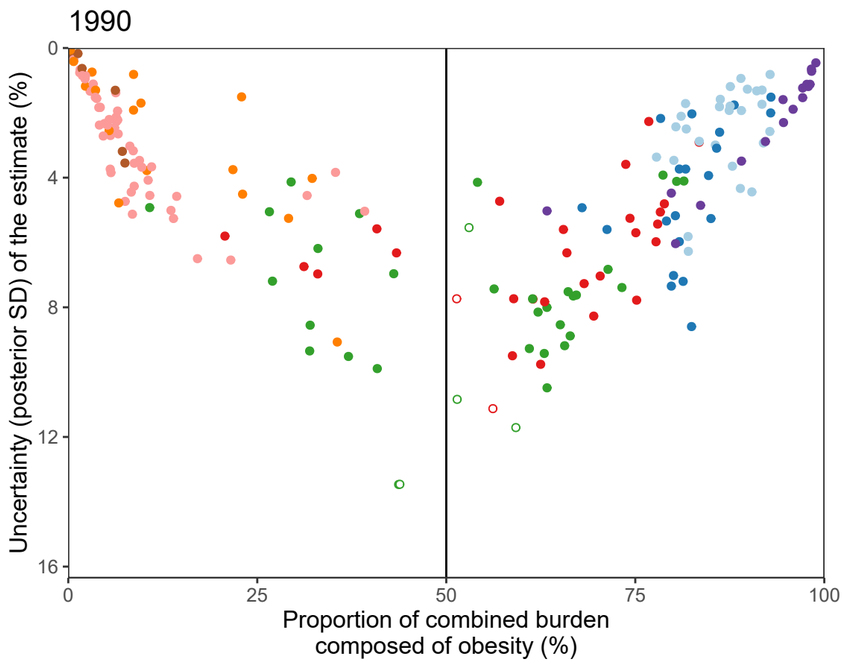
Each point shows one country. Points that are filled have posterior probability (PP) ≥0.80 of obesity being more prevalent than underweight, or of underweight being more prevalent than obesity. If neither is more prevalent than the other at PP = 0.80, the point is hollow.

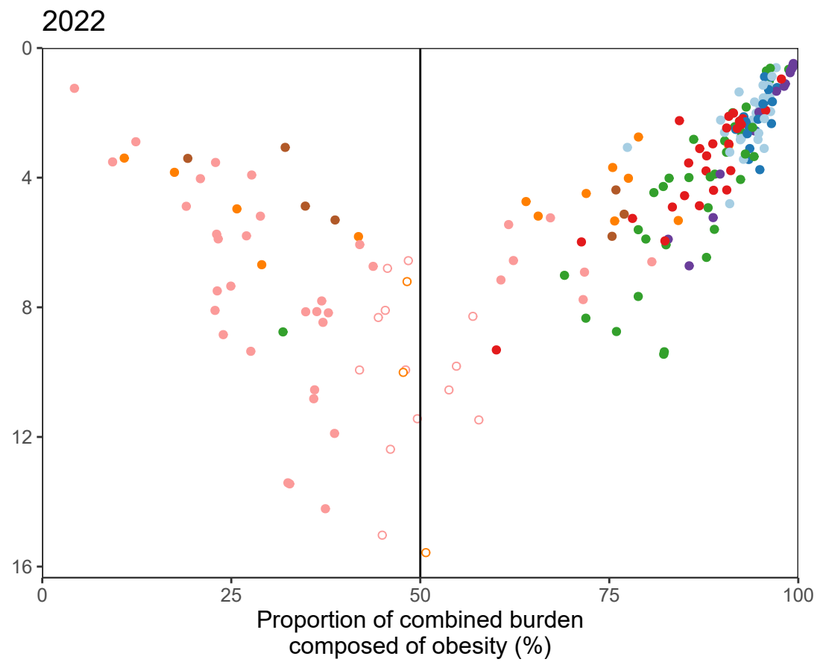
Women

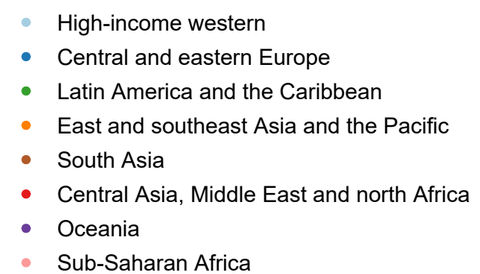

1990
Uncertainty (posterior SD) of the estimate (%)
0
4
8
12
16
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

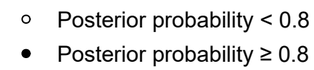

2022
0
4
8
12
16
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

Men


1990
Uncertainty (posterior SD) of the estimate (%)
0
4
8
12
16
0
25
50
75
100
Proportion of combined burden composed of obesity (%)


2022
0
4
8
12
16
0
25
50
75
100
Proportion of combined burden composed of obesity (%)


High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

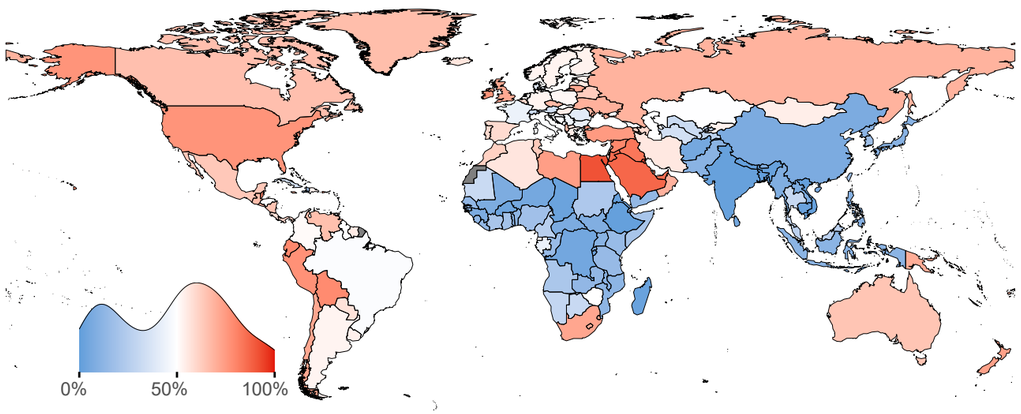

Posterior probability < 0.8
Posterior probability ≥ 0.8

Appendix Figure 11. Proportion of double burden composed of obesity for adults, by age group.

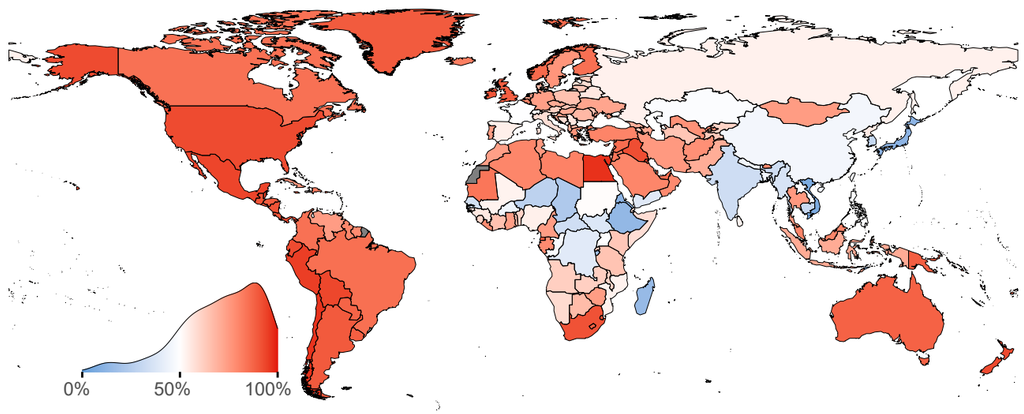
Age-standardised proportion of double burden from obesity in 1990 and 2022. The density plot alongside each map shows the smoothed distribution of estimates across countries. Prevalence was age-standardised within each age group presented.

Women, 20-39 years

1990



2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

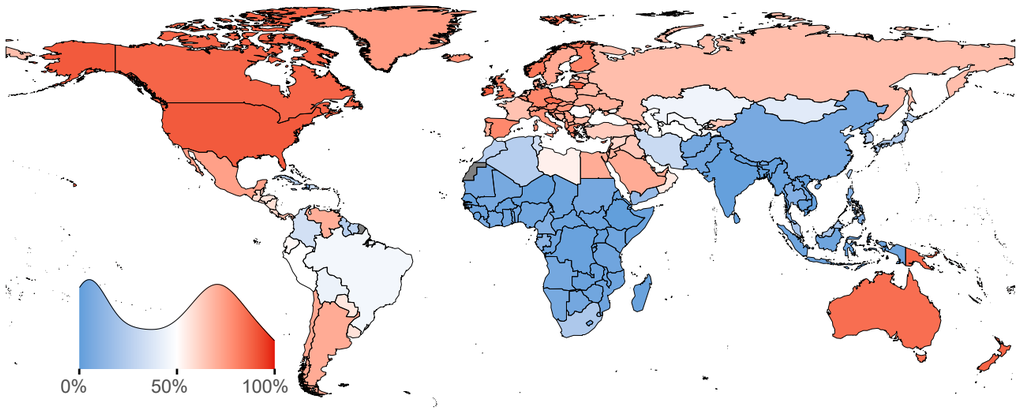
Obesity dominance

Equal prevalence

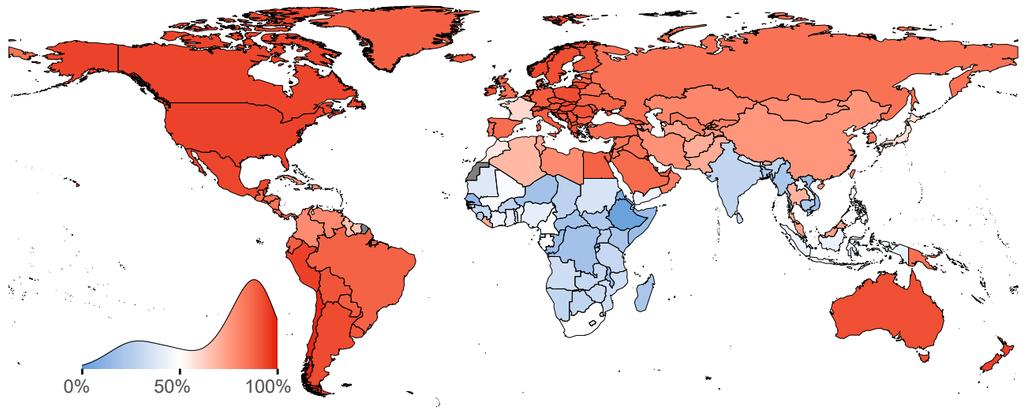
Underweight dominance

Men, 20-39 years

1990



2022



American Samoa
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Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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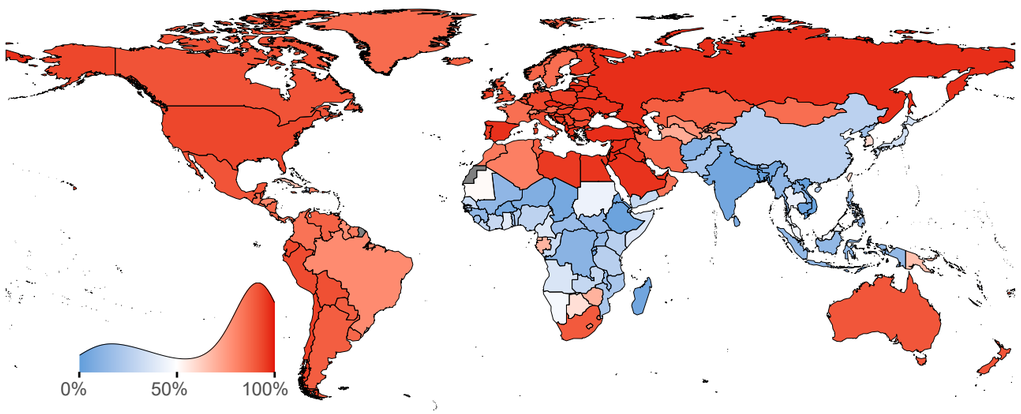
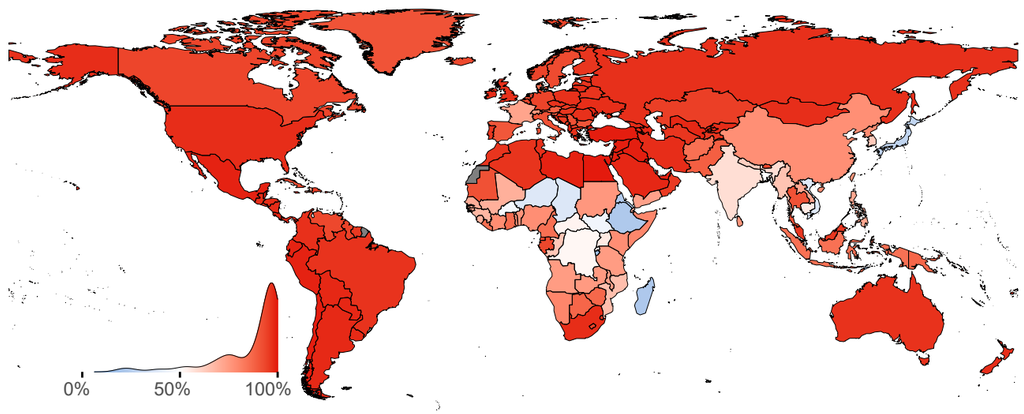
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Women, 40-64 years

1990



2022



American Samoa
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Cape Verde
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Cook Islands
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Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

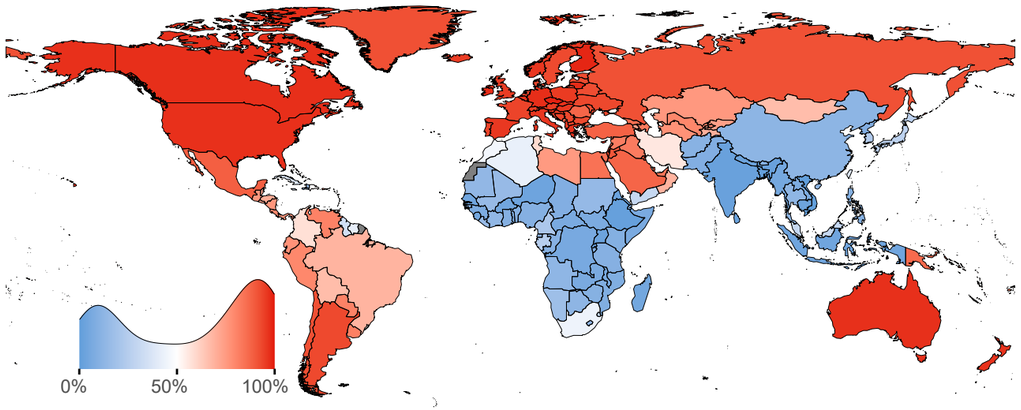
Obesity dominance

Equal prevalence

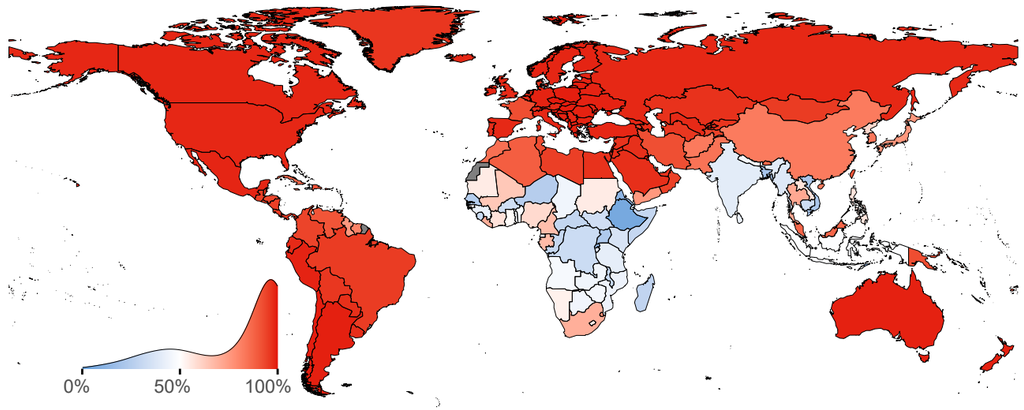
Underweight dominance

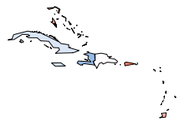
Men, 40-64 years

1990



2022





American Samoa
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Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
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Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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Brunei Darussalam
Cape Verde
Comoros
Cook Islands
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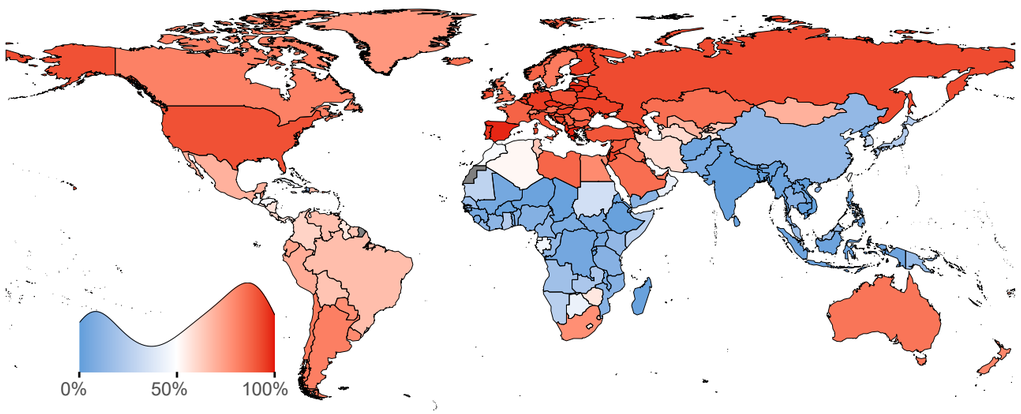
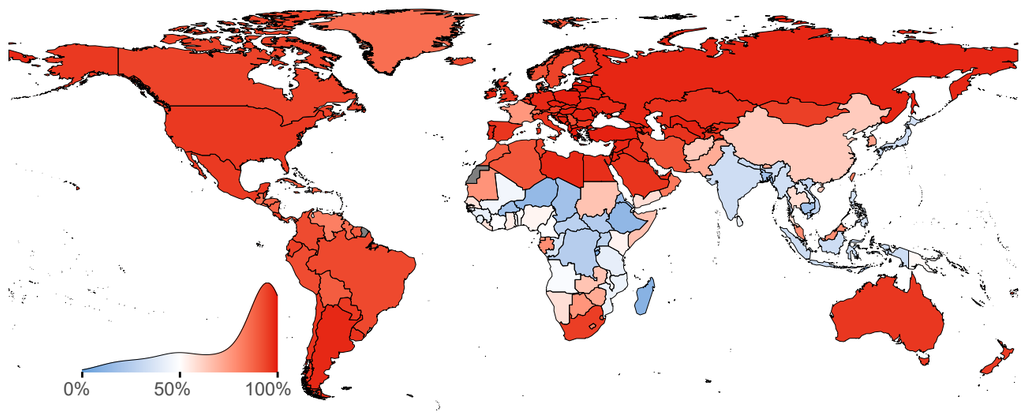
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Women, 65+ years

1990



2022



American Samoa
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Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
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Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

American Samoa
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Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

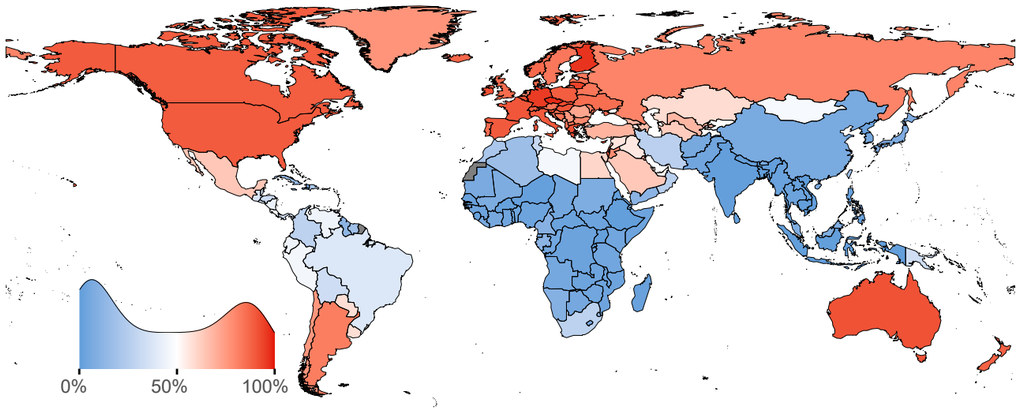
Obesity dominance

Equal prevalence

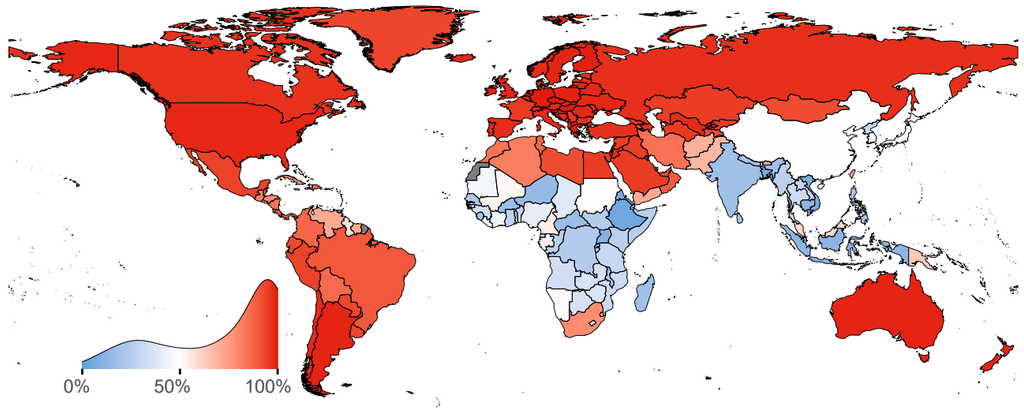
Underweight dominance

Men, 65+ years

1990



2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
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Nauru
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Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

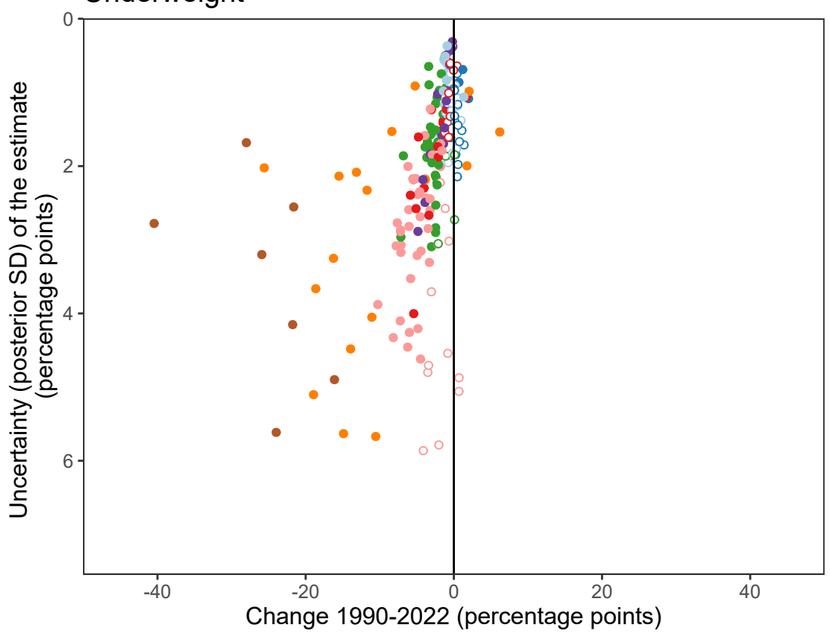
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Appendix Figure 12. Change in age-standardised underweight, obesity, combined burden, and the proportion of combined burden composed of obesity from 1990 to 2022, in relation to the uncertainty of the change measured by posterior standard deviation, for adults.

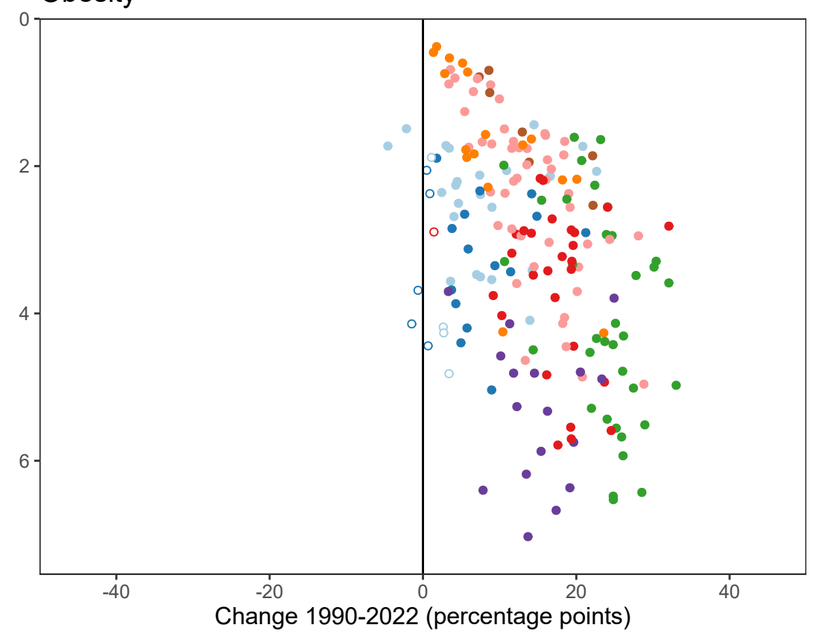
Each point shows one country. Points that are filled have posterior probability (PP) ≥0.80 of the observed change being a true decrease or increase. If neither an increase nor a decrease was detected at PP = 0.80 the point is hollow.

Women

Underweight

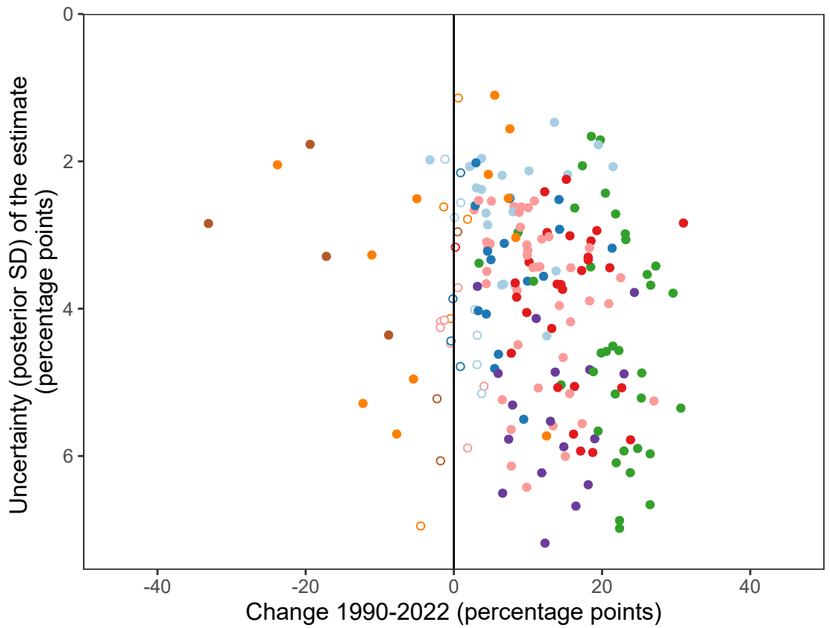


Obesity

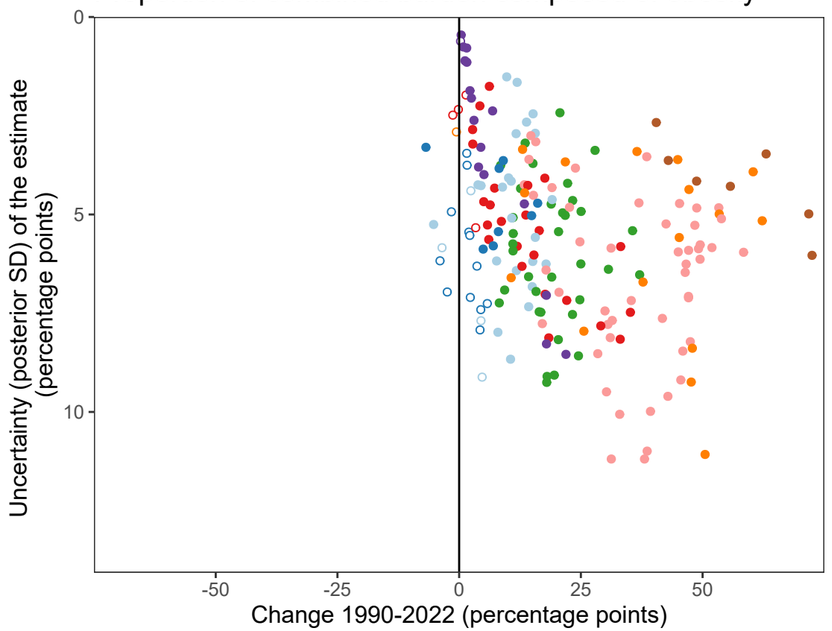


- High-income western
- Central and eastern Europe
- Latin America and the Caribbean
- East and southeast Asia and the Pacific
- South Asia
- Central Asia, Middle East and north Africa
- Oceania
- Sub-Saharan Africa

Combined burden



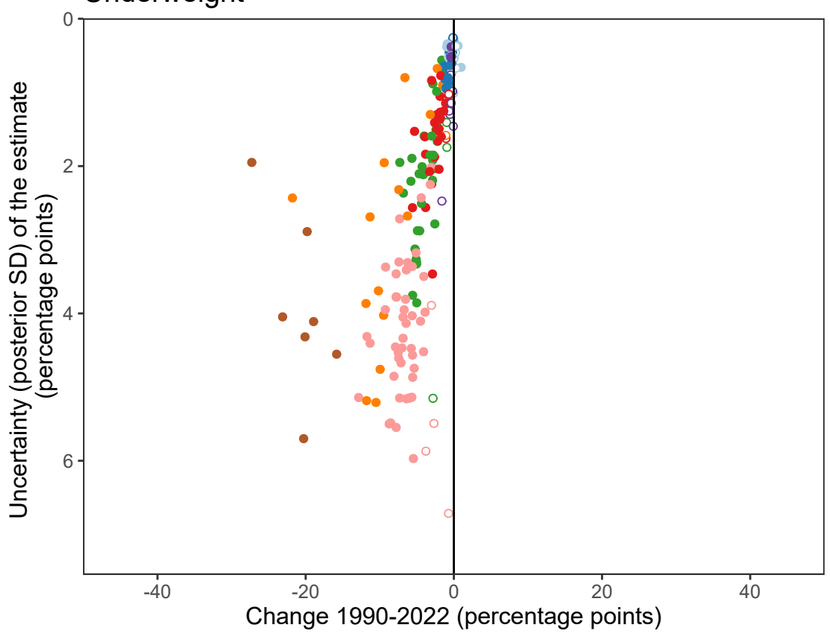
Proportion of combined burden composed of obesity



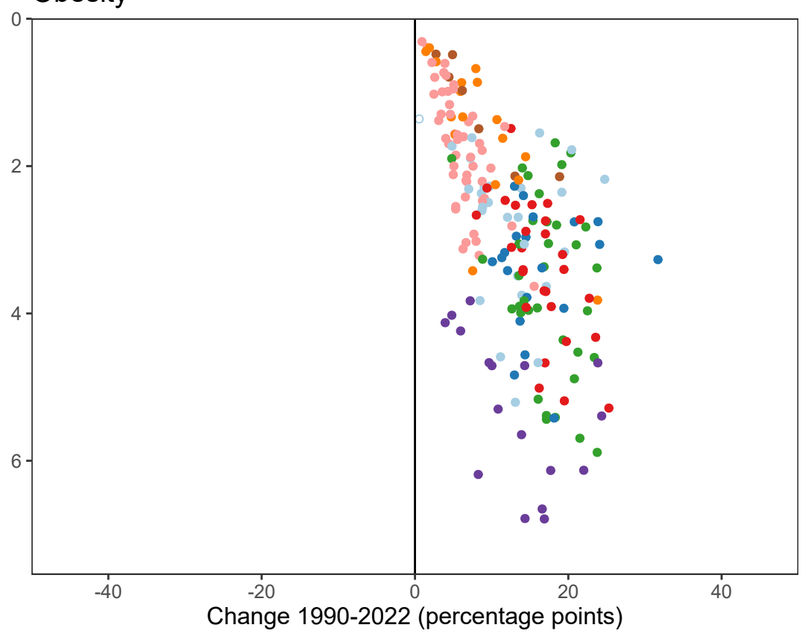
- Posterior probability < 0.8
- Posterior probability ≥ 0.8

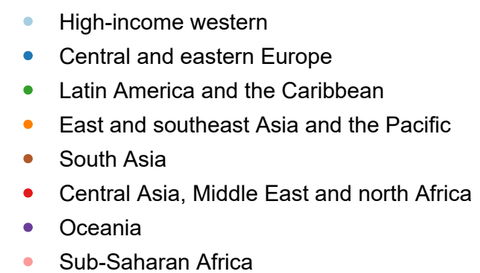
Men

Underweight

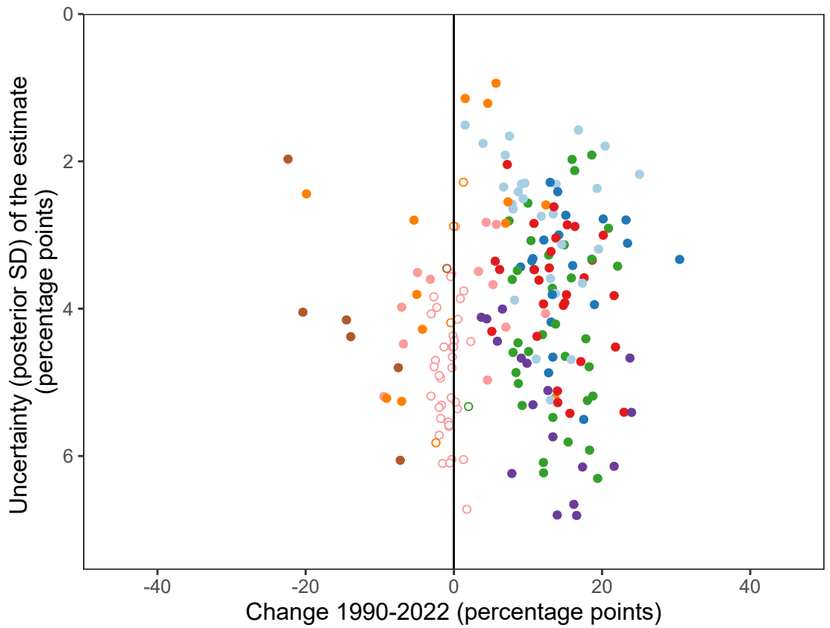


Obesity

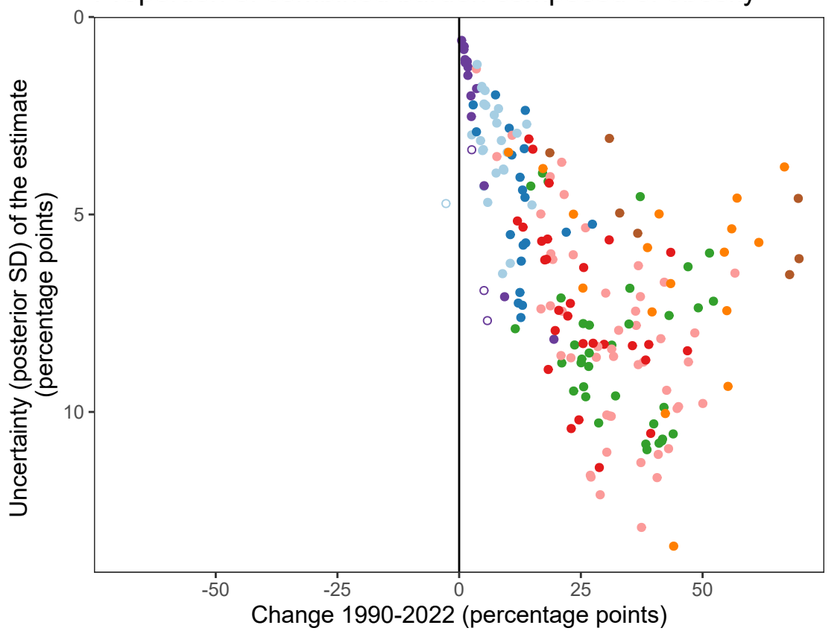


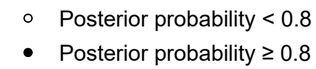


Combined burden



Proportion of combined burden composed of obesity





Appendix Figure 13. Contributions of the change in age-standardised underweight and obesity prevalence to their combined prevalence for adults, by age group.

The blue and red bars show the change in age-standardised prevalence of underweight and obesity respectively, and the grey points show the change in the age-standardised combined prevalence. The numbers in brackets after each country's name show the total number of data sources and the number of nationally representative data sources, respectively. Prevalence was age-standardised within each age group presented.

Women, 20-39 years

Samoa (9,7)
St. Lucia (4,3)
St. Vincent & the Grenadines (1,1)
Jamaica (8,6)
Barbados (5,3)
Puerto Rico (4,2)
Dominica (1,1)
Cook Islands (2,2)
Bermuda (0,0)
USA (70,26)
Bolivia (6,6)
Tuvalu (1,1)
El Salvador (4,3)
Mexico (26,22)
Argentina (14,4)
Gabon (4,3)
Niue (1,1)
Kiribati (4,2)
Uruguay (6,3)
Tokelau (2,2)
Equatorial Guinea (1,1)
Brazil (60,10)
Qatar (2,2)
American Samoa (5,5)
Colombia (19,9)
French Polynesia (1,1)
Sudan (3,1)
Seychelles (5,5)
Marshall Islands (2,2)
Australia (26,12)
United Kingdom (85,50)
Mauritius (8,6)
Ireland (9,9)
Fiji (6,3)
Botswana (2,2)
Libya (2,1)
Thailand (9,9)
Canada (24,10)
Malaysia (11,11)
Cameroon (14,5)
Bahrain (5,3)
Senegal (10,5)
Syrian Arab Republic (1,1)
Finland (39,19)
Kenya (9,7)
Mongolia (6,6)
Uganda (12,7)
South Korea (41,38)
Djibouti (0,0)
Slovakia (7,7)
North Macedonia (1,1)
Algeria (4,2)
Lebanon (3,3)
Cote d'Ivoire (7,4)
South Sudan (1,0)
Zambia (8,6)
Bulgaria (5,3)
Namibia (5,4)
Togo (5,4)
Indonesia (13,8)
Uzbekistan (5,4)
Kyrgyzstan (4,4)
Turkiye (30,23)
Serbia (12,4)
Netherlands (29,1)
Italy (56,8)
Germany (63,2)
Portugal (11,3)
Luxembourg (3,2)
Cuba (8,3)
Vanuatu (4,3)
Nigeria (22,7)
Czechia (17,13)
Tajikistan (4,4)
Ukraine (3,3)
Malawi (11,8)
Switzerland (10,1)
Russian Federation (41,15)
Haiti (7,5)
Mali (10,5)
Benin (8,7)
France (24,6)
Spain (37,7)
Kuwait (25,24)
Estonia (12,9)
North Korea (0,0)
Eritrea (4,4)
Moldova (3,3)
Philippines (30,8)
Lao PDR (3,2)
Austria (8,2)
Belarus (2,2)
Pakistan (11,7)
Ethiopia (11,6)
Cambodia (8,8)
Sierra Leone (4,4)
DR Congo (10,3)
Myanmar (6,3)
Nepal (17,9)
Bangladesh (21,13)

Bahamas (2,2)
Chile (13,5)
Panama (3,2)
Tonga (5,3)
St. Kitts & Nevis (1,0)
Belize (2,2)
Eswatini (2,2)
Egypt (14,12)
Antigua & Barbuda (0,0)
Grenada (1,1)
Dominican Republic (7,7)
Honduras (4,3)
Guyana (2,2)
New Zealand (18,15)
Suriname (1,0)
Peru (40,26)
Costa Rica (10,9)
Nicaragua (6,5)
Guatemala (15,10)
Paraguay (1,1)
Iraq (2,2)
Mauritania (3,2)
Ecuador (7,6)
Brunei Darussalam (2,2)
South Africa (22,12)
Trinidad & Tobago (4,3)
Lesotho (5,5)
Greenland (2,2)
Comoros (3,3)
Romania (9,6)
Somalia (1,0)
Cabo Verde (2,2)
Saudi Arabia (15,12)
Morocco (4,4)
Venezuela (13,3)
Belgium (28,4)
Tanzania (12,6)
Micronesia (6,0)
Central African Republic (5,1)
Oman (6,4)
State of Palestine (7,4)
Japan (93,43)
Singapore (14,10)
Sao Tome & Principe (3,3)
Norway (20,0)
Iceland (17,0)
Croatia (9,4)
Hungary (13,8)
Malta (3,1)
Solomon Islands (7,1)
Gambia (6,5)
Liberia (5,5)
Zimbabwe (9,6)
Papua New Guinea (3,1)
Palau (2,2)
Angola (1,0)
Albania (3,2)
Poland (35,11)
Jordan (14,12)
Georgia (2,2)
Azerbaijan (5,5)
Iran (91,18)
Tunisia (5,3)
Mozambique (5,5)
Israel (23,16)
Ghana (19,8)
Greece (13,6)
Cyprus (2,2)
Slovenia (60,58)
Andorra (1,1)
Denmark (33,1)
Latvia (2,2)
Bosnia & Herzegovina (3,0)
Yemen (5,5)
Sweden (36,3)
China (130,47)
Guinea Bissau (1,1)
Rwanda (7,7)
Niger (6,6)
Congo (9,3)
Burundi (2,2)
Guinea (5,4)
Nauru (6,6)
Lithuania (11,2)
Maldives (6,4)
Armenia (5,5)
United Arab Emirates (5,3)
Burkina Faso (10,7)
Montenegro (2,2)
Madagascar (6,4)
Timor-Leste (7,3)
Taiwan (12,8)
Turkmenistan (3,3)
Afghanistan (2,2)
Kazakhstan (9,3)
Bhutan (3,2)
Chad (4,3)
Sri Lanka (9,5)
Viet Nam (25,12)
India (92,18)

-40 -30 -20 -10 0 10 20 30 40

Change 1990-2022 (percentage points)

Men, 20-39 years

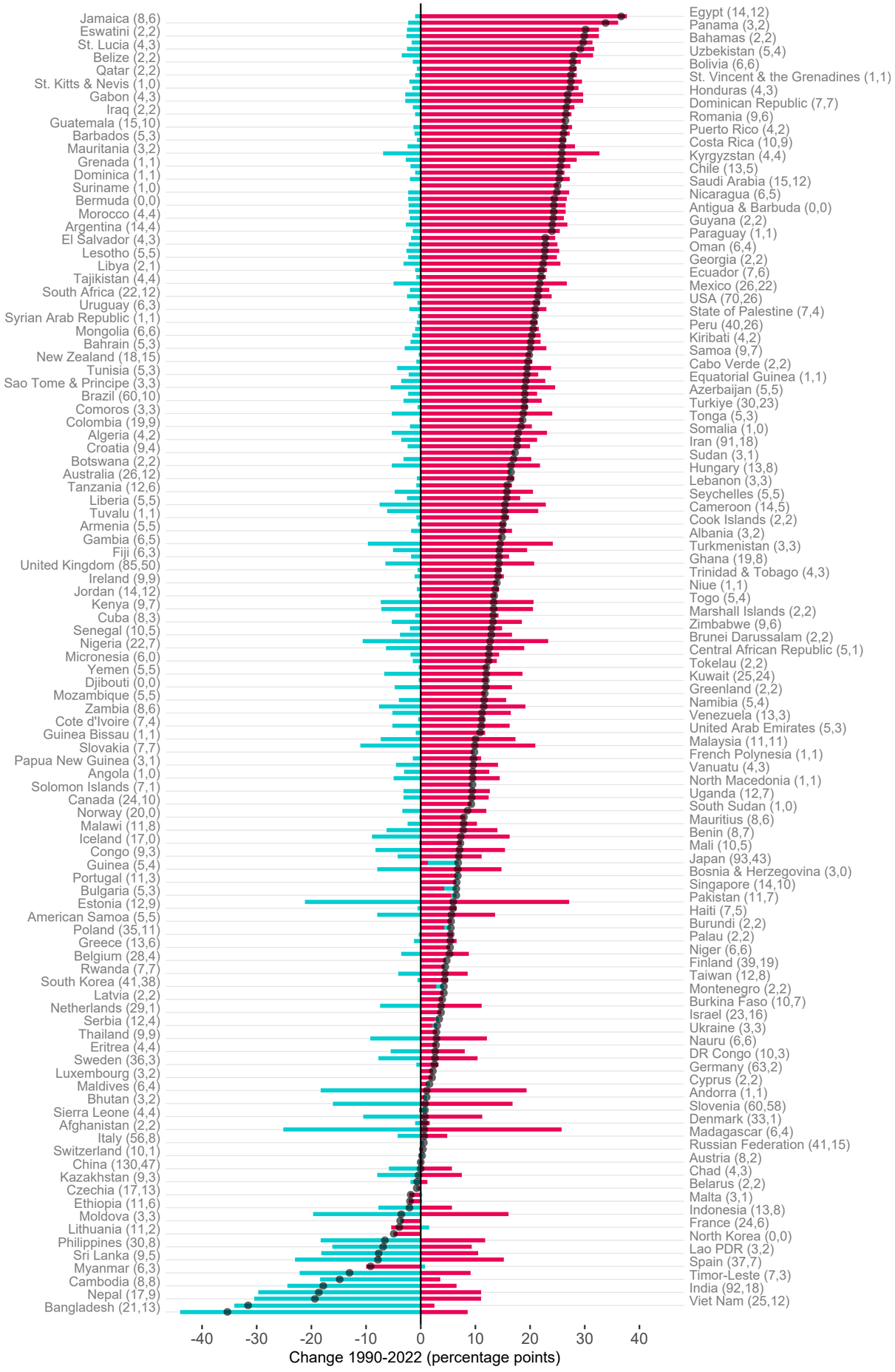
USA (64,25)
Romania (9,6)
Qatar (2,2)
Mexico (24,20)
Brunei Darussalam (2,2)
New Zealand (18,15)
Panama (3,2)
Niue (1,1)
Tuvalu (1,1)
Georgia (2,2)
Uruguay (6,3)
Paraguay (1,1)
Australia (27,12)
Poland (53,15)
Jordan (7,5)
Peru (30,16)
Slovakia (7,7)
Barbados (5,3)
French Polynesia (1,1)
State of Palestine (7,4)
Honduras (1,0)
American Samoa (5,5)
Russian Federation (42,15)
Egypt (8,6)
El Salvador (2,1)
North Macedonia (0,0)
Seychelles (5,5)
Norway (20,0)
Marshall Islands (2,2)
Bermuda (0,0)
Lebanon (3,3)
Oman (6,4)
Slovenia (60,58)
Greenland (2,2)
St. Lucia (4,3)
Libya (2,1)
Malaysia (11,11)
Iceland (17,0)
Kuwait (27,24)
South Korea (60,57)
Venezuela (13,3)
Latvia (2,2)
Suriname (1,0)
Israel (23,16)
Jamaica (8,6)
Dominica (1,1)
Albania (3,2)
Austria (45,39)
Grenada (1,1)
Tajikistan (1,1)
Kyrgyzstan (2,2)
Turkiye (23,17)
Denmark (57,23)
Japan (92,43)
Montenegro (13,13)
Sweden (70,32)
Iran (93,18)
Luxembourg (3,2)
Algeria (4,2)
Philippines (12,7)
Ukraine (2,2)
Yemen (3,3)
Turkmenistan (2,2)
Netherlands (30,1)
Belarus (2,2)
Liberia (3,3)
Papua New Guinea (3,1)
France (25,6)
Eswatini (2,2)
North Korea (0,0)
Maldives (4,2)
Indonesia (13,8)
South Africa (22,12)
Sao Tome & Principe (3,3)
Mali (3,0)
Comoros (1,1)
Central African Republic (4,0)
Gabon (1,0)
Cote d'Ivoire (3,0)
Kenya (4,2)
Burkina Faso (5,2)
Mauritania (1,0)
Mozambique (2,2)
Nigeria (19,3)
Cabo Verde (2,2)
Nauru (6,6)
Namibia (2,1)
Ethiopia (7,4)
Senegal (5,2)
South Sudan (1,0)
Myanmar (5,2)
Rwanda (4,4)
Angola (1,0)
Togo (2,2)
Bhutan (3,2)
Ghana (12,3)
Zambia (3,1)
Sri Lanka (8,4)
Nepal (13,5)
India (92,17)

Tonga (5,3)
Cook Islands (2,2)
Samoa (9,7)
Chile (14,5)
Saudi Arabia (15,12)
Puerto Rico (3,2)
Tokelau (2,2)
St. Kitts & Nevis (1,0)
Bahamas (2,2)
Croatia (9,4)
Argentina (13,3)
Belize (2,2)
Hungary (15,8)
Guatemala (7,2)
Nicaragua (1,0)
Singapore (14,10)
Brazil (52,8)
Malta (3,1)
Greece (13,5)
Costa Rica (9,8)
Micronesia (6,0)
Bahrain (5,3)
United Kingdom (88,51)
Bolivia (2,2)
Canada (24,10)
Ecuador (6,5)
Uzbekistan (4,3)
Iraq (2,2)
Serbia (12,4)
Ireland (9,9)
Antigua & Barbuda (0,0)
Syrian Arab Republic (1,1)
Mongolia (6,6)
Taiwan (12,8)
United Arab Emirates (4,3)
Cyprus (2,2)
Fiji (6,3)
Trinidad & Tobago (4,3)
Dominican Republic (5,5)
Portugal (26,19)
Finland (46,20)
Kiribati (4,2)
Tunisia (5,3)
Czechia (17,13)
Andorra (1,1)
Palau (2,2)
Lithuania (11,2)
Colombia (16,6)
Guyana (2,2)
Thailand (12,9)
St. Vincent & the Grenadines (1,1)
Mauritius (8,6)
Bosnia & Herzegovina (3,0)
Armenia (2,2)
Bulgaria (5,3)
Azerbaijan (3,3)
Germany (82,14)
Belgium (30,4)
Italy (61,8)
Moldova (2,2)
Estonia (14,9)
Solomon Islands (7,1)
Kazakhstan (8,1)
Morocco (2,2)
Cuba (8,3)
China (134,49)
Spain (38,7)
Switzerland (29,20)
Haiti (2,0)
Sudan (3,1)
Vanuatu (3,2)
Somalia (1,0)
Eritrea (2,2)
Pakistan (9,5)
Cambodia (2,2)
Lao PDR (2,1)
Cameroon (9,0)
Uganda (10,5)
Niger (2,2)
Tanzania (7,1)
Burundi (0,0)
Djibouti (0,0)
Guinea Bissau (0,0)
Lesotho (3,3)
Benin (3,2)
Equatorial Guinea (0,0)
Botswana (2,2)
Chad (1,0)
Congo (4,0)
Madagascar (2,0)
Timor-Leste (5,2)
Malawi (5,2)
Guinea (1,0)
Gambia (3,2)
Zimbabwe (6,3)
Afghanistan (1,1)
Sierra Leone (3,3)
DR Congo (7,0)
Viet Nam (25,12)
Bangladesh (14,6)

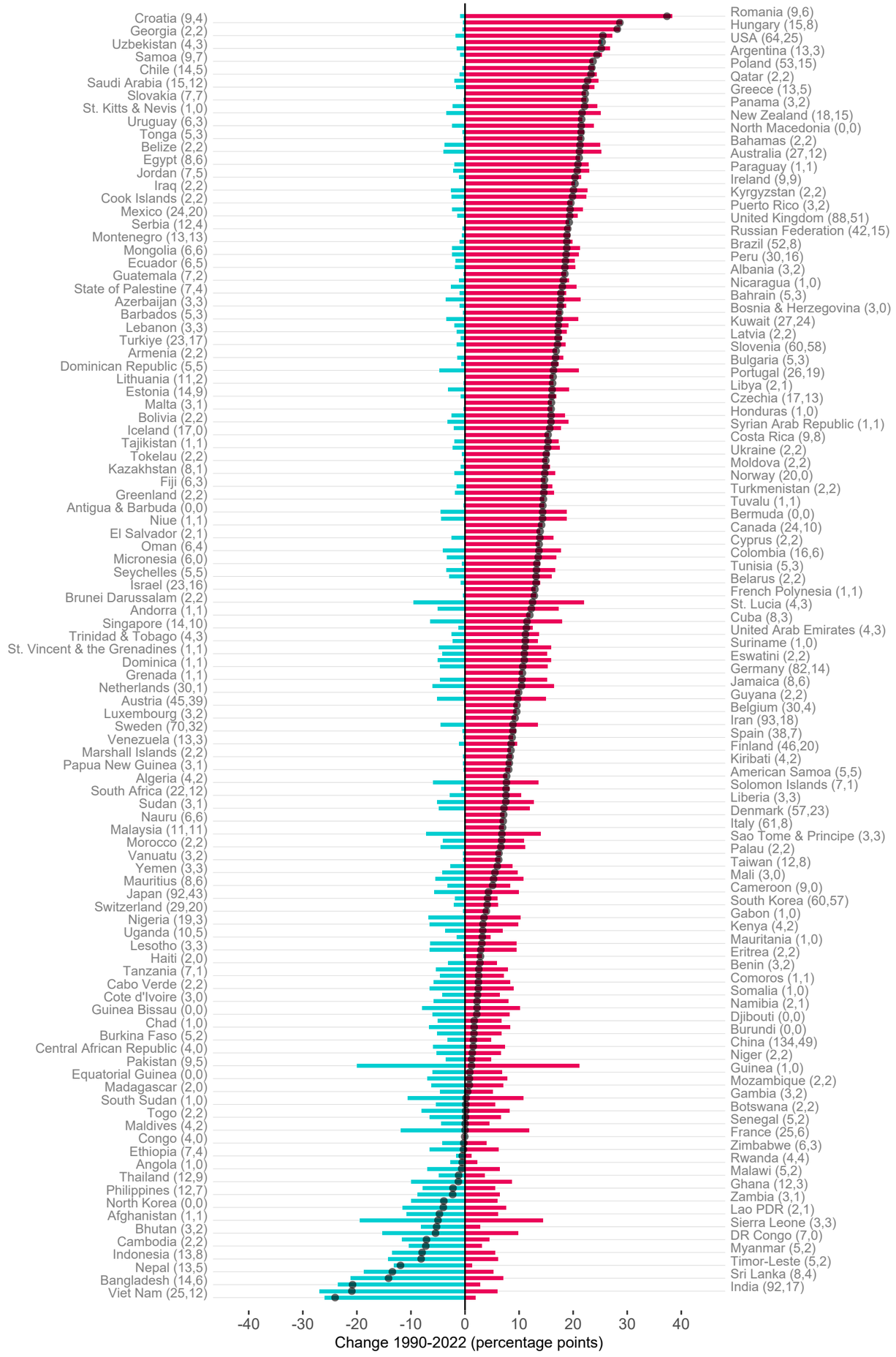
-40 -30 -20 -10 0 10 20 30 40

Change 1990-2022 (percentage points)

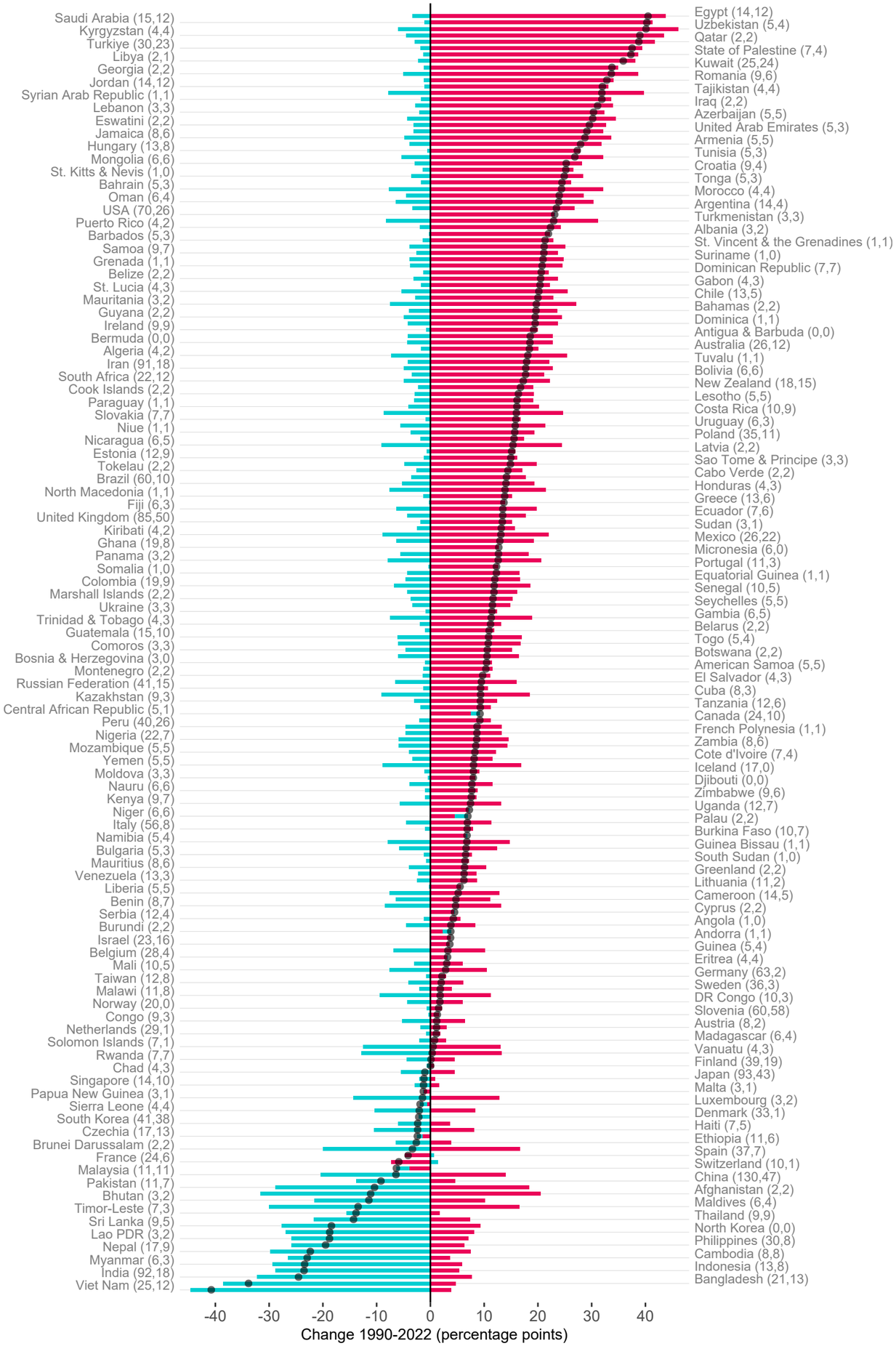
Women, 40-64 years



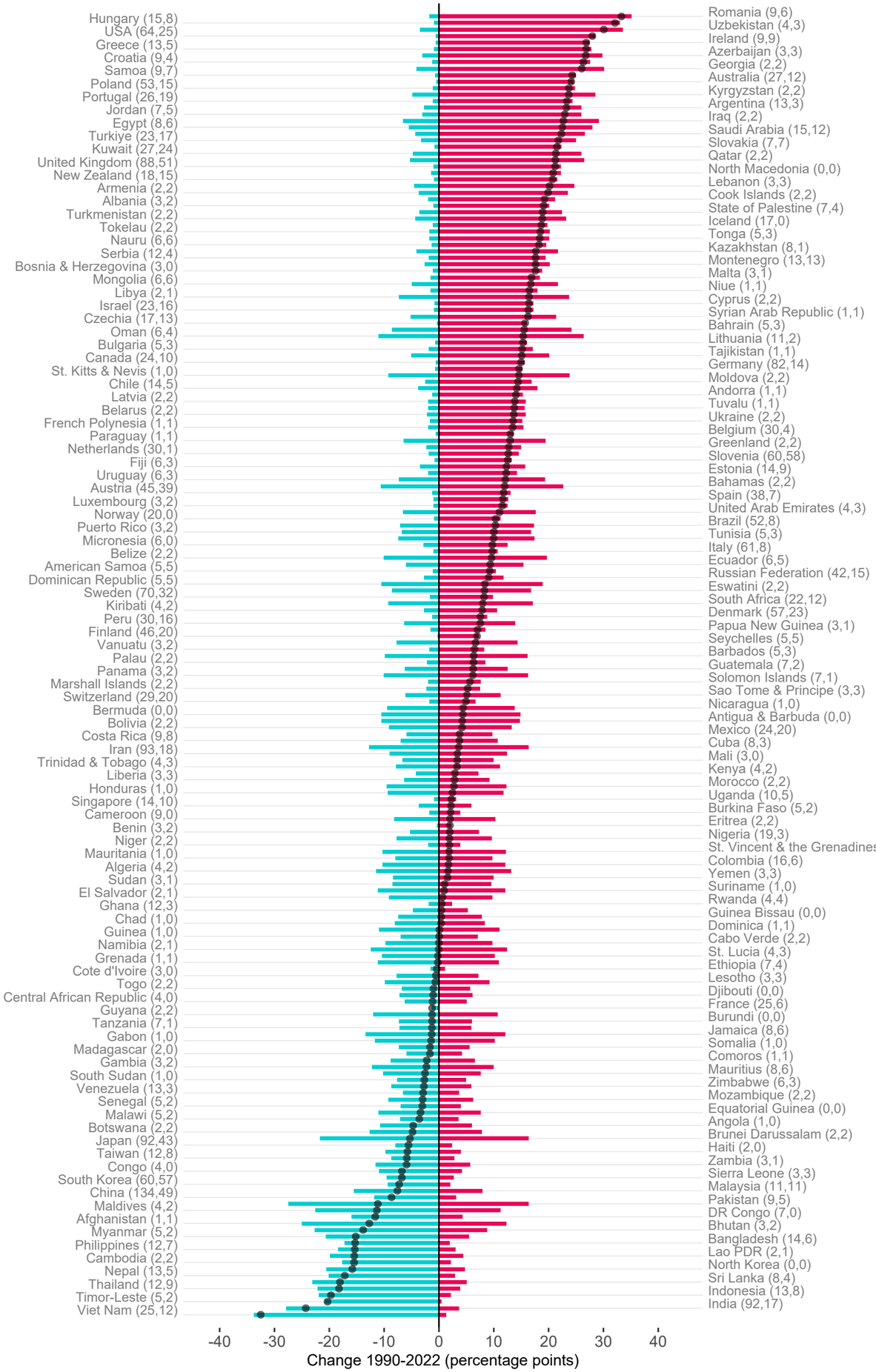
Men, 40-64 years



Women, 65+ years



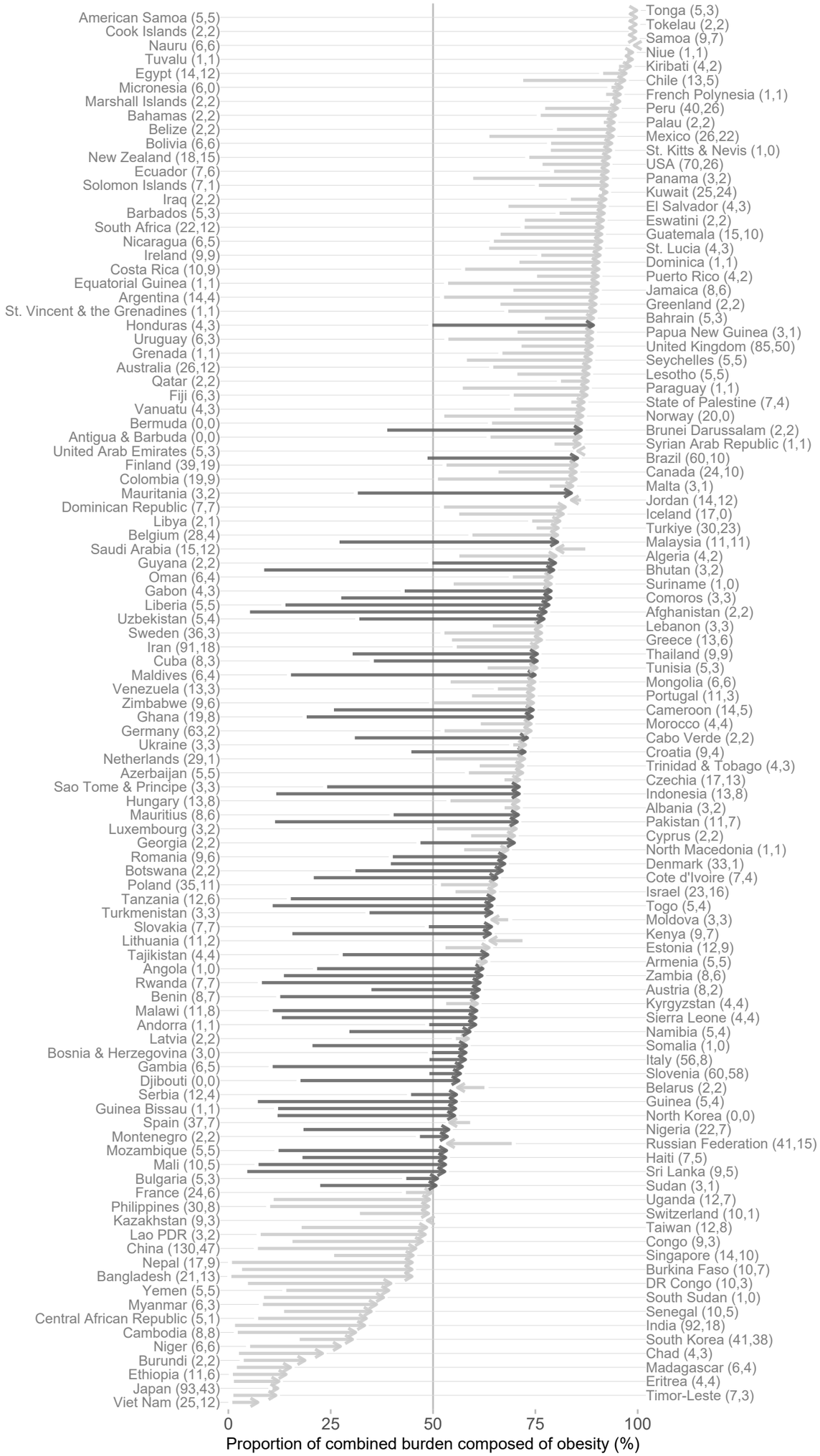
Men, 65+ years



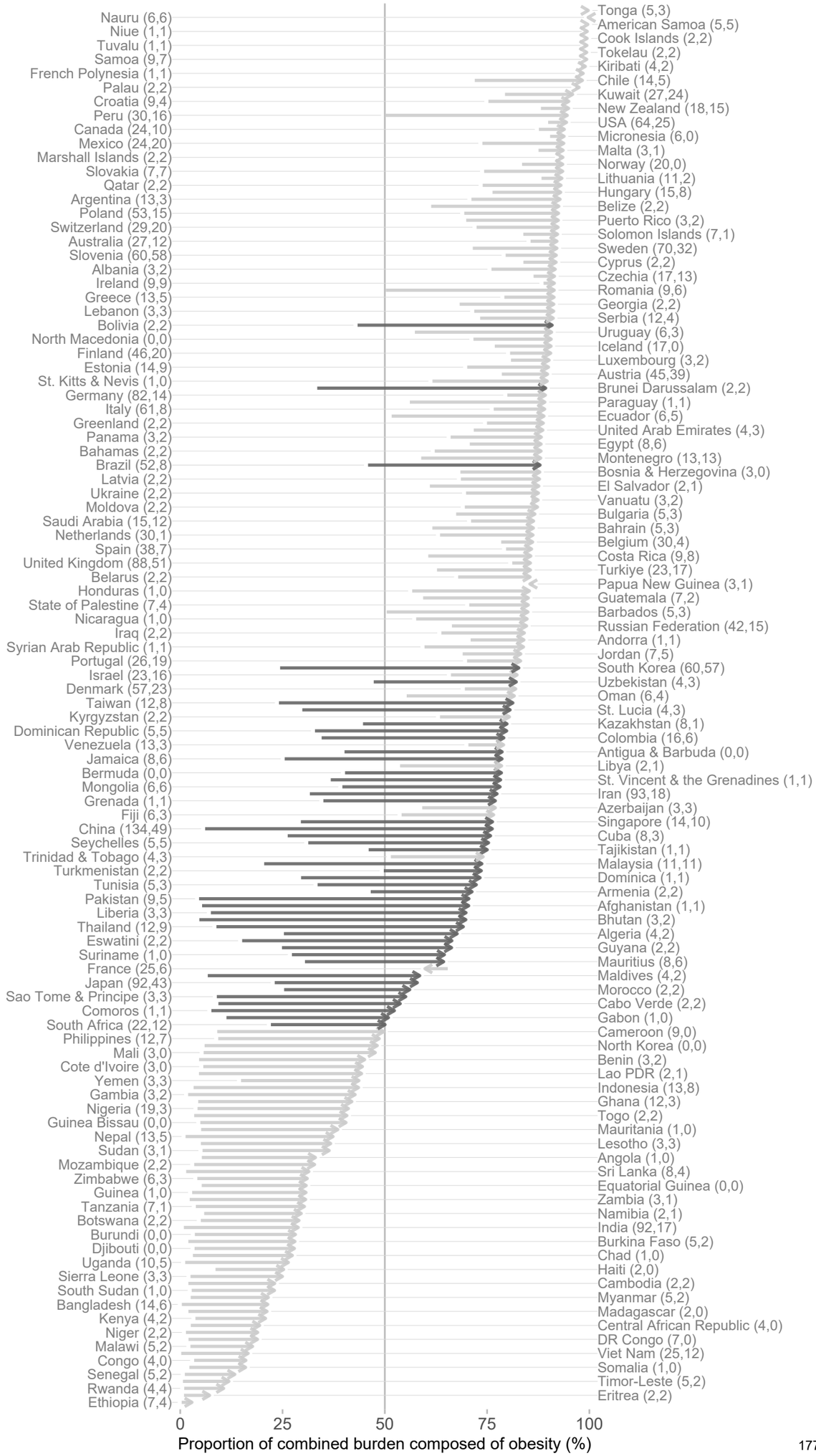
Appendix Figure 14. Change in composition of double burden from 1990 to 2022 for adults, by age group.

The arrows start from the proportion of double burden that was from obesity in 1990 and end at the proportion in 2022; they are ordered by the proportion in 2022. The arrows in darker shade show countries where double burden shifted from underweight dominance to obesity dominance. Prevalence was age-standardised within each age group presented.

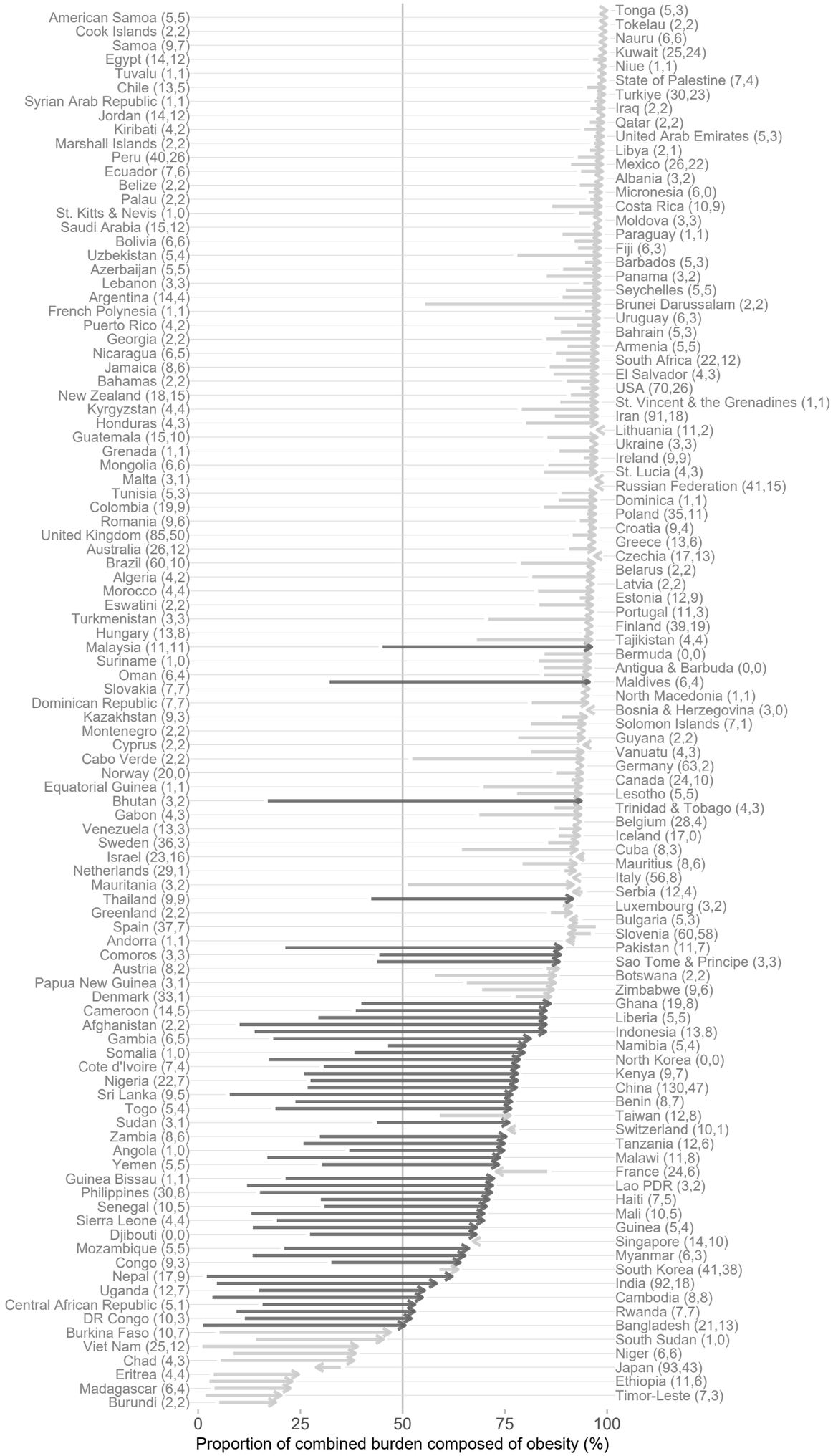
Women, 20-39 years



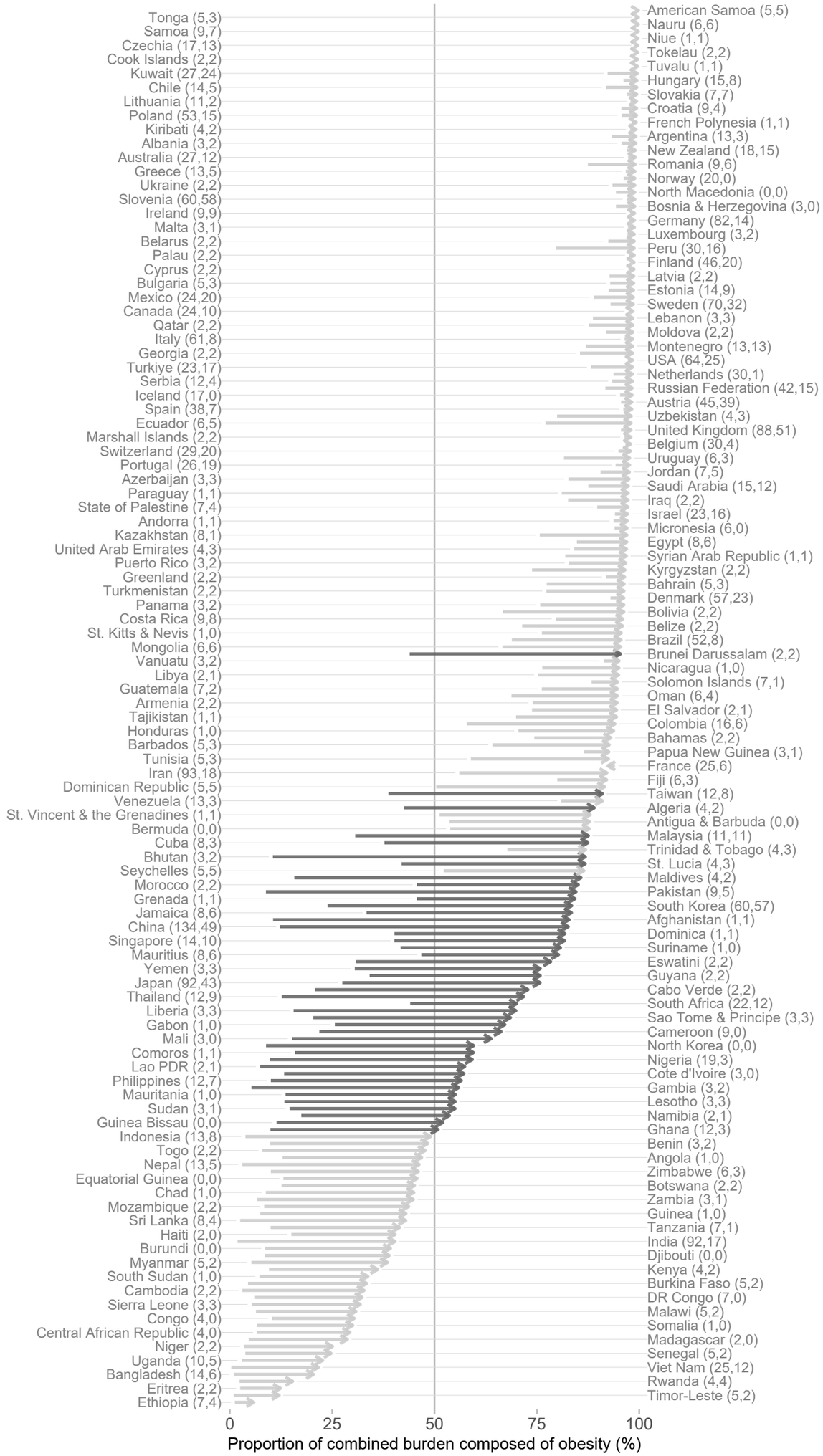
Men, 20-39 years



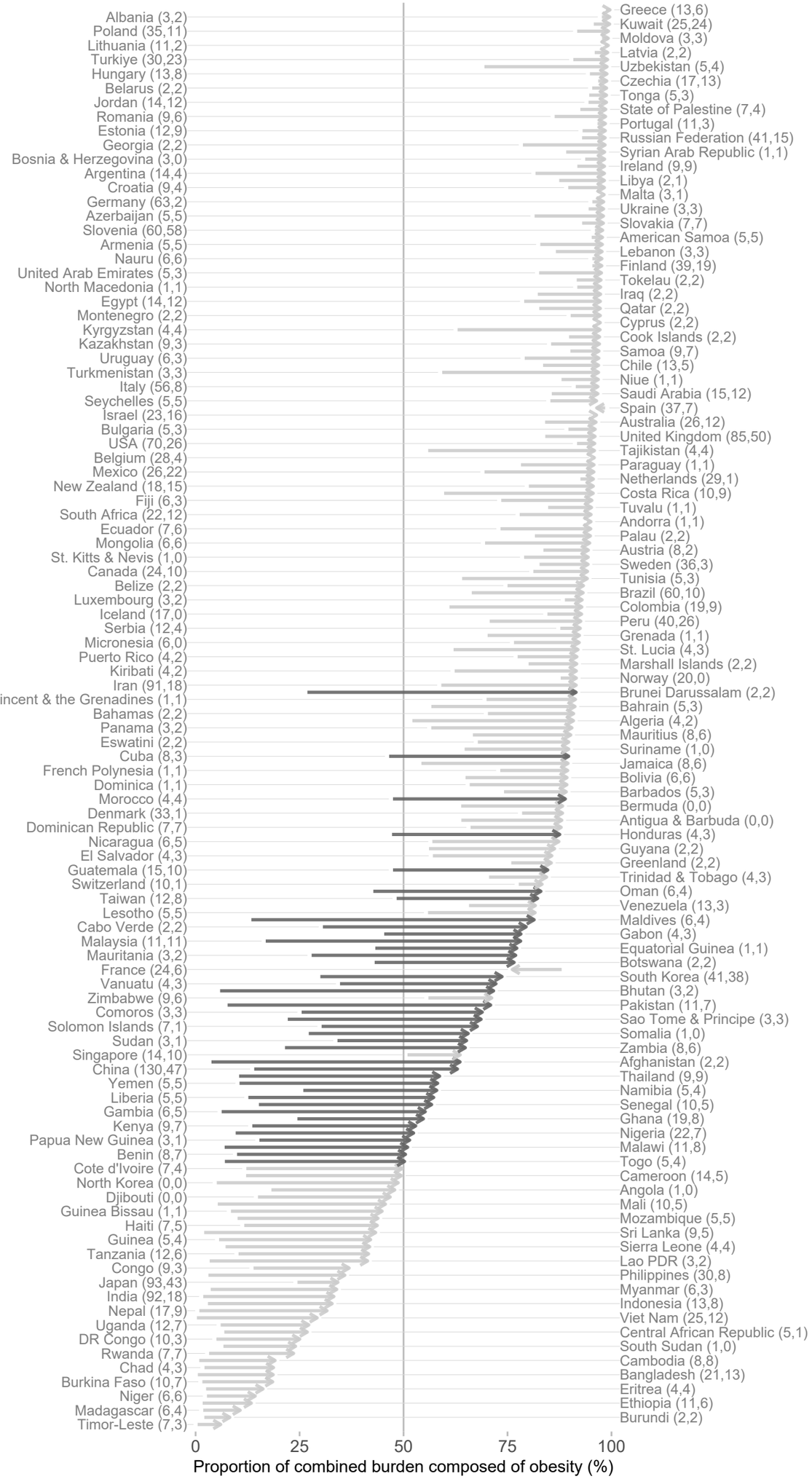
Women, 40-64 years



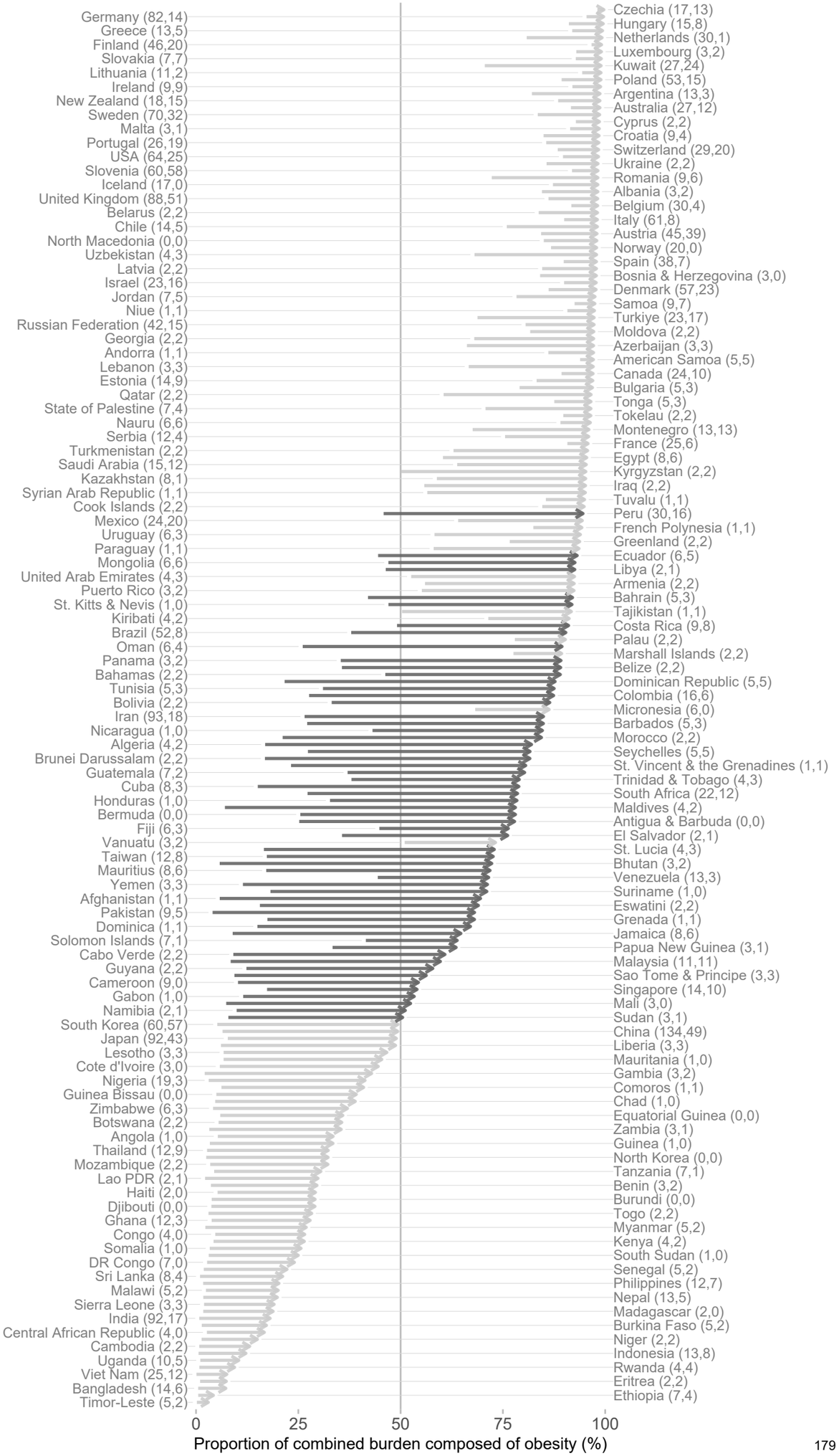
Men, 40-64 years



Women, 65+ years



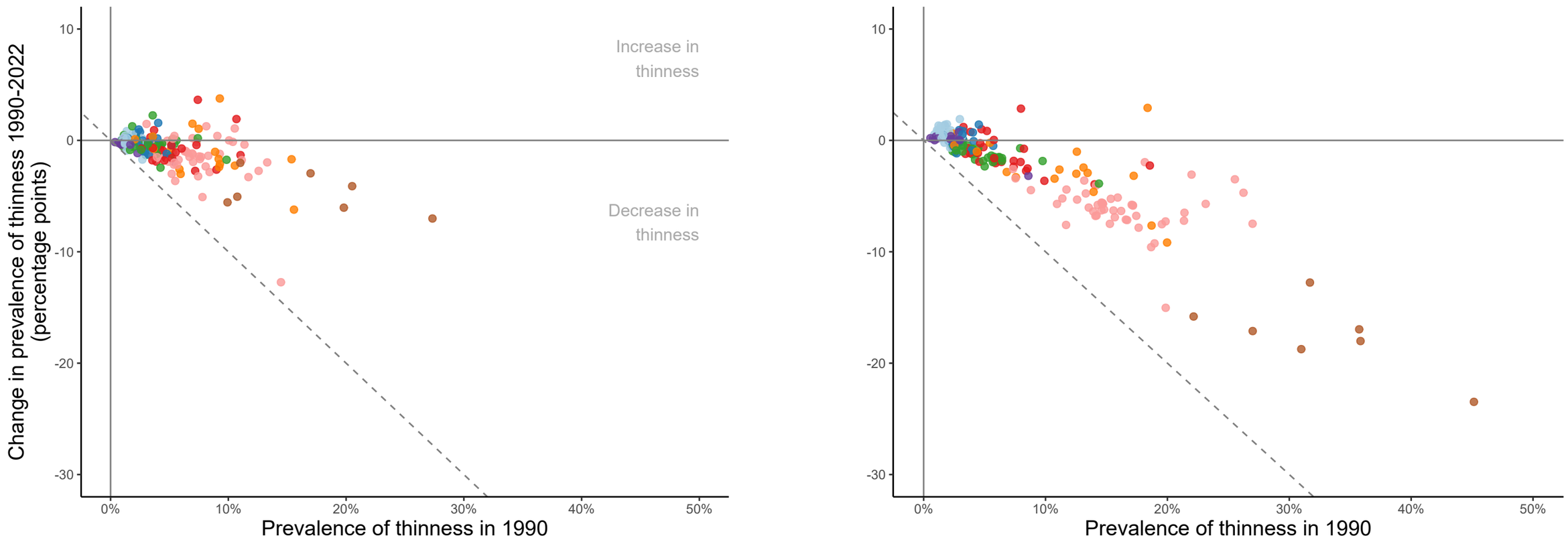
Men, 65+ years



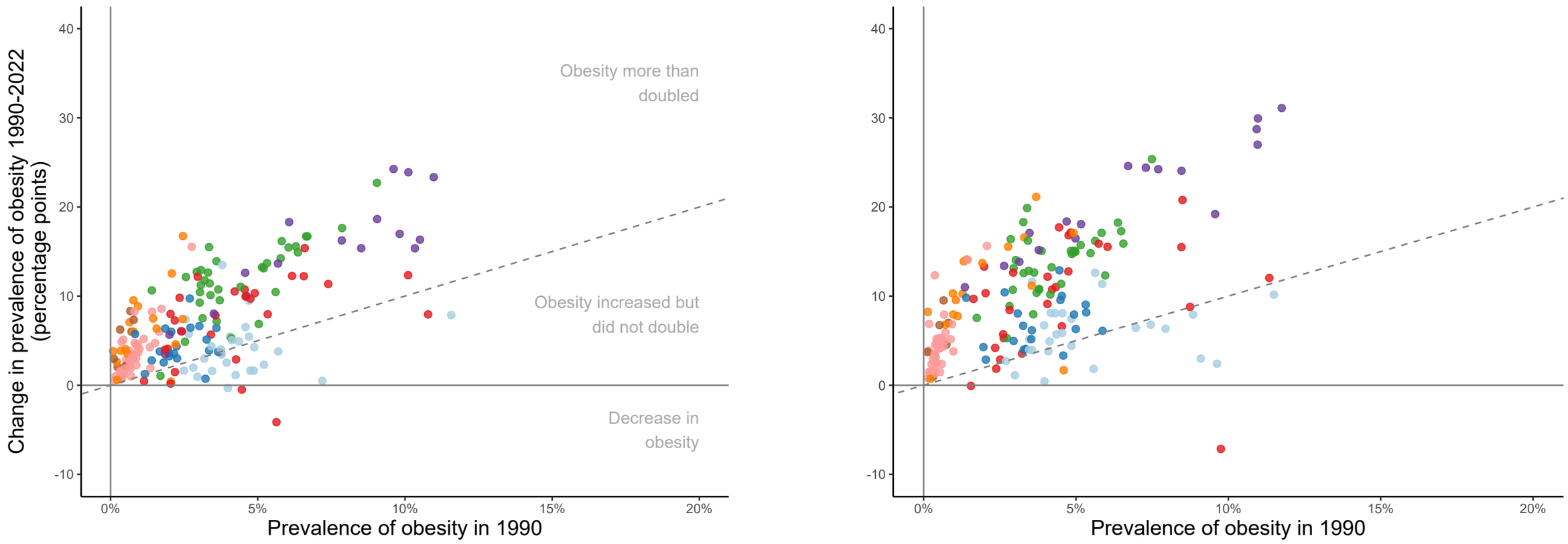
Appendix Figure 15. Change in age-standardised prevalence of thinness and obesity, for school-aged children and adolescents.

(A) Change in thinness from 1990 to 2022 in relation to thinness in 1990. (B) Change in obesity from 1990 to 2022 in relation to obesity in 1990. (C) Change in obesity in relation to change in thinness. The sloped solid line intersecting the origin delineates regions where an increase (above the line) or decrease (below) in the combined prevalence of thinness and obesity took place, and the dashed parallel lines indicate 10 percentage point intervals in change in combined prevalence.

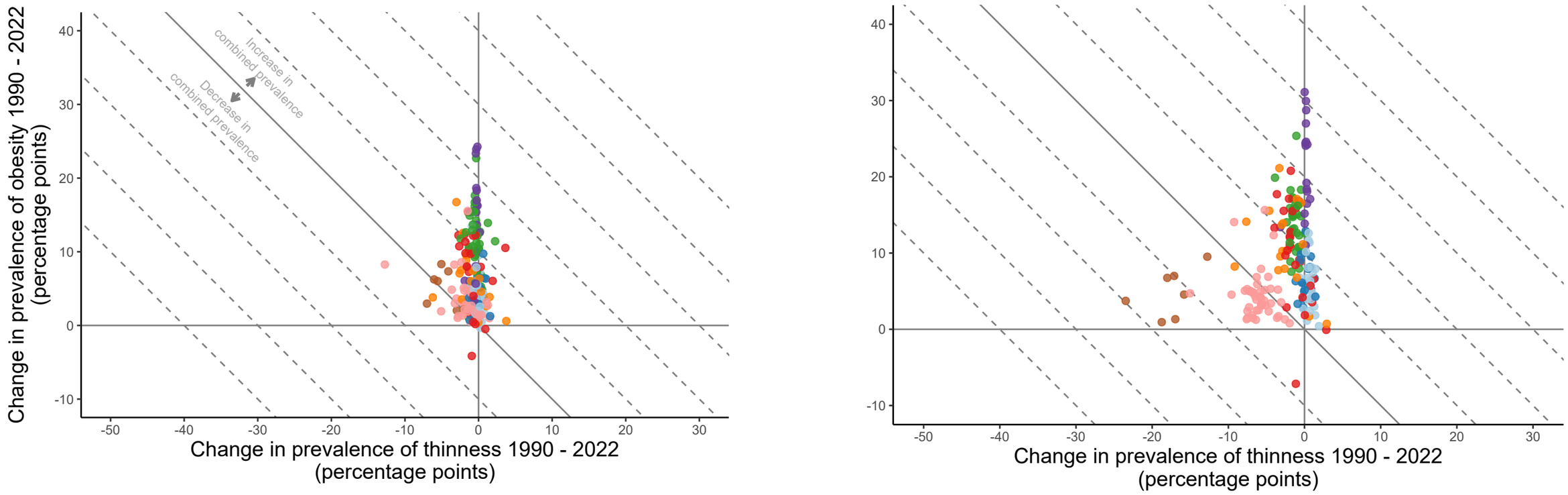
A



B



C

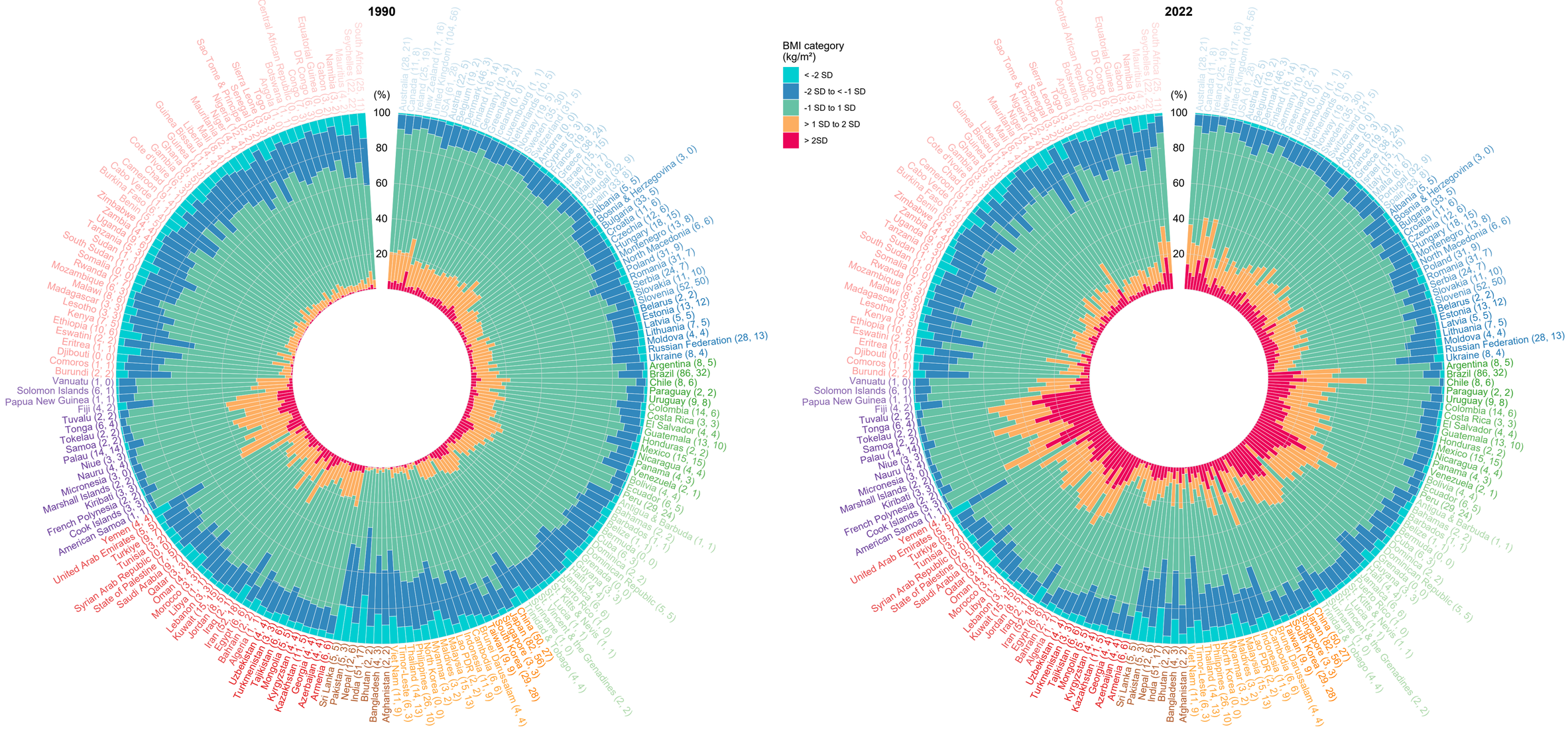


High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

Appendix Figure 16. Age-standardised prevalence of all BMI categories in 1990 and 2022, for school-aged children and adolescents.

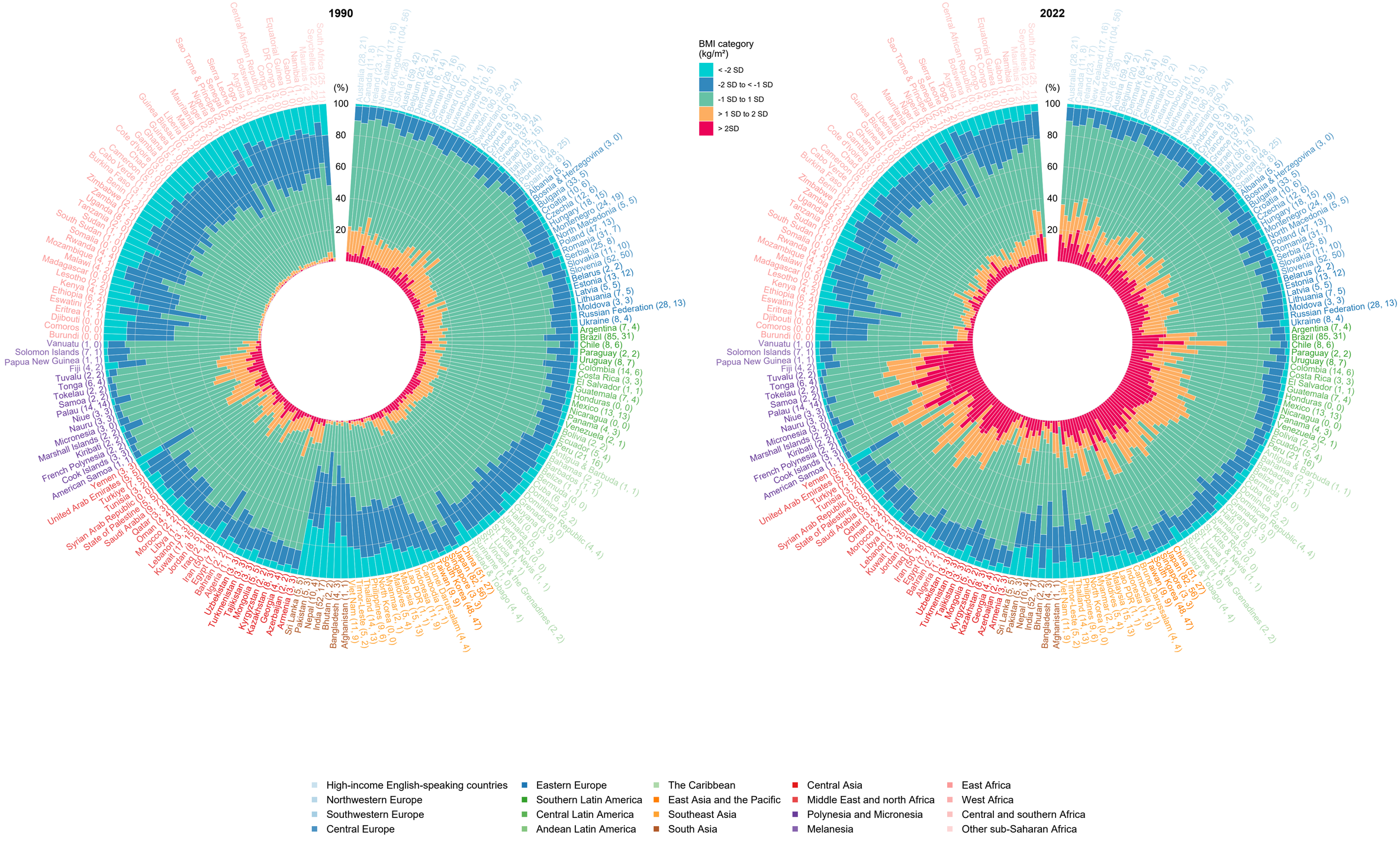
Country names are coloured by region. The numbers in brackets after each country's name show the total number of data sources and the number of nationally representative data sources, respectively. Countries are ordered alphabetically within each region.

Girls



High-income English-speaking countries
Northwestern Europe
Southwestern Europe
Central Europe
Eastern Europe
Southern Latin America
Central Latin America
Andean Latin America
The Caribbean
East Asia and the Pacific
Southeast Asia
South Asia
Central Asia
Middle East and north Africa
Polynesia and Micronesia
Melanesia
East Africa
West Africa
Central and southern Africa
Other sub-Saharan Africa

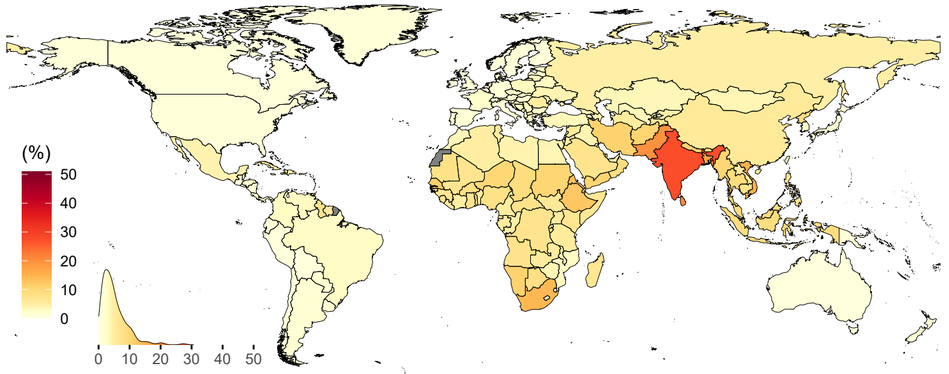
Boys


1990
2022
BMI category (kg/m²)
< -2 SD
-2 SD to < -1 SD
-1 SD to 1 SD
> 1 SD to 2 SD
> 2SD
(%)
100
80
60
40
20
High-income English-speaking countries
Northwestern Europe
Southwestern Europe
Central Europe
Eastern Europe
Southern Latin America
Central Latin America
Andean Latin America
The Caribbean
East Asia and the Pacific
Southeast Asia
South Asia
Central Asia
Middle East and north Africa
Polynesia and Micronesia
Melanesia
East Africa
West Africa
Central and southern Africa
Other sub-Saharan Africa

Appendix Figure 17. Age-standardised prevalence of thinness in 1990 and 2022, its change from 1990 to 2022, and posterior probability that the prevalence increased from 1990 to 2022, for school-aged children and adolescents.

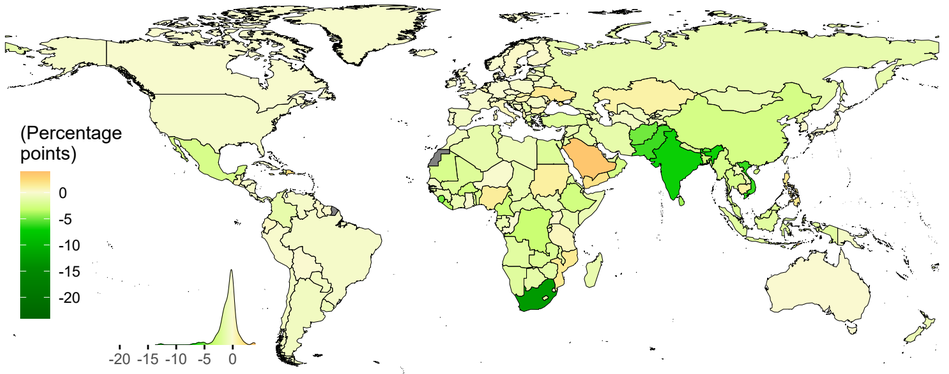
Girls

1990



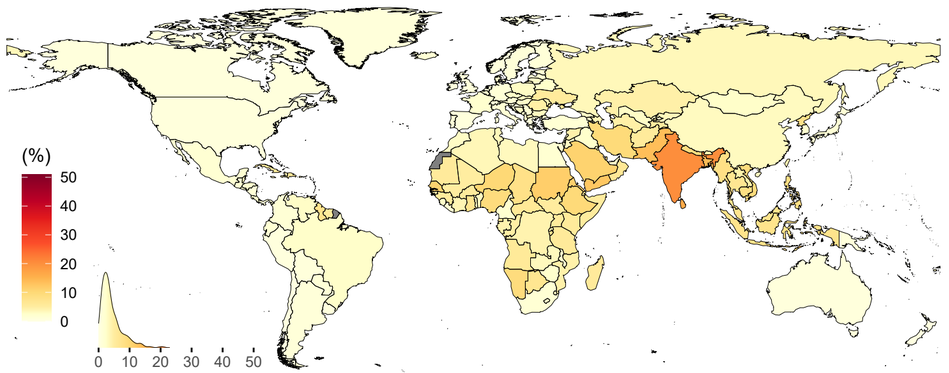
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



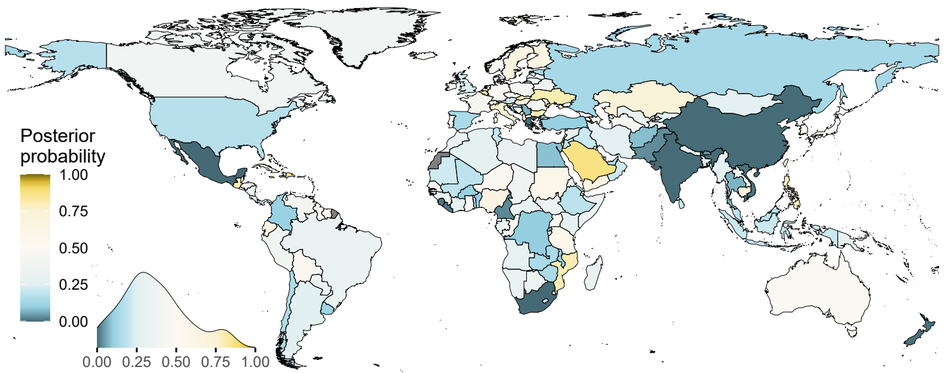
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

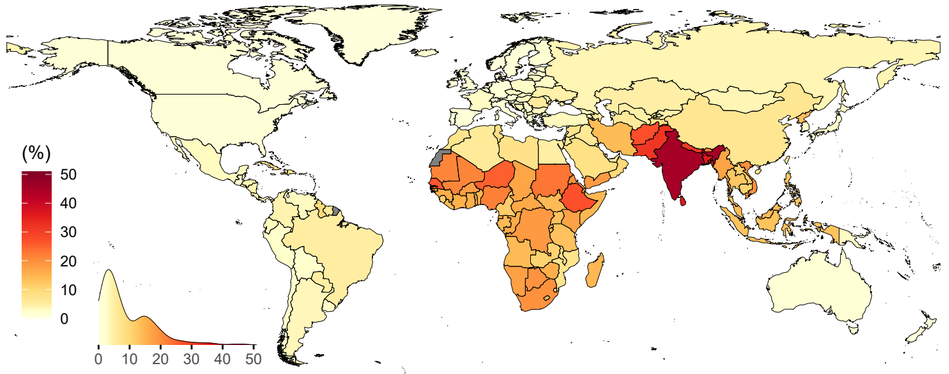
Posterior probability of an increase from 1990 to 2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

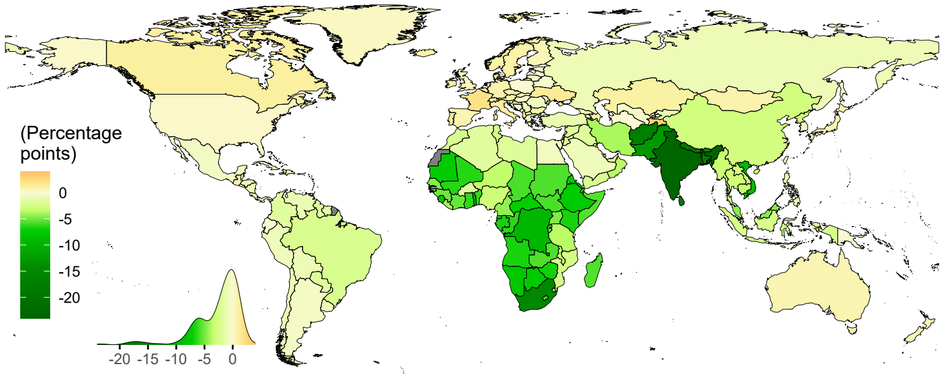
Boys

1990



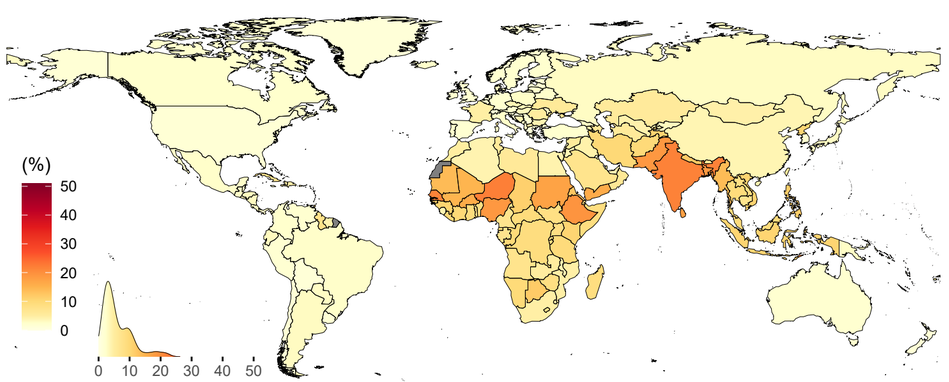
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



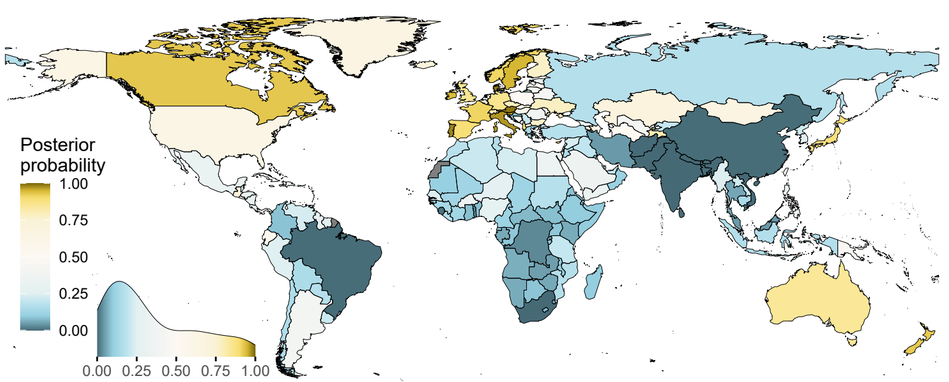
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Posterior probability of an increase from 1990 to 2022

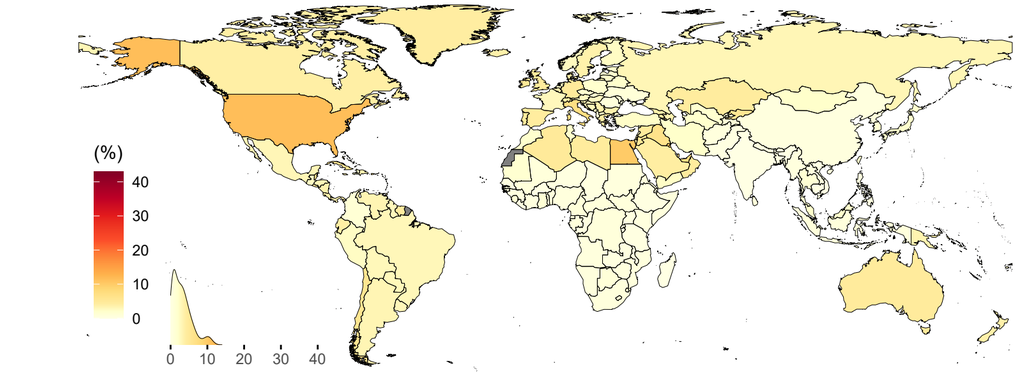


American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Appendix Figure 18. Age-standardised prevalence of obesity in 1990 and 2022, its change from 1990 to 2022, and posterior probability that the prevalence increased from 1990 to 2022, for school-aged children and adolescents.

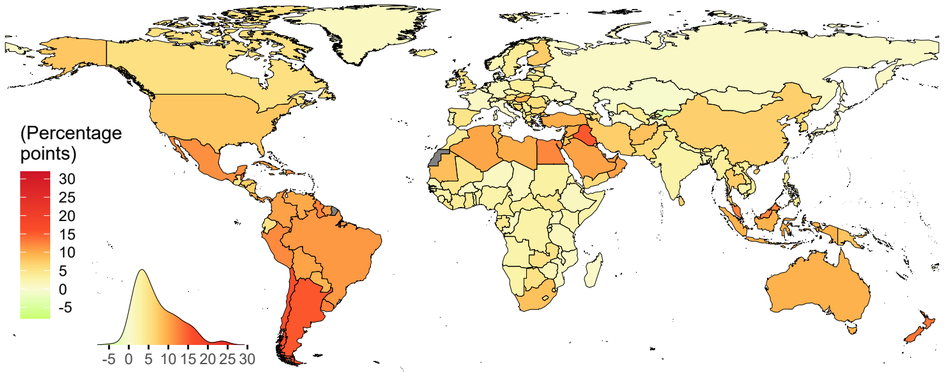
Girls

1990



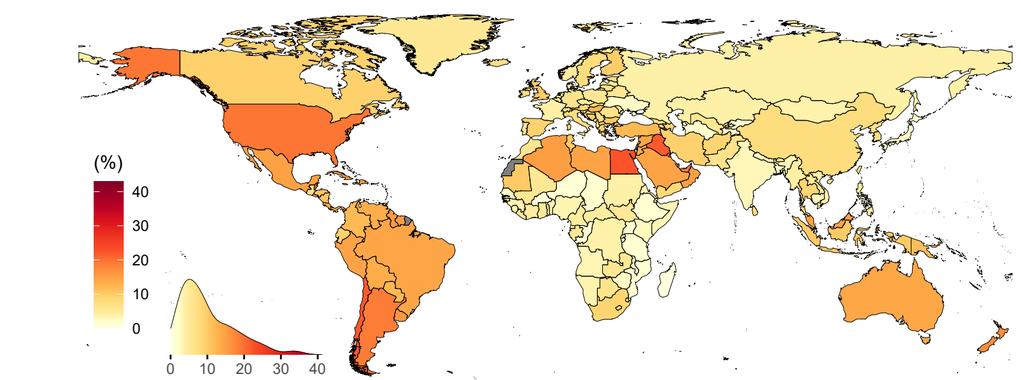
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



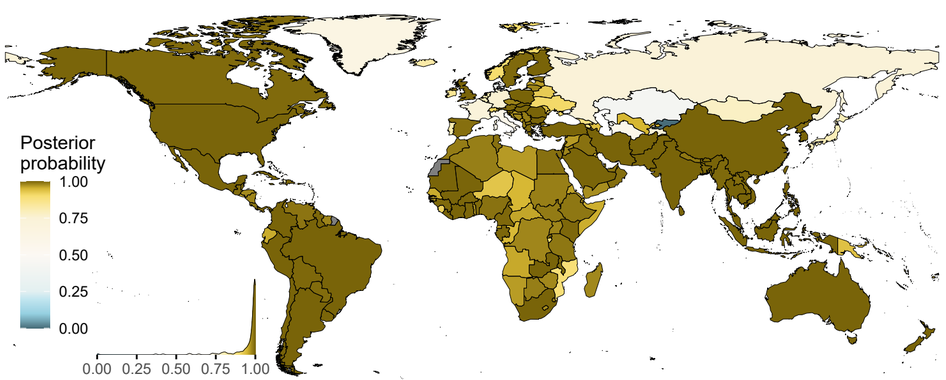
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

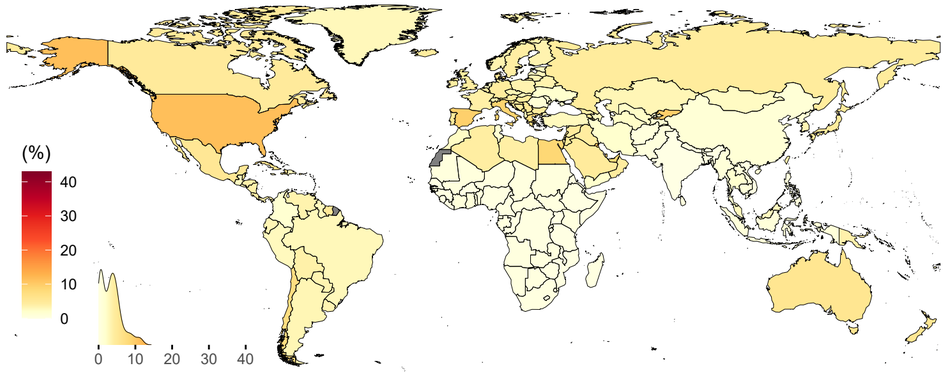
Posterior probability of an increase from 1990 to 2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

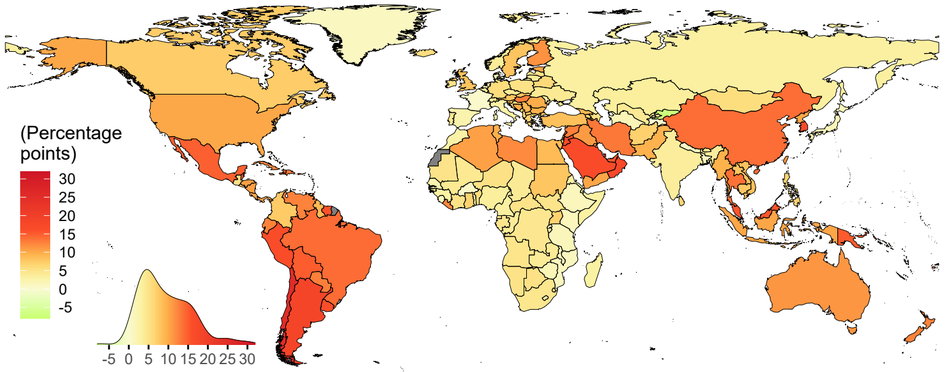
Boys

1990



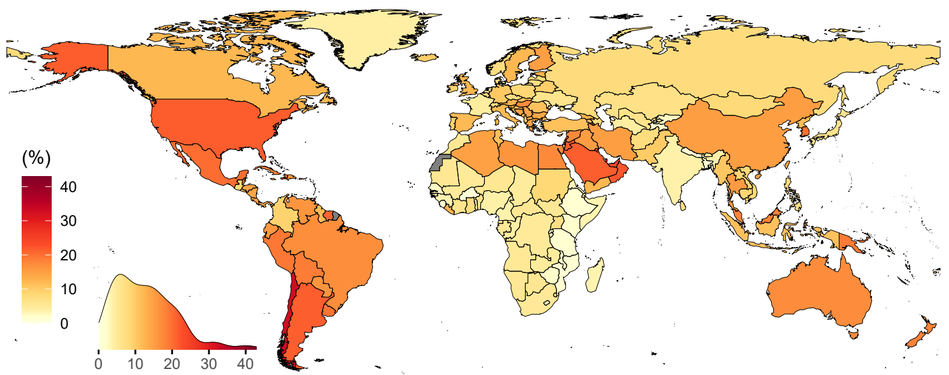
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Change from 1990 to 2022



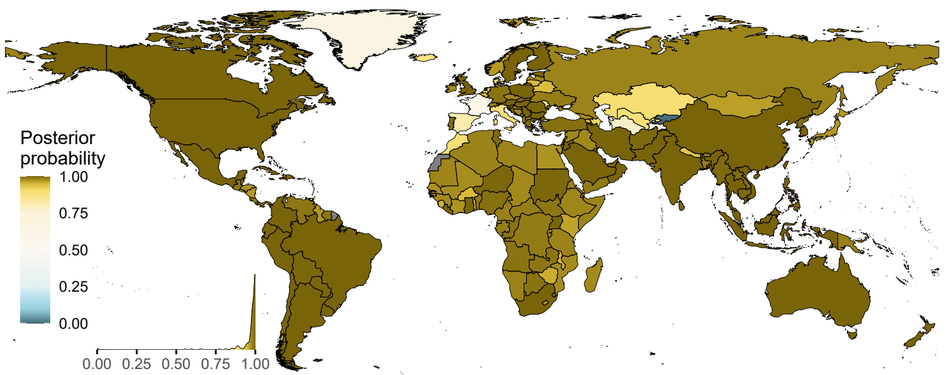
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

2022



American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

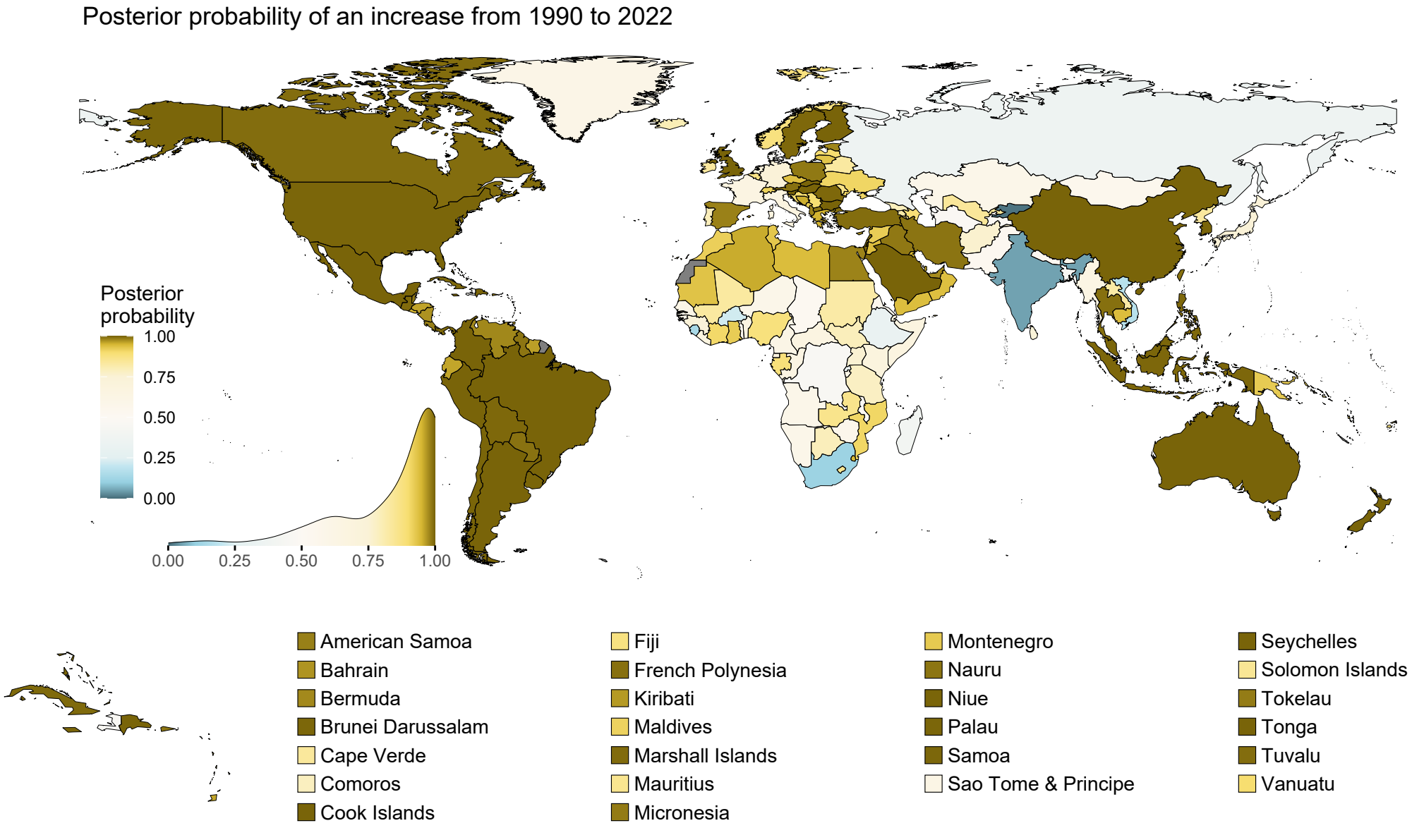
Posterior probability of an increase from 1990 to 2022



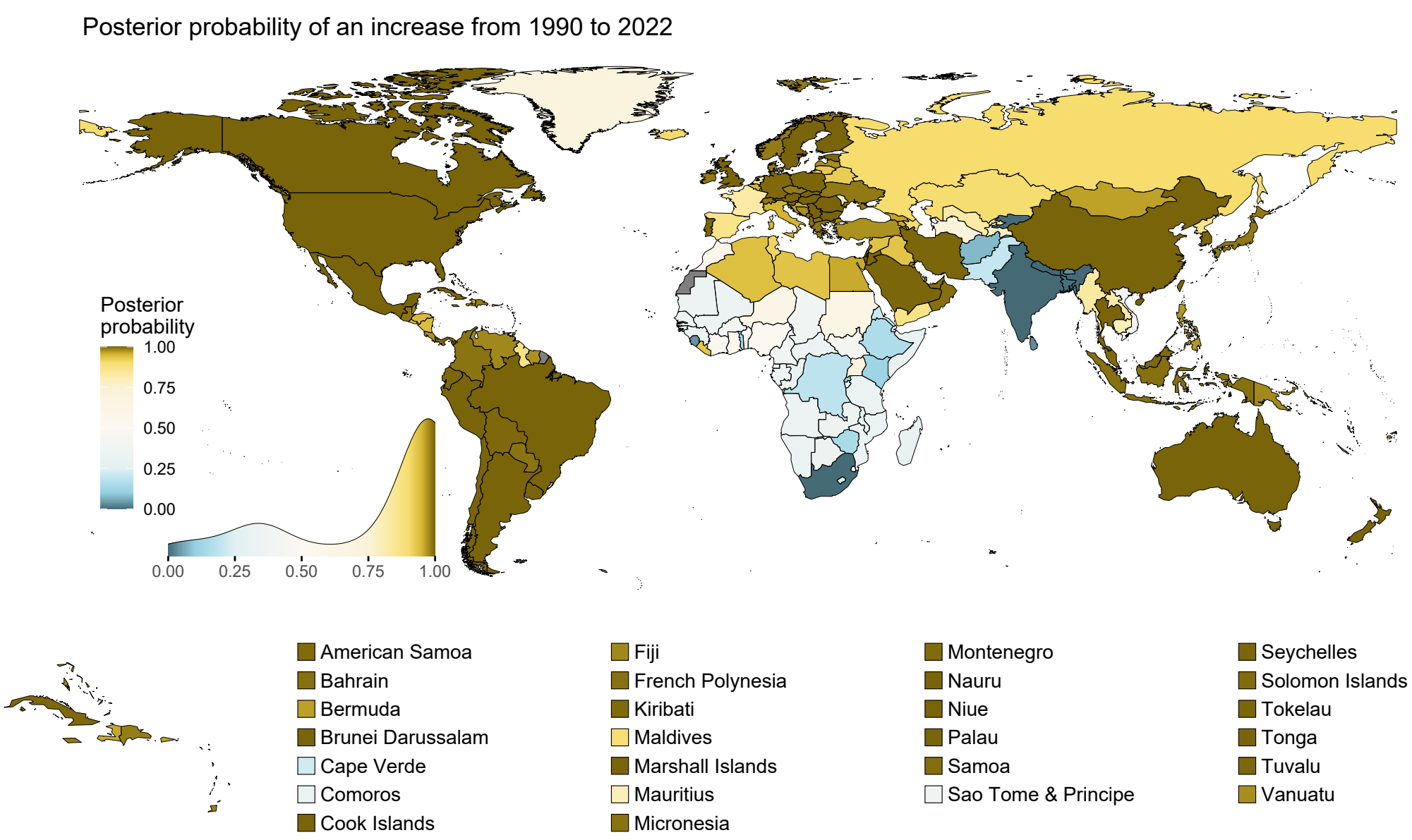
American Samoa, Bahrain, Bermuda, Brunei Darussalam, Cape Verde, Comoros, Cook Islands, Fiji, French Polynesia, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montenegro, Nauru, Niue, Palau, Samoa, Sao Tome & Principe, Seychelles, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu

Appendix Figure 19. Posterior probability that the age-standardised combined prevalence of thinness and obesity increased from 1990 to 2022, for school-aged children and adolescents.

Girls


Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00
0.25
0.50
0.75
1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

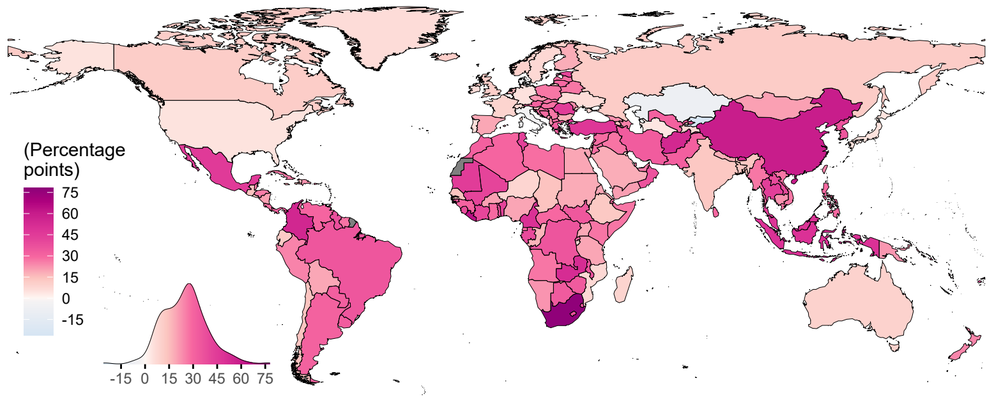
Boys


Posterior probability of an increase from 1990 to 2022
Posterior probability
1.00
0.75
0.50
0.25
0.00
0.00
0.25
0.50
0.75
1.00
American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

Appendix Figure 20. Change in age-standardised proportion of combined burden composed of obesity and posterior probability that the proportion increased from 1990 to 2022, for school-aged children and adolescents.

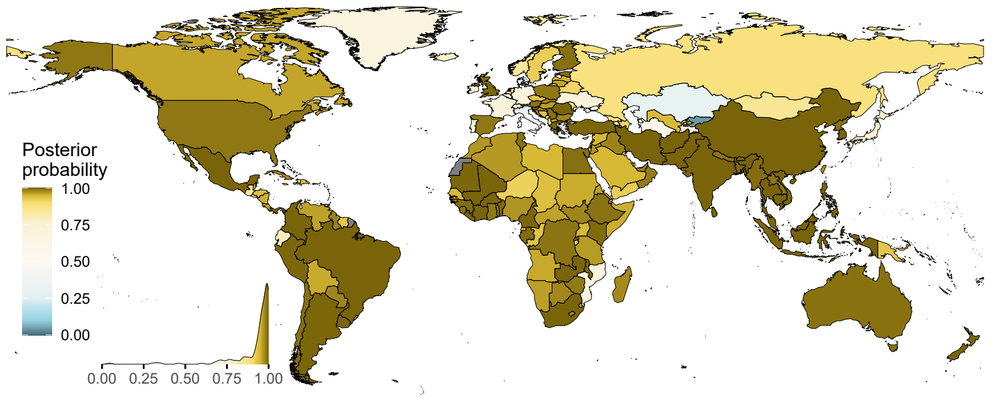
Girls

Change from 1990 to 2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

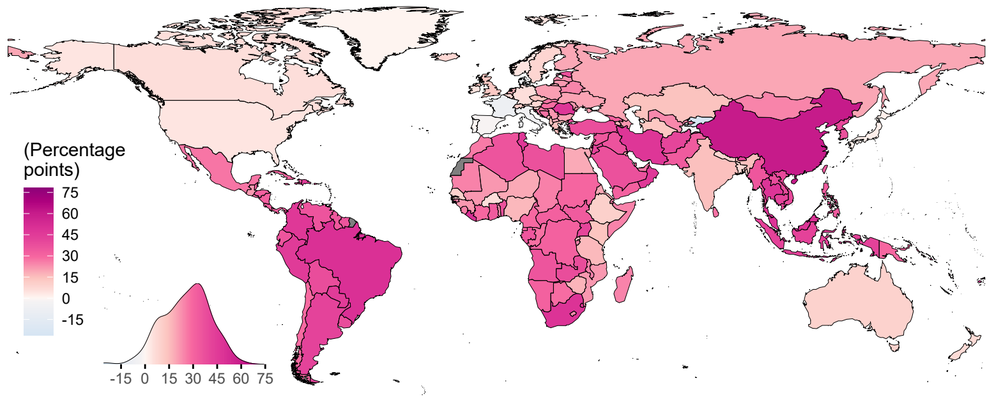
Posterior probability of an increase from 1990 to 2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

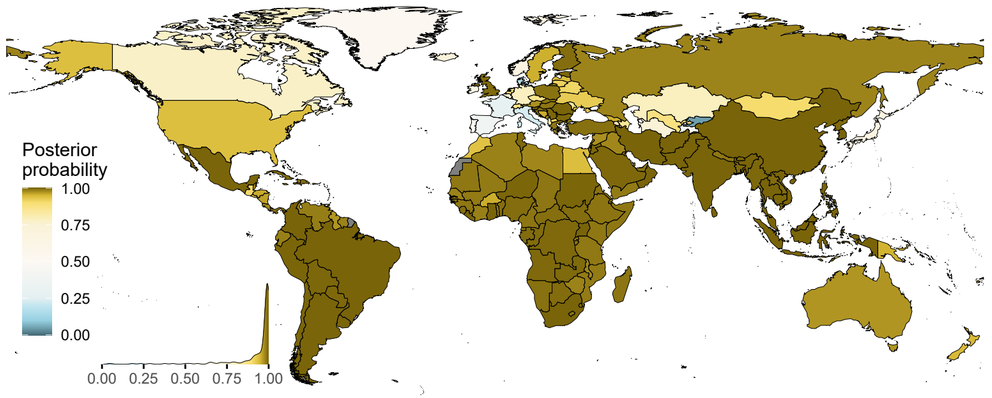
Boys

Change from 1990 to 2022



American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

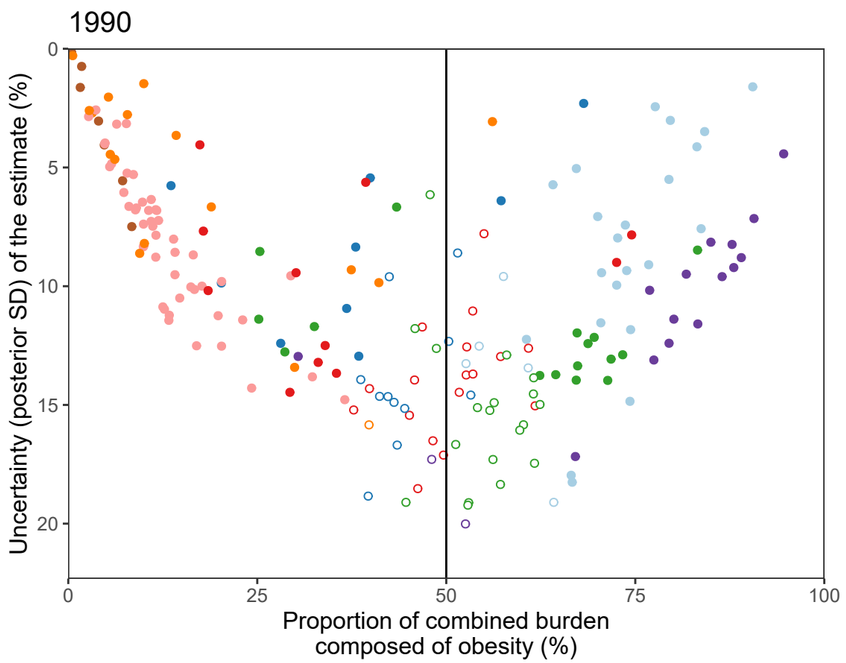
Posterior probability of an increase from 1990 to 2022

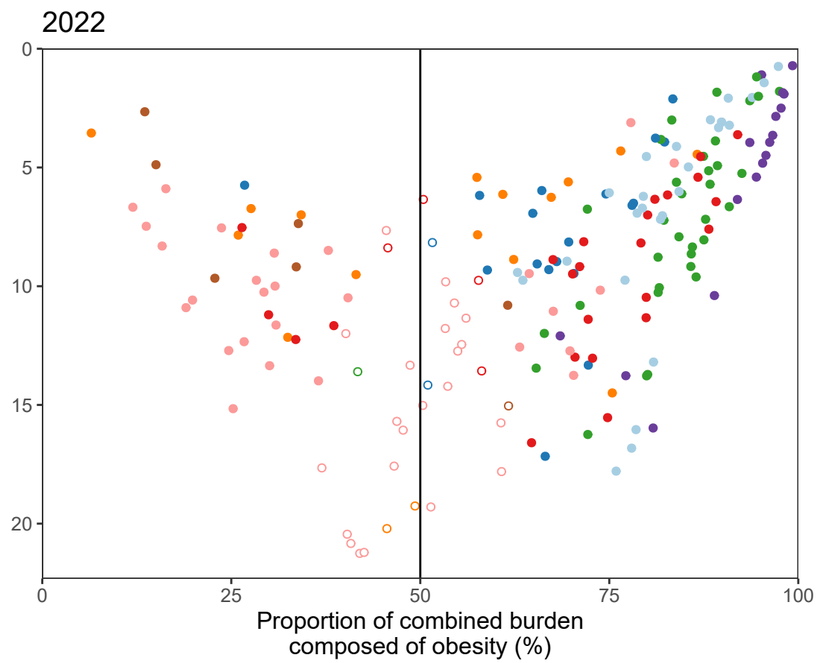


American Samoa
Bahrain
Bermuda
Brunei Darussalam
Cape Verde
Comoros
Cook Islands
Fiji
French Polynesia
Kiribati
Maldives
Marshall Islands
Mauritius
Micronesia
Montenegro
Nauru
Niue
Palau
Samoa
Sao Tome & Principe
Seychelles
Solomon Islands
Tokelau
Tonga
Tuvalu
Vanuatu

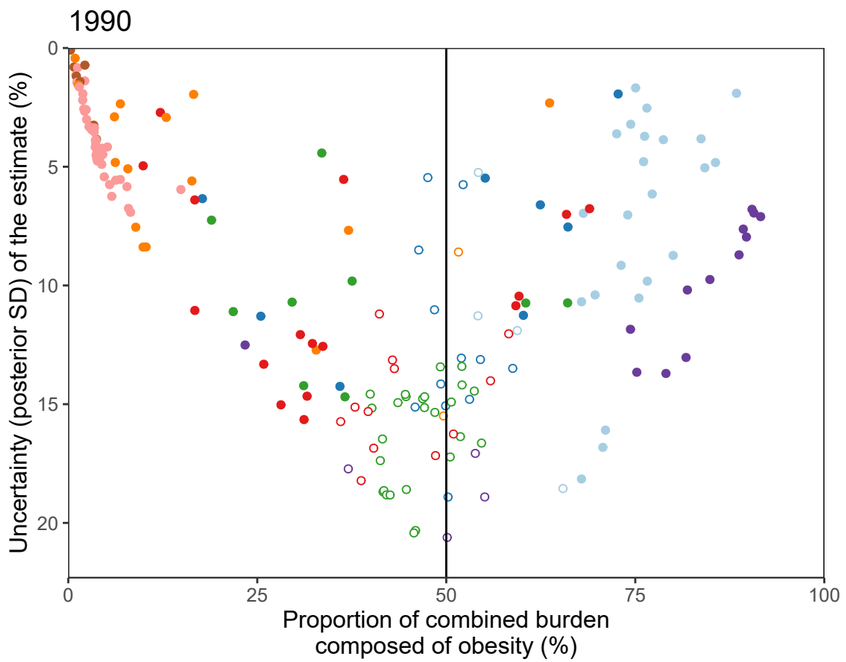
Appendix Figure 21. Age-standardised proportion of the combined burden of thinness and obesity composed of obesity in 1990 and 2022, in relation to the uncertainty of the proportion measured by posterior standard deviation, for school-aged children and adolescents.

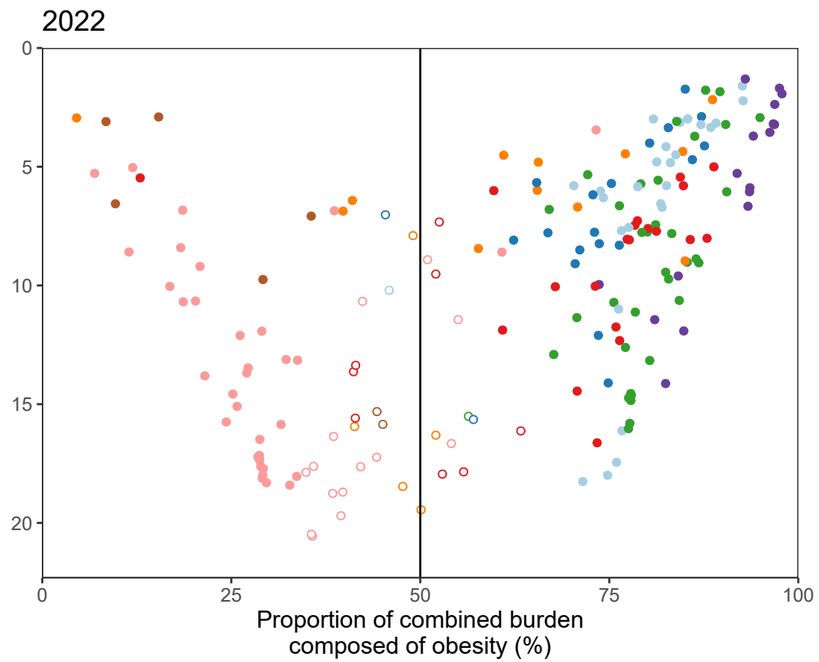
Girls

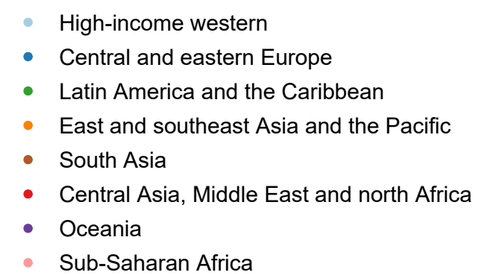

1990
Uncertainty (posterior SD) of the estimate (%)
0
5
10
15
20
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

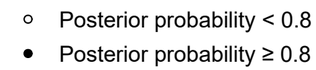

2022
0
5
10
15
20
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

Boys


1990
Uncertainty (posterior SD) of the estimate (%)
0
5
10
15
20
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

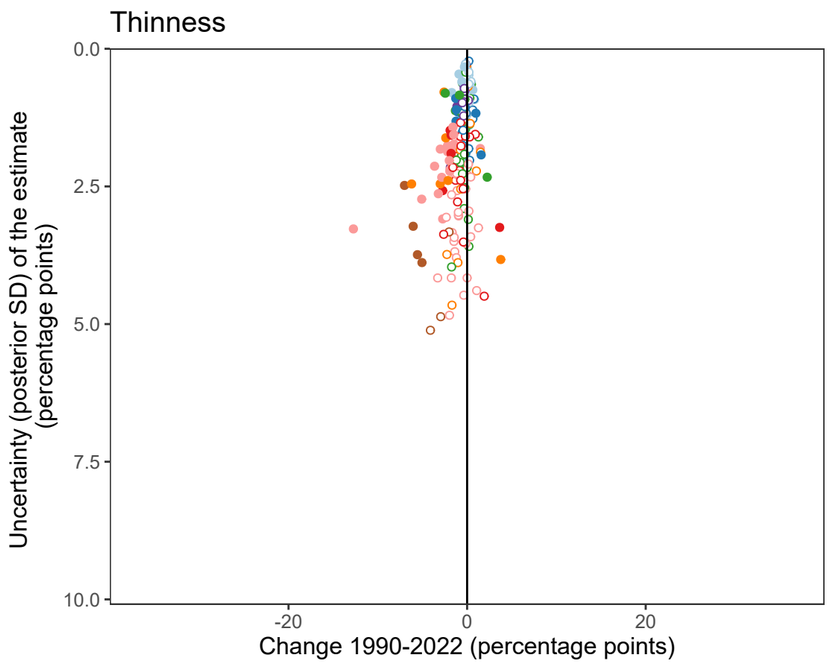

2022
0
5
10
15
20
0
25
50
75
100
Proportion of combined burden composed of obesity (%)

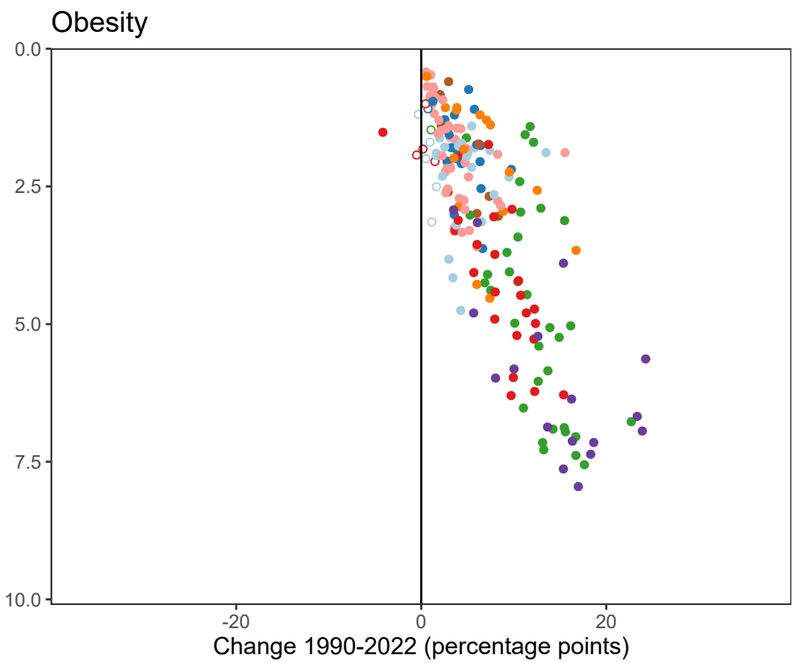

High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

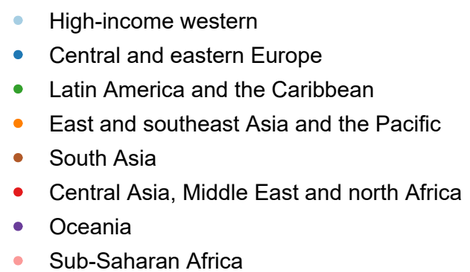

Posterior probability < 0.8
Posterior probability ≥ 0.8

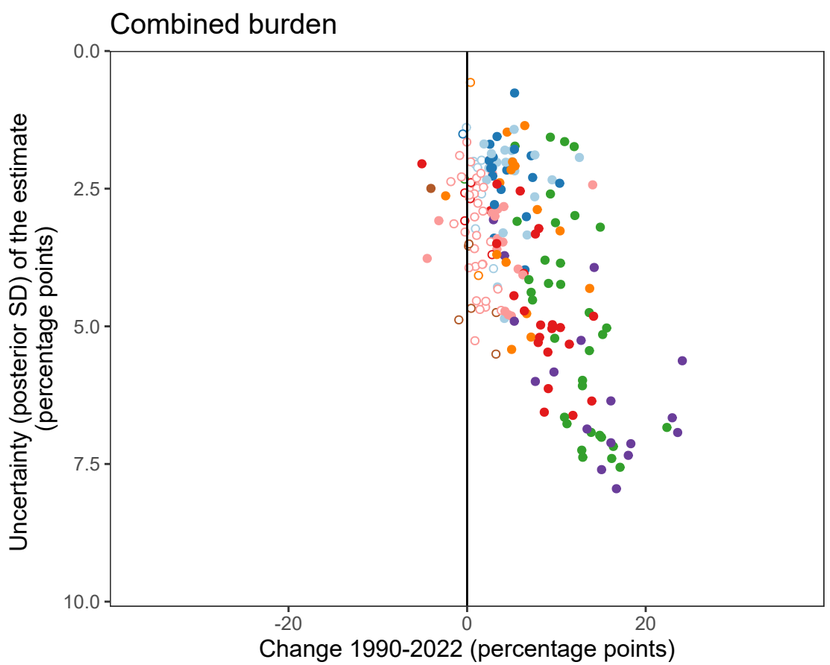
Appendix Figure 22. Change in age-standardised thinness, obesity, combined burden, and the proportion of combined burden composed of obesity from 1990 to 2022, in relation to the uncertainty of the change measured by posterior standard deviation, for school-aged children and adolescents.

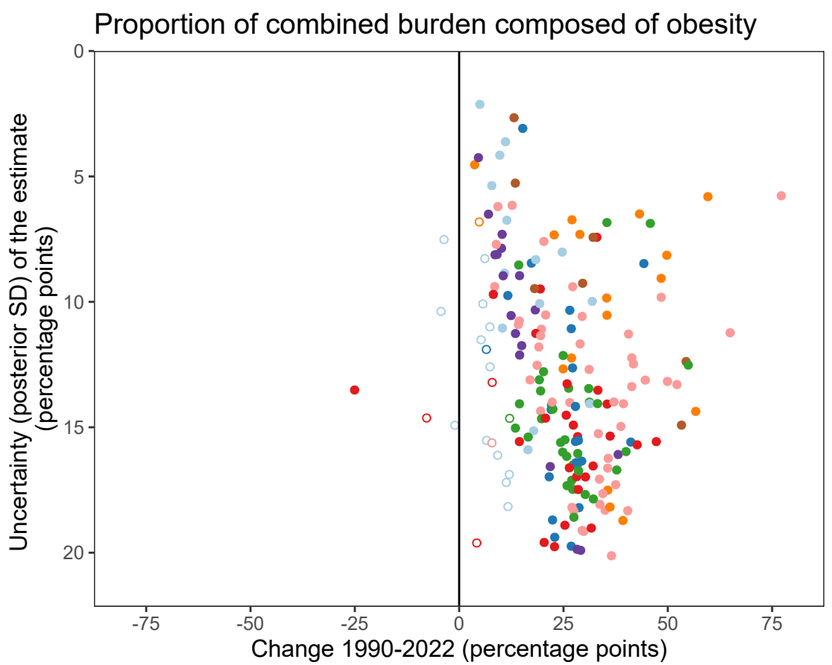
Girls

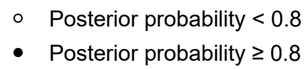

Thinness
Uncertainty (posterior SD) of the estimate (percentage points)
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)


Obesity
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)

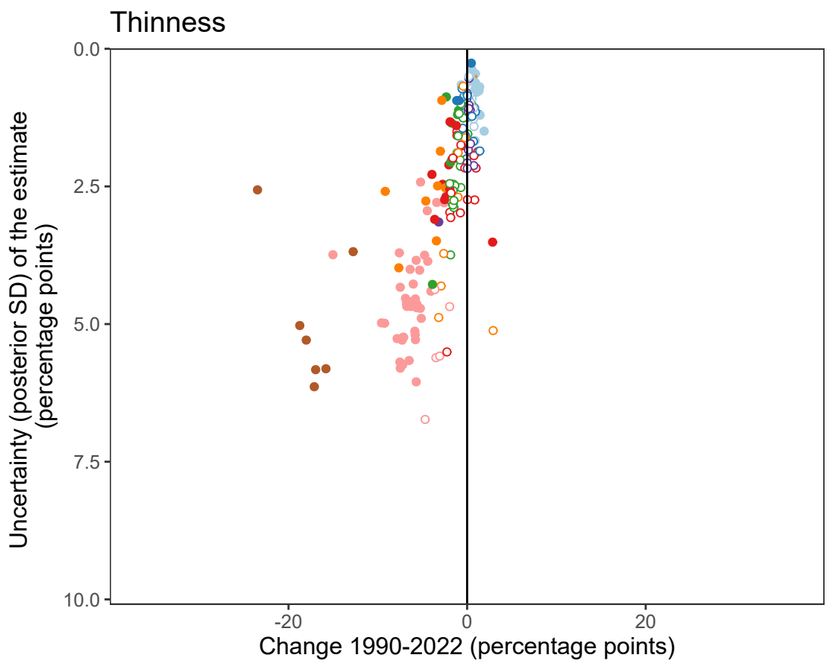

High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

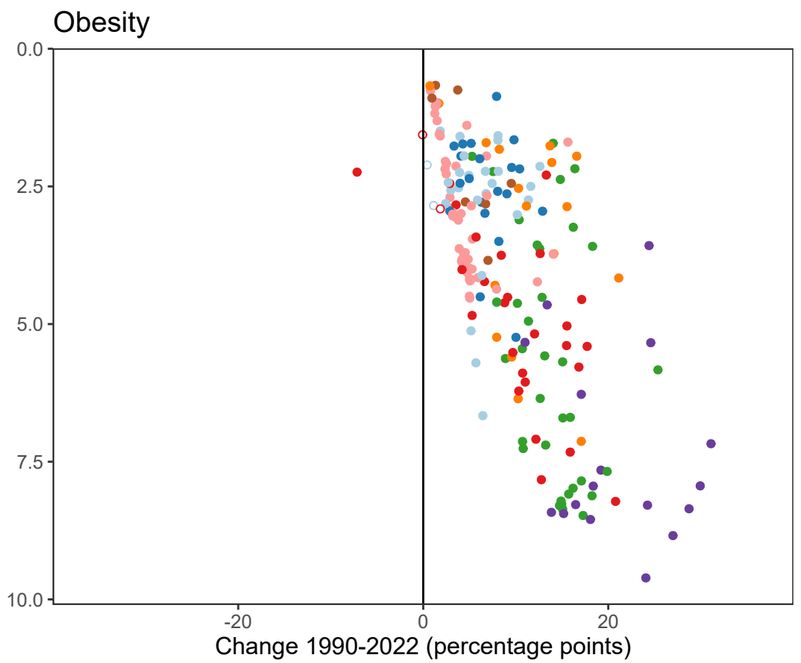

Combined burden
Uncertainty (posterior SD) of the estimate (percentage points)
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)

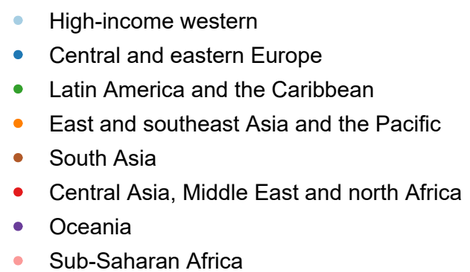

Proportion of combined burden composed of obesity
Uncertainty (posterior SD) of the estimate (percentage points)
0
5
10
15
20
-75
-50
-25
0
25
50
75
Change 1990-2022 (percentage points)

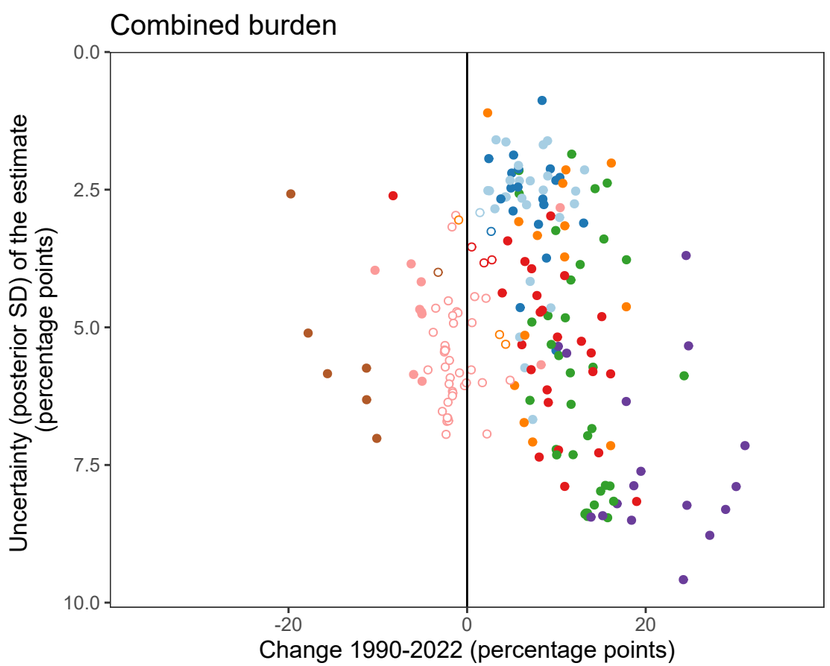

Posterior probability < 0.8
Posterior probability ≥ 0.8

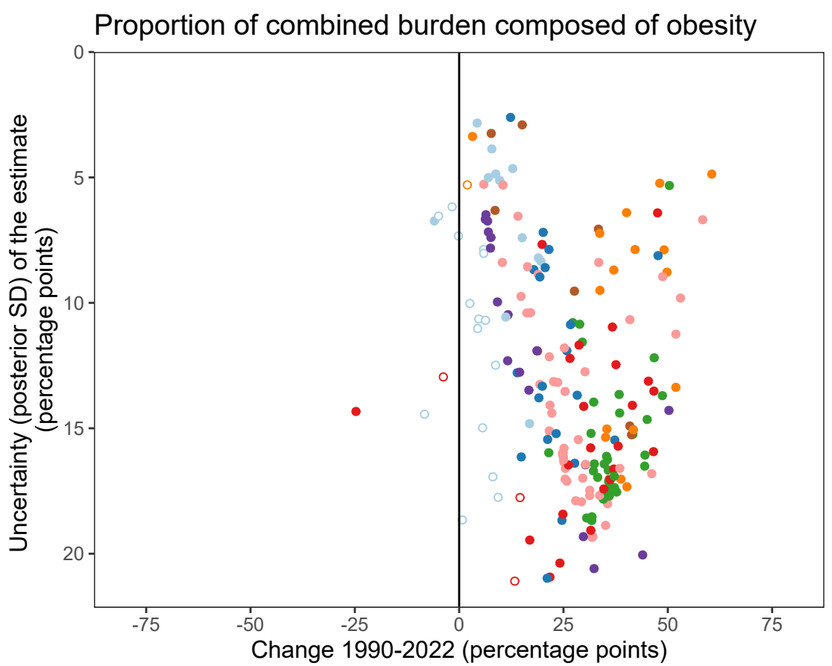
Boys

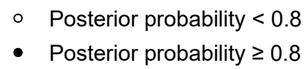

Thinness
Uncertainty (posterior SD) of the estimate (percentage points)
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)


Obesity
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)


High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

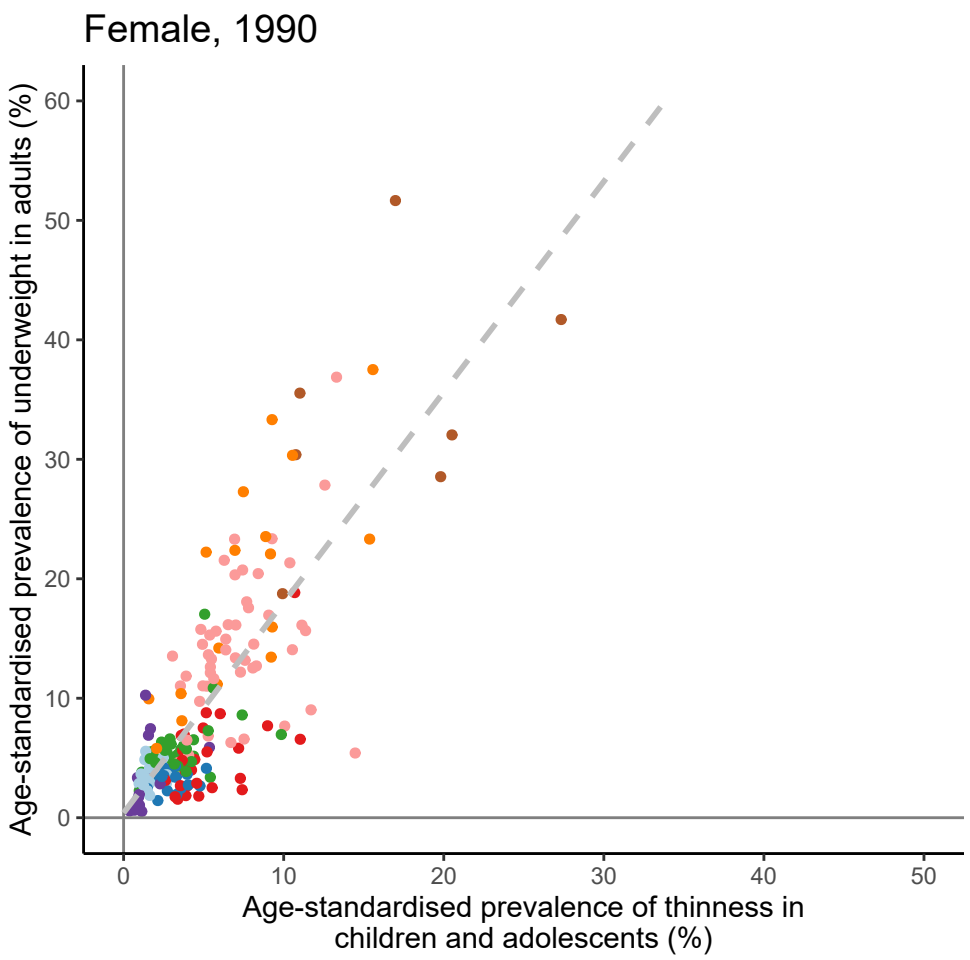

Combined burden
Uncertainty (posterior SD) of the estimate (percentage points)
0.0
2.5
5.0
7.5
10.0
-20
0
20
Change 1990-2022 (percentage points)

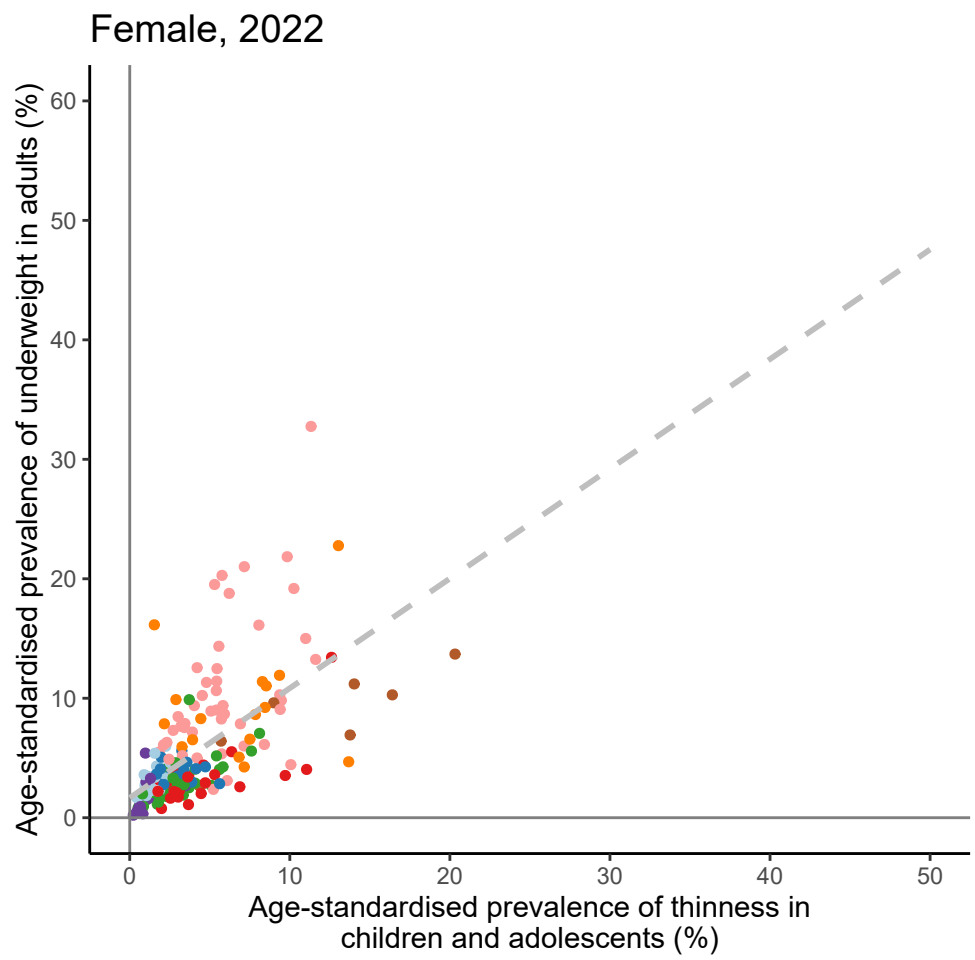

Proportion of combined burden composed of obesity
Uncertainty (posterior SD) of the estimate (percentage points)
0
5
10
15
20
-75
-50
-25
0
25
50
75
Change 1990-2022 (percentage points)

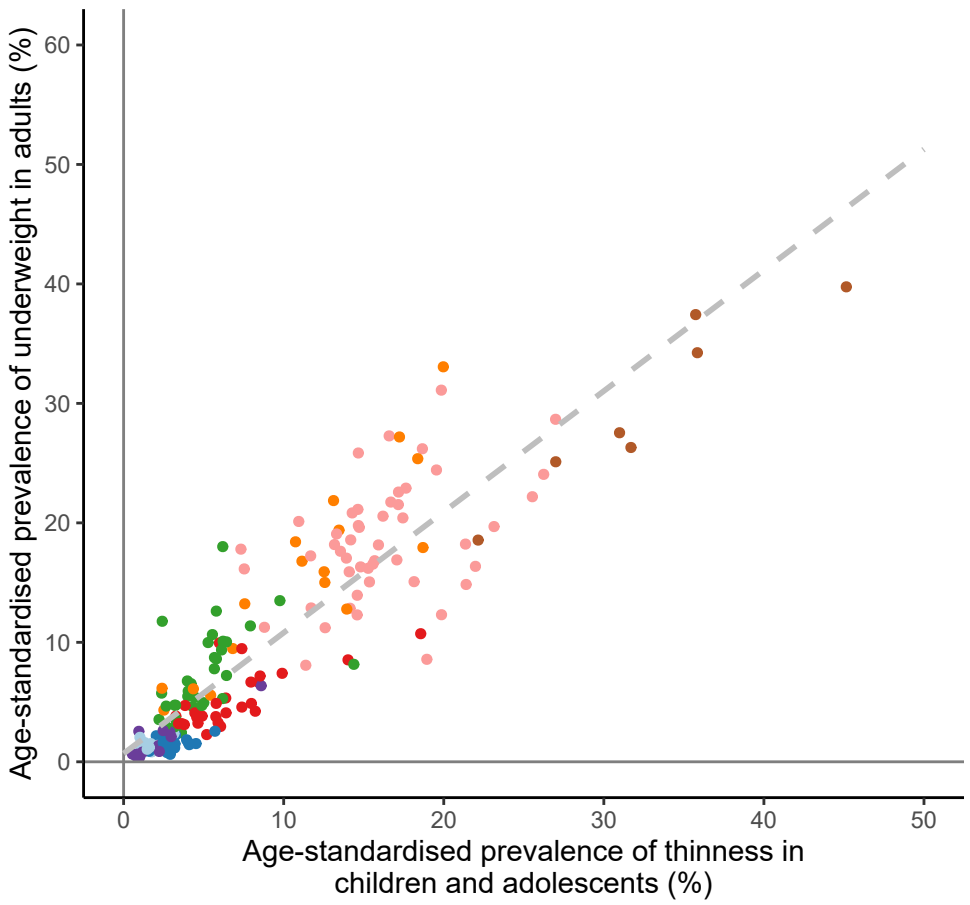

Posterior probability < 0.8
Posterior probability ≥ 0.8

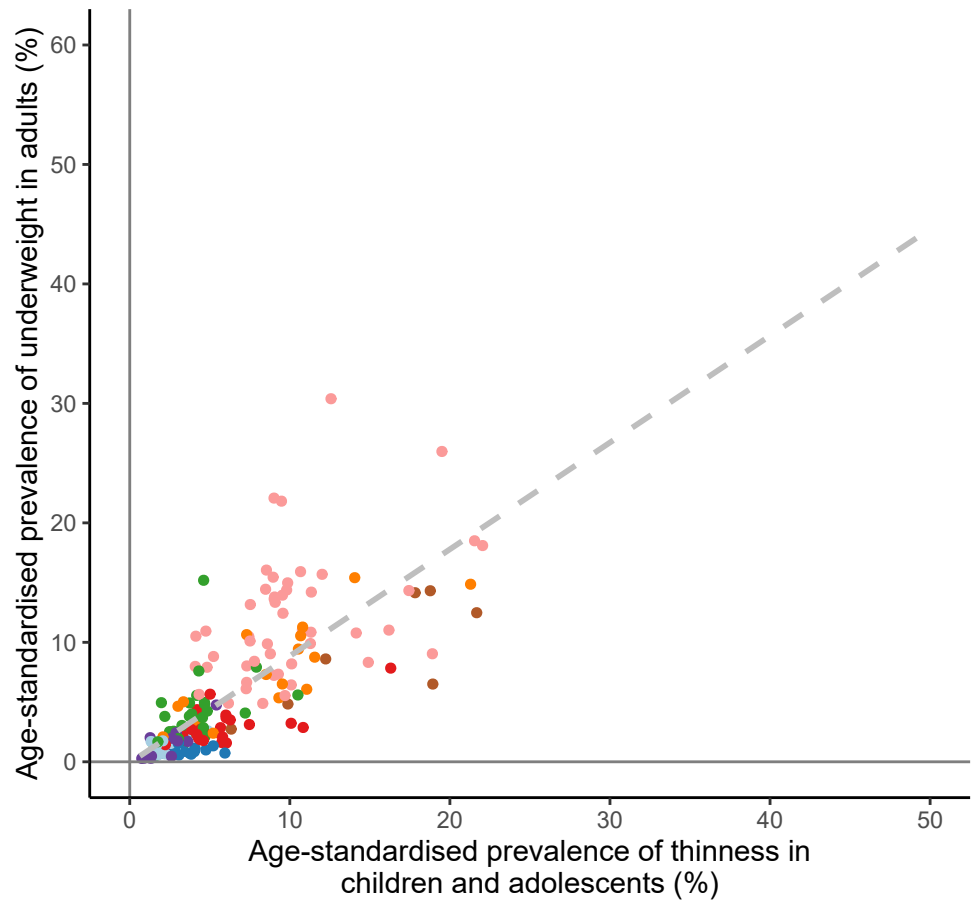
Appendix Figure 23. Comparison of age-standardised prevalence of thinness in school-aged children and adolescents and of underweight in adults.

Each point shows one country. The dotted line shows the ordinary least squares linear regression fit.


Female, 1990
Age-standardised prevalence of underweight in adults (%)
0
10
20
30
40
50
60
Age-standardised prevalence of thinness in children and adolescents (%)
0
10
20
30
40
50


Female, 2022
Age-standardised prevalence of underweight in adults (%)
0
10
20
30
40
50
60
Age-standardised prevalence of thinness in children and adolescents (%)
0
10
20
30
40
50

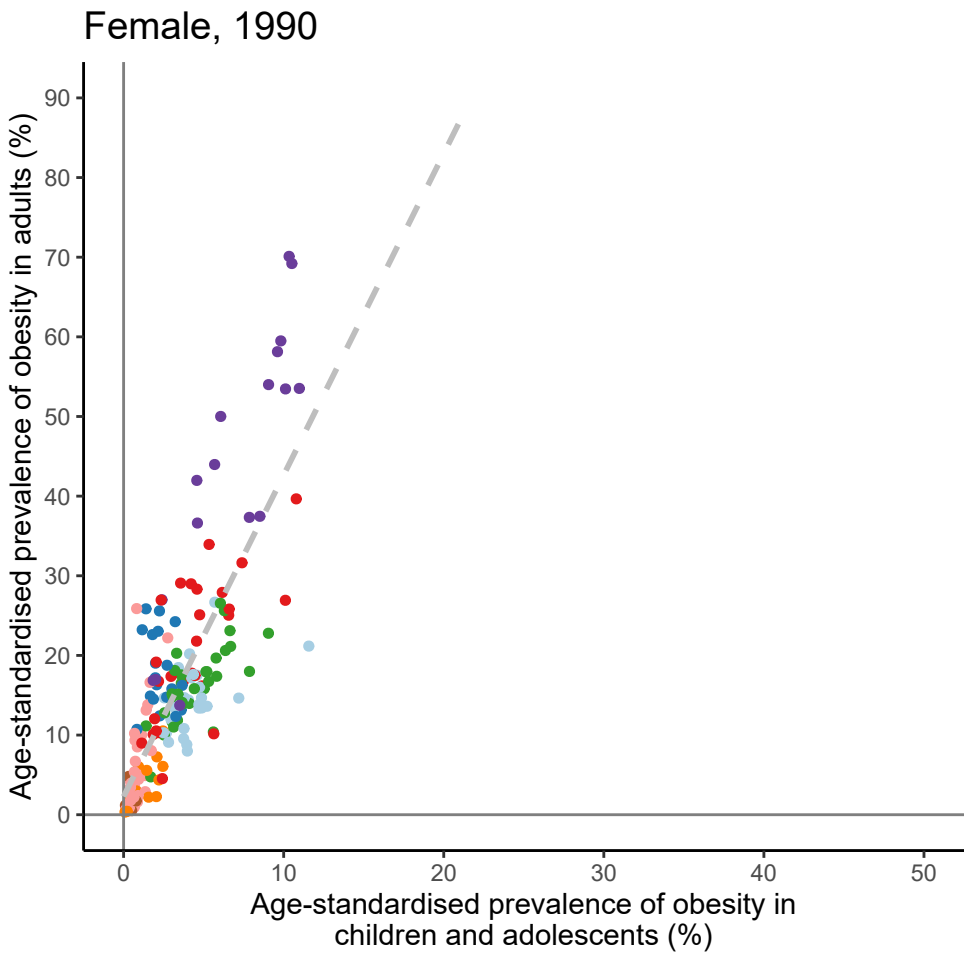

Male, 1990
Age-standardised prevalence of underweight in adults (%)
0
10
20
30
40
50
60
Age-standardised prevalence of thinness in children and adolescents (%)
0
10
20
30
40
50

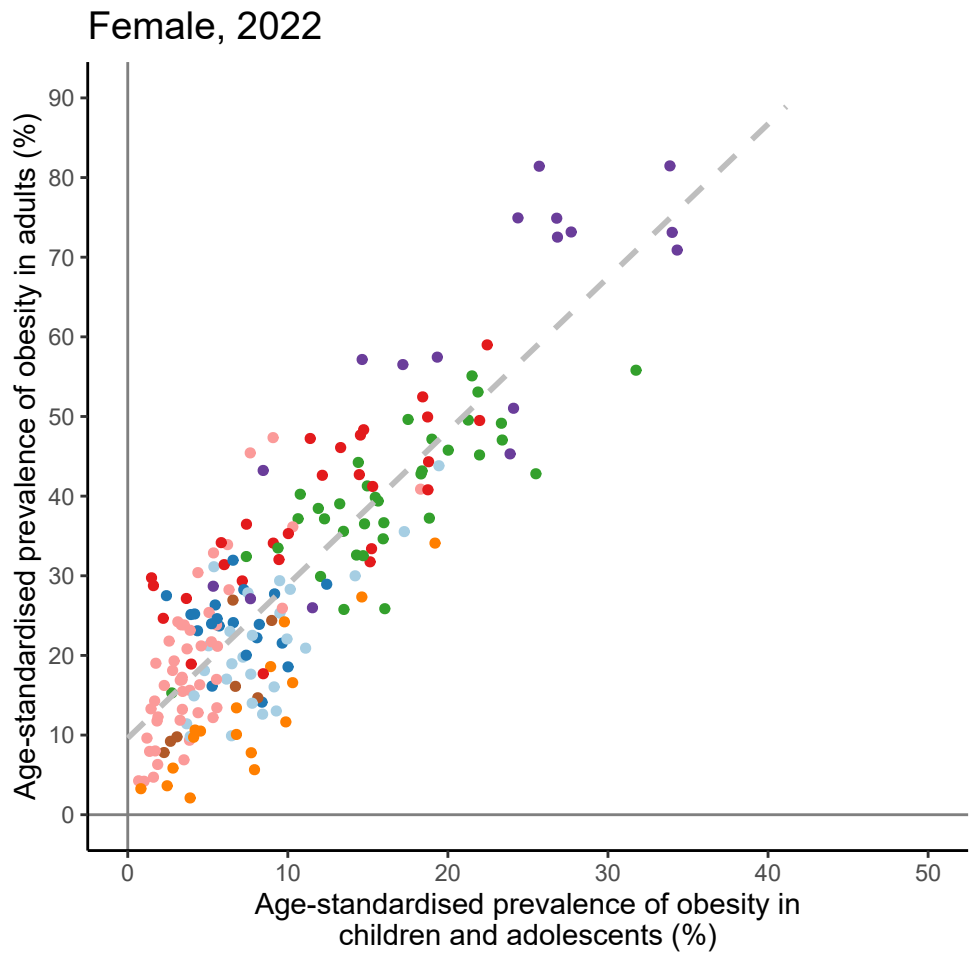

Male, 2022
Age-standardised prevalence of underweight in adults (%)
0
10
20
30
40
50
60
Age-standardised prevalence of thinness in children and adolescents (%)
0
10
20
30
40
50

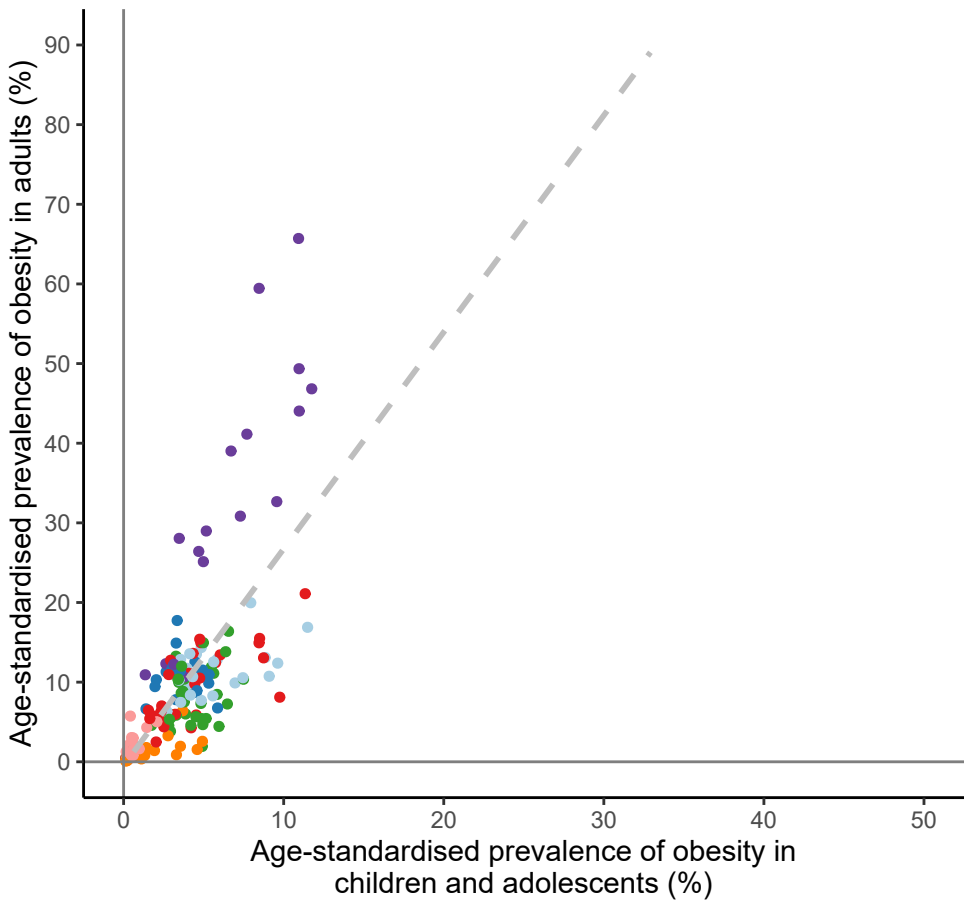

High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

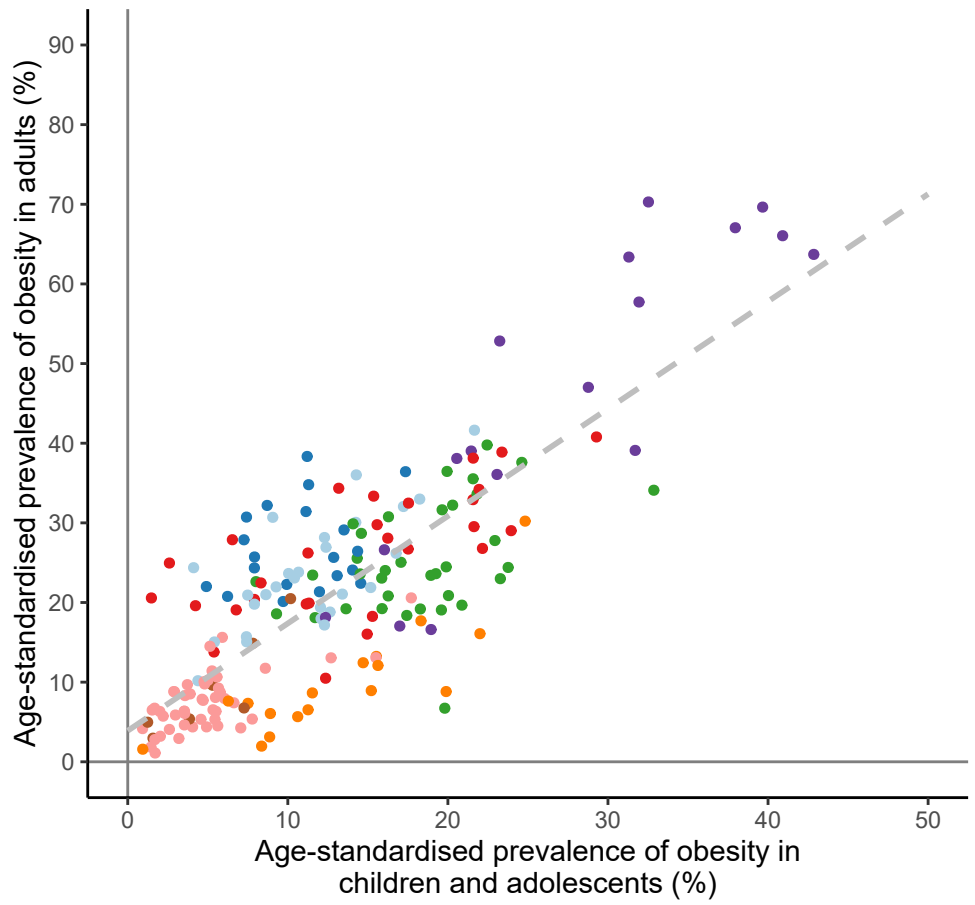
Appendix Figure 24. Comparison of age-standardised prevalence of obesity in school-aged children and adolescents and in adults.

Each point shows one country. The dotted line shows the ordinary least squares linear regression fit.









High-income western
Central and eastern Europe
Latin America and the Caribbean
East and southeast Asia and the Pacific
South Asia
Central Asia, Middle East and north Africa
Oceania
Sub-Saharan Africa

Appendix Figure 25. Age standardised prevalence of thinness, obesity and their combined burden for school-aged children and adolescents, and underweight, obesity and their combined burden for adults, from 1990 to 2022, by country.

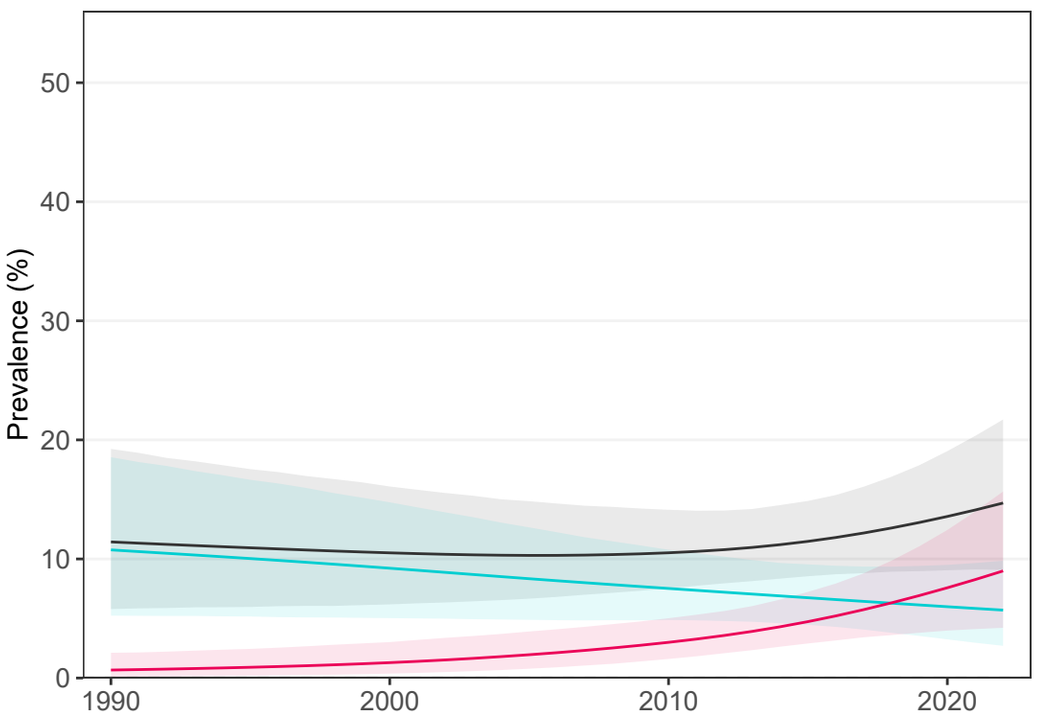
Trends were obtained by connecting the annual estimates. The solid lines show the posterior mean and the shaded areas the 95% uncertainty interval.

Afghanistan

School-aged children and adolescents

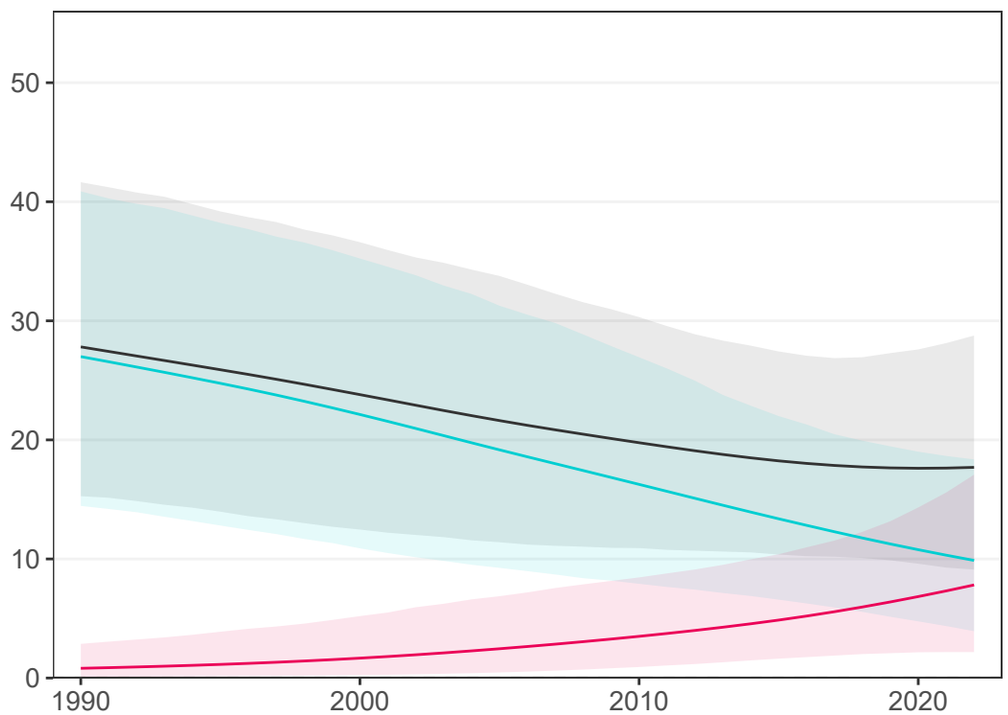
Girls

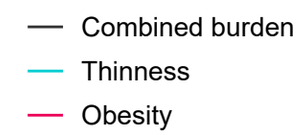
2 studies (2 national)



Boys

1 study (1 national)

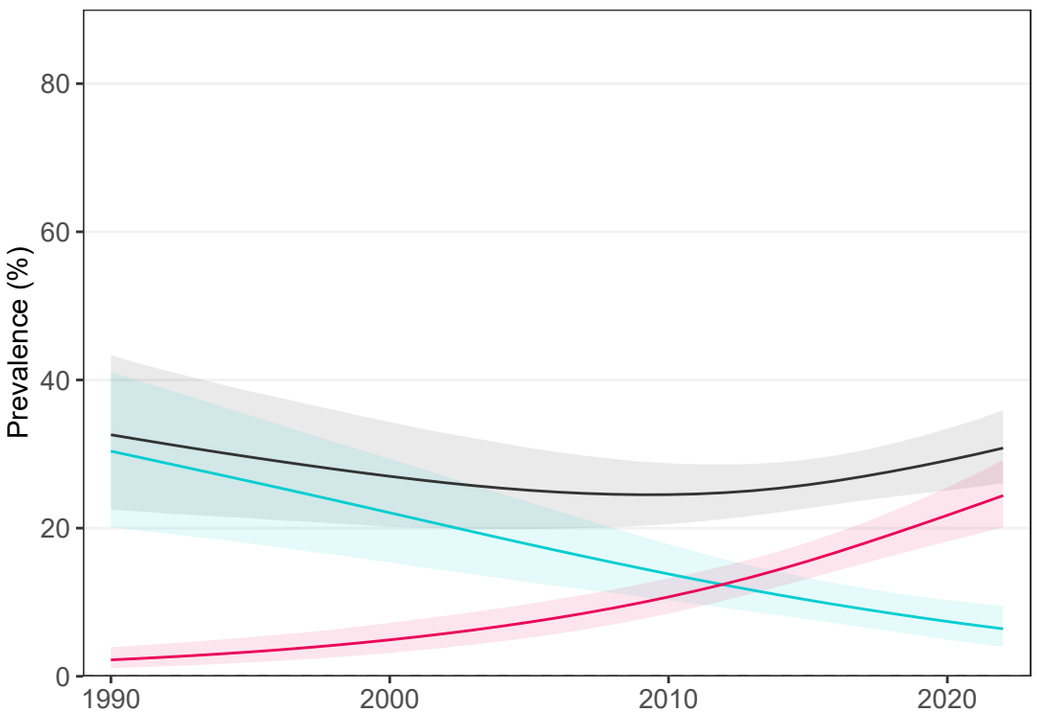




Adults

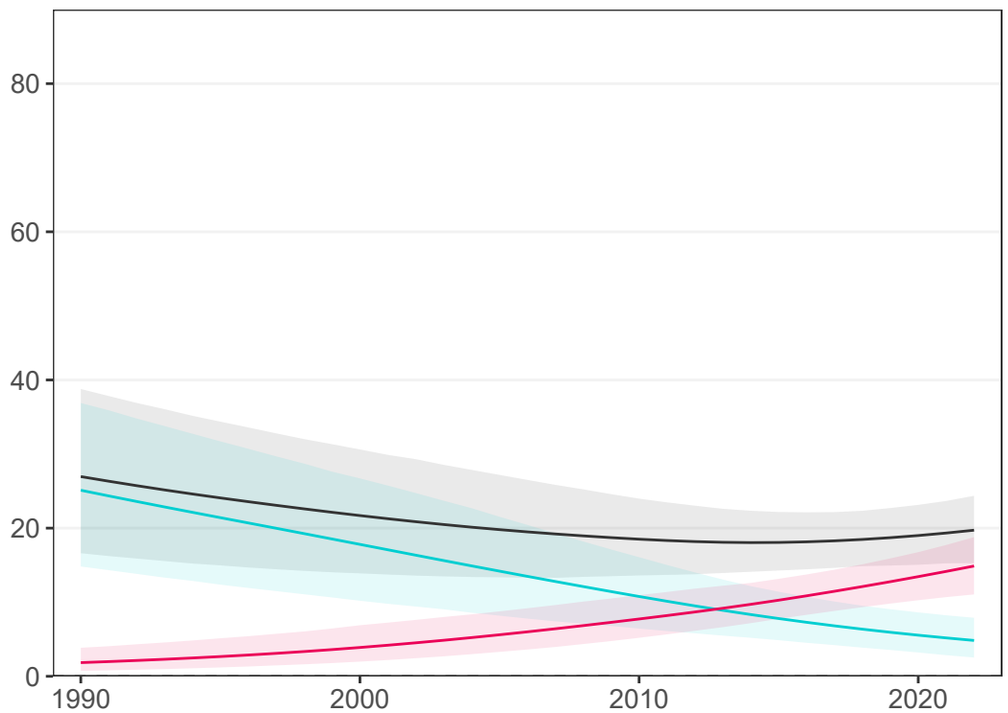
Women

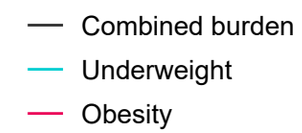
2 studies (2 national)



Men

1 study (1 national)



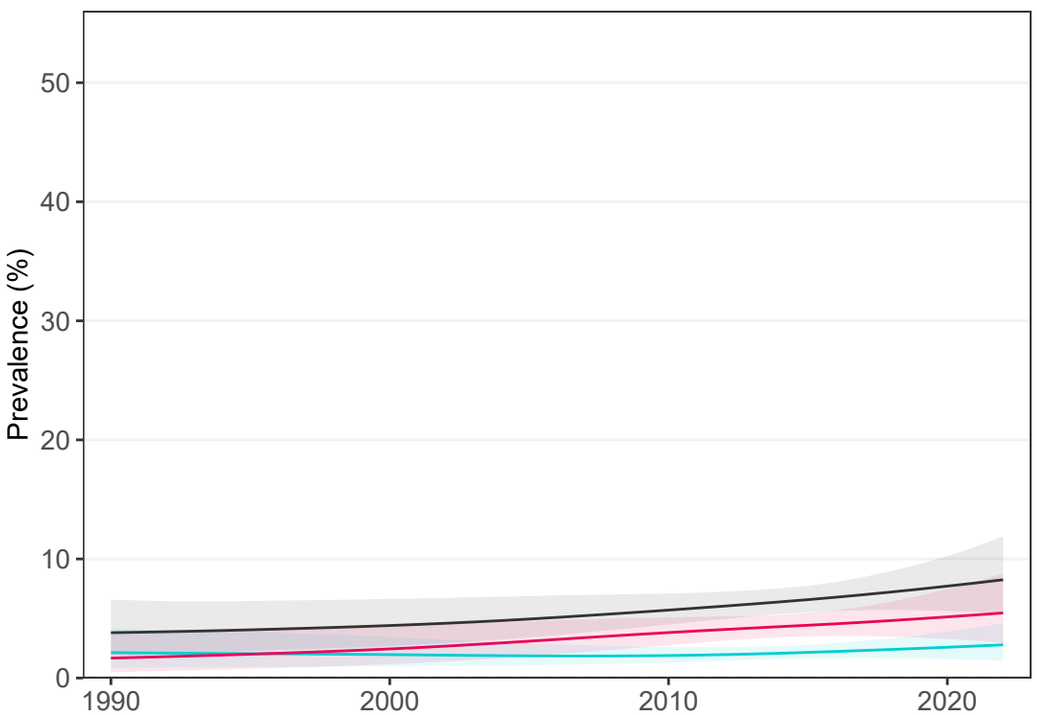


Albania

School-aged children and adolescents

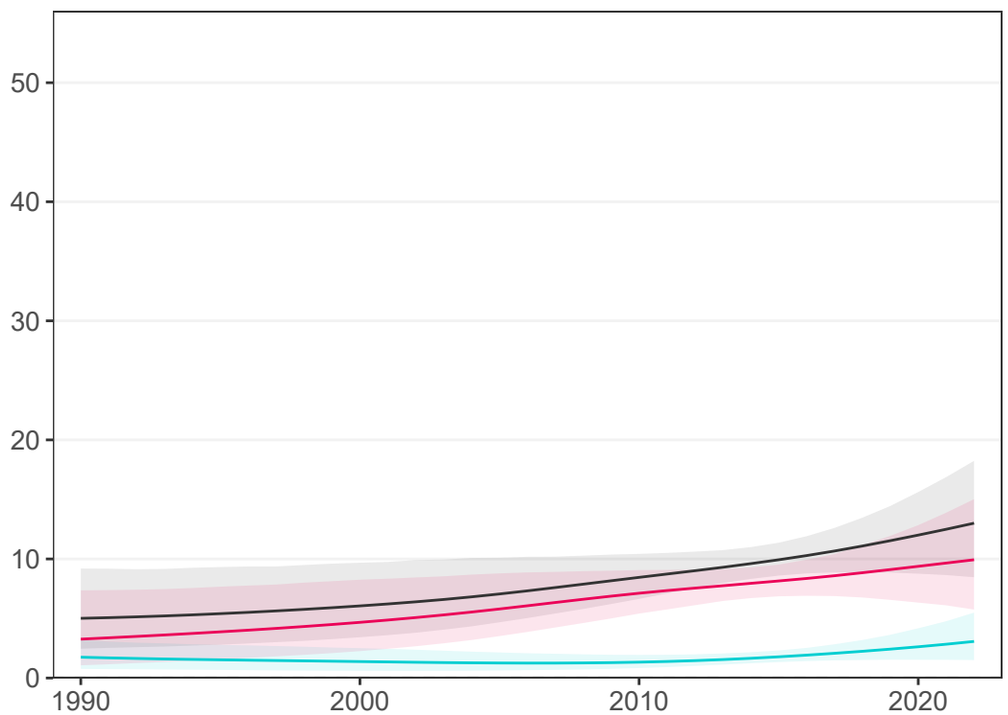
Girls

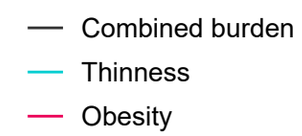
5 studies (5 national)



Boys

5 studies (5 national)

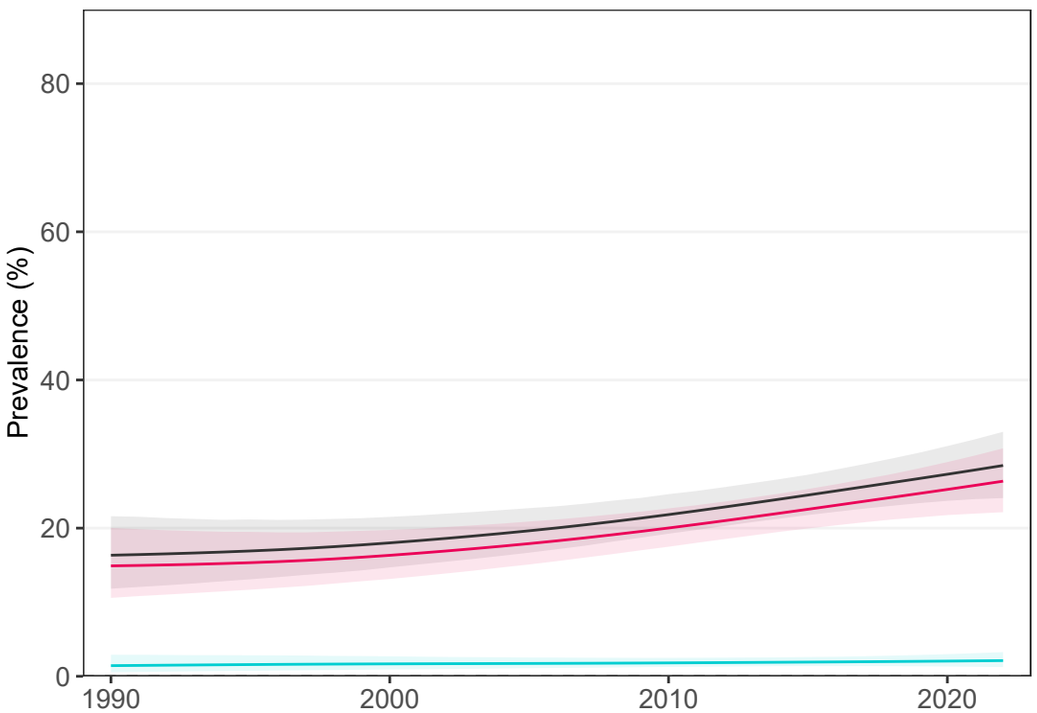




Adults

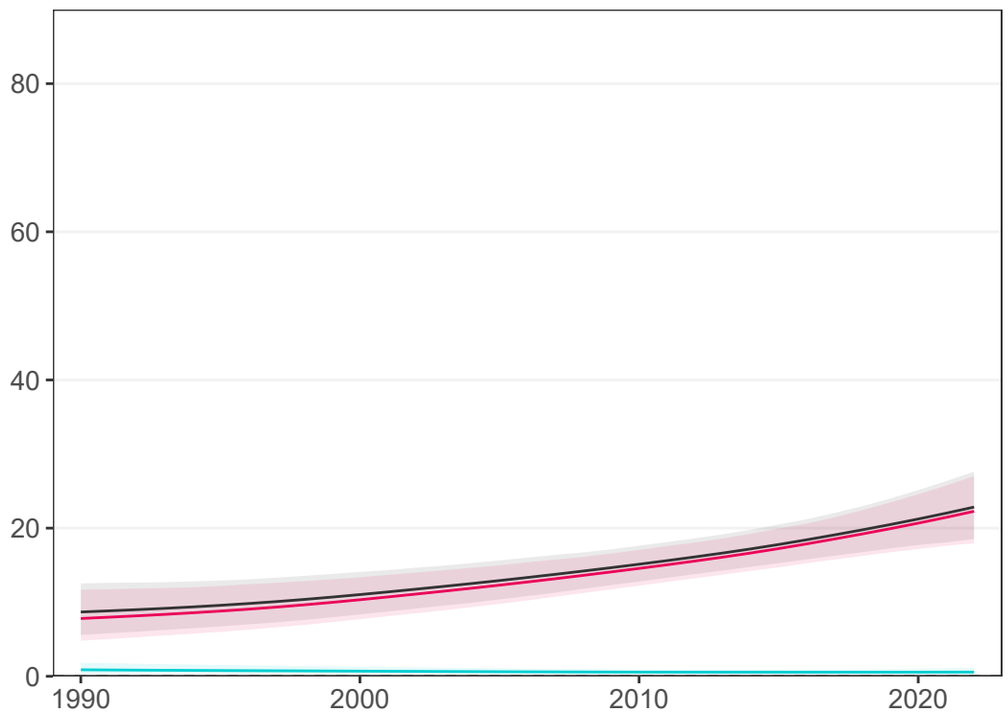
Women

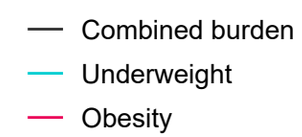
3 studies (2 national)



Men

3 studies (2 national)



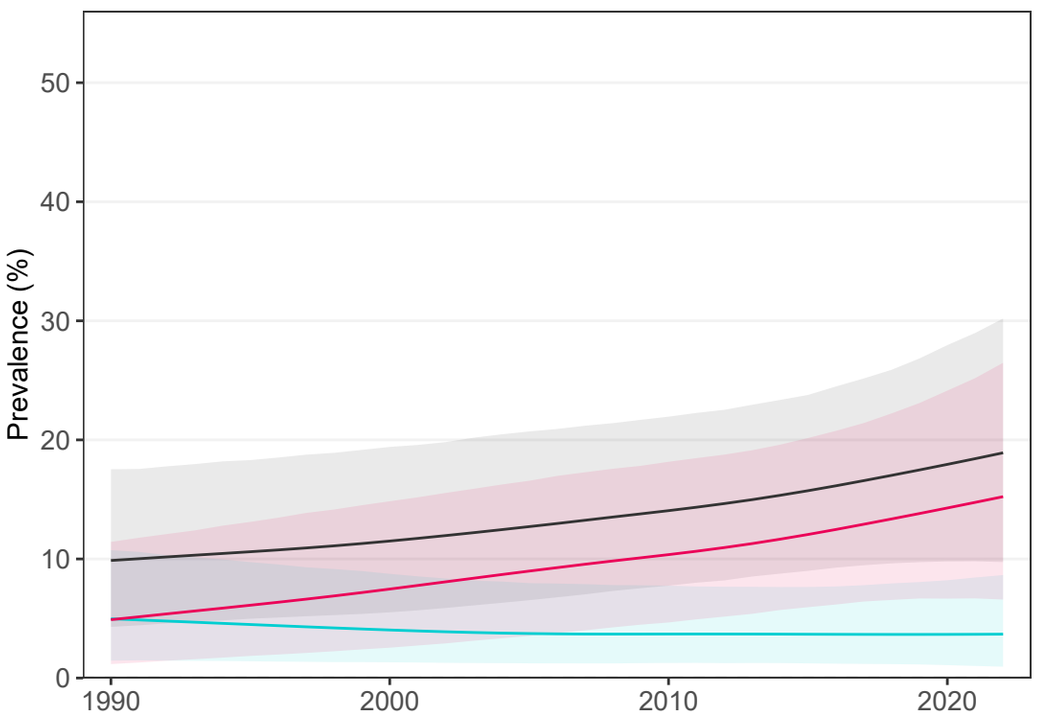


Algeria

School-aged children and adolescents

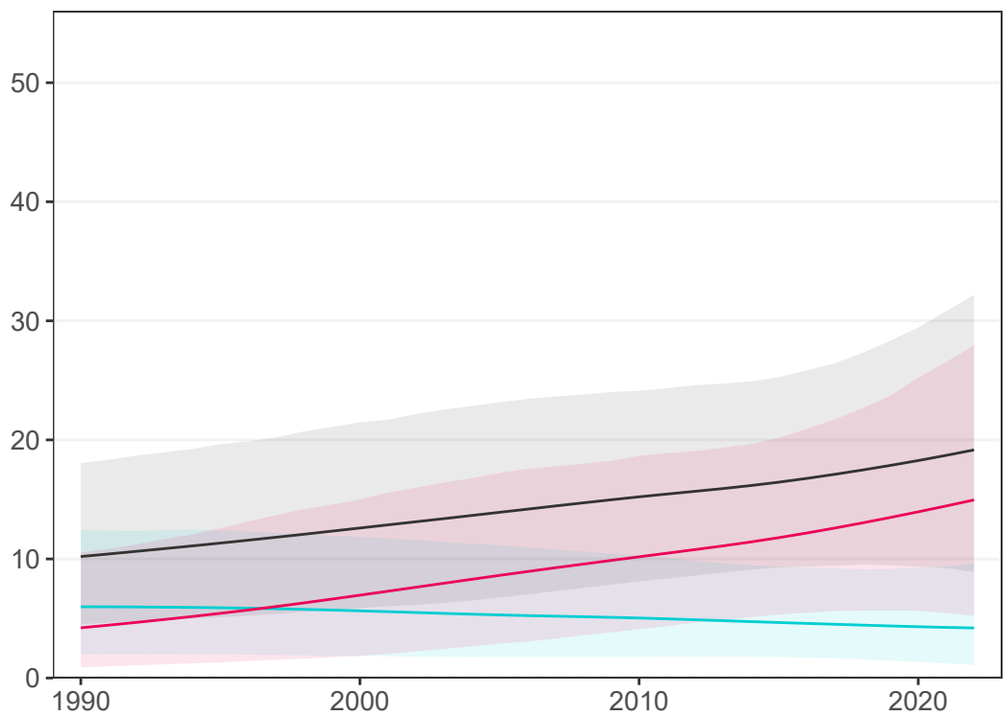
Girls

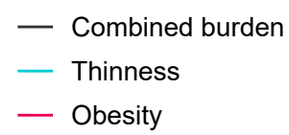
1 study (1 national)



Boys

1 study (1 national)

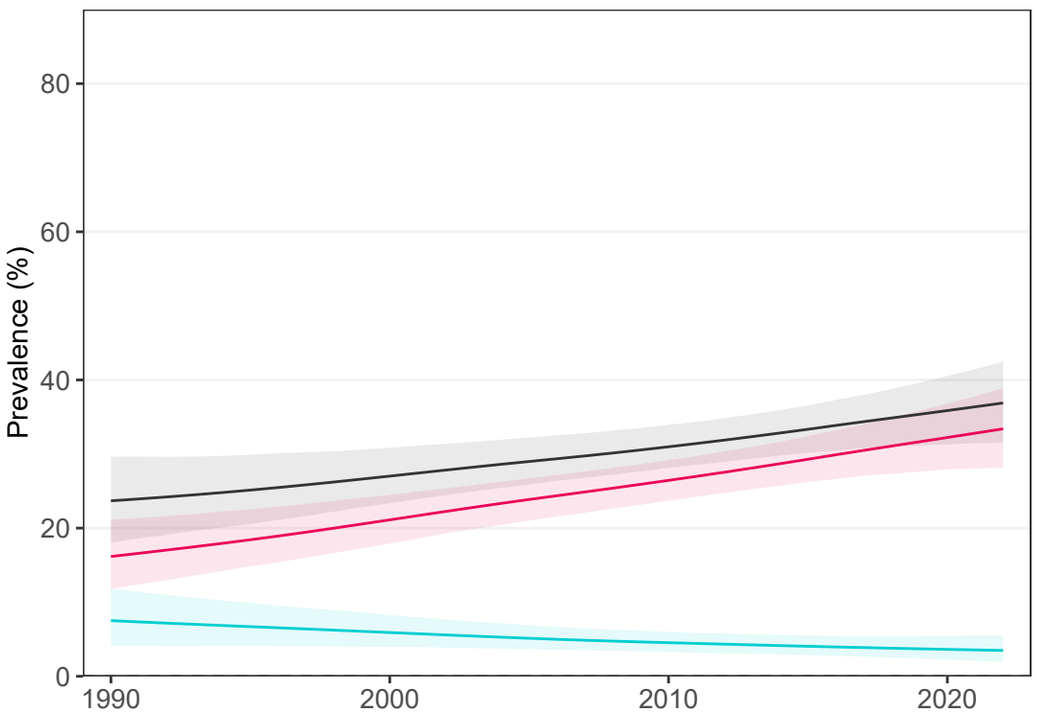




Adults

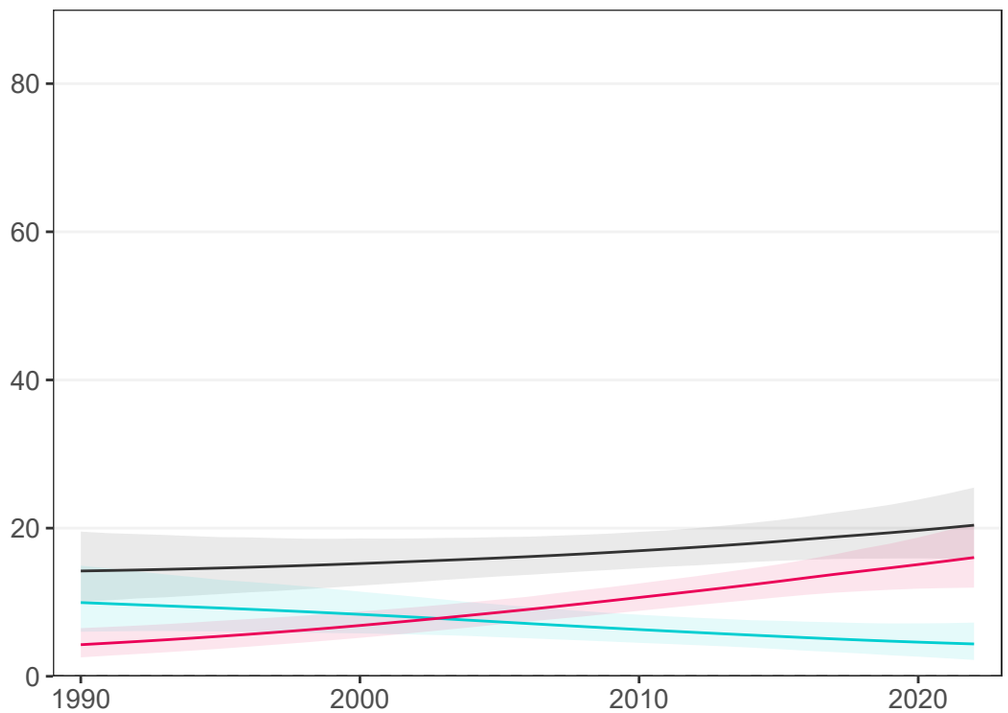
Women

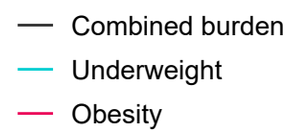
4 studies (2 national)



Men

4 studies (2 national)



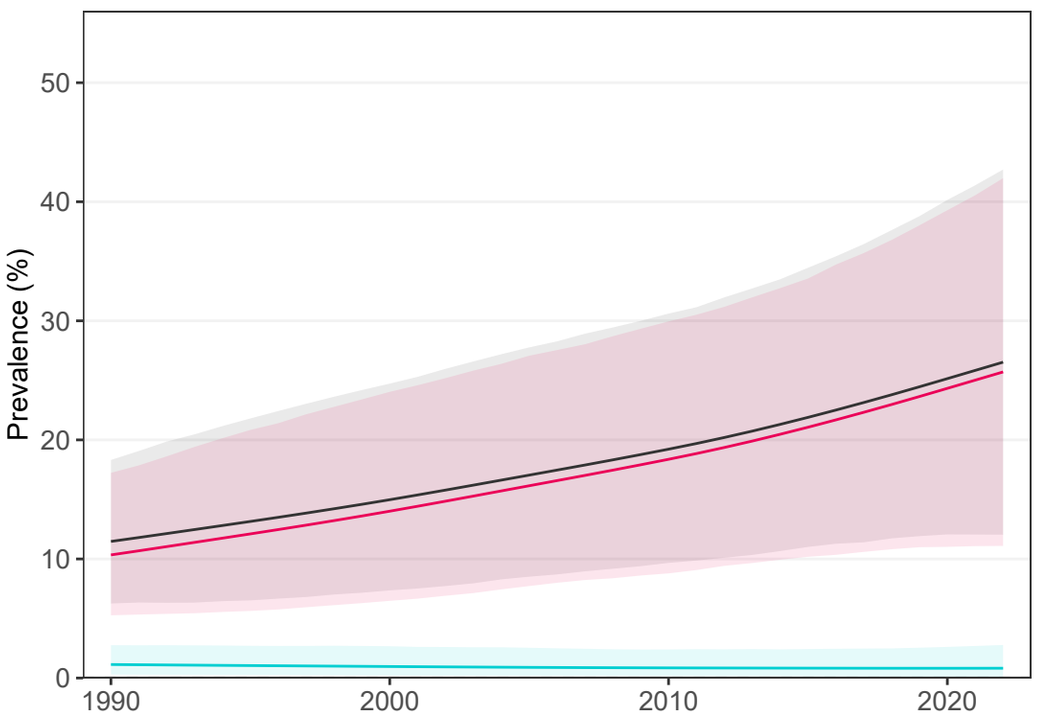


American Samoa

School-aged children and adolescents

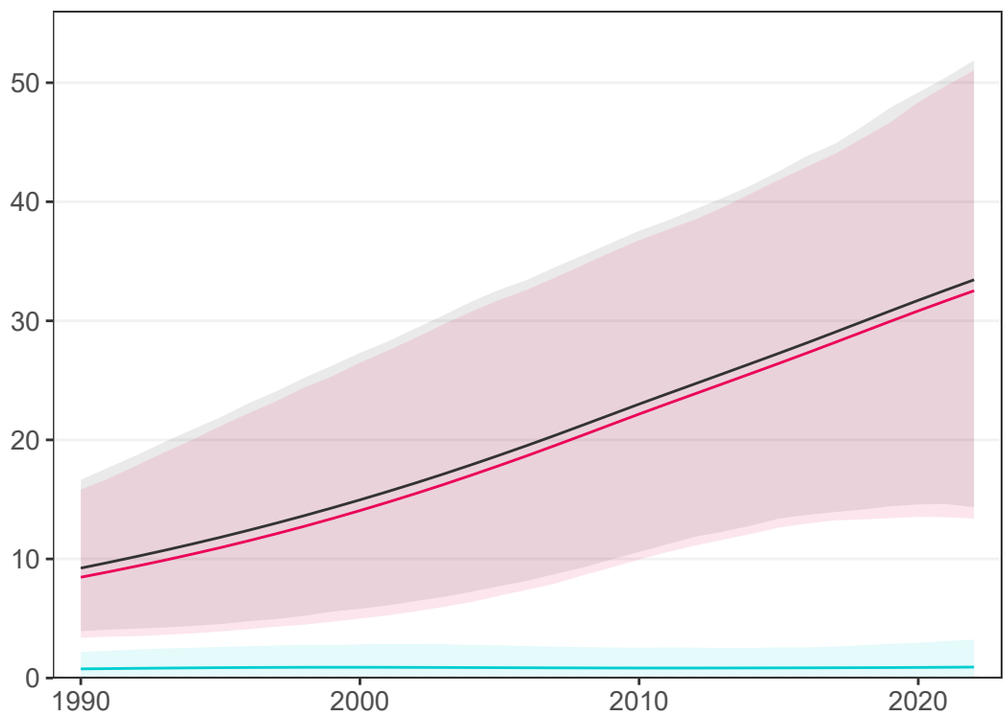
Girls

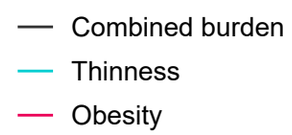
1 study (1 national)



Boys

1 study (1 national)

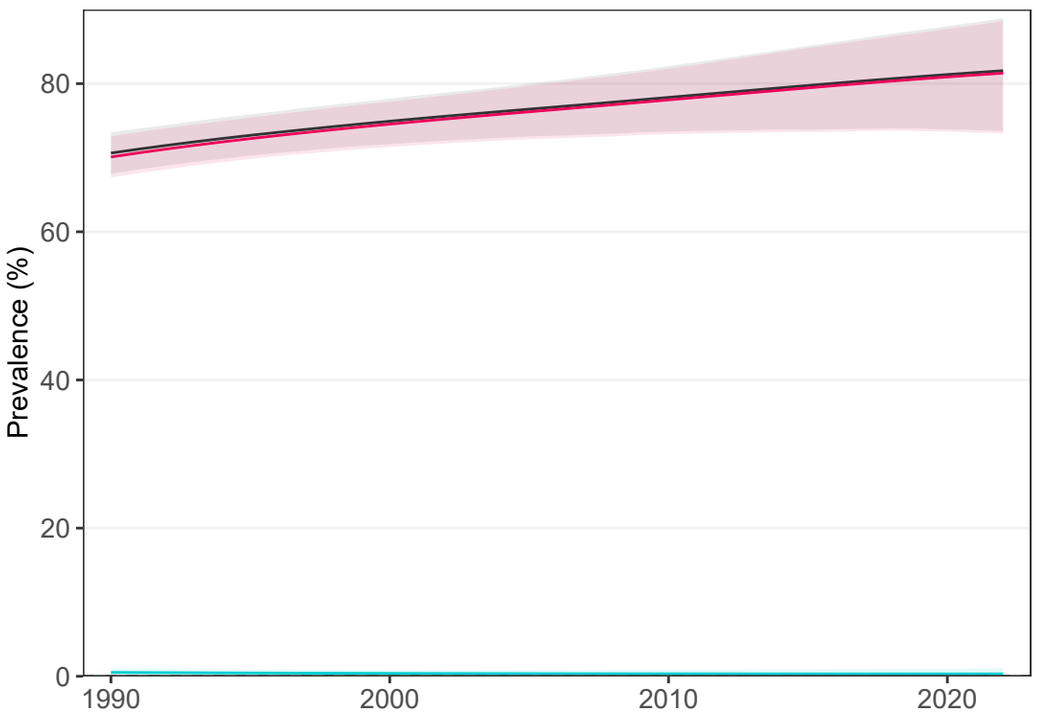




Adults

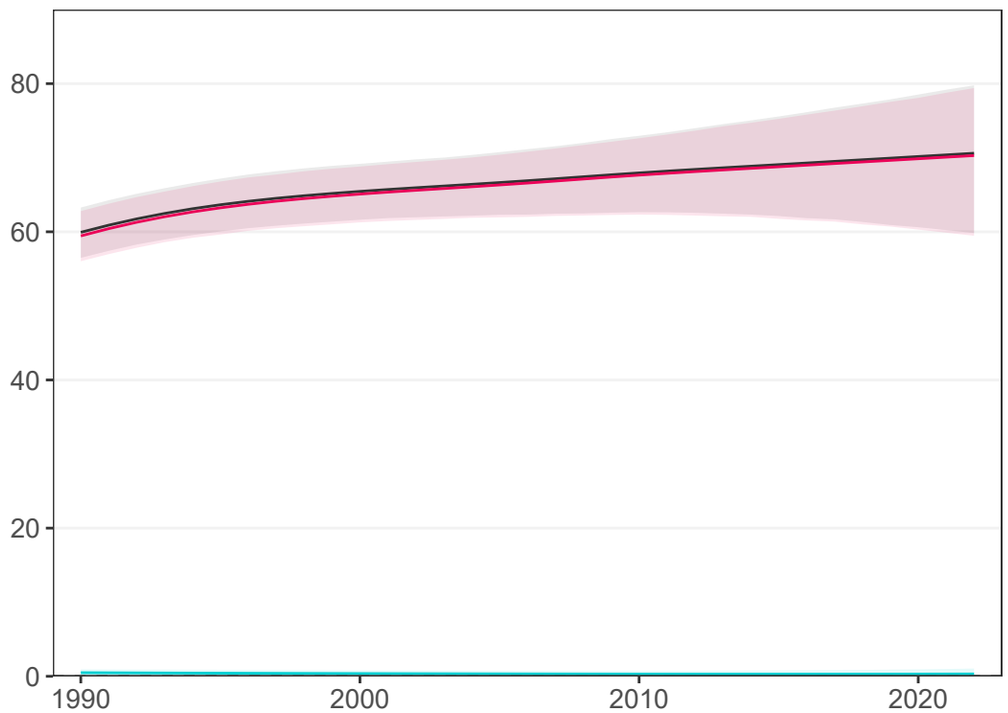
Women

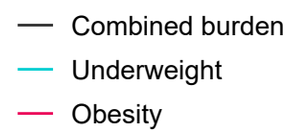
5 studies (5 national)



Men

5 studies (5 national)



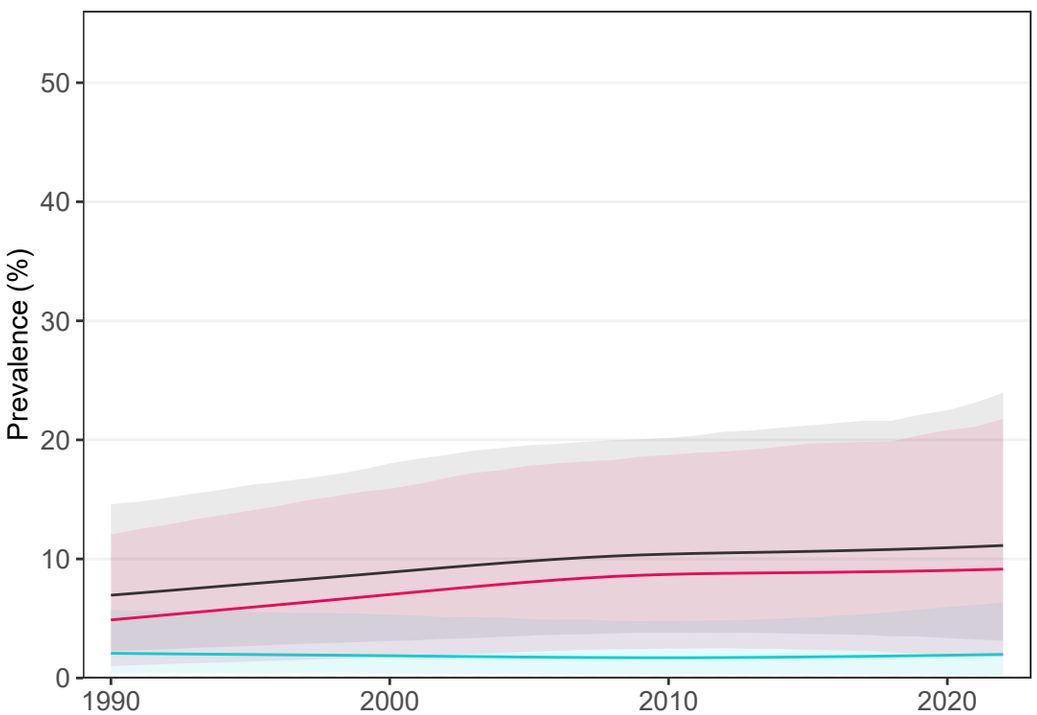


Andorra

School-aged children and adolescents

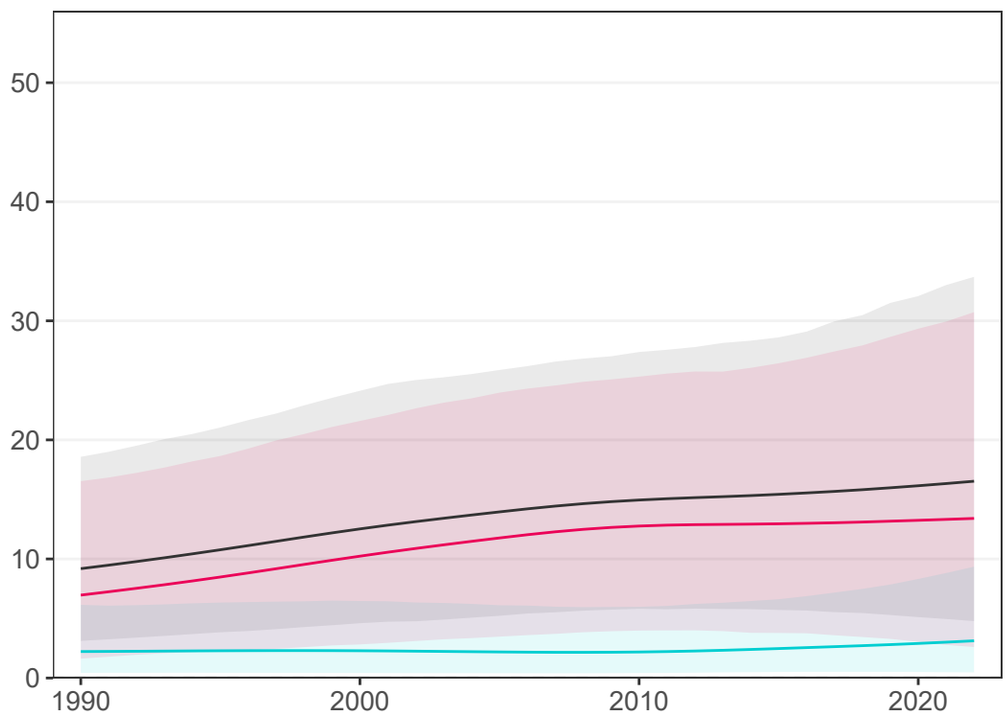
Girls

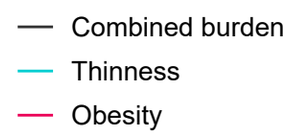
No studies



Boys

No studies

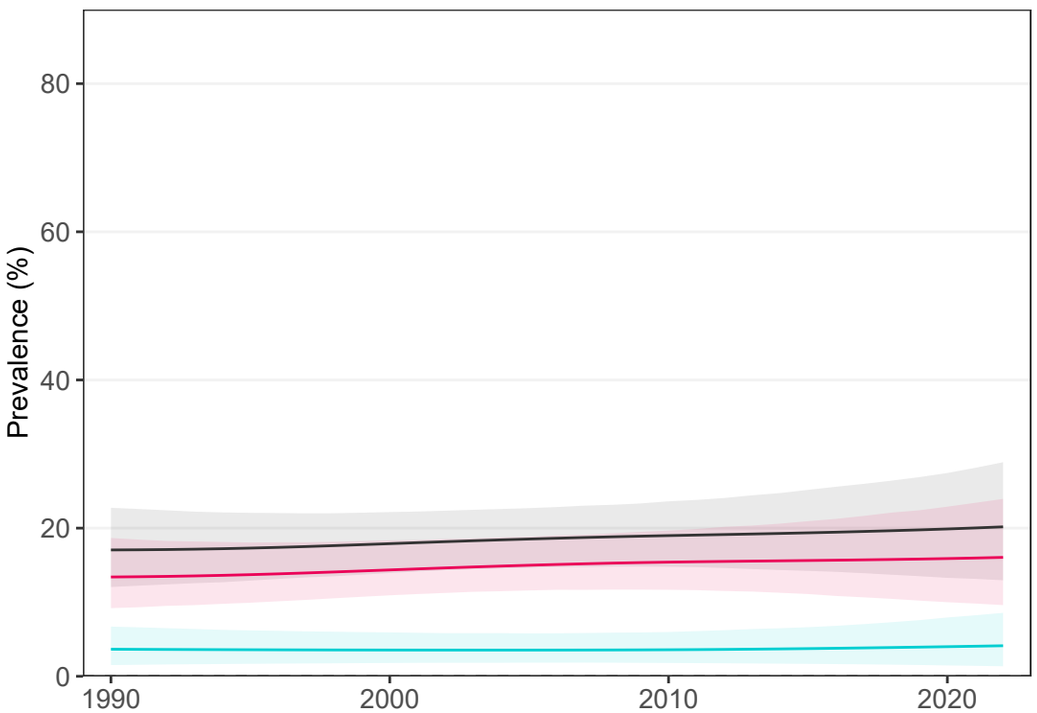




Adults

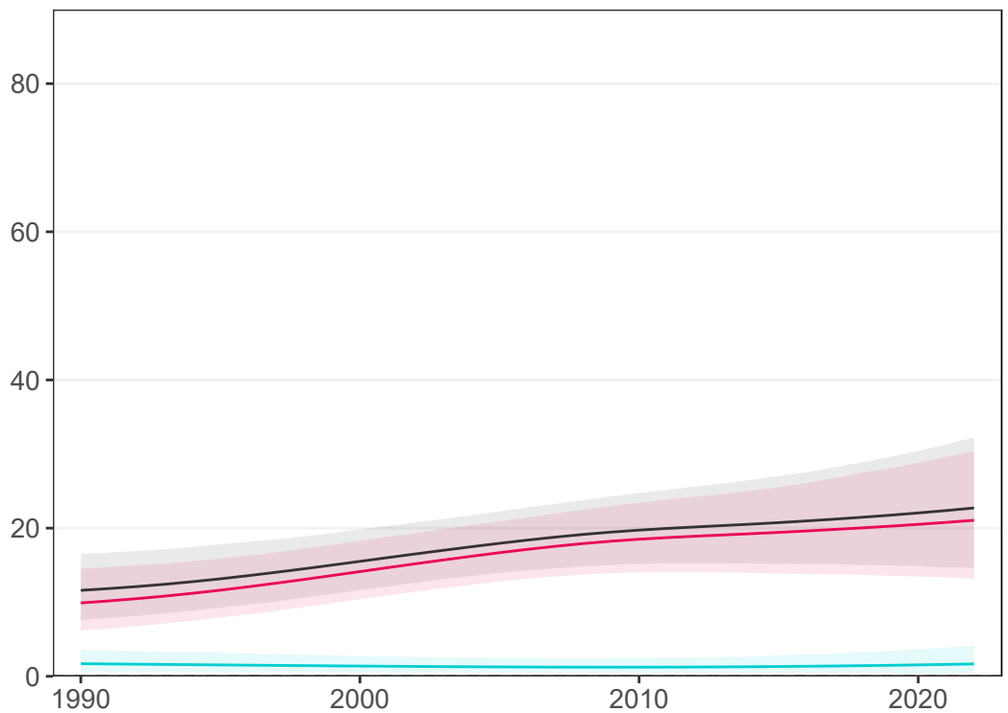
Women

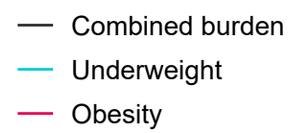
1 study (1 national)



Men

1 study (1 national)



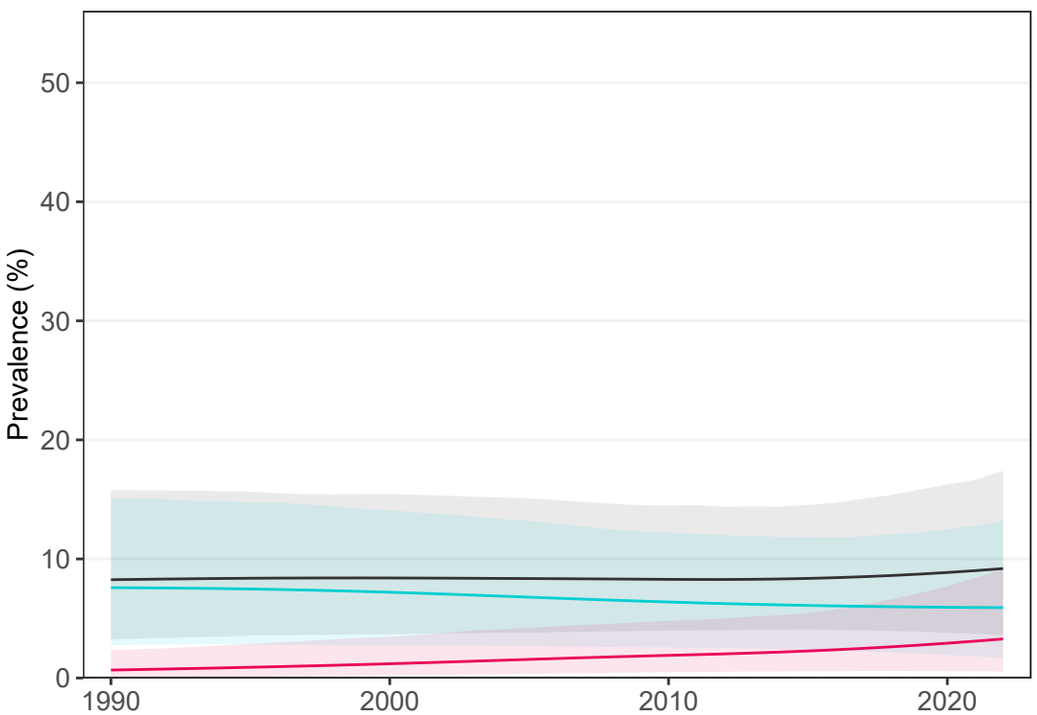


Angola

School-aged children and adolescents

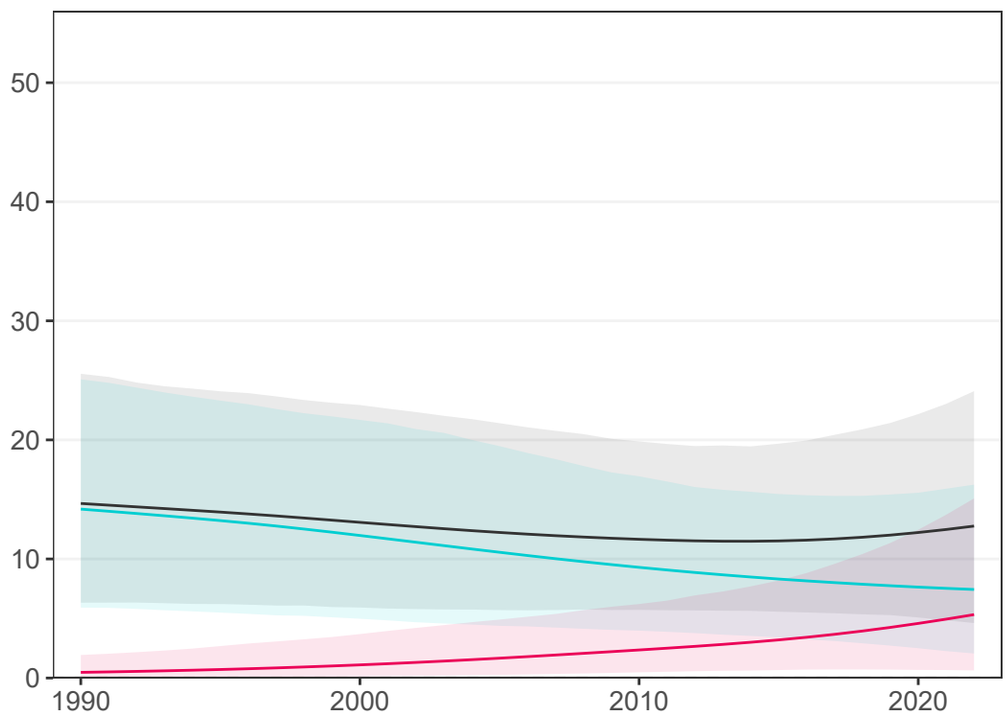
Girls

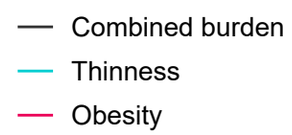
1 study (0 national)



Boys

1 study (0 national)

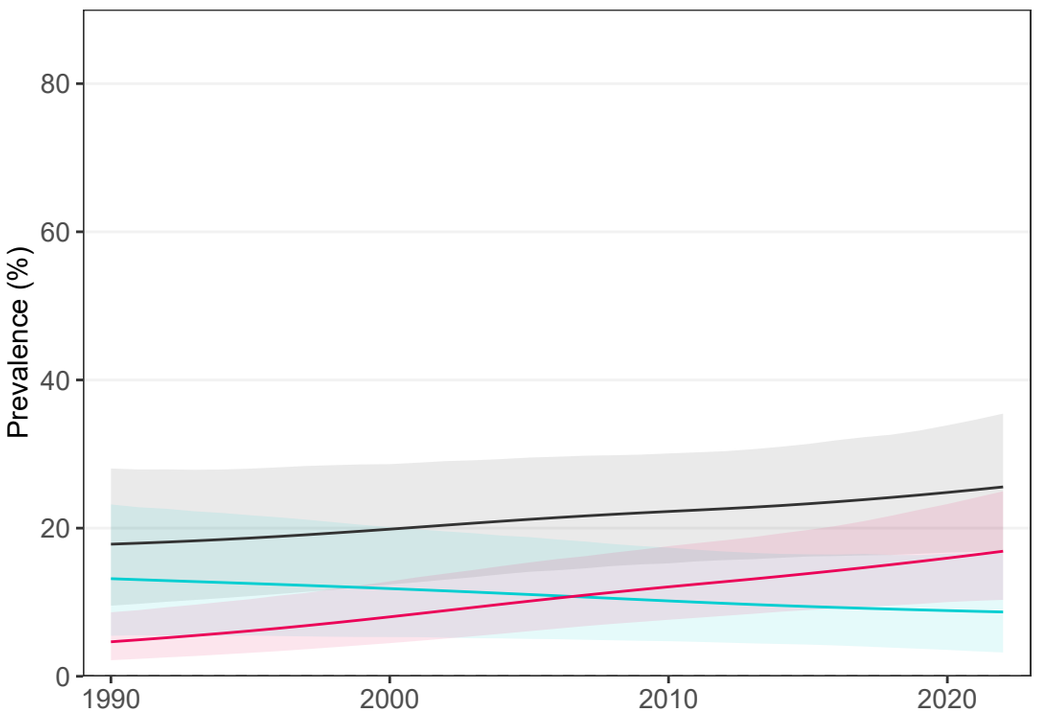




Adults

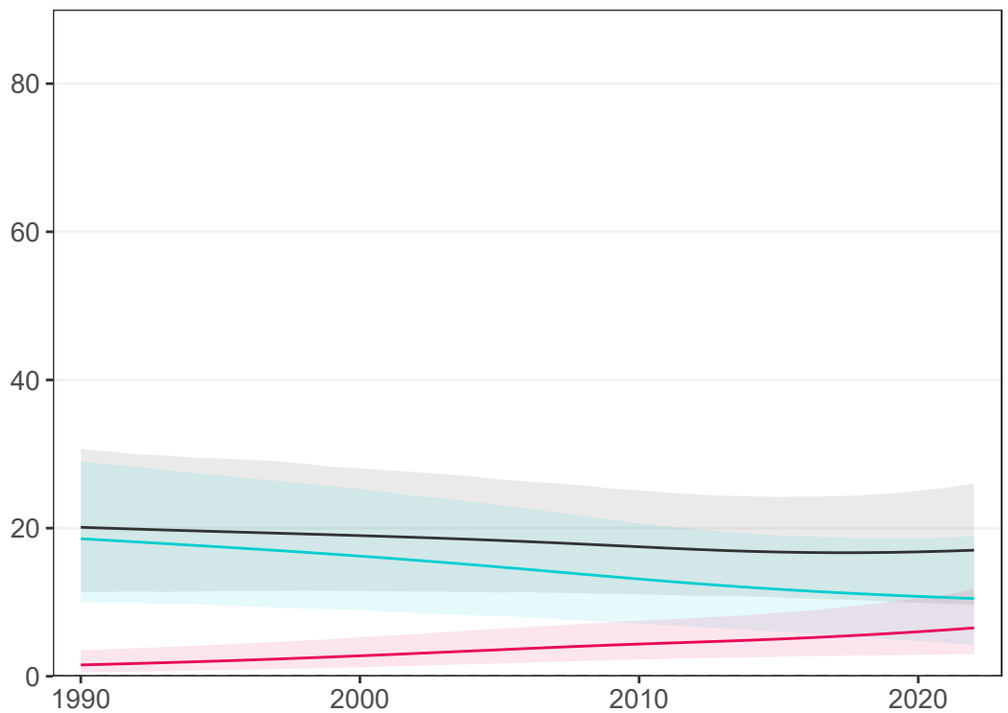
Women

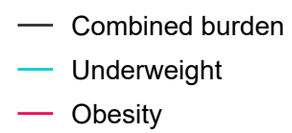
1 study (0 national)



Men

1 study (0 national)



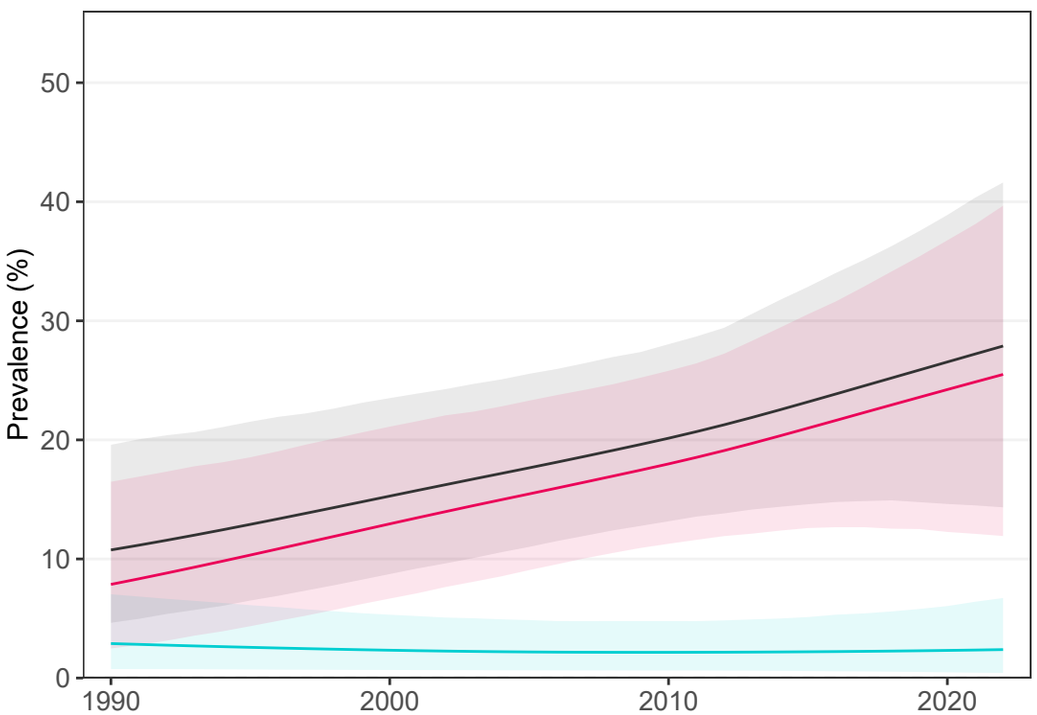


Antigua & Barbuda

School-aged children and adolescents

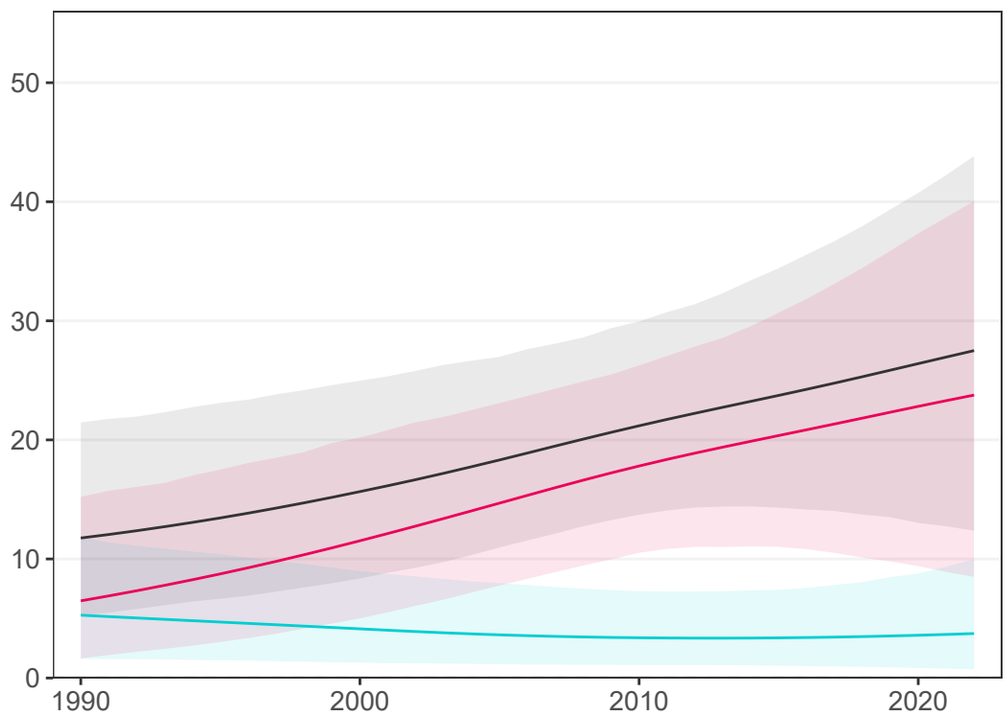
Girls

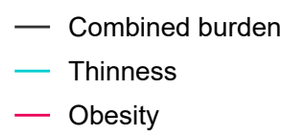
1 study (1 national)



Boys

1 study (1 national)

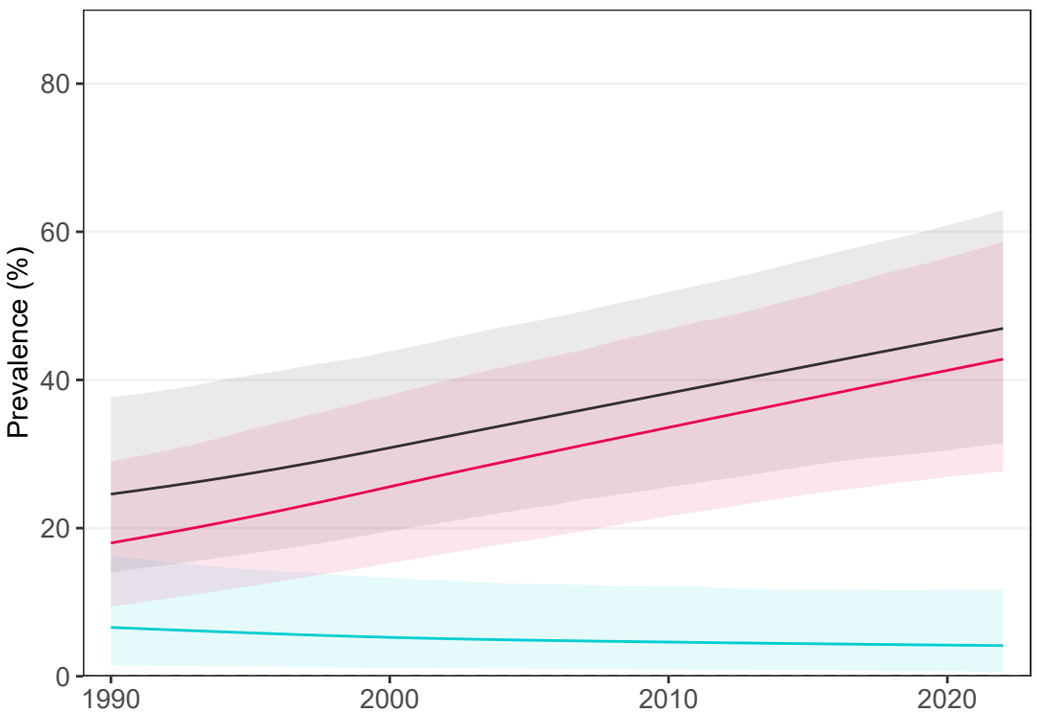




Adults

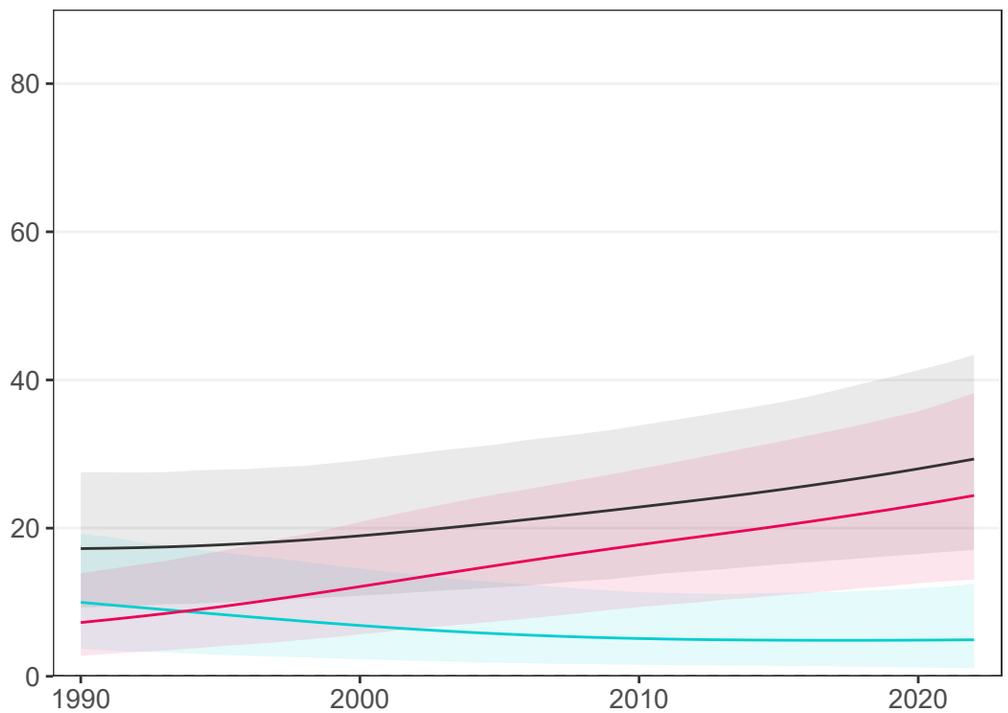
Women

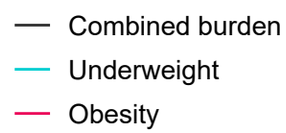
No studies



Men

No studies



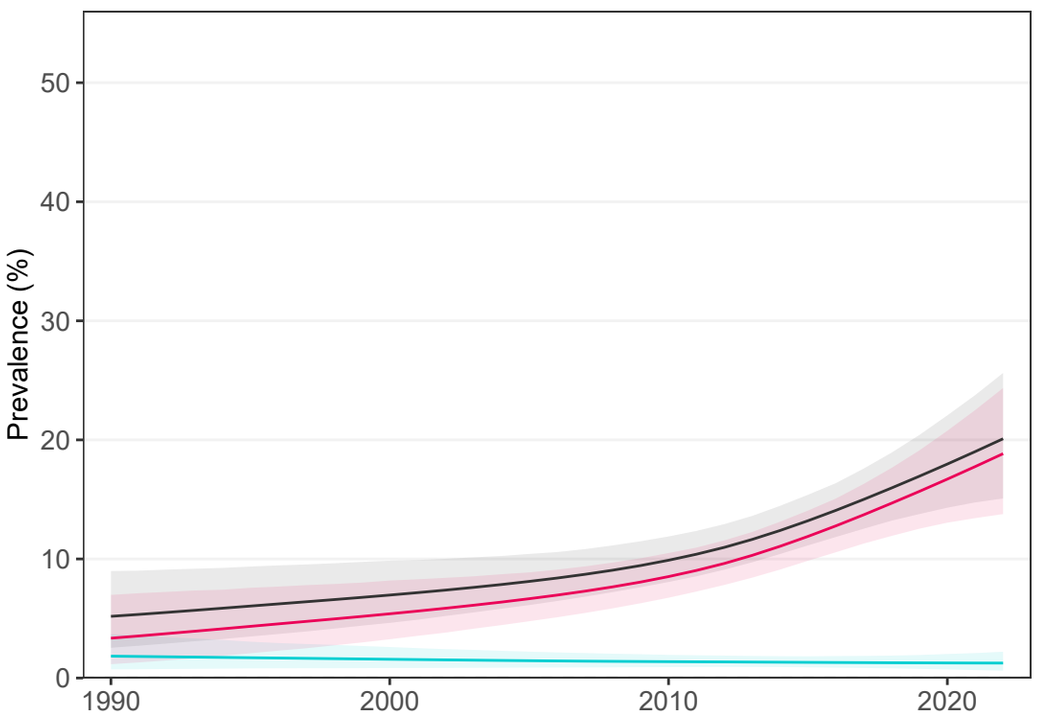


Argentina

School-aged children and adolescents

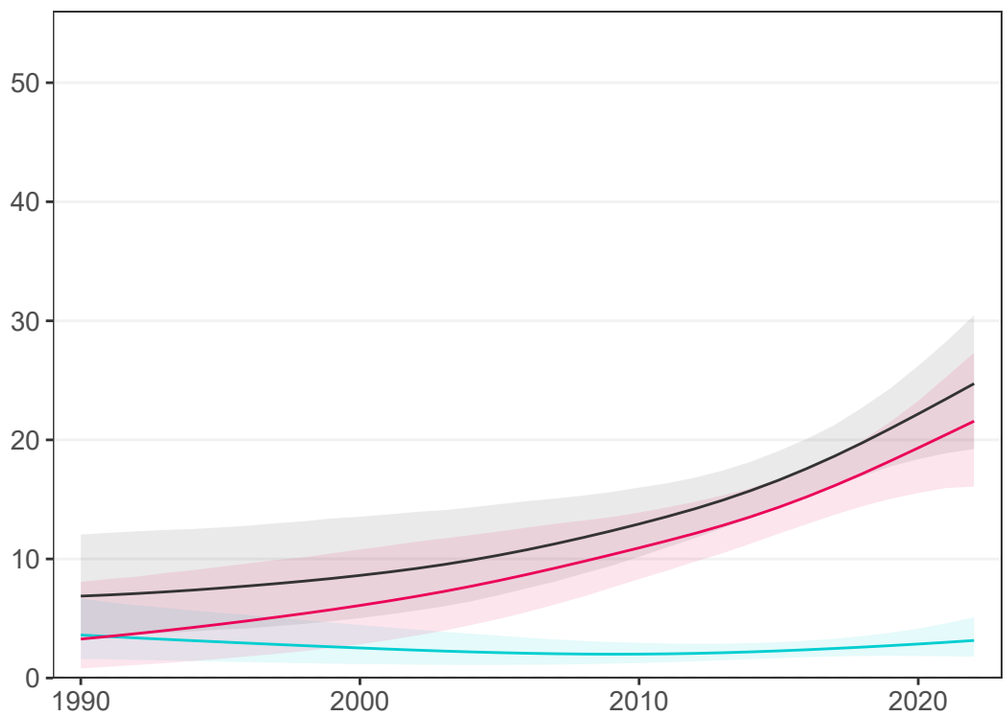
Girls

8 studies (5 national)



Boys

7 studies (4 national)

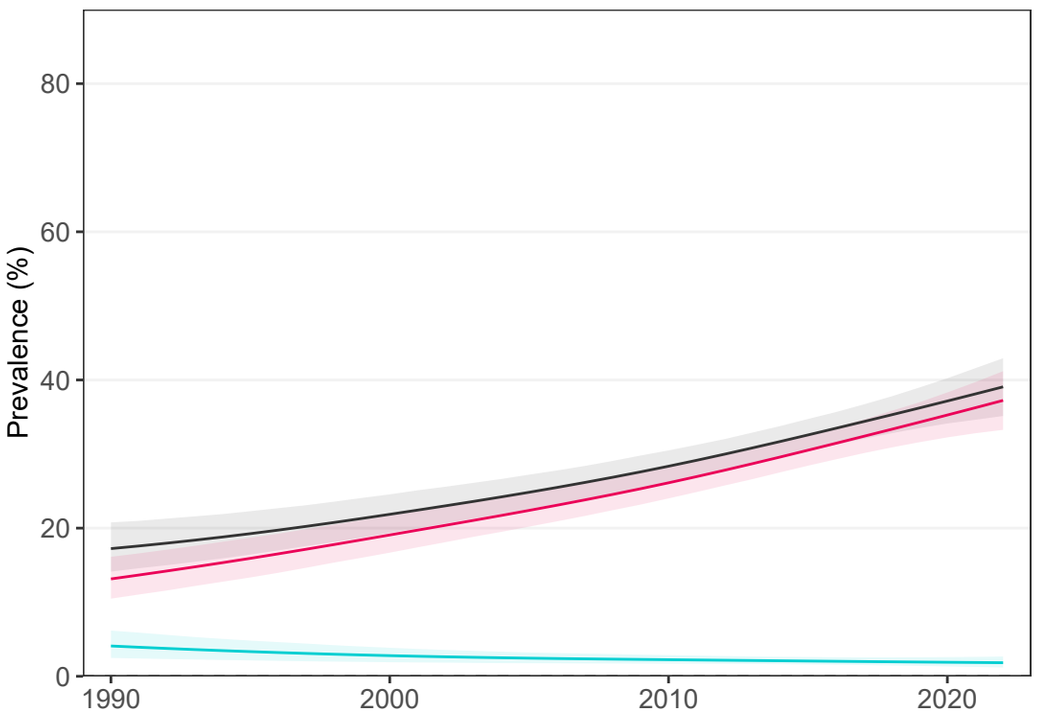


Combined burden
Thinness
Obesity

Adults

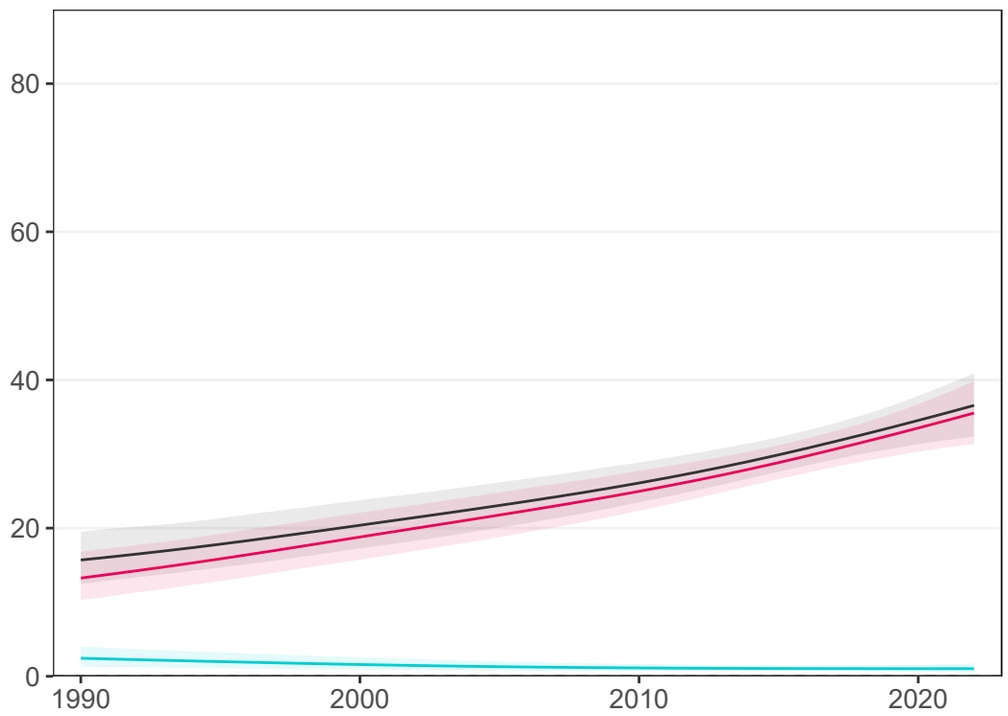
Women

14 studies (4 national)



Men

13 studies (3 national)



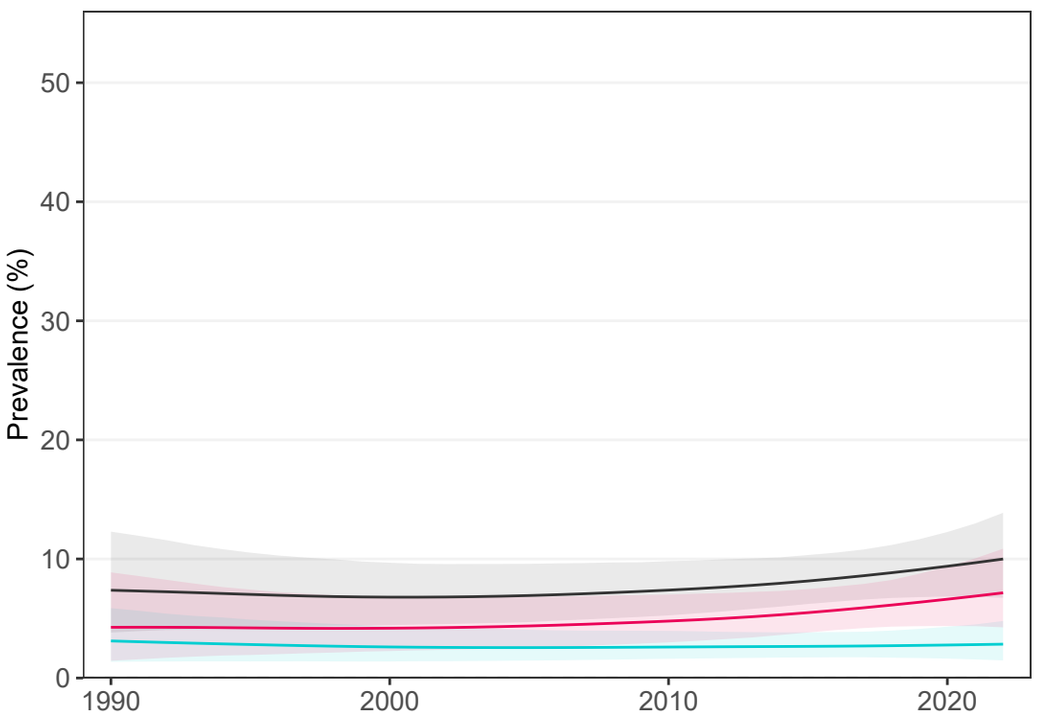
Combined burden
Underweight
Obesity

Armenia

School-aged children and adolescents

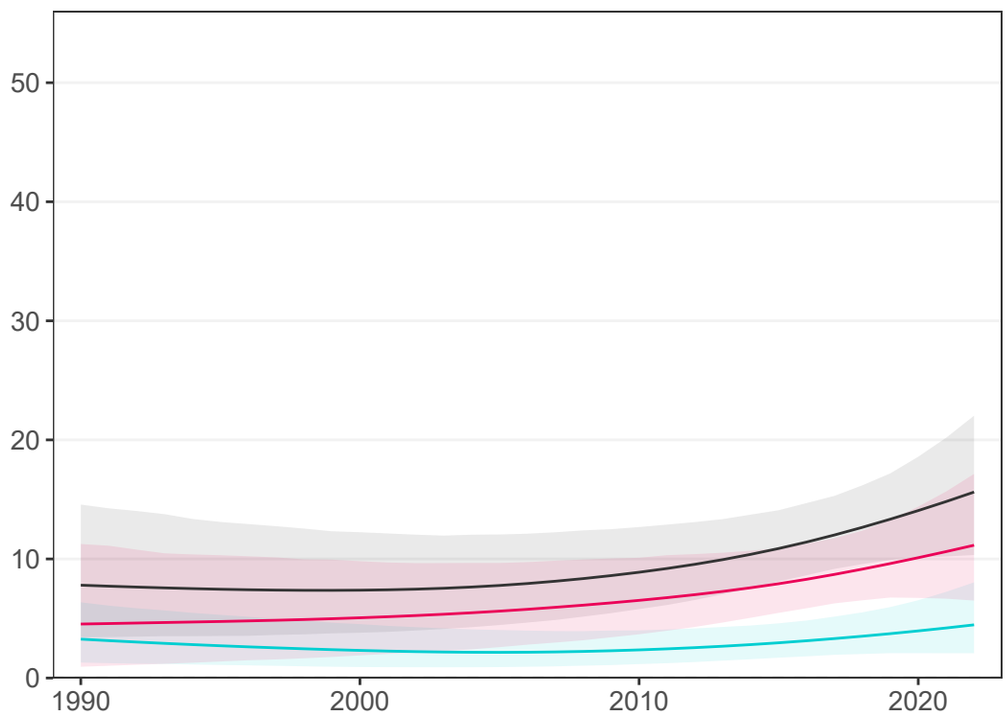
Girls

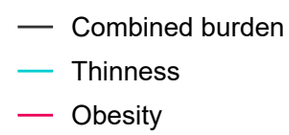
6 studies (6 national)



Boys

3 studies (3 national)

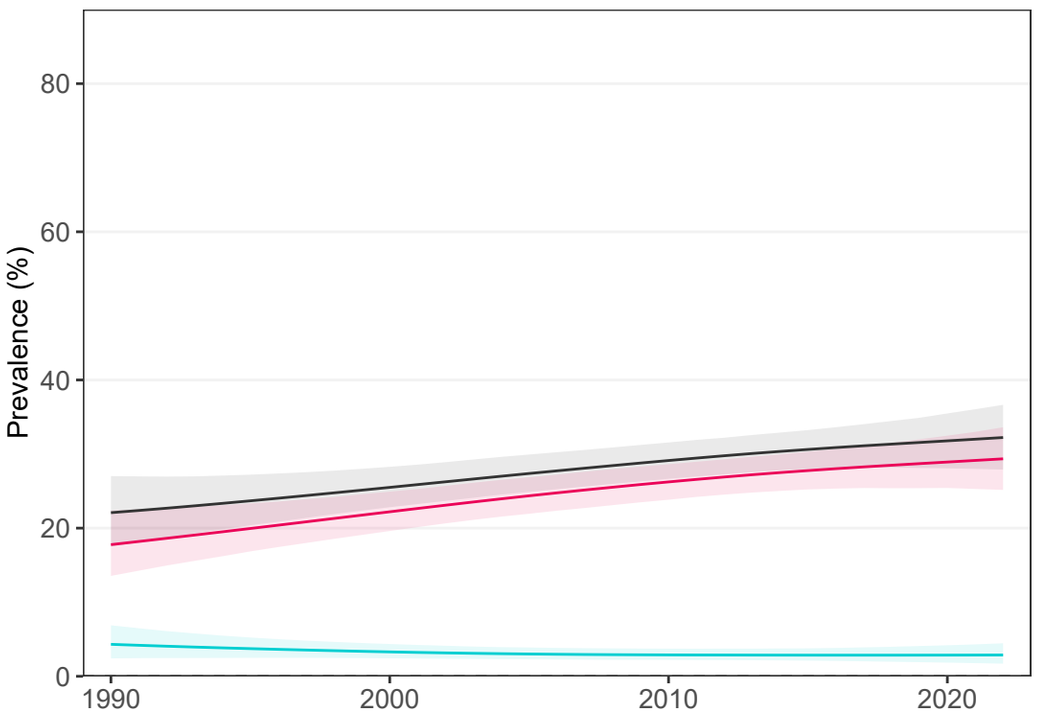




Adults

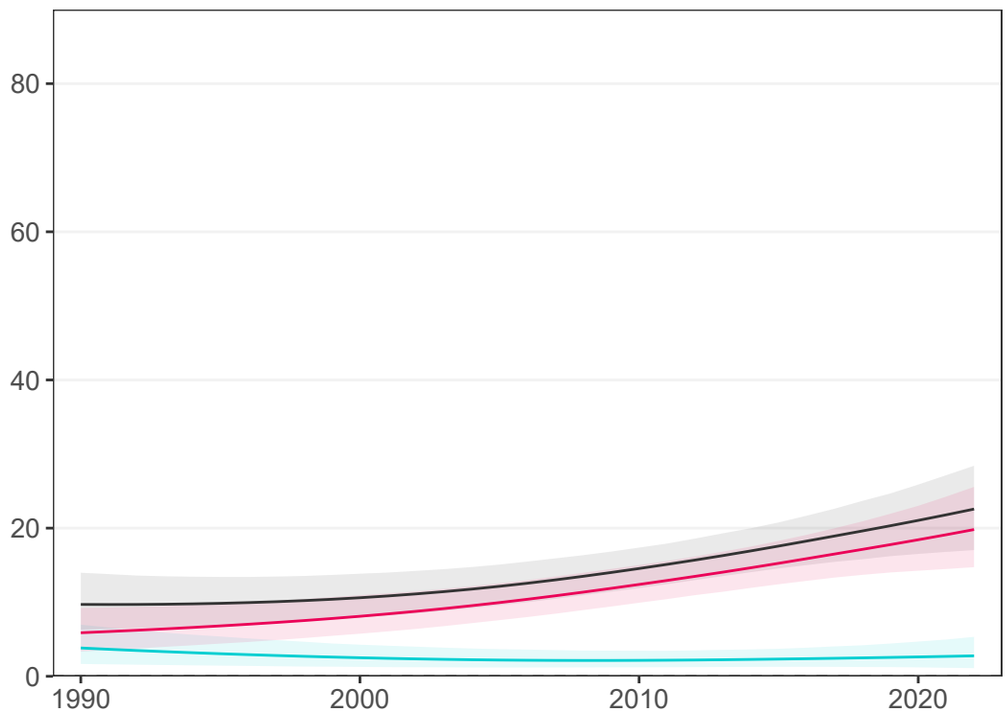
Women

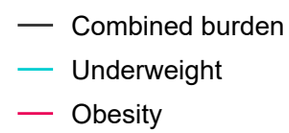
5 studies (5 national)



Men

2 studies (2 national)



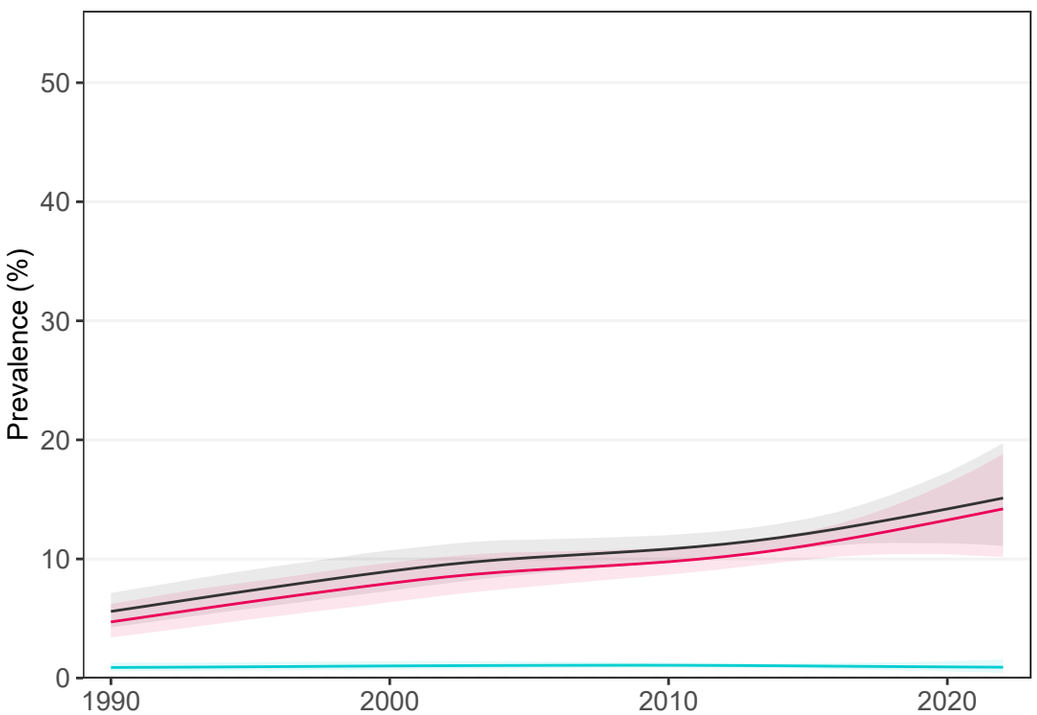


Australia

School-aged children and adolescents

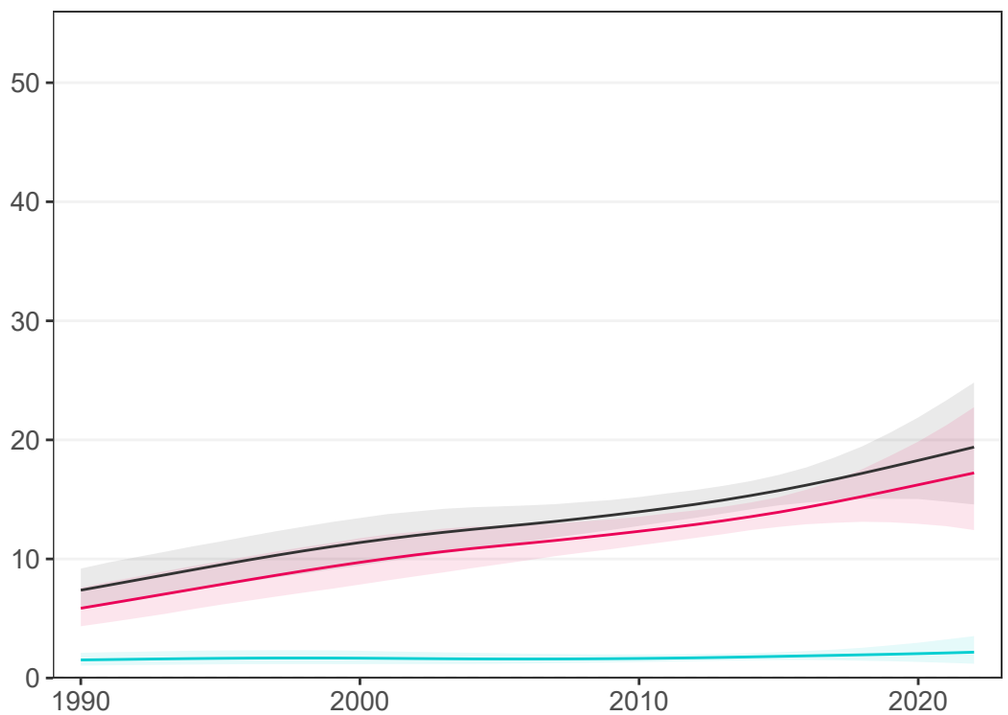
Girls

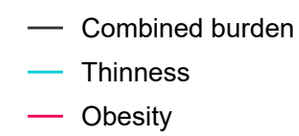
28 studies (21 national)



Boys

28 studies (21 national)

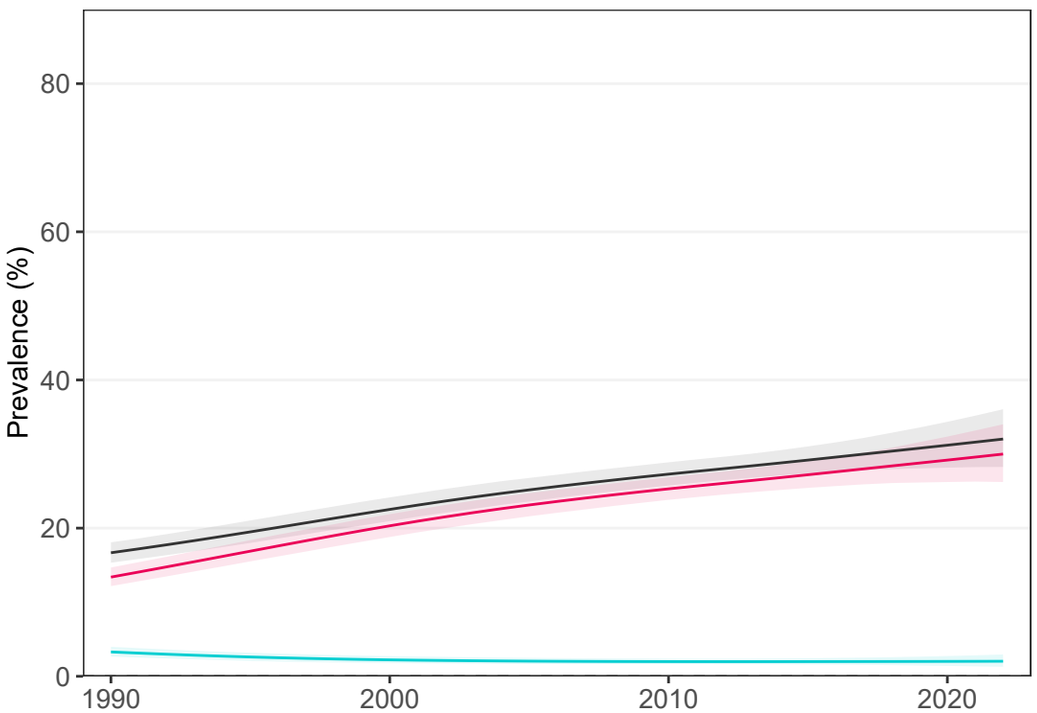




Adults

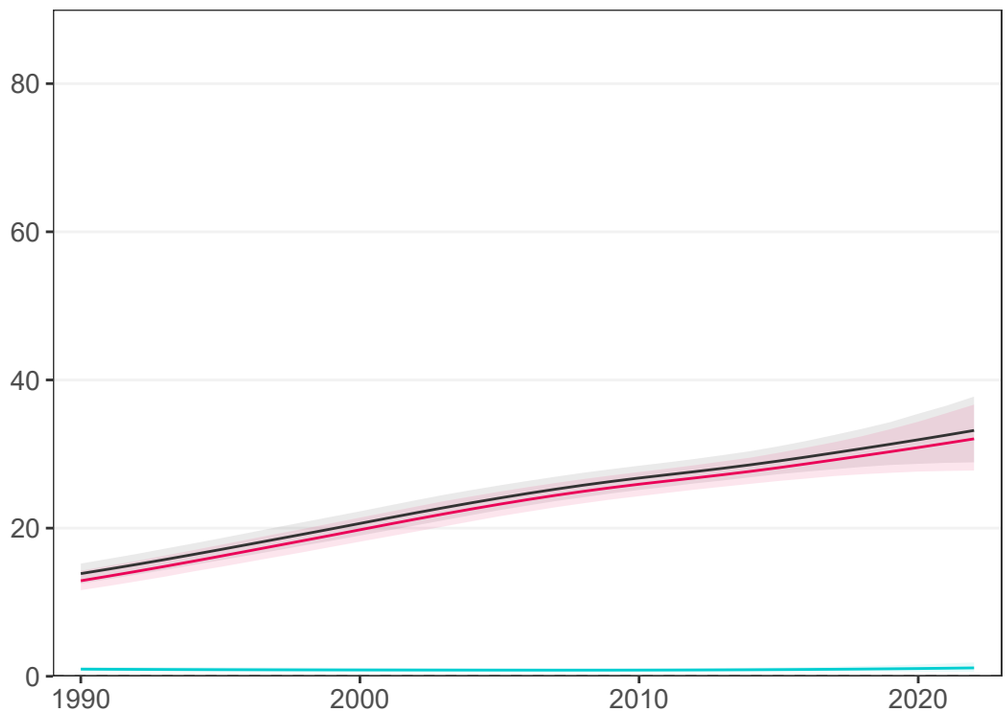
Women

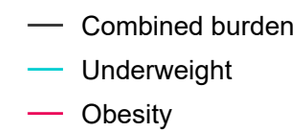
26 studies (12 national)



Men

27 studies (12 national)



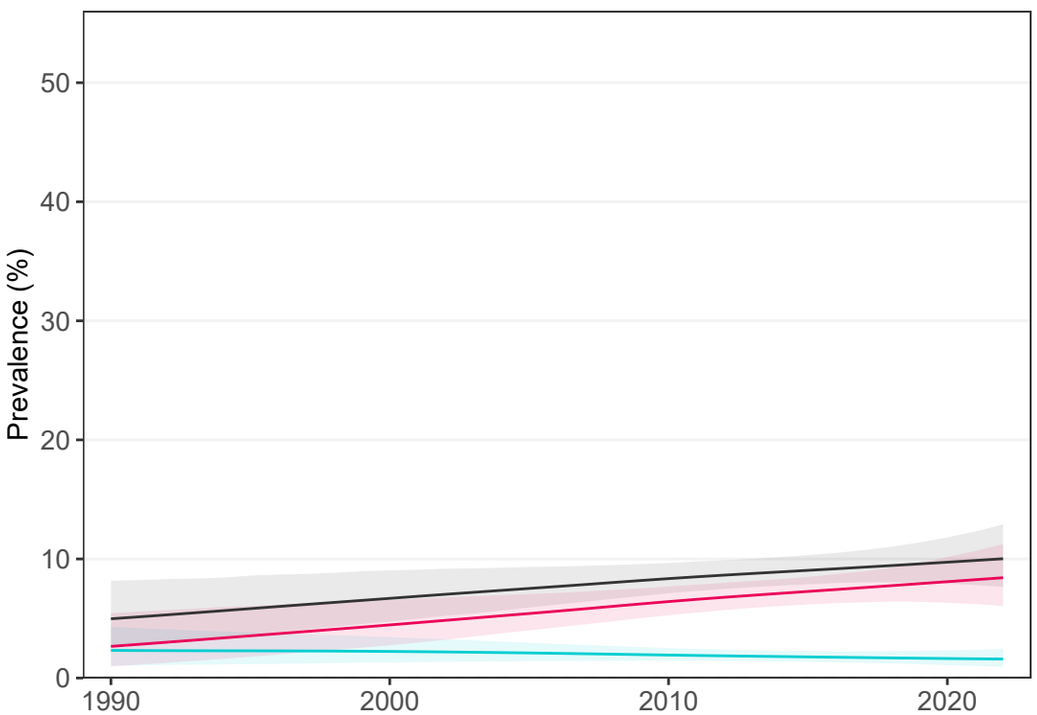


Austria

School-aged children and adolescents

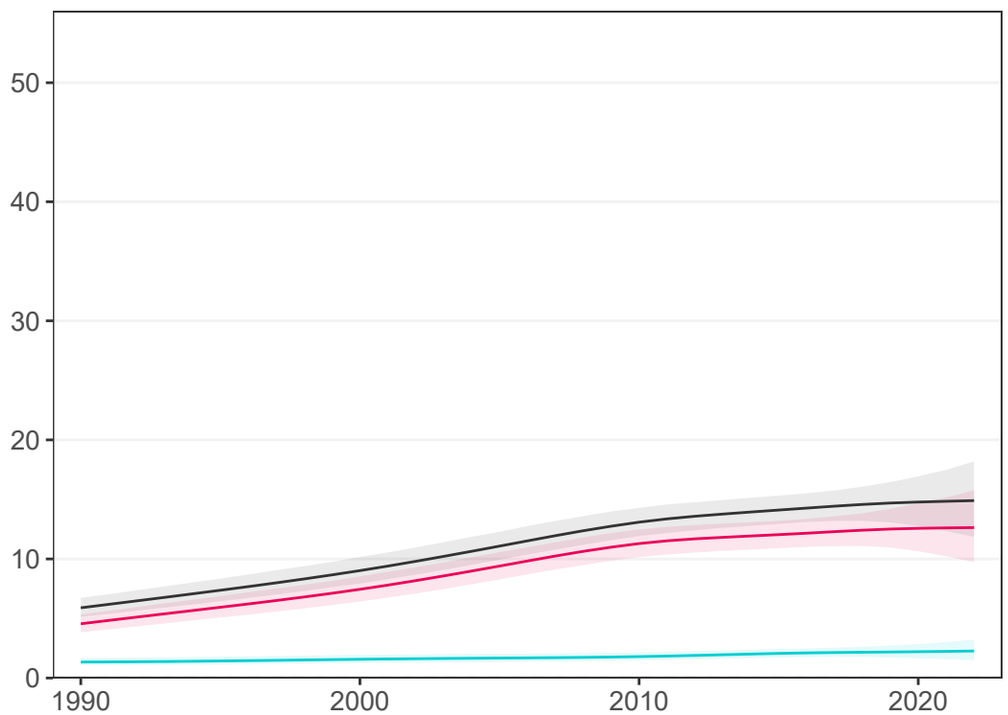
Girls

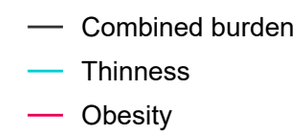
22 studies (5 national)



Boys

59 studies (42 national)

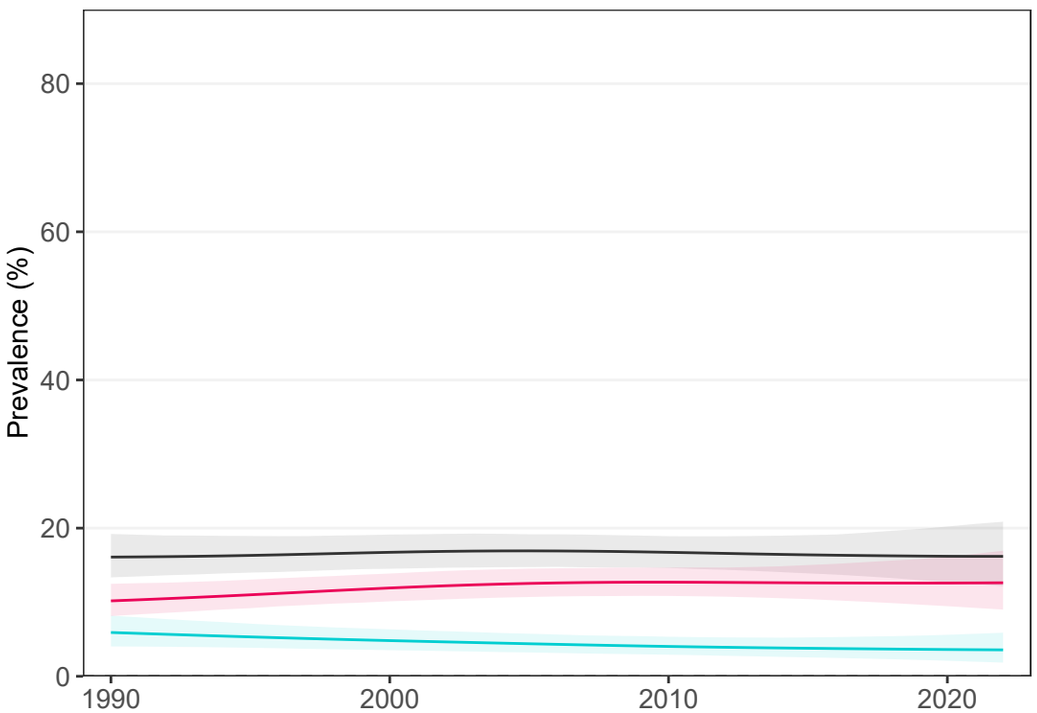




Adults

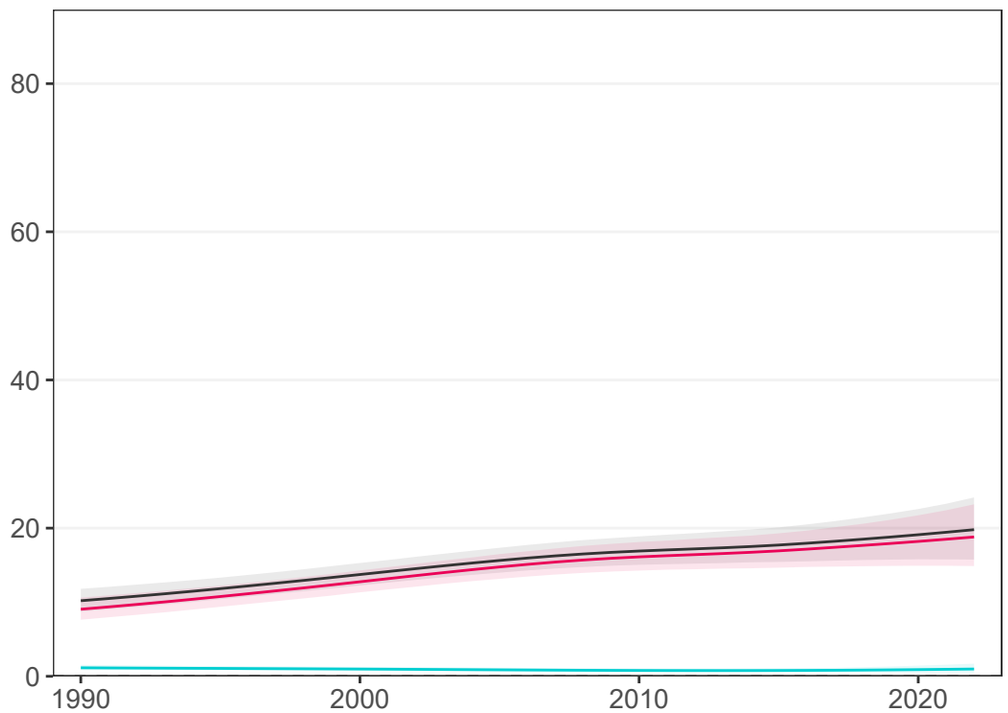
Women

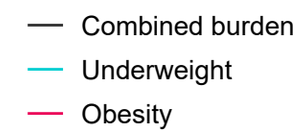
8 studies (2 national)



Men

45 studies (39 national)



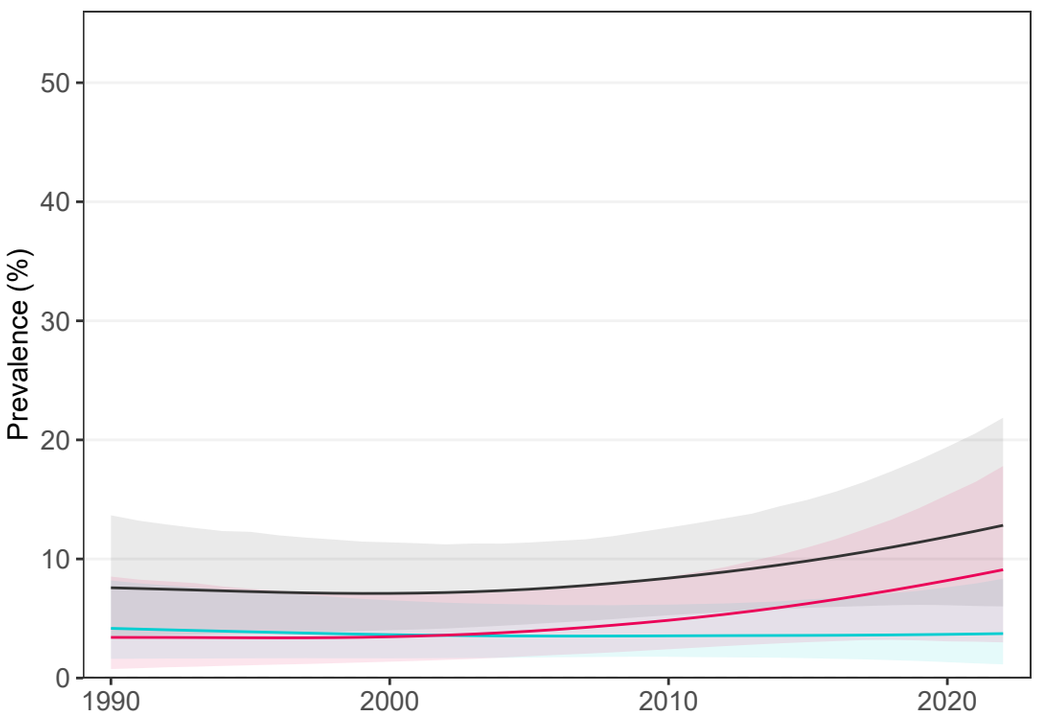


Azerbaijan

School-aged children and adolescents

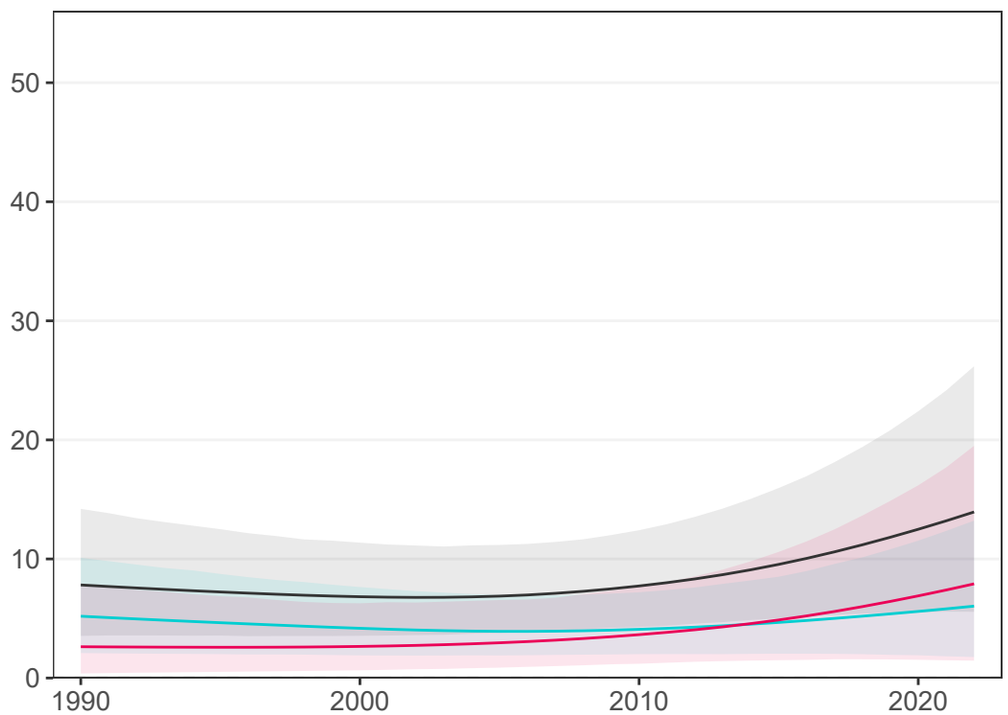
Girls

4 studies (4 national)



Boys

2 studies (2 national)

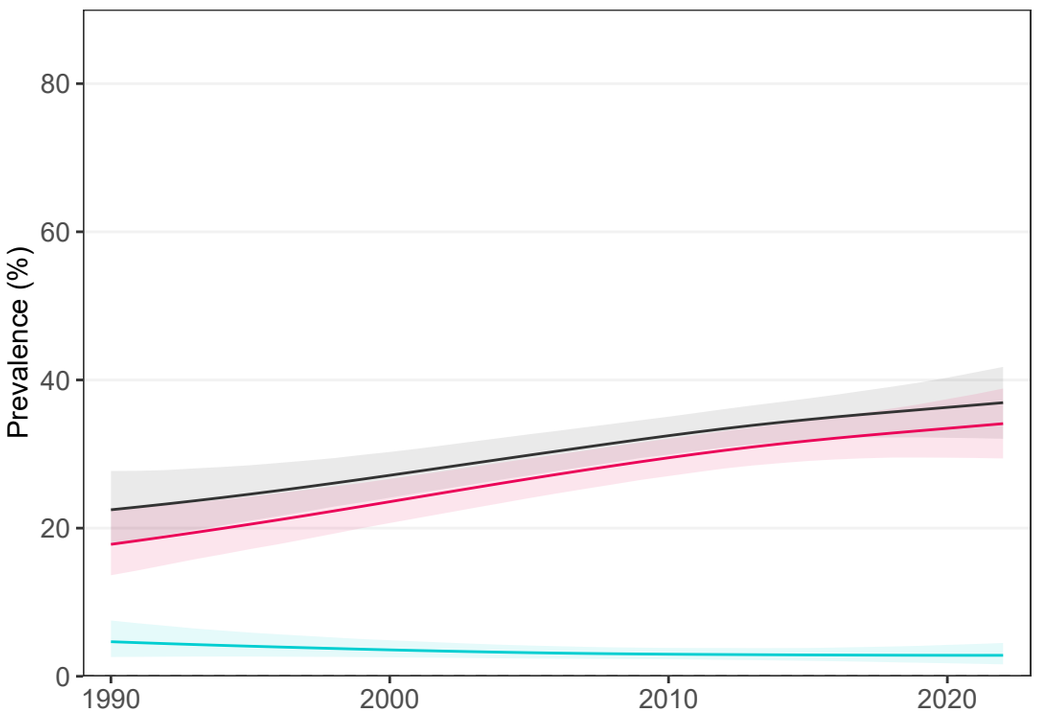


Combined burden
Thinness
Obesity

Adults

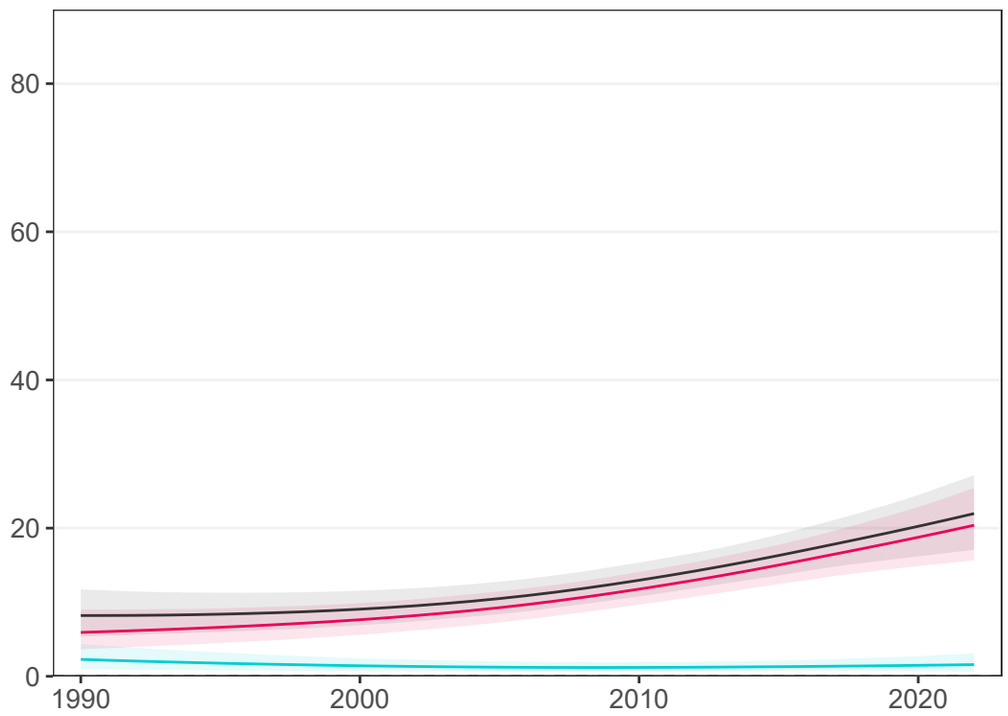
Women

5 studies (5 national)



Men

3 studies (3 national)



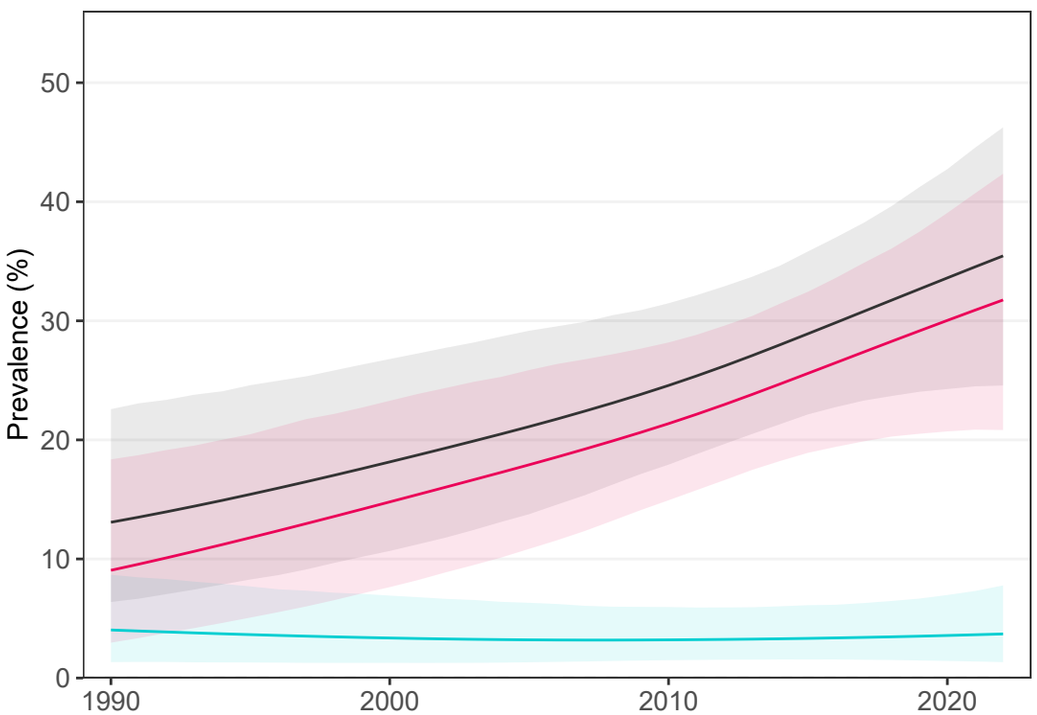
Combined burden
Underweight
Obesity

Bahamas

School-aged children and adolescents

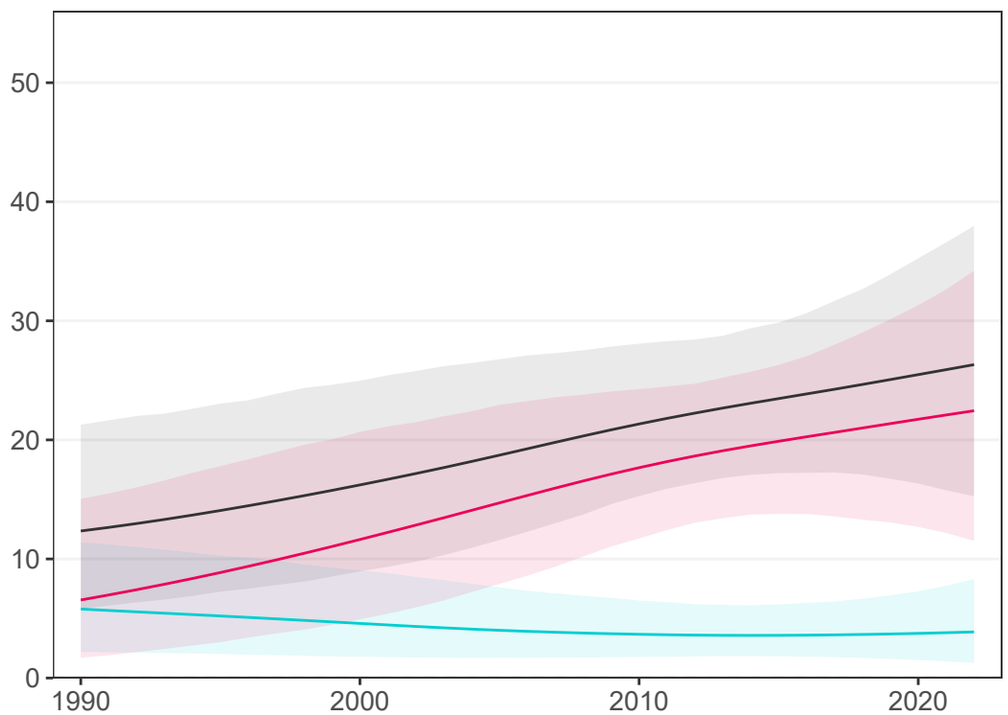
Girls

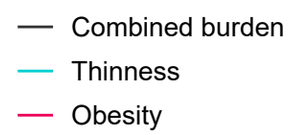
2 studies (2 national)



Boys

2 studies (2 national)

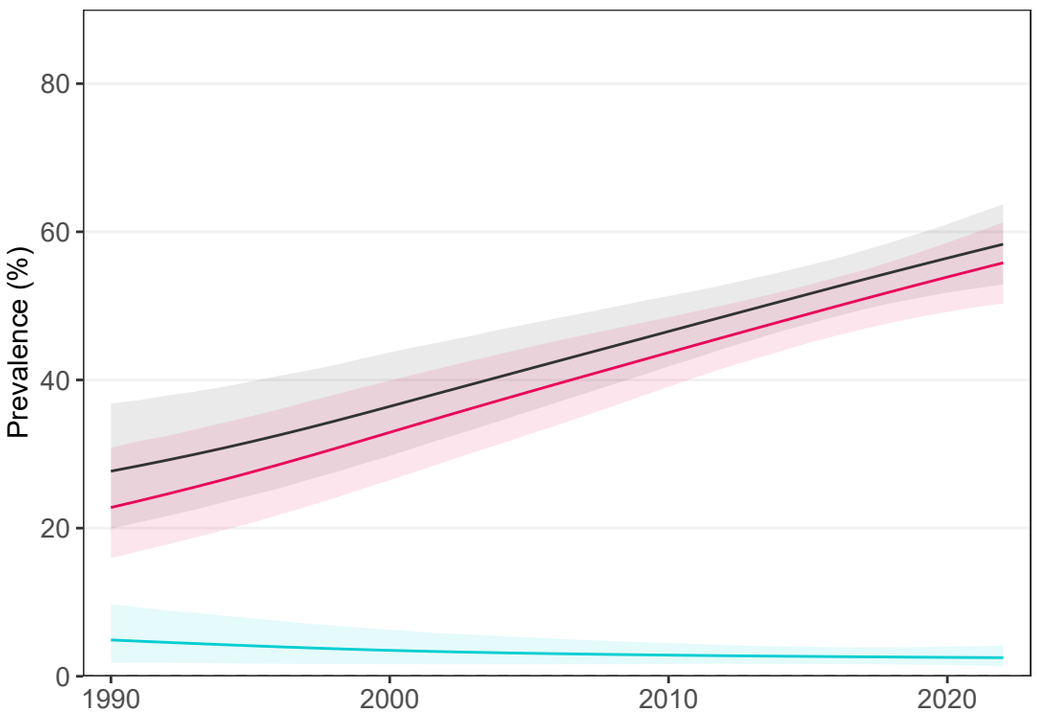




Adults

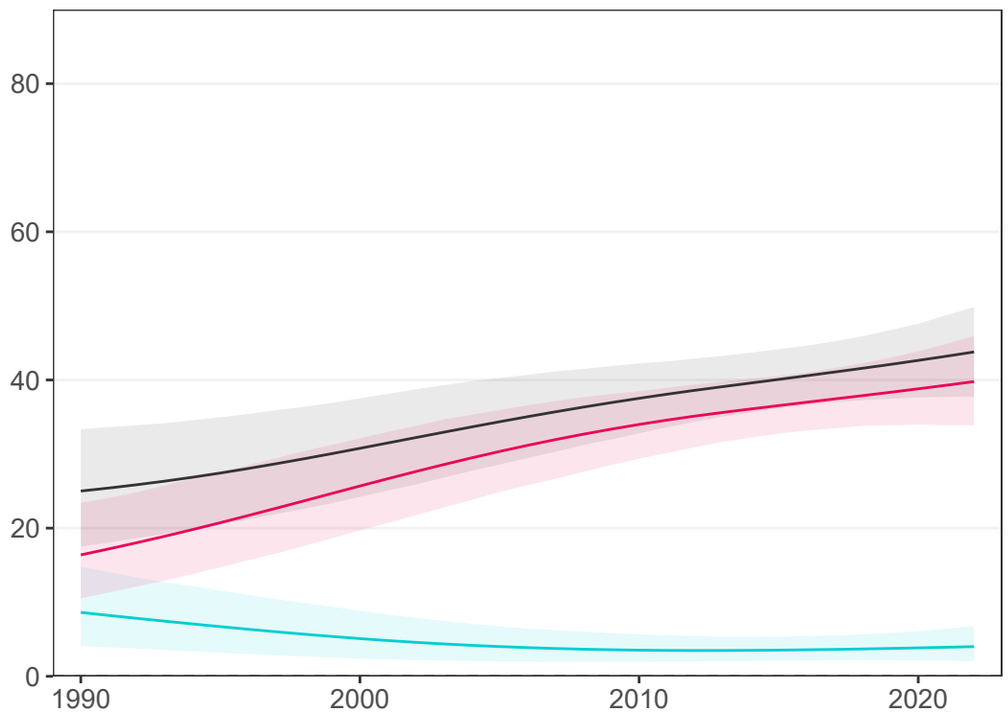
Women

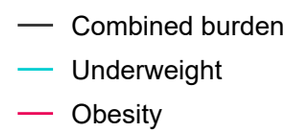
2 studies (2 national)



Men

2 studies (2 national)



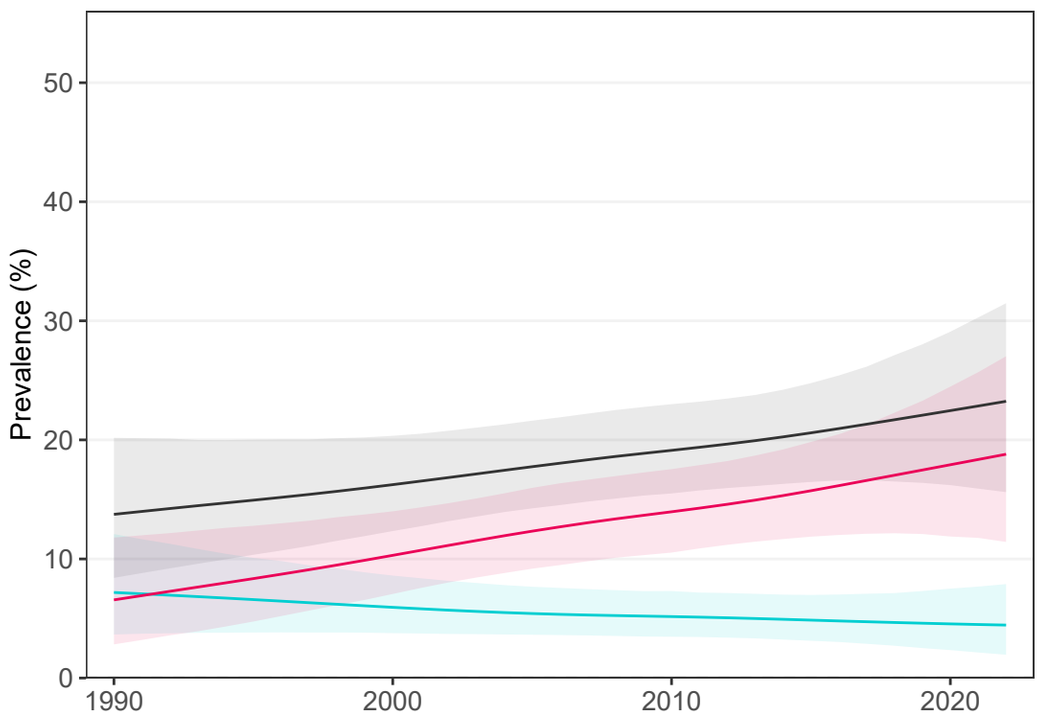


Bahrain

School-aged children and adolescents

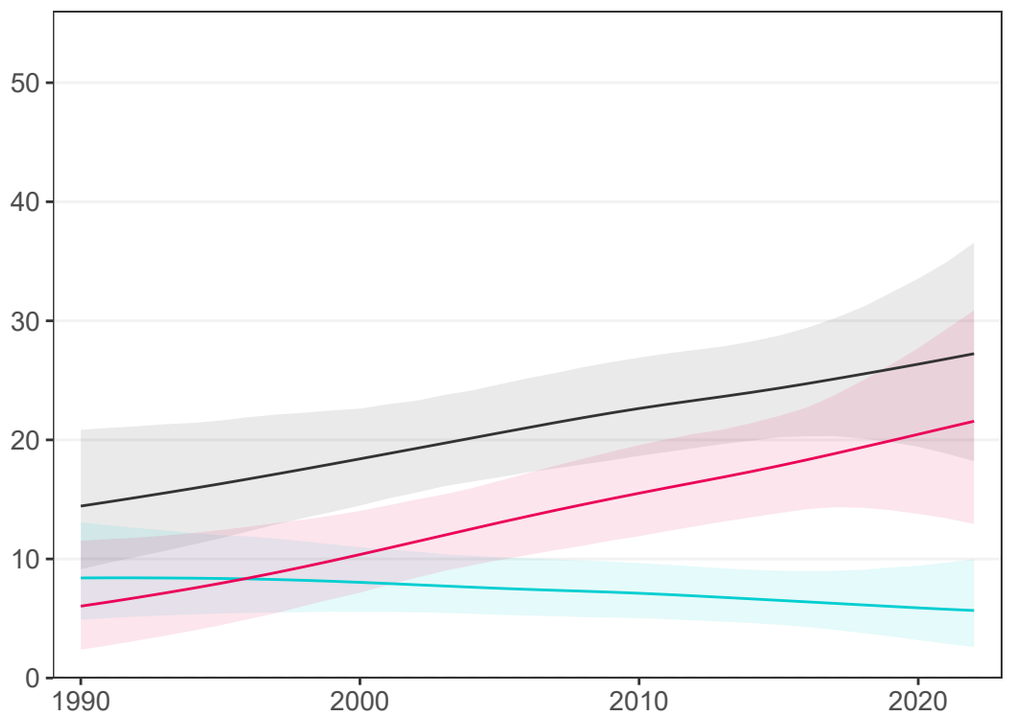
Girls

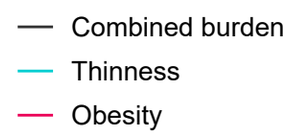
2 studies (2 national)



Boys

2 studies (2 national)

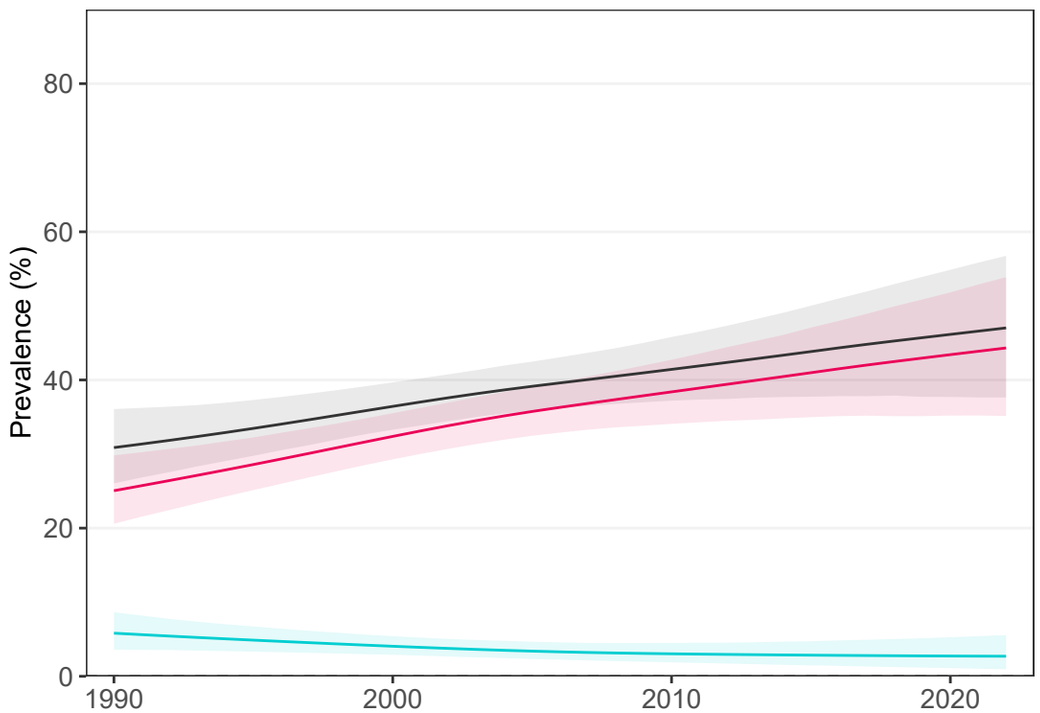




Adults

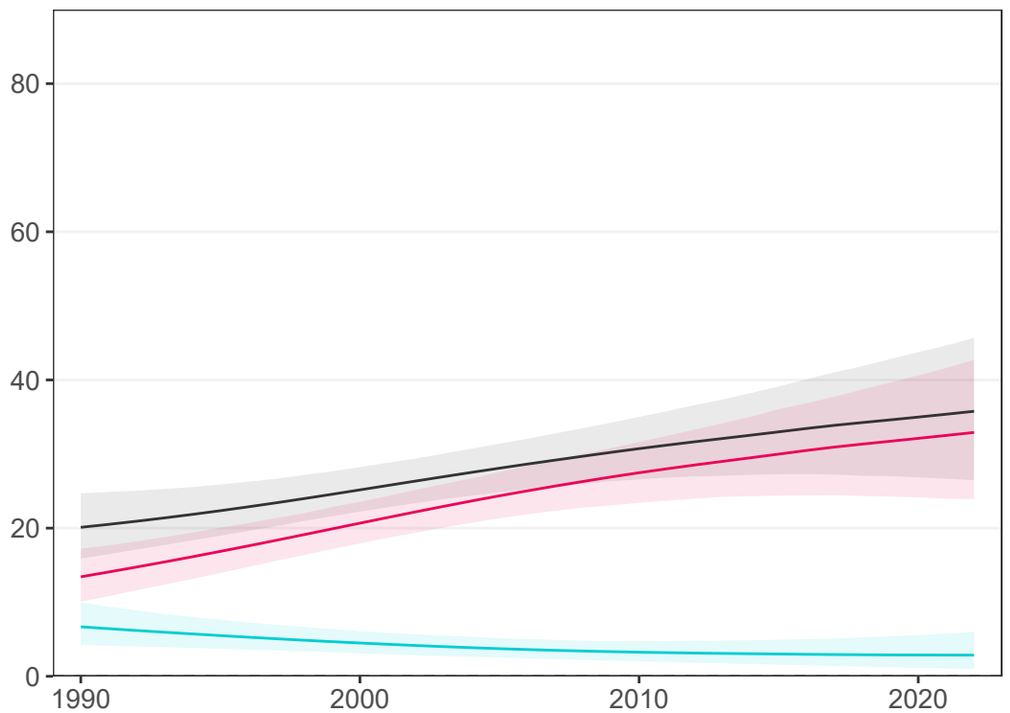
Women

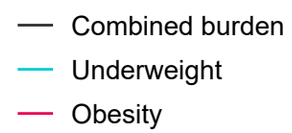
5 studies (3 national)



Men

5 studies (3 national)



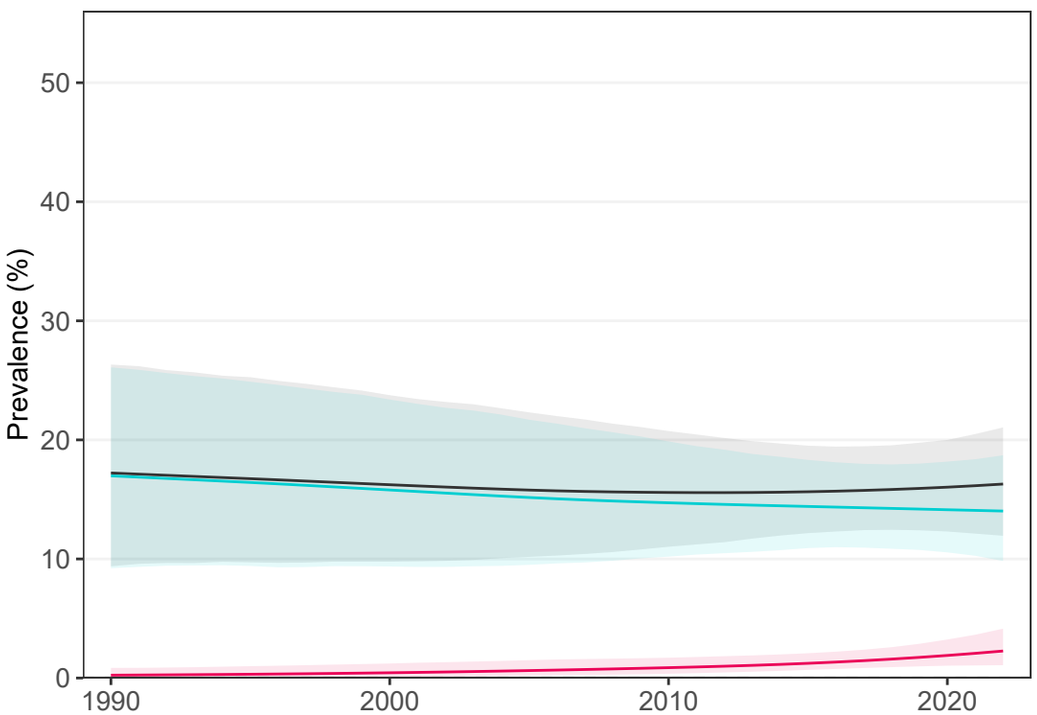


Bangladesh

School-aged children and adolescents

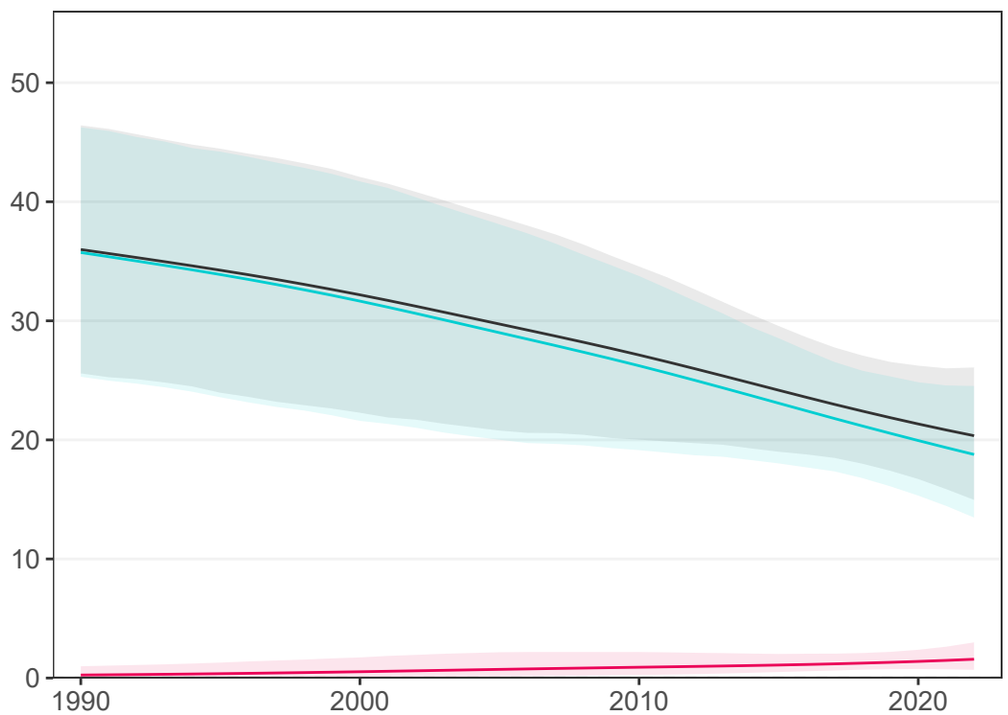
Girls

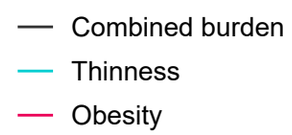
4 studies (3 national)



Boys

4 studies (3 national)

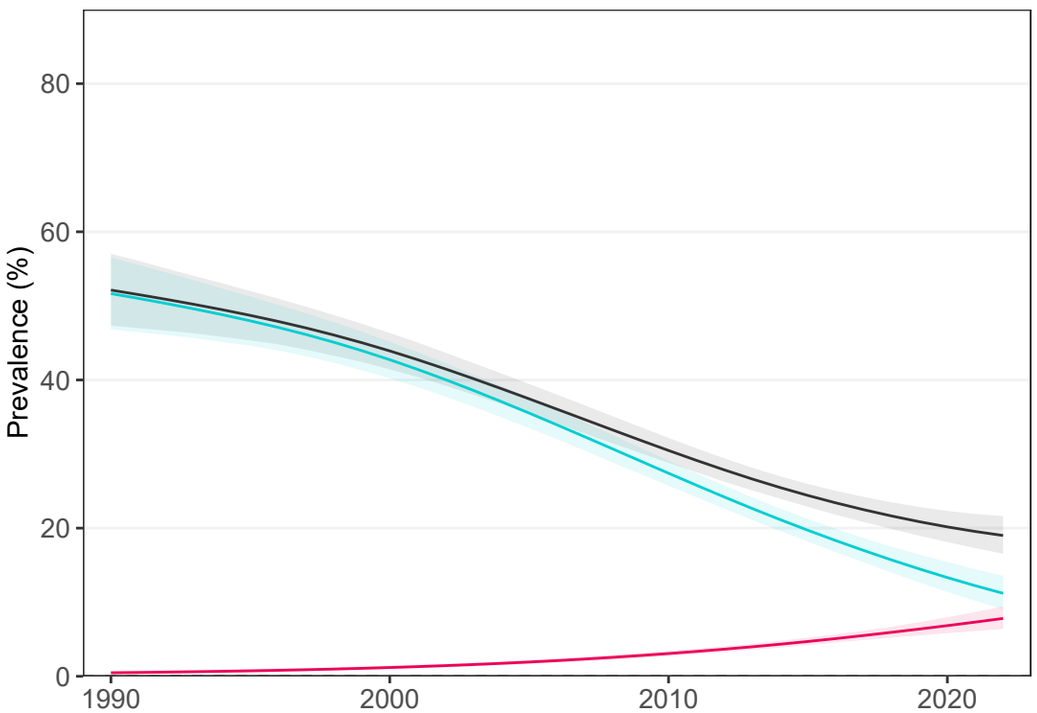




Adults

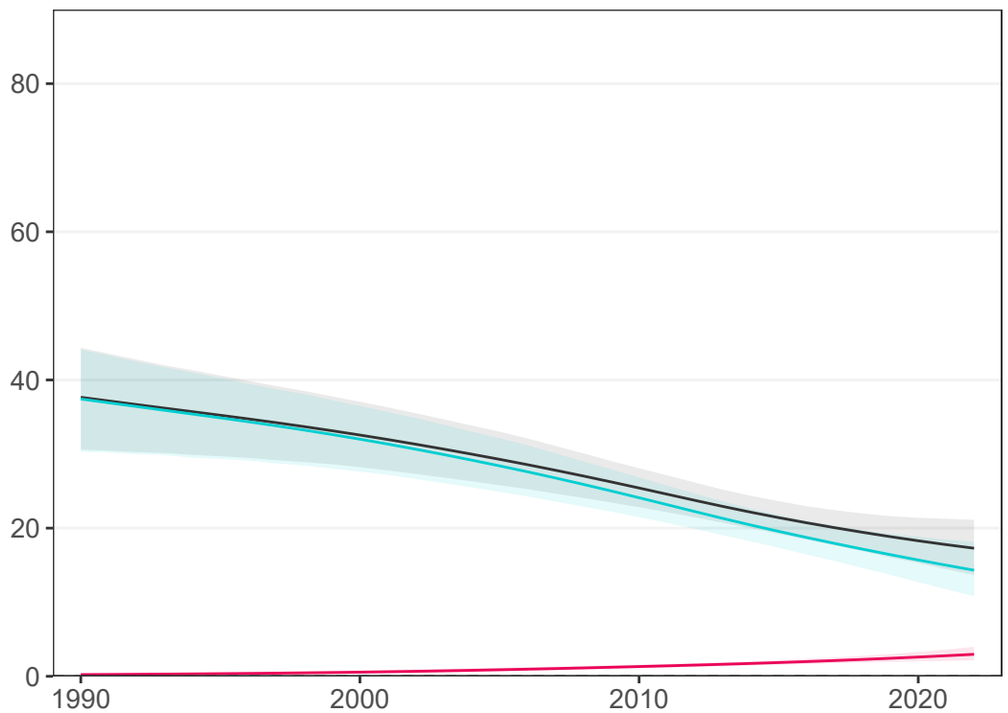
Women

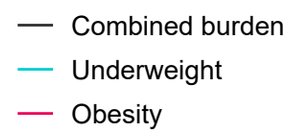
21 studies (13 national)



Men

14 studies (6 national)



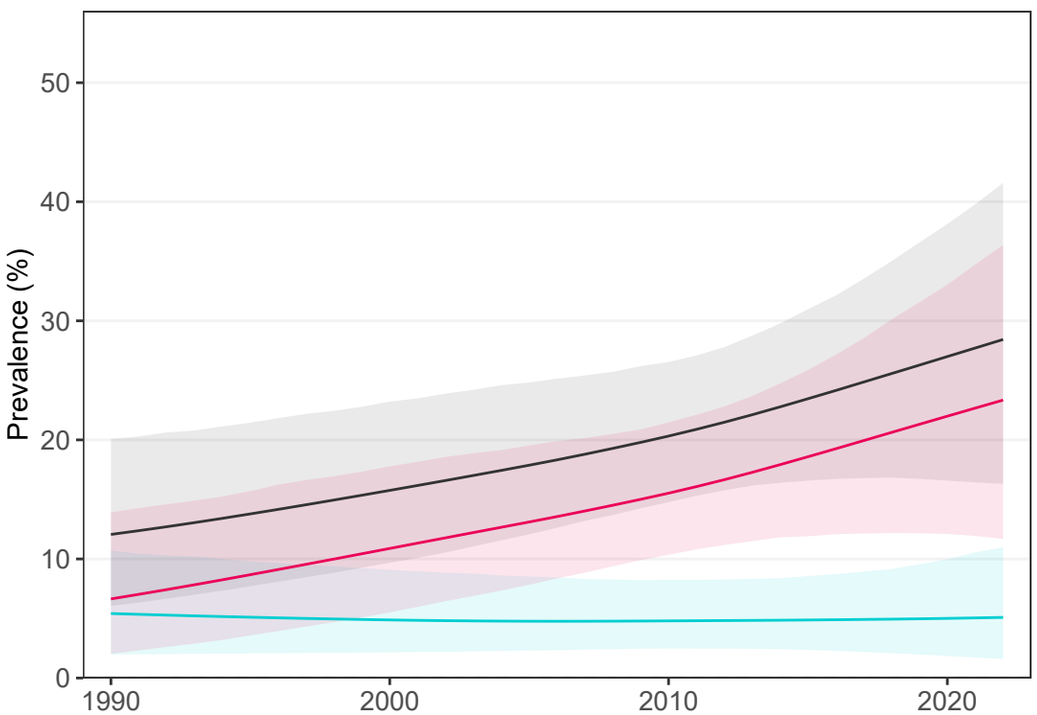


Barbados

School-aged children and adolescents

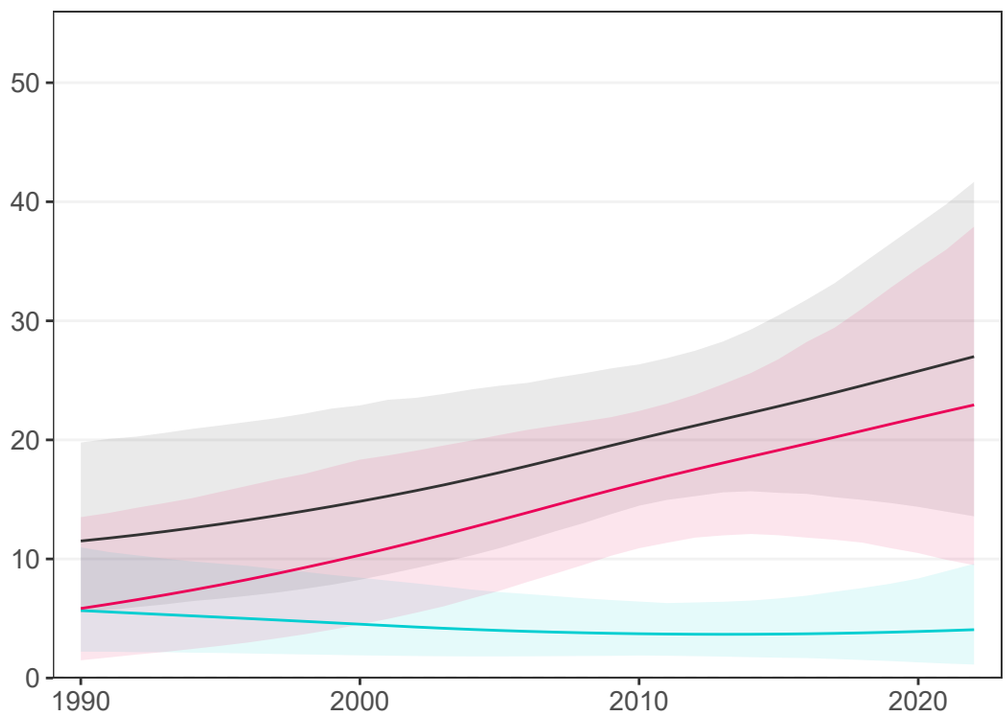
Girls

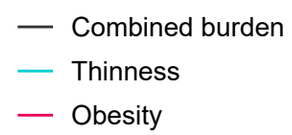
1 study (1 national)



Boys

1 study (1 national)

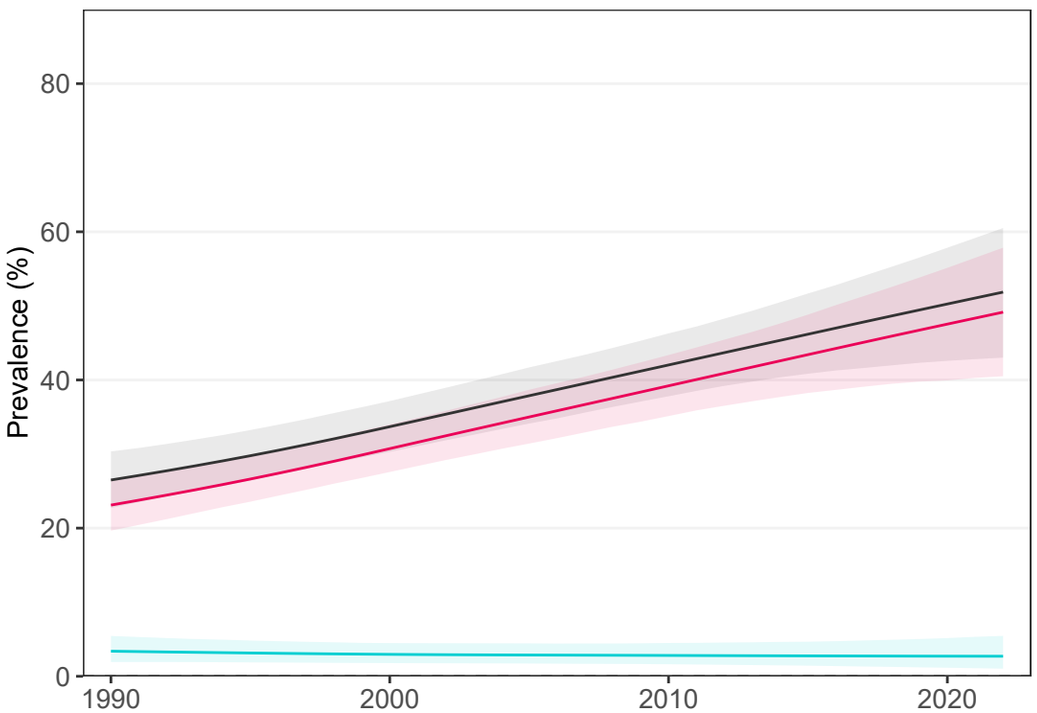




Adults

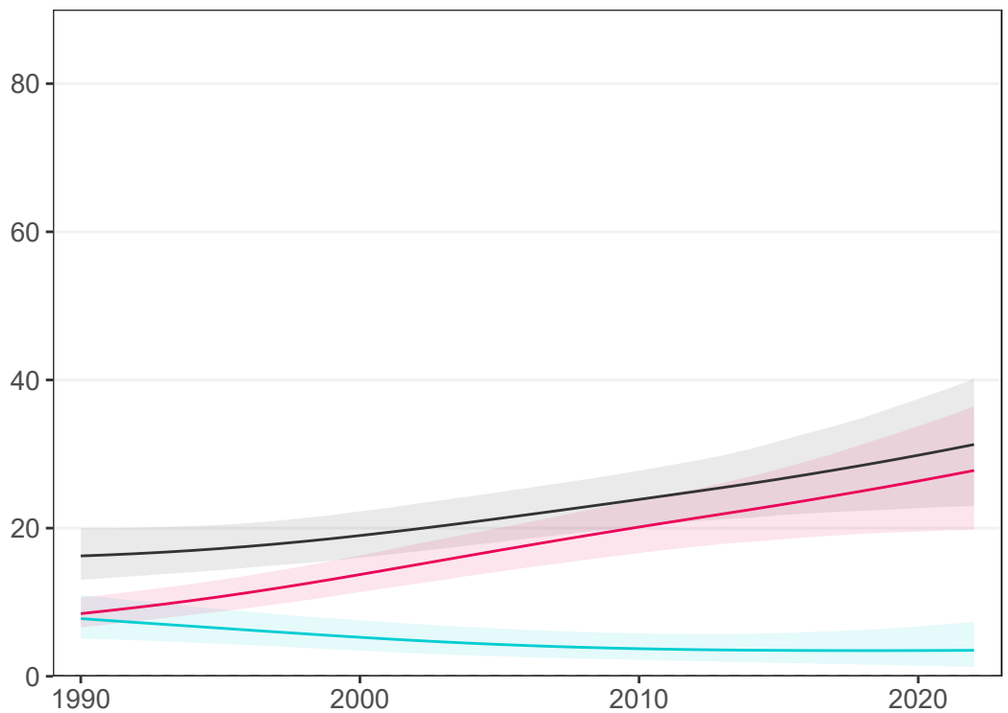
Women

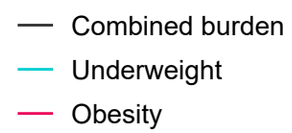
5 studies (3 national)



Men

5 studies (3 national)



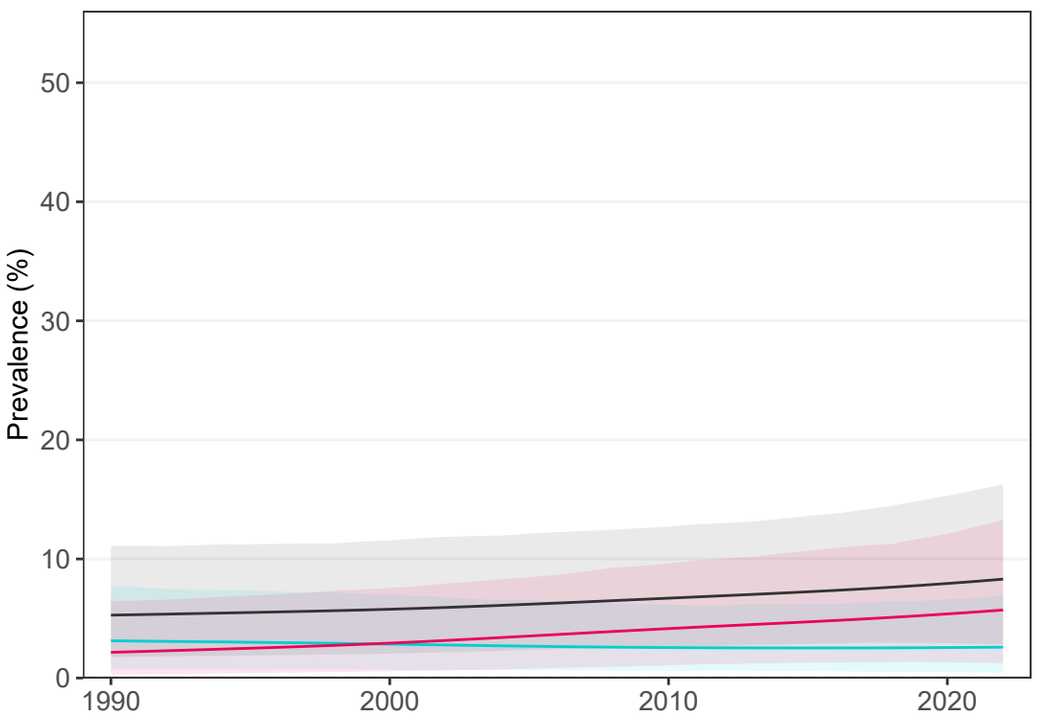


Belarus

School-aged children and adolescents

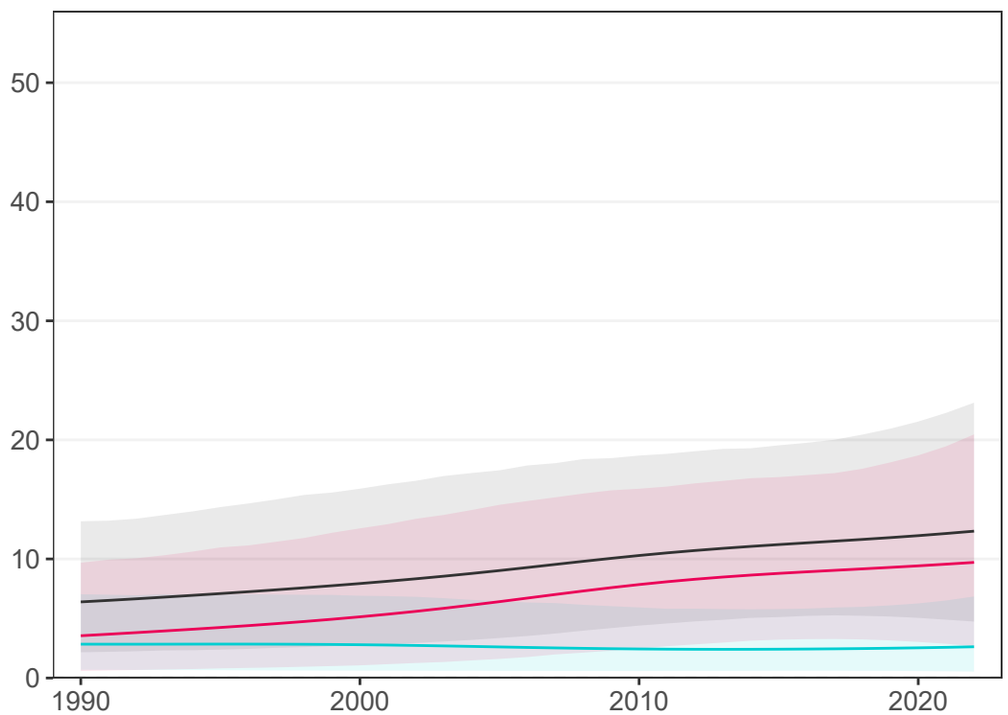
Girls

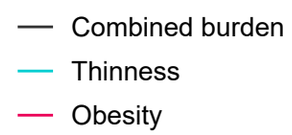
2 studies (2 national)



Boys

2 studies (2 national)

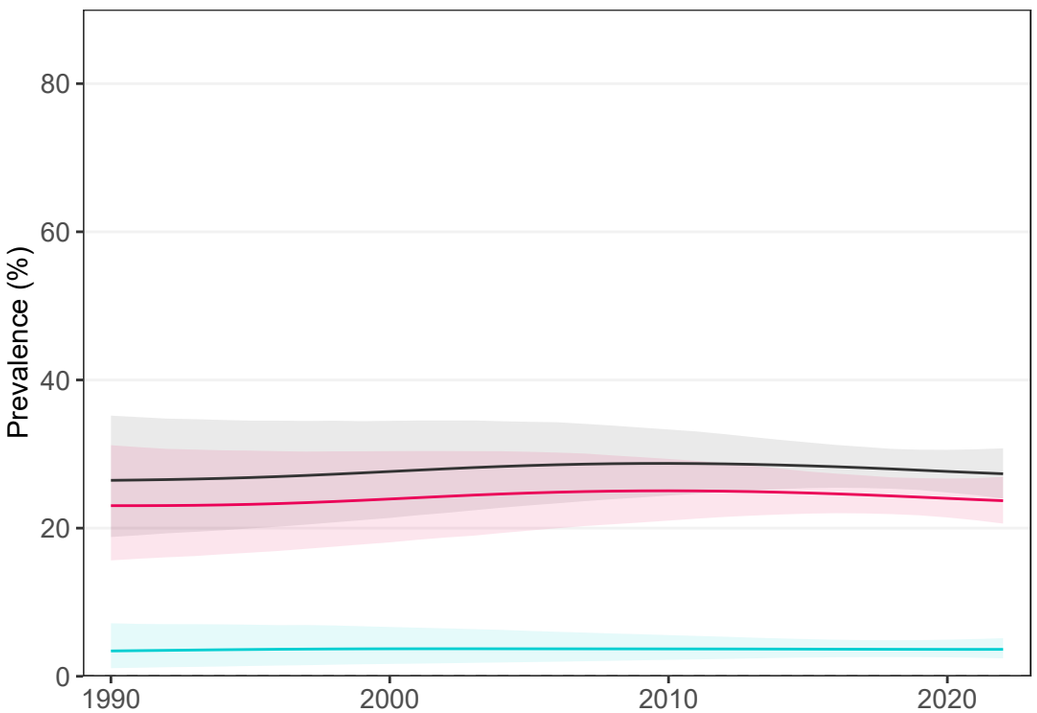




Adults

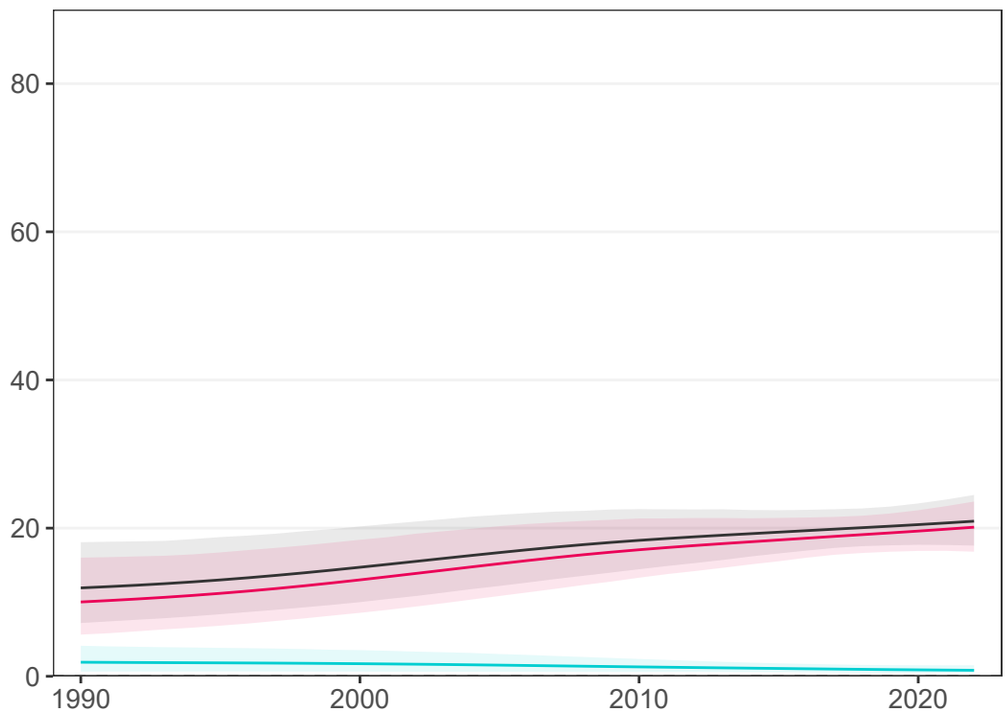
Women

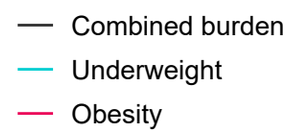
2 studies (2 national)



Men

2 studies (2 national)



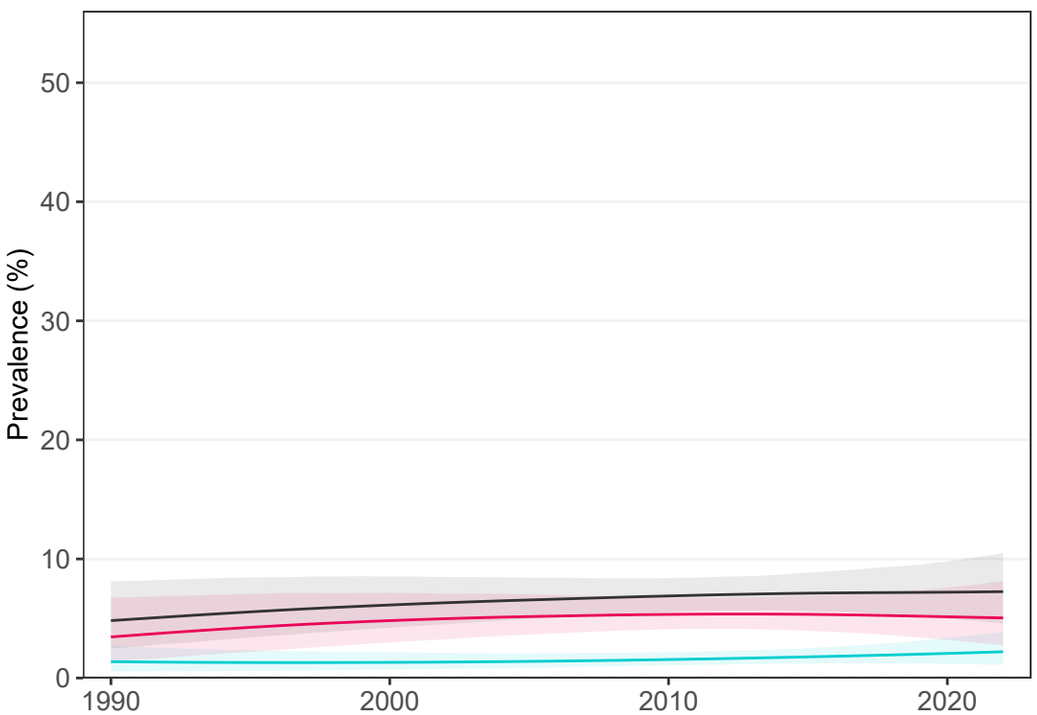


Belgium

School-aged children and adolescents

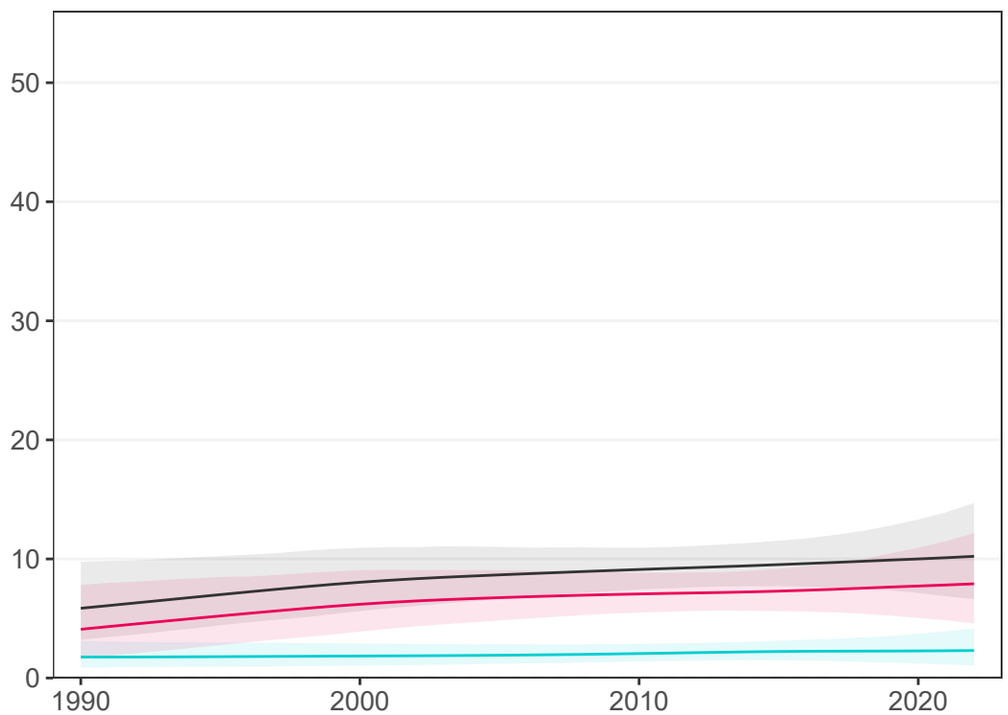
Girls

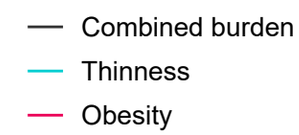
19 studies (2 national)



Boys

20 studies (2 national)

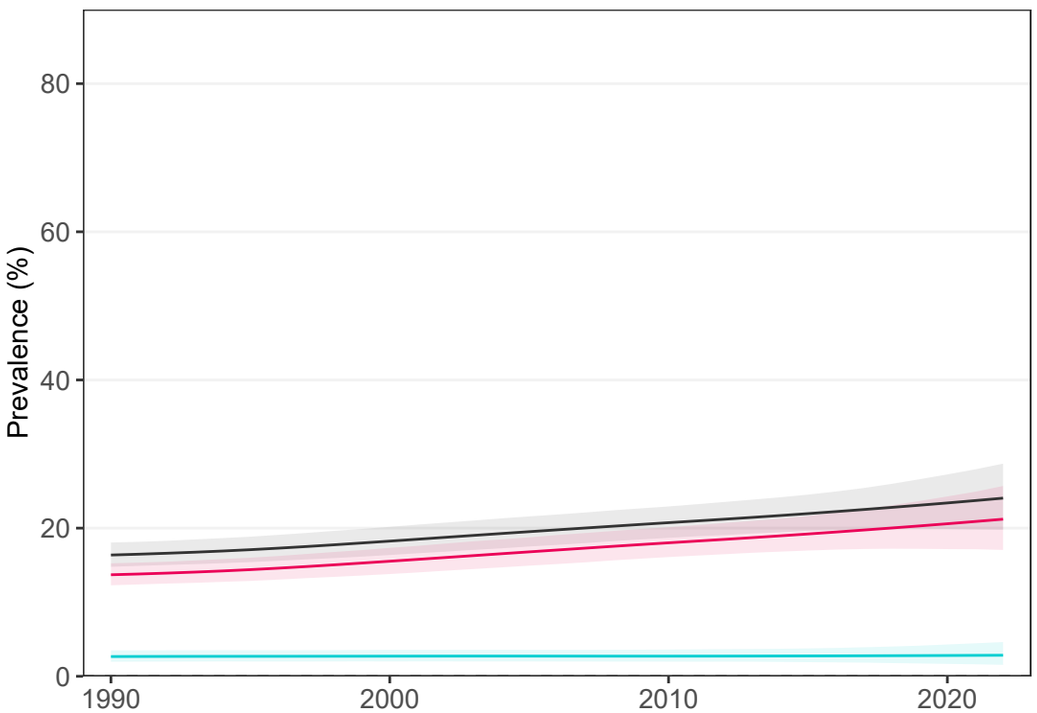




Adults

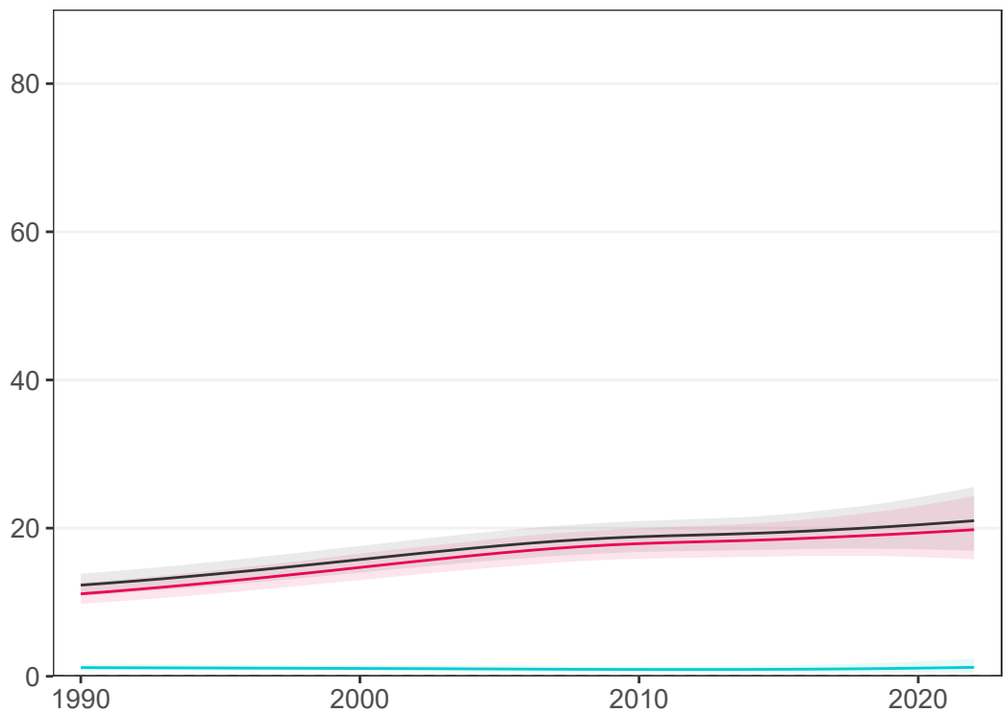
Women

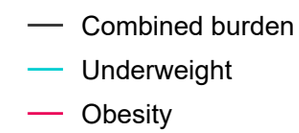
28 studies (4 national)



Men

30 studies (4 national)



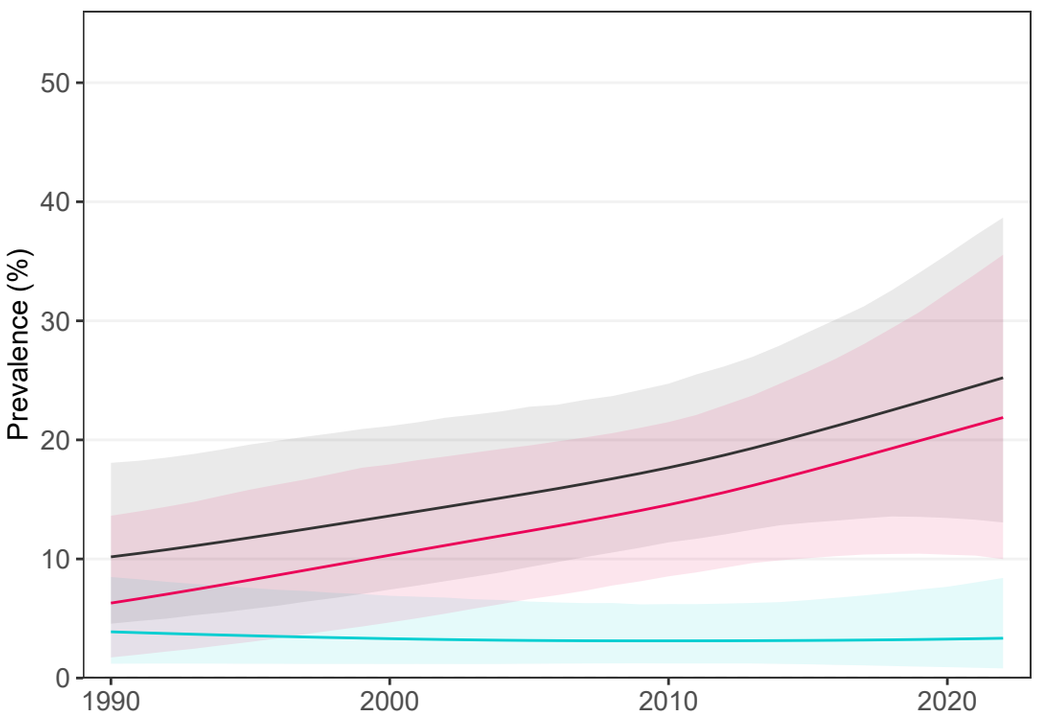


Belize

School-aged children and adolescents

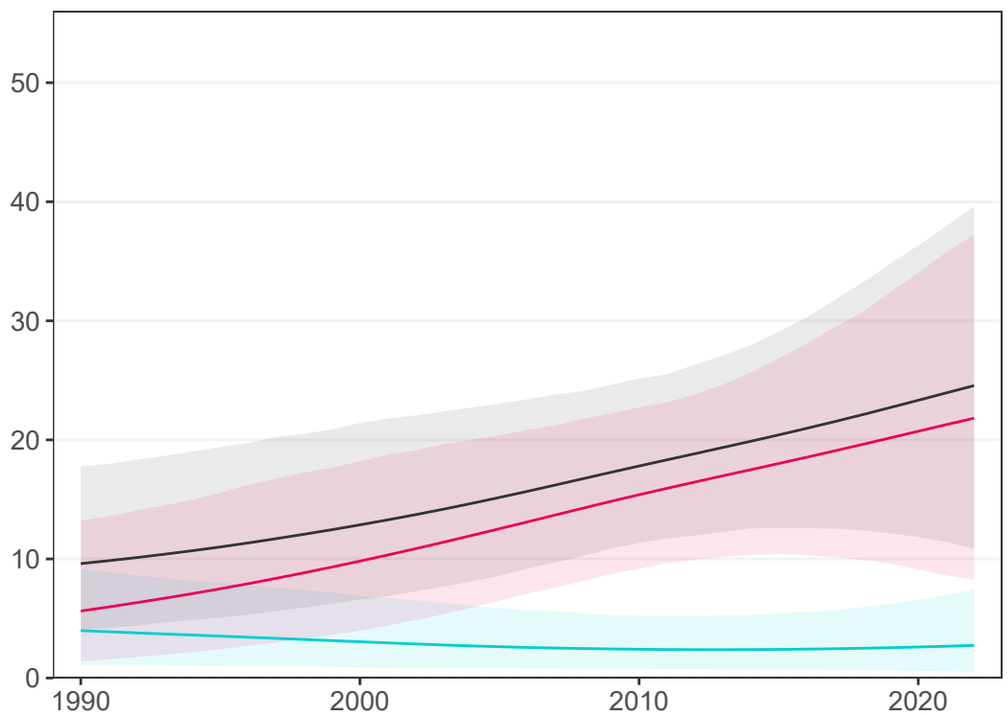
Girls

1 study (1 national)



Boys

1 study (1 national)

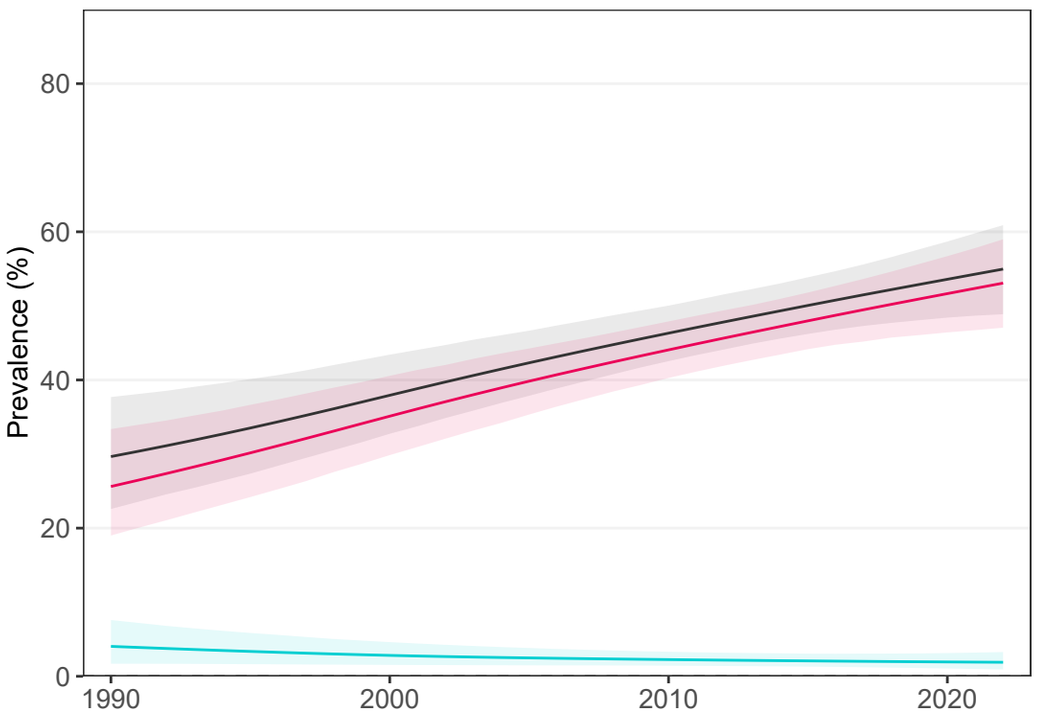


Combined burden
Thinness
Obesity

Adults

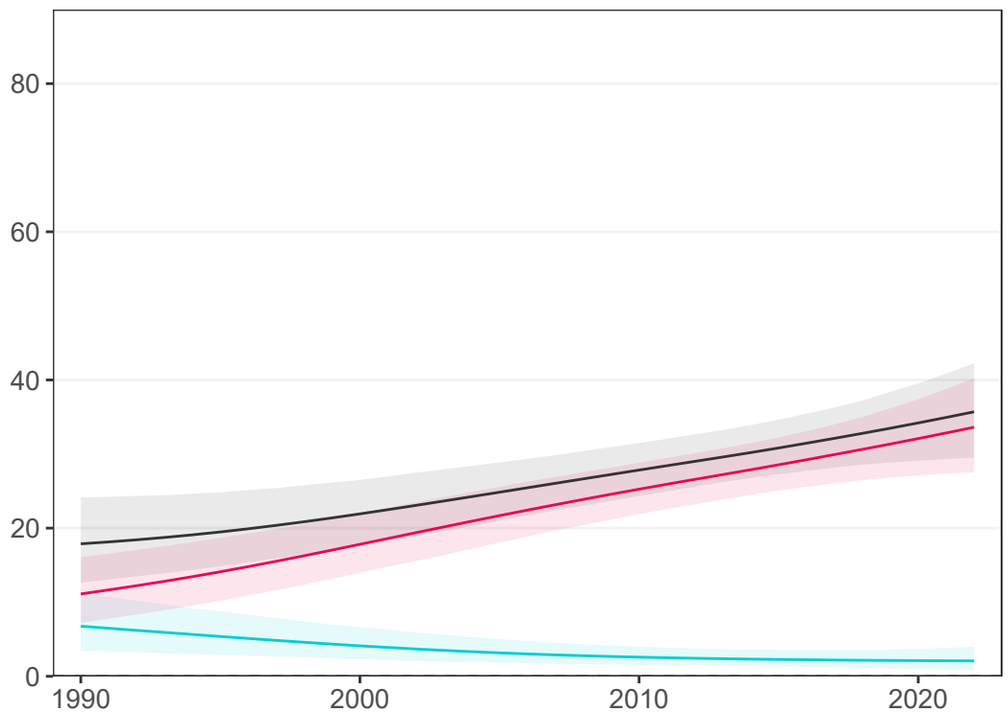
Women

2 studies (2 national)



Men

2 studies (2 national)



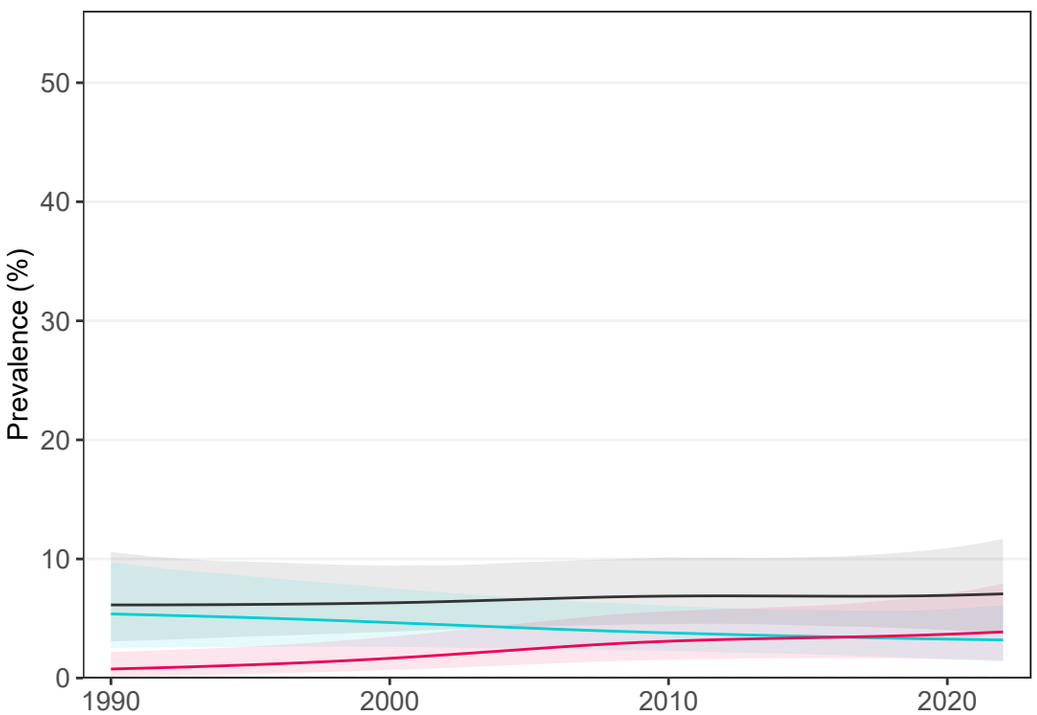
Combined burden
Underweight
Obesity

Benin

School-aged children and adolescents

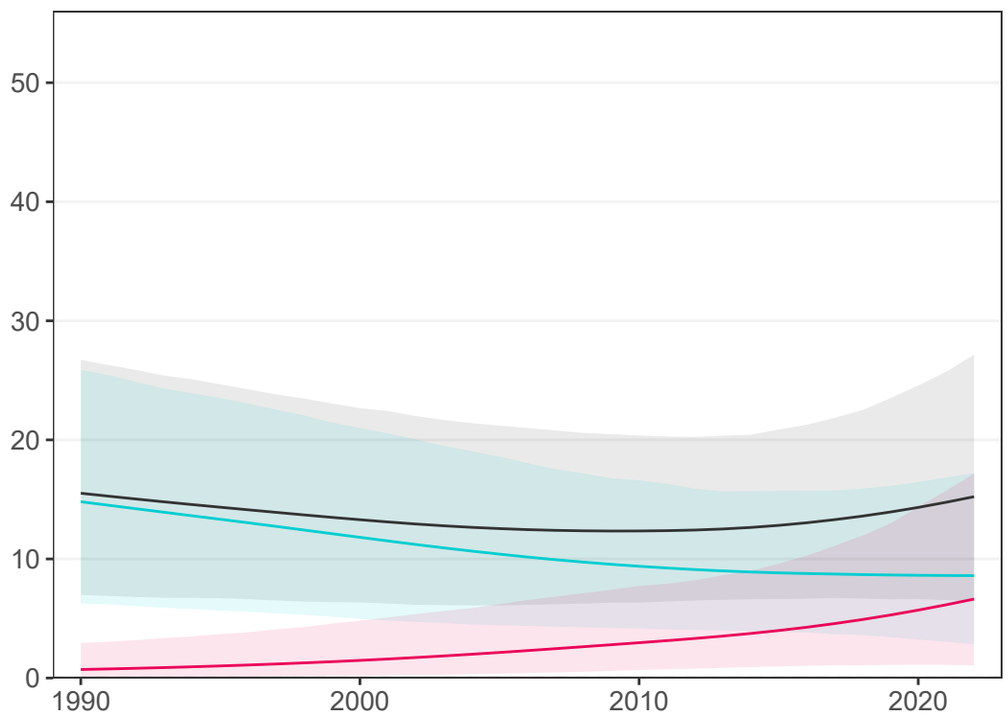
Girls

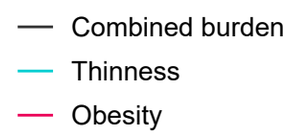
5 studies (5 national)



Boys

1 study (1 national)

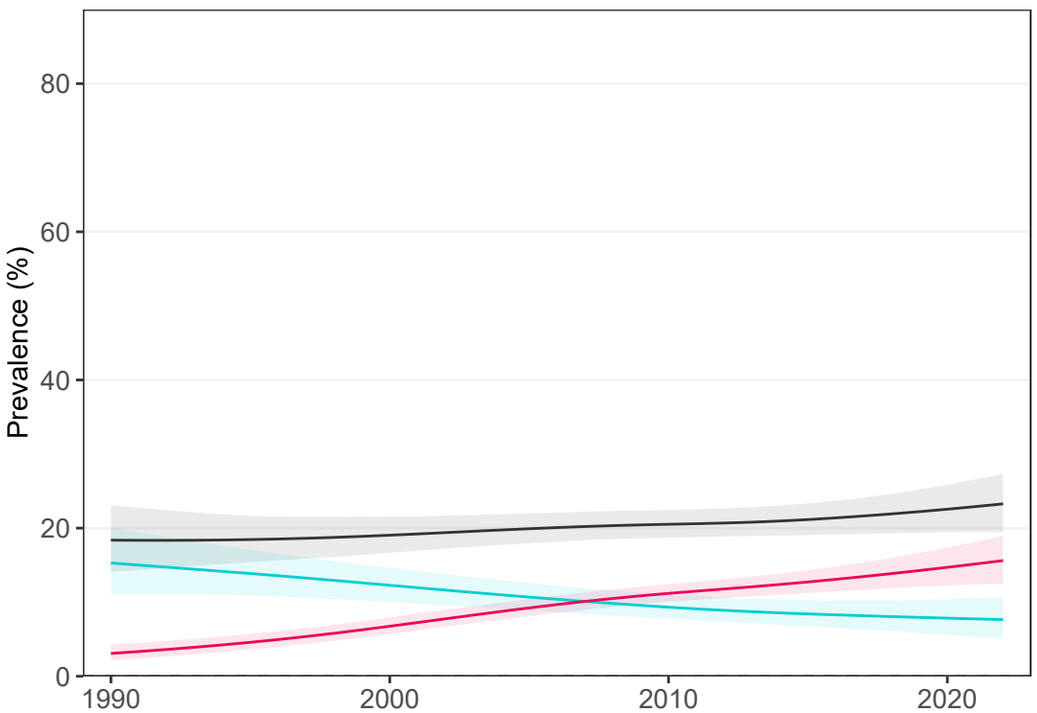




Adults

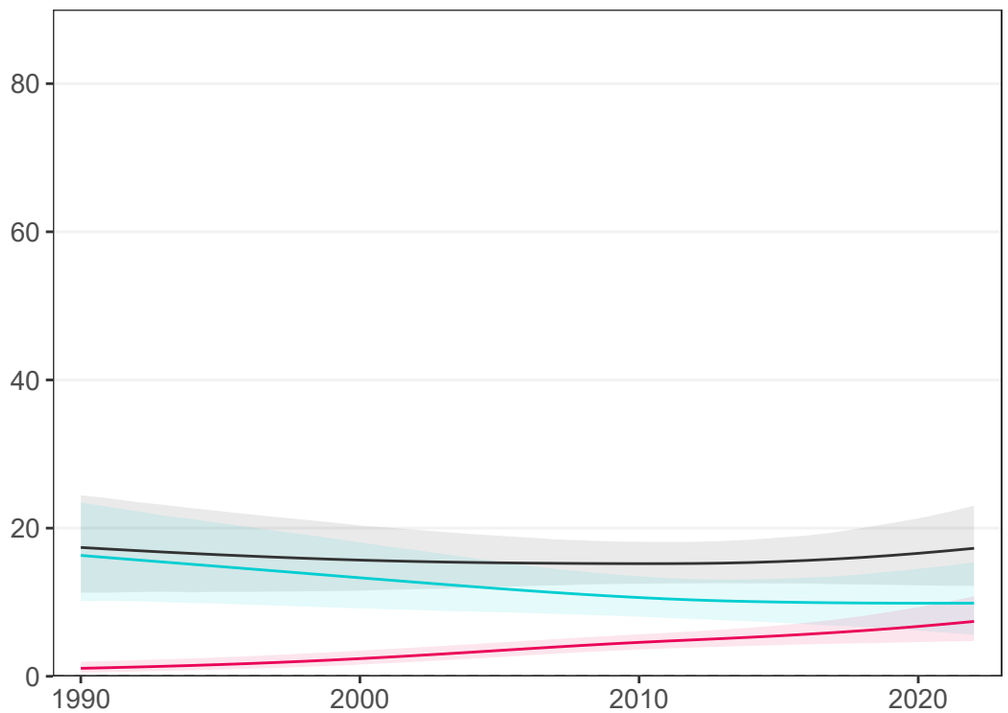
Women

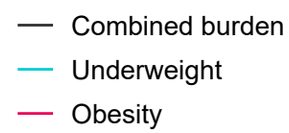
8 studies (7 national)



Men

3 studies (2 national)



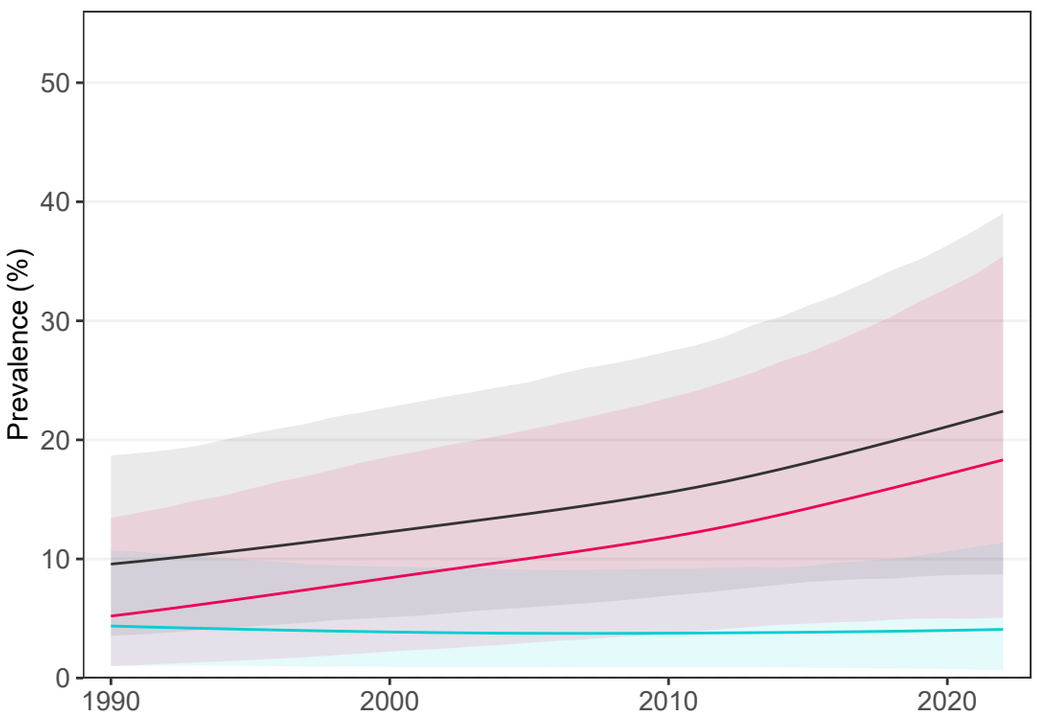


Bermuda

School-aged children and adolescents

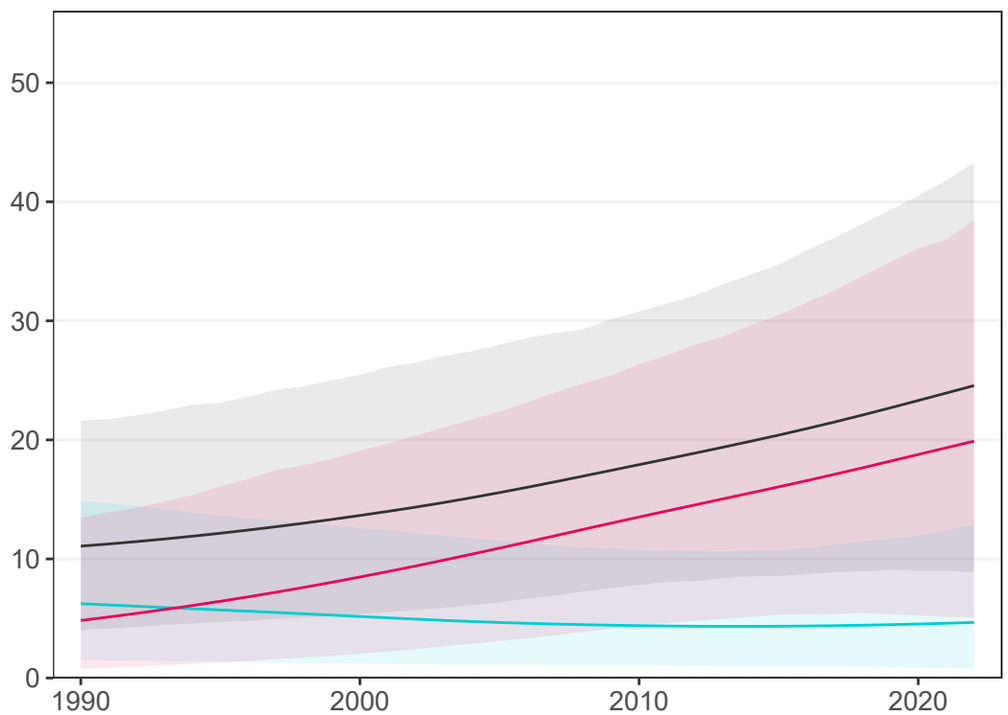
Girls

No studies



Boys

No studies

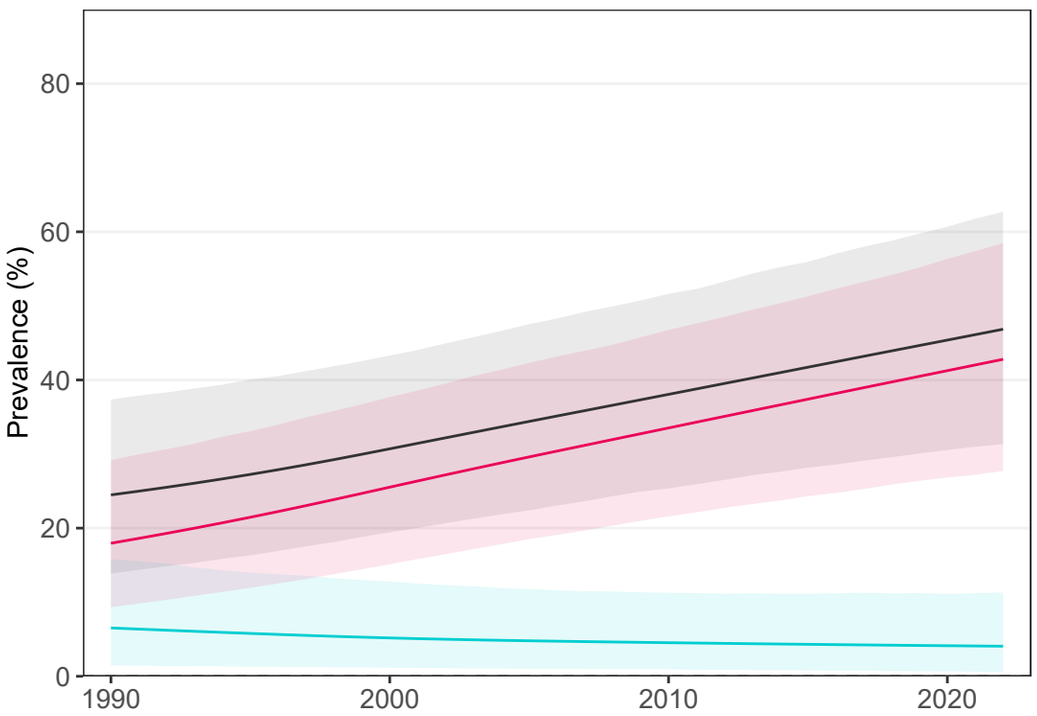


Combined burden
Thinness
Obesity

Adults

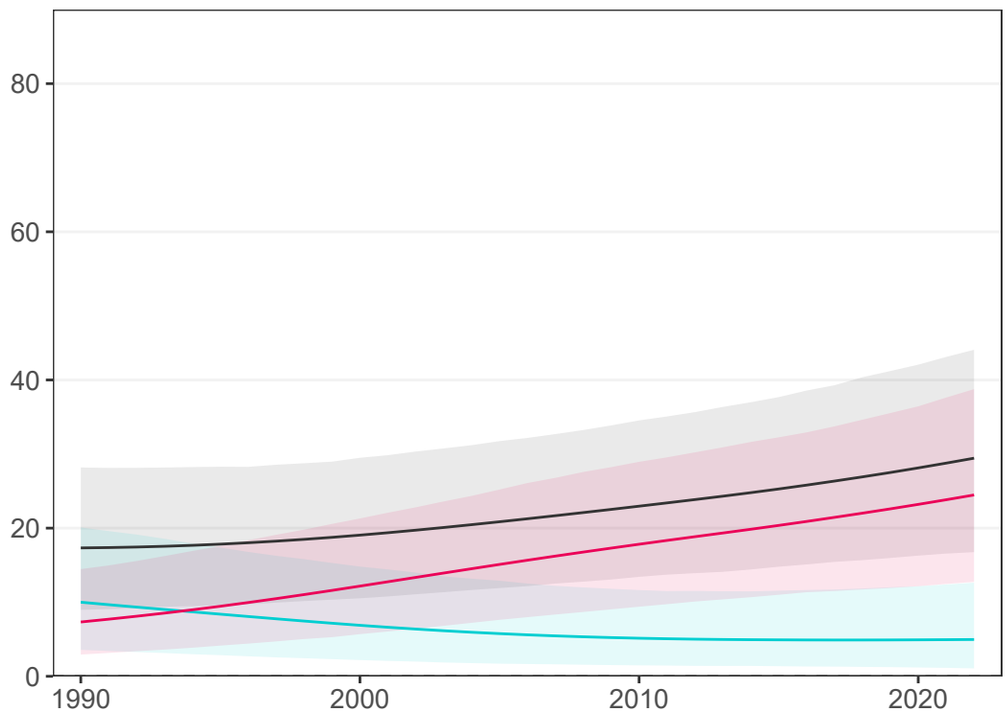
Women

No studies



Men

No studies



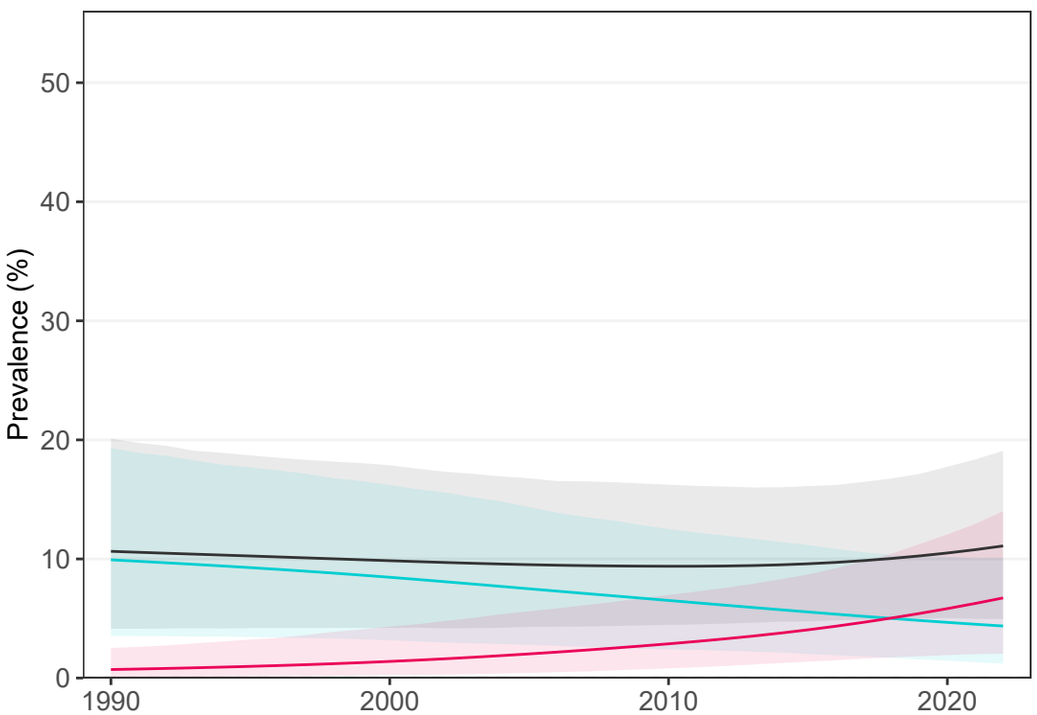
Combined burden
Underweight
Obesity

Bhutan

School-aged children and adolescents

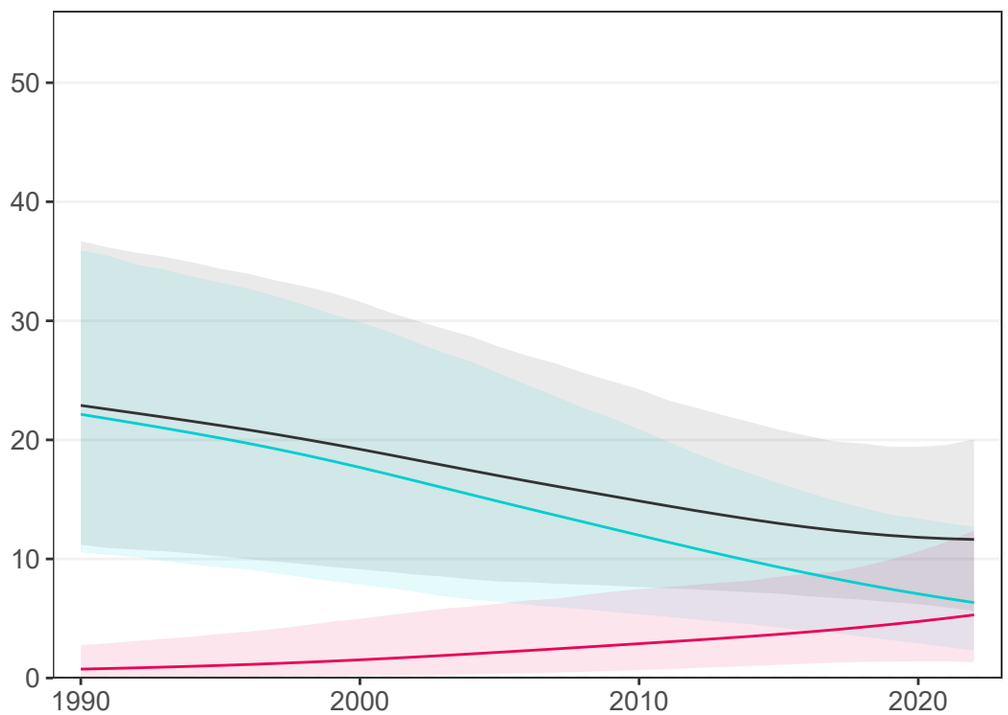
Girls

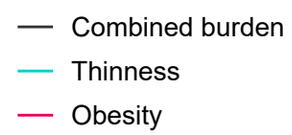
2 studies (2 national)



Boys

2 studies (2 national)

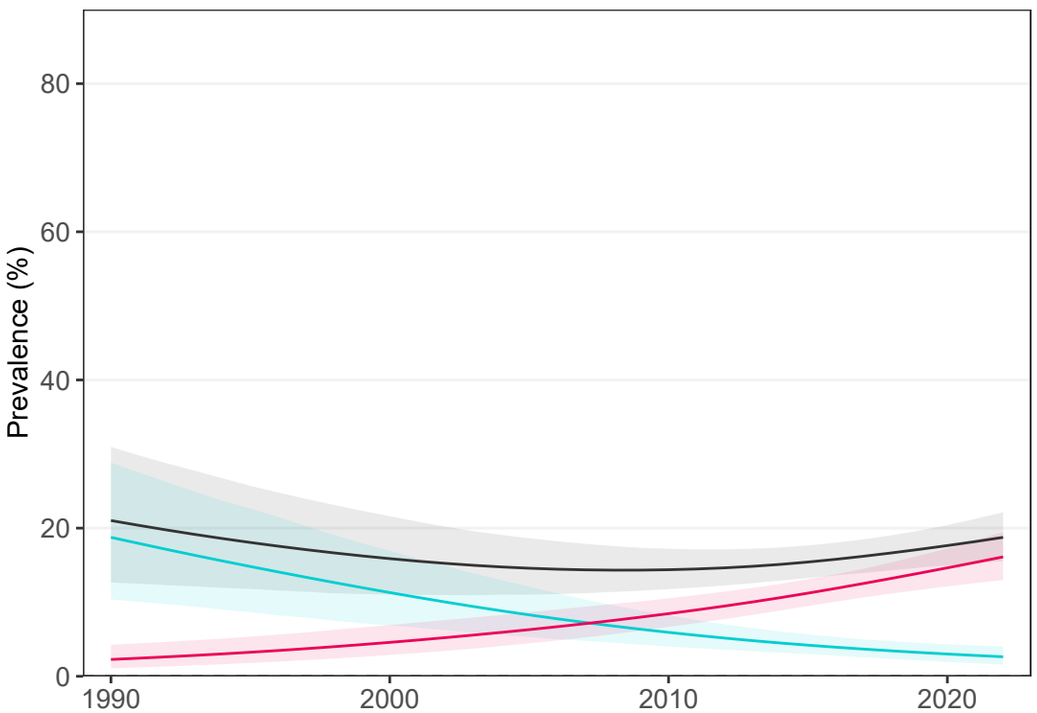




Adults

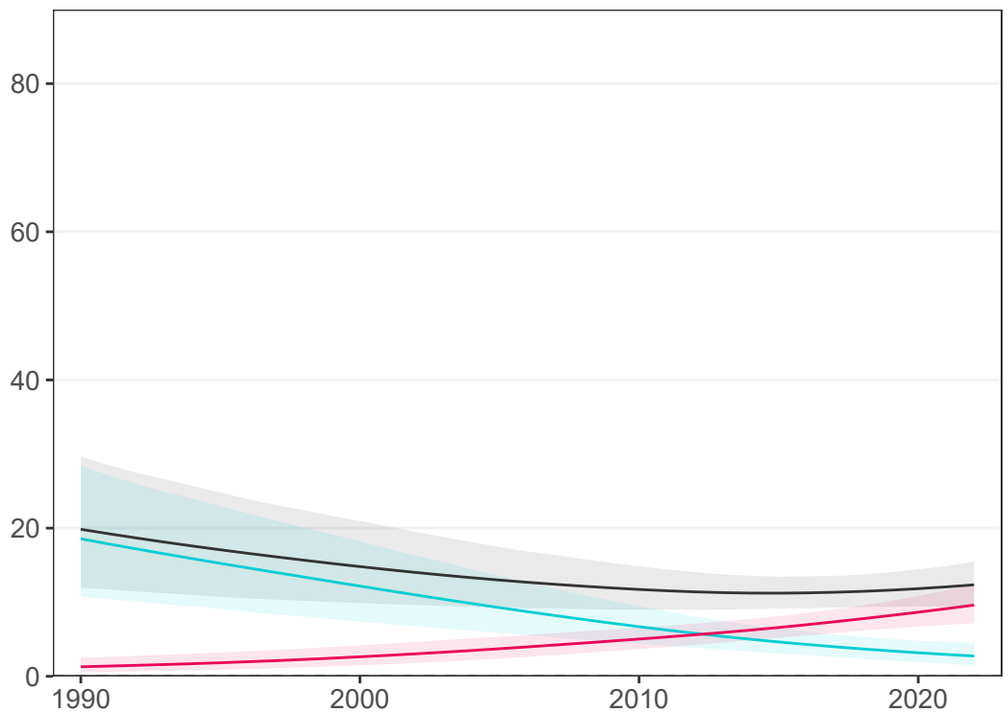
Women

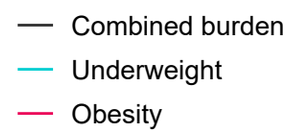
3 studies (2 national)



Men

3 studies (2 national)



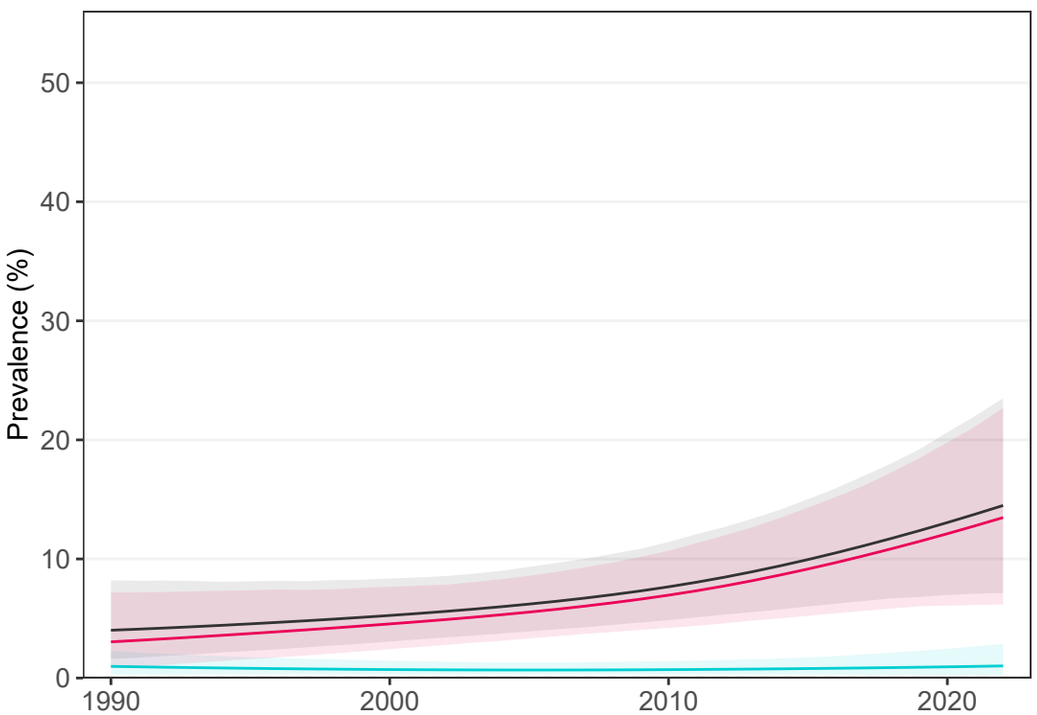


Bolivia

School-aged children and adolescents

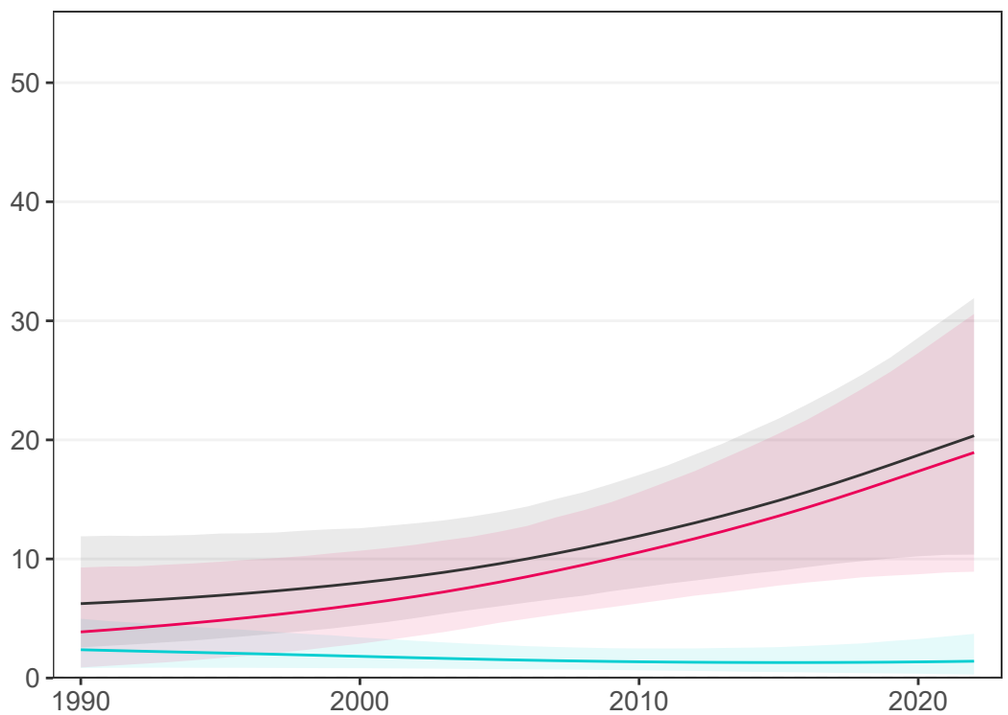
Girls

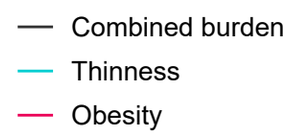
4 studies (4 national)



Boys

2 studies (2 national)

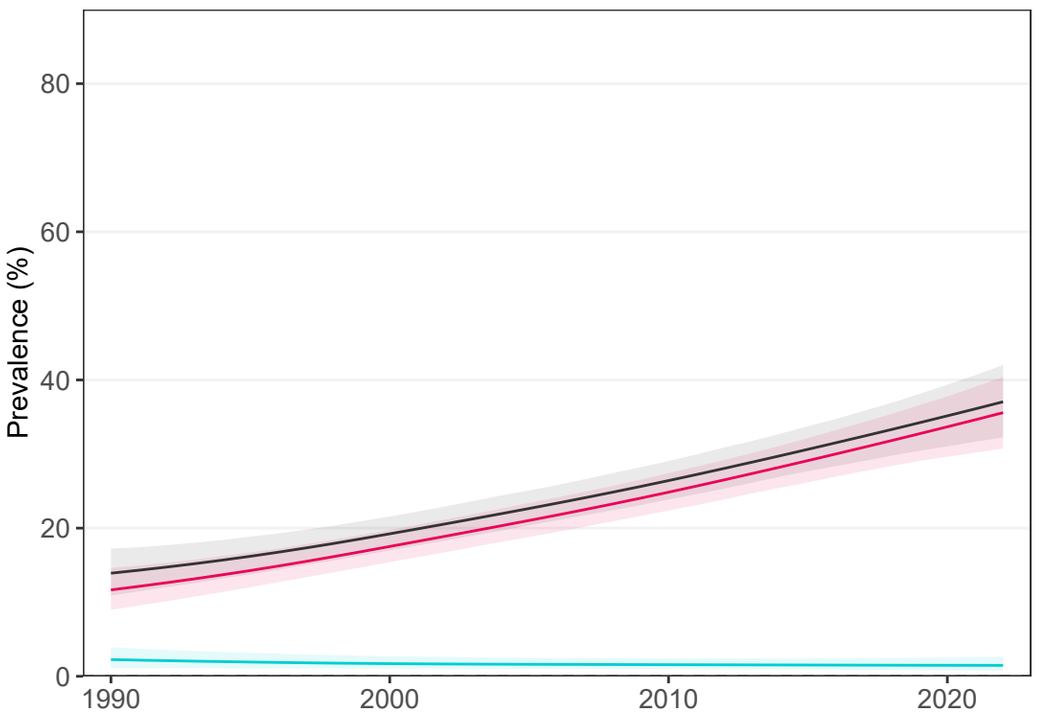




Adults

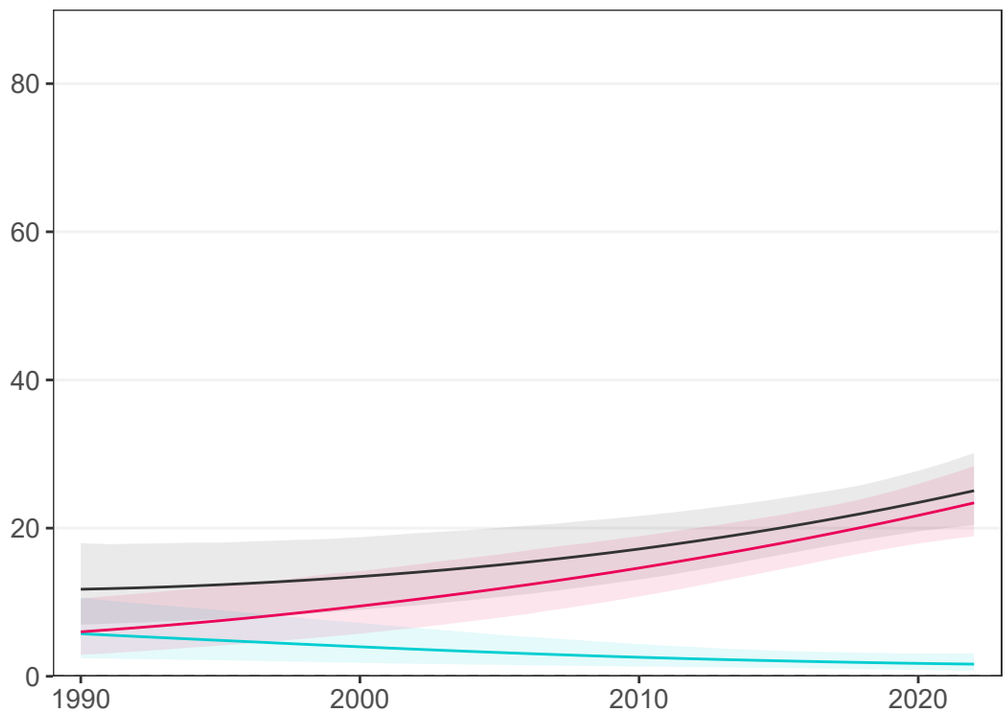
Women

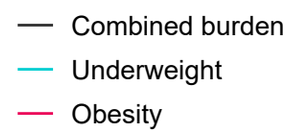
6 studies (6 national)



Men

2 studies (2 national)



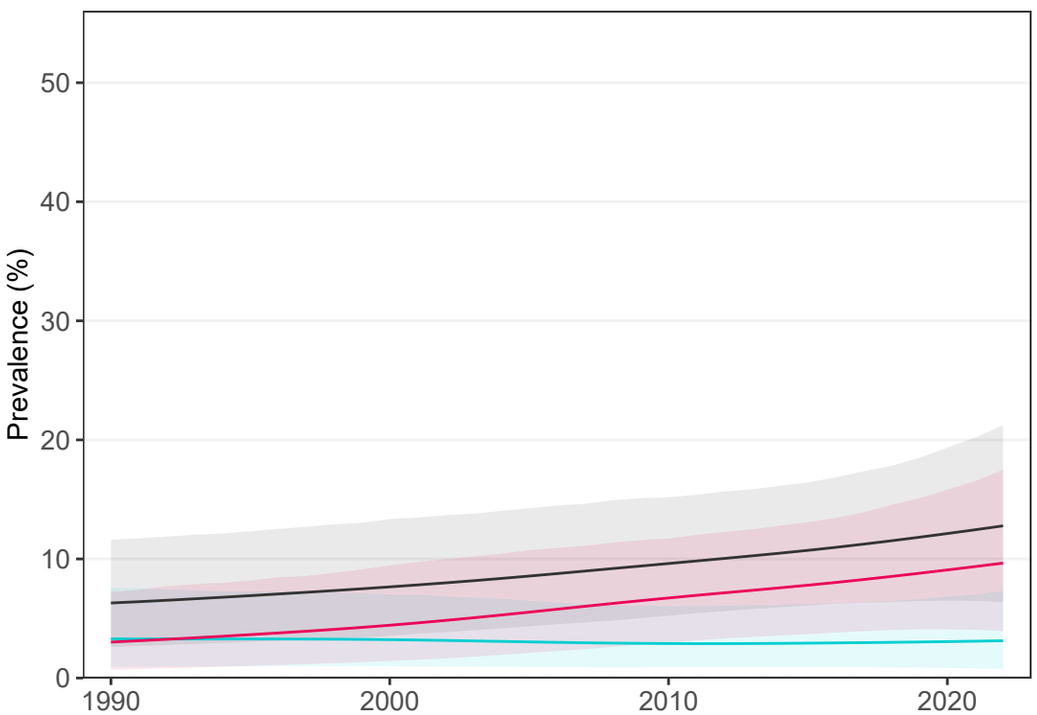


Bosnia & Herzegovina

School-aged children and adolescents

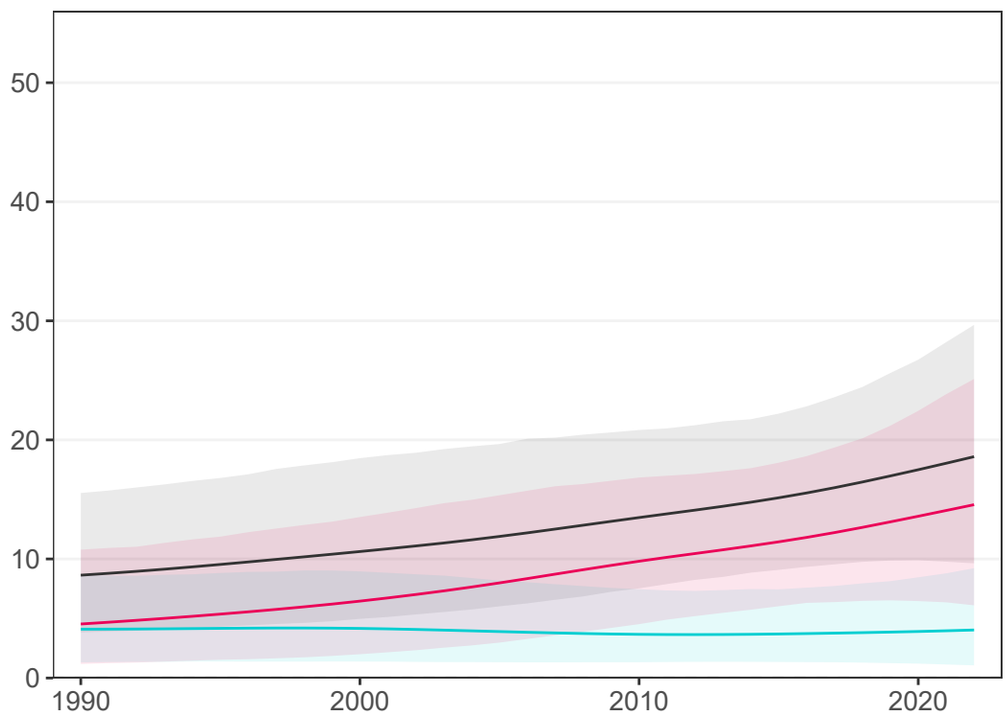
Girls

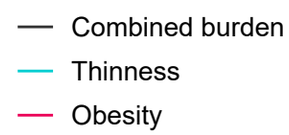
3 studies (0 national)



Boys

3 studies (0 national)

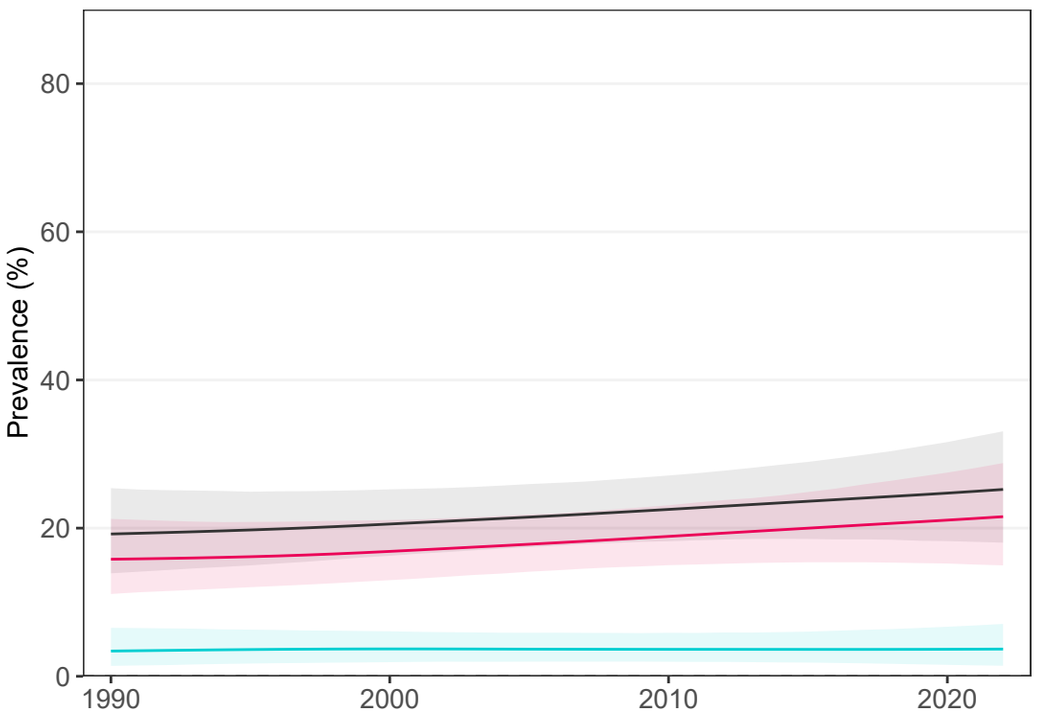




Adults

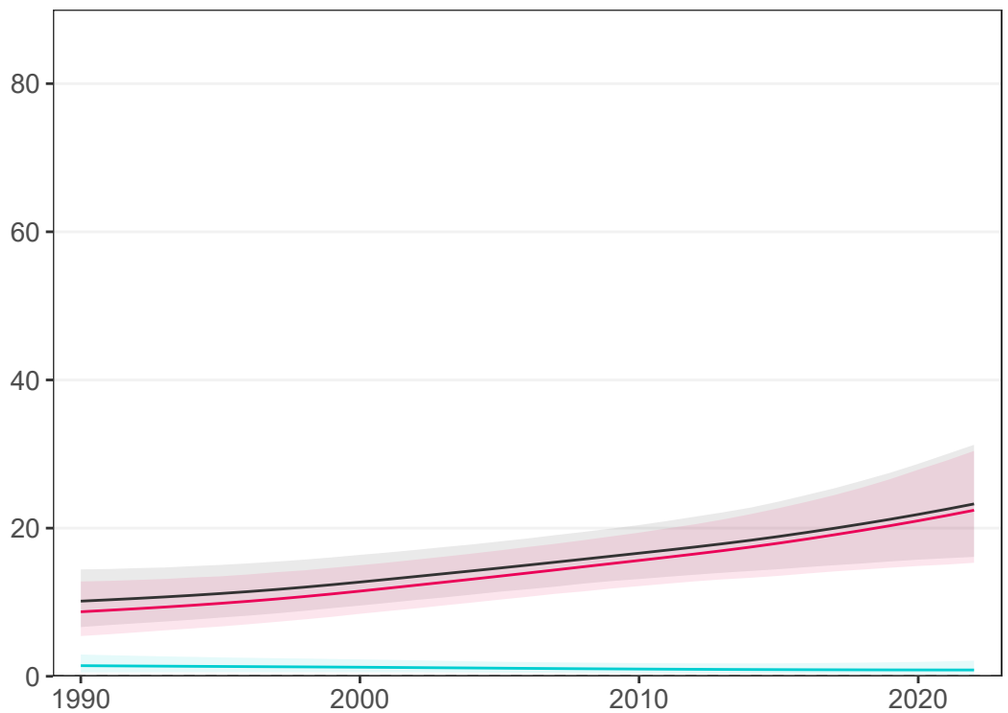
Women

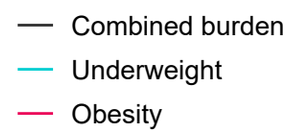
3 studies (0 national)



Men

3 studies (0 national)



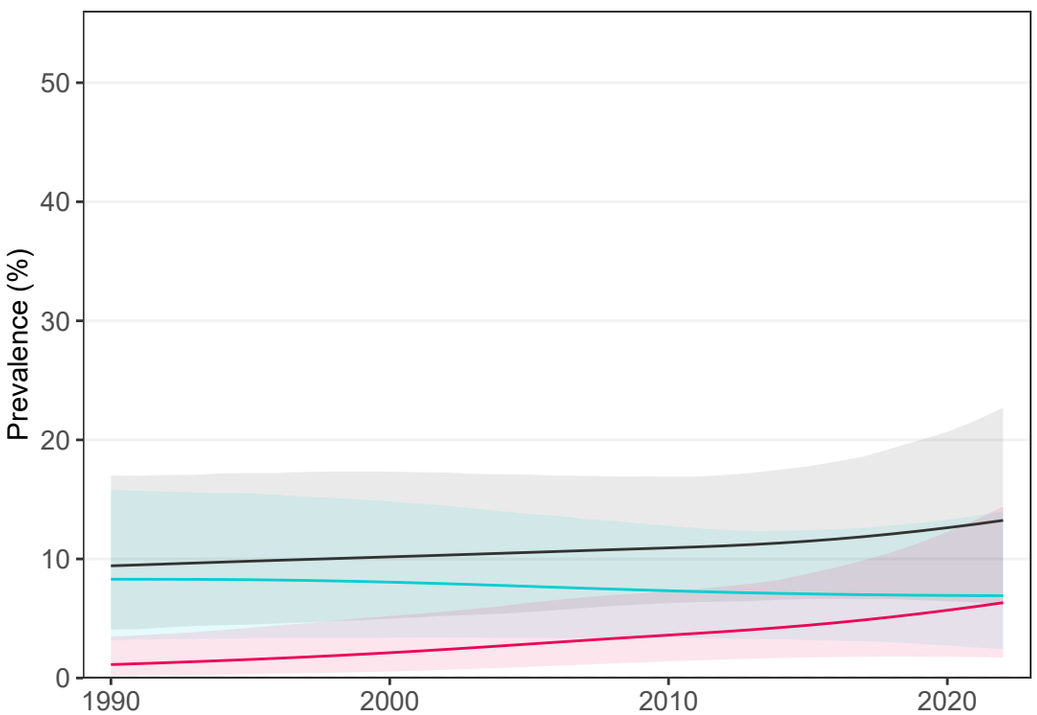


Botswana

School-aged children and adolescents

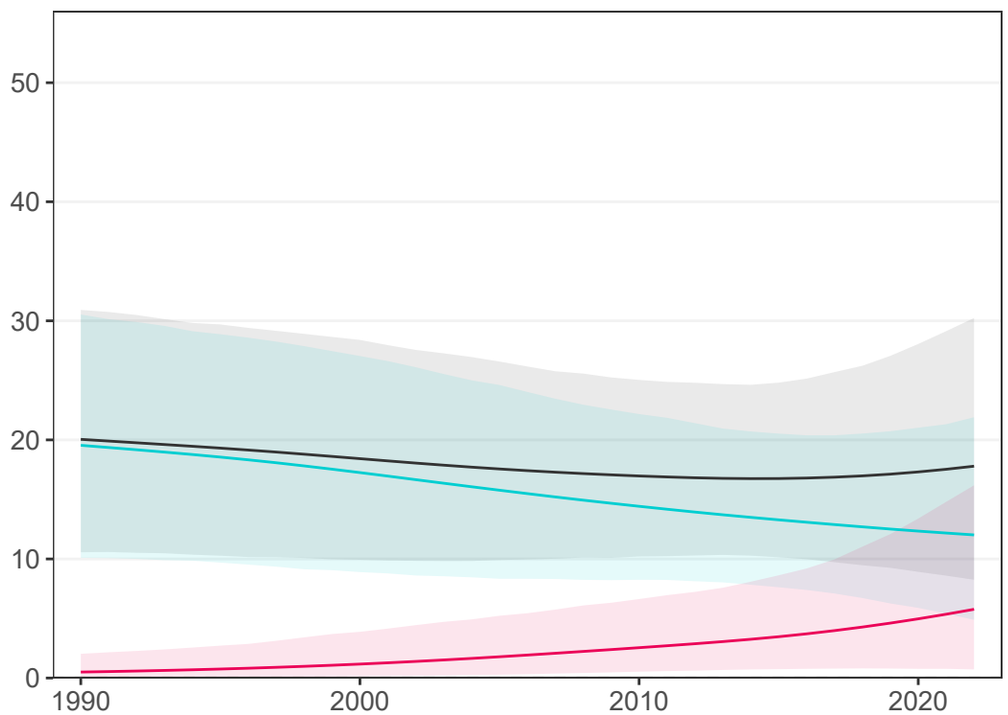
Girls

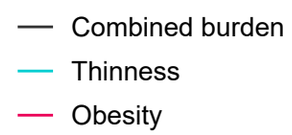
1 study (1 national)



Boys

1 study (1 national)

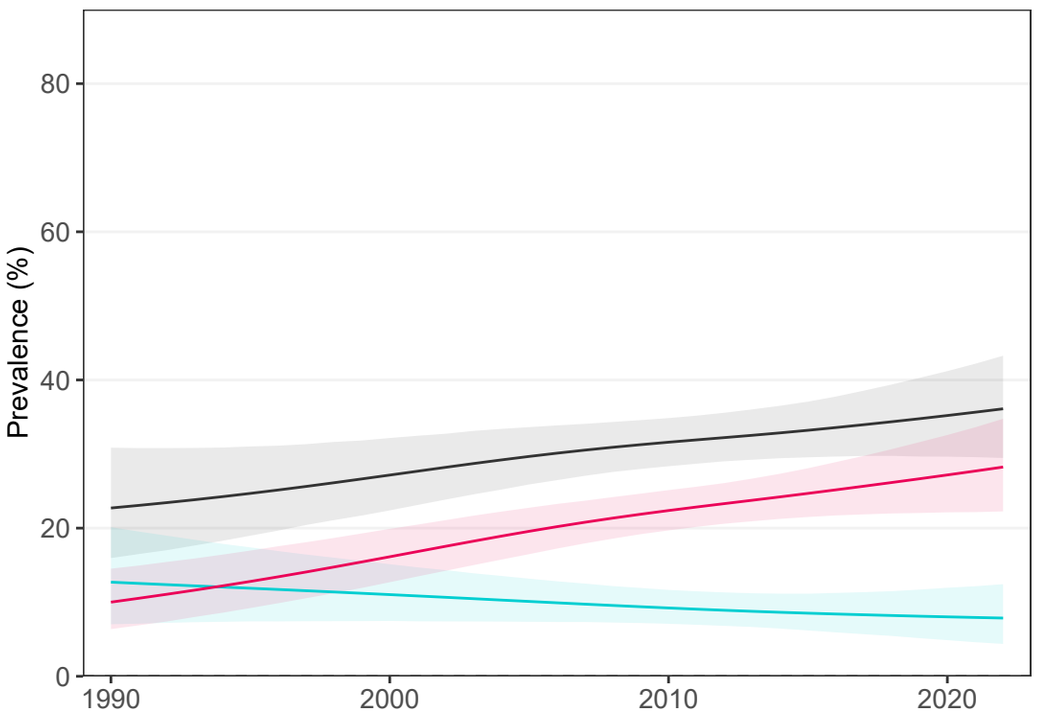




Adults

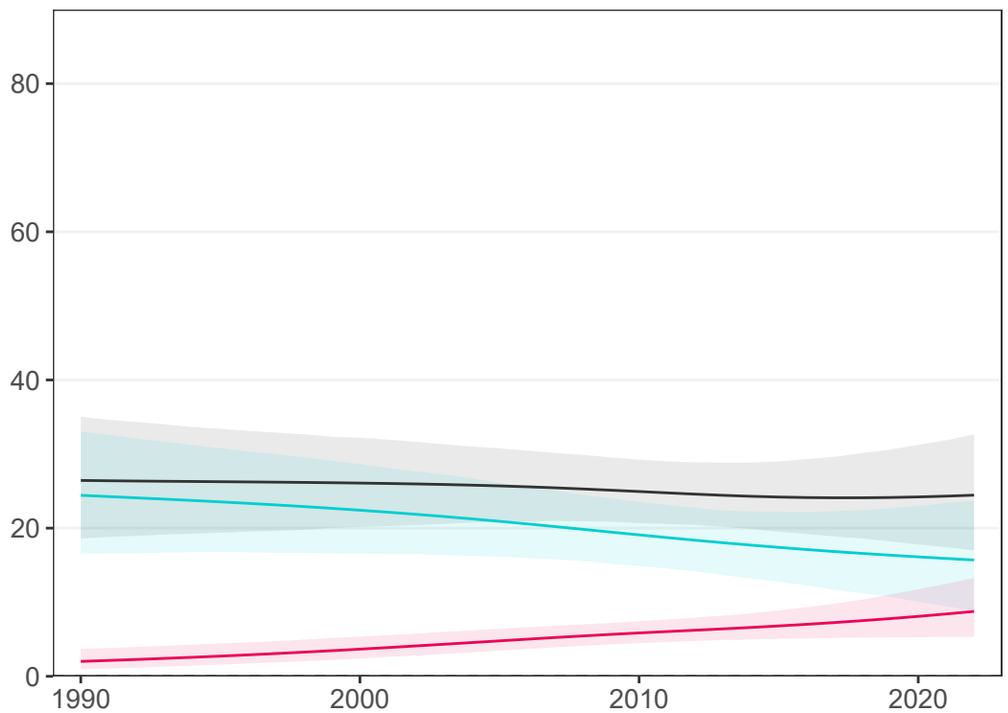
Women

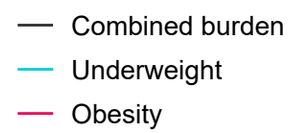
2 studies (2 national)



Men

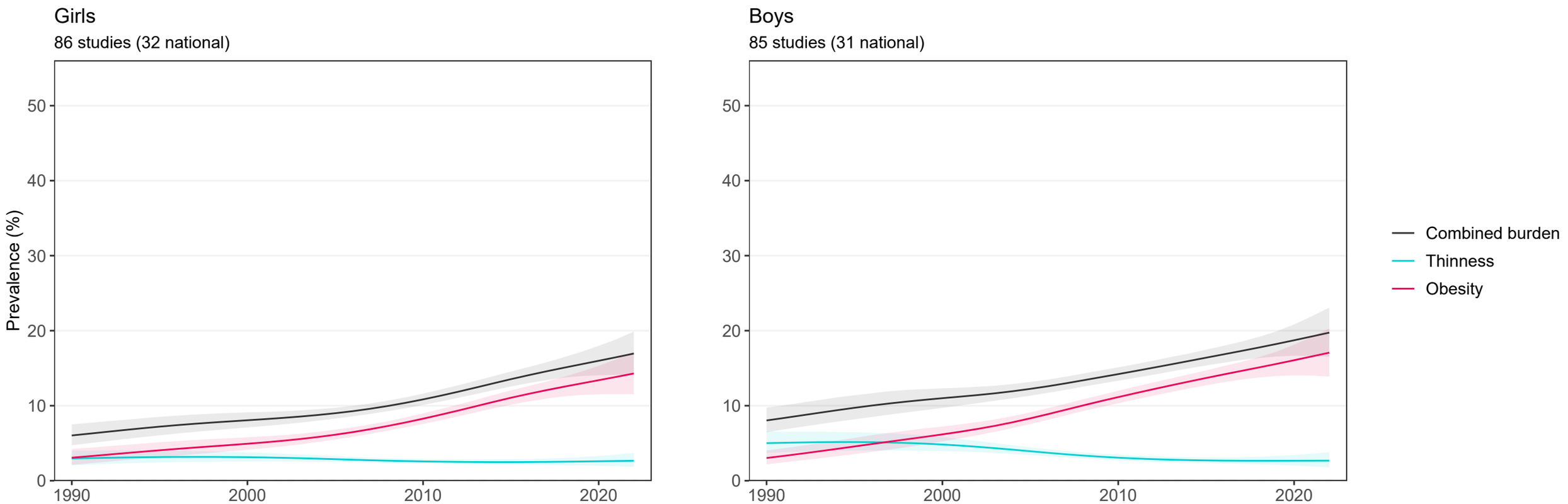
2 studies (2 national)



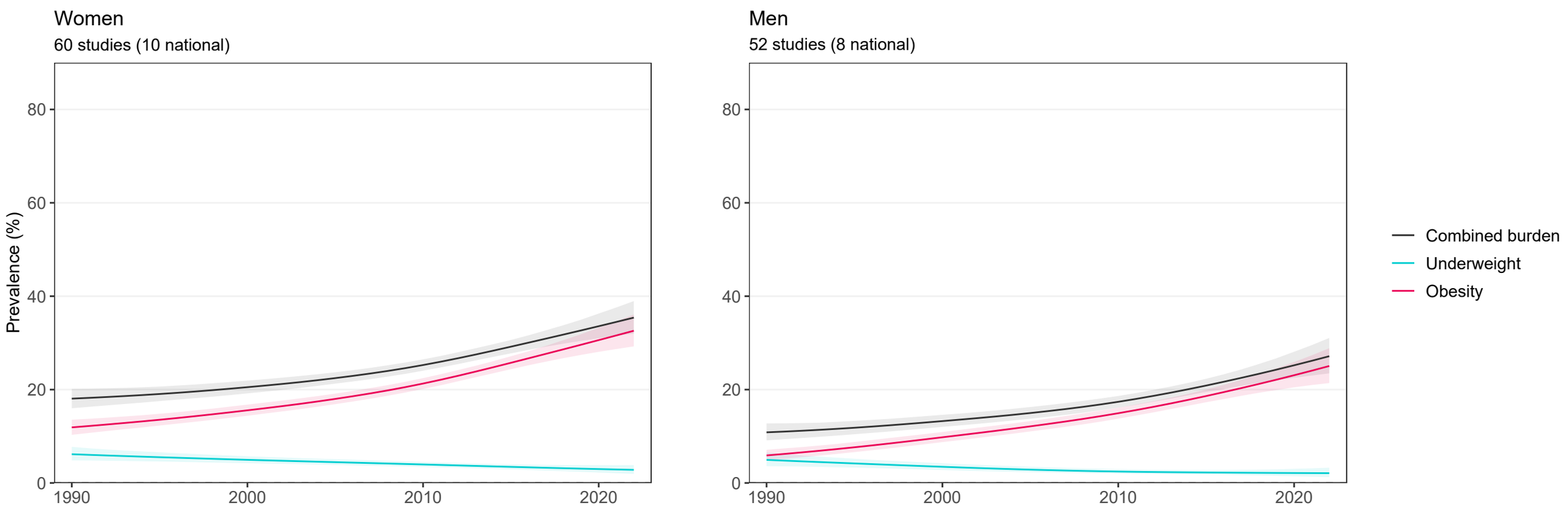


Brazil

School-aged children and adolescents



Adults

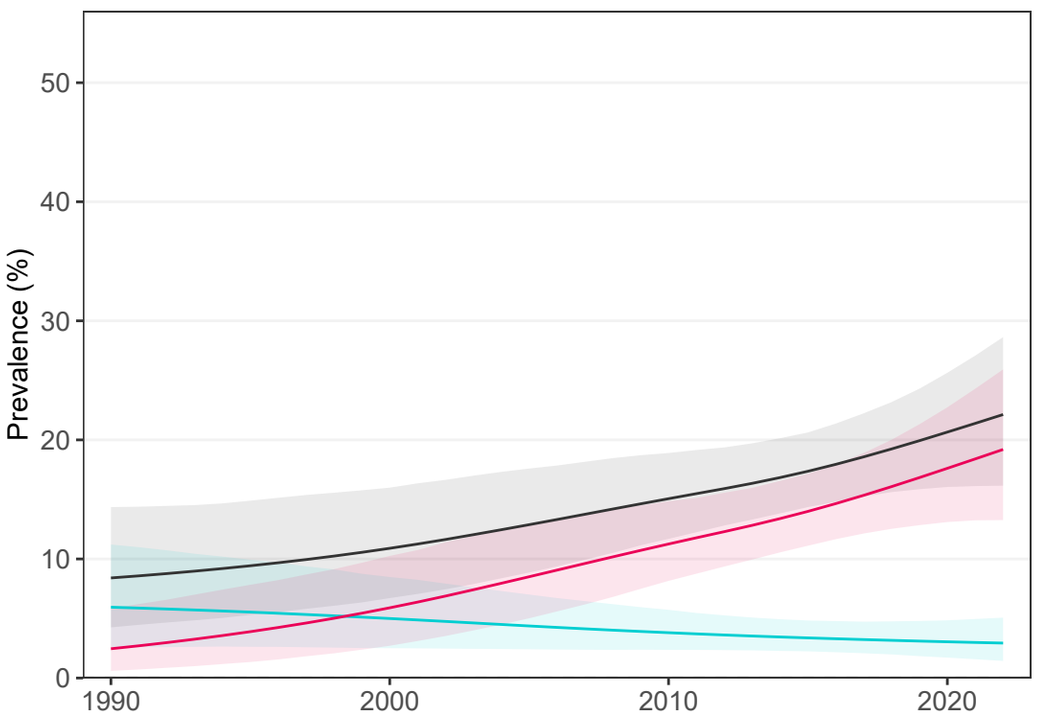


Brunei Darussalam

School-aged children and adolescents

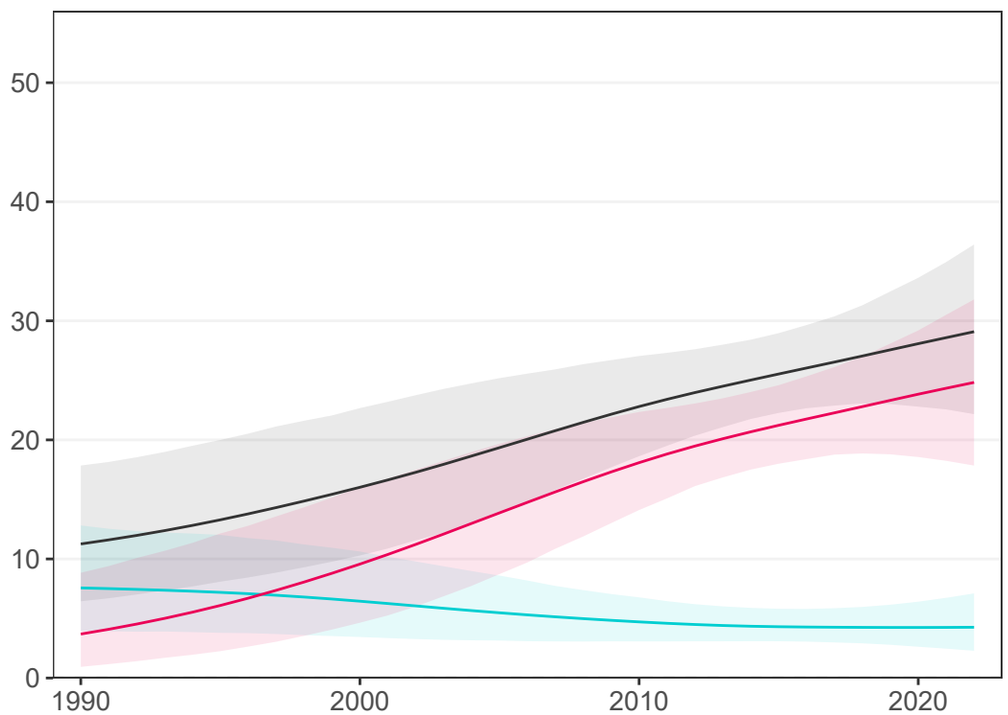
Girls

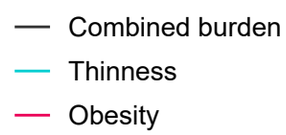
4 studies (4 national)



Boys

4 studies (4 national)

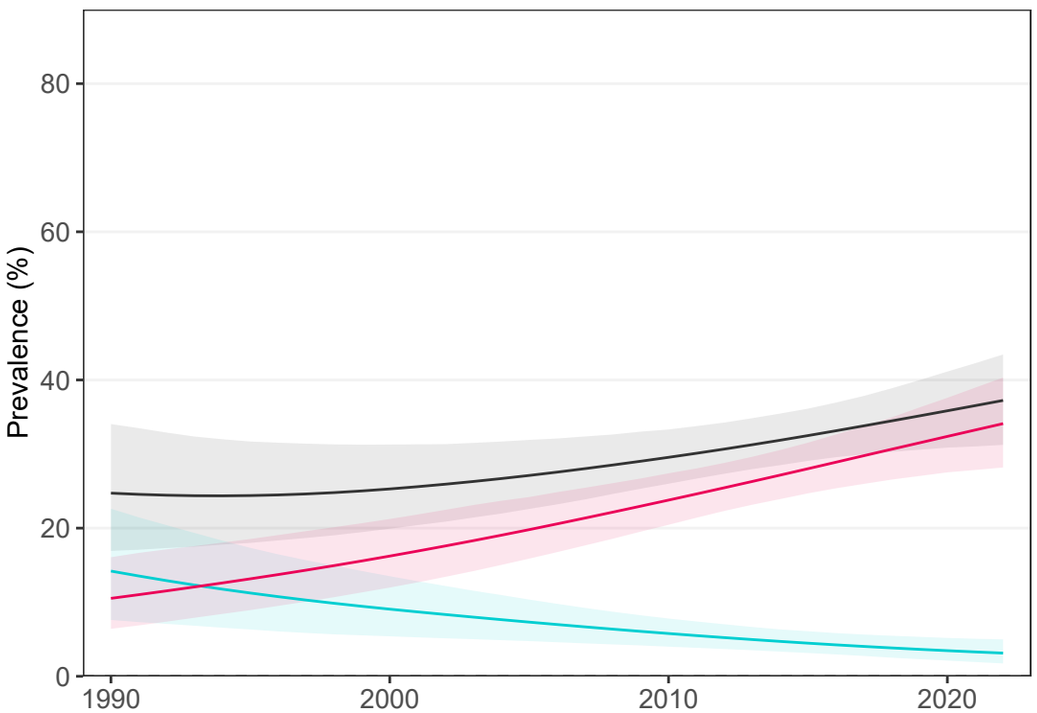




Adults

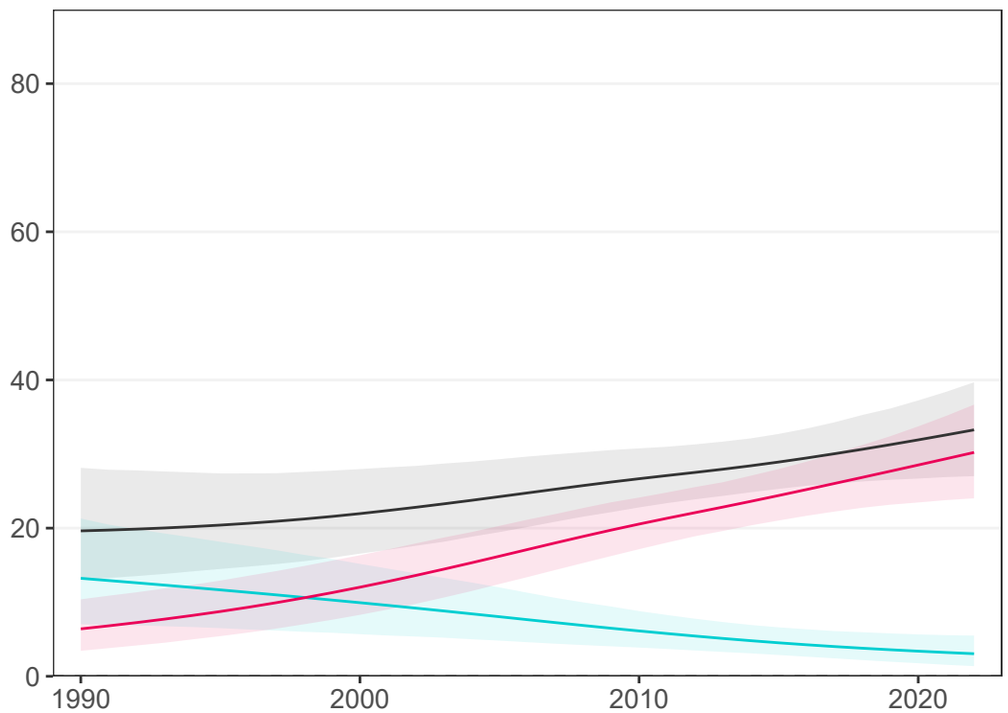
Women

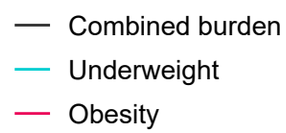
2 studies (2 national)



Men

2 studies (2 national)



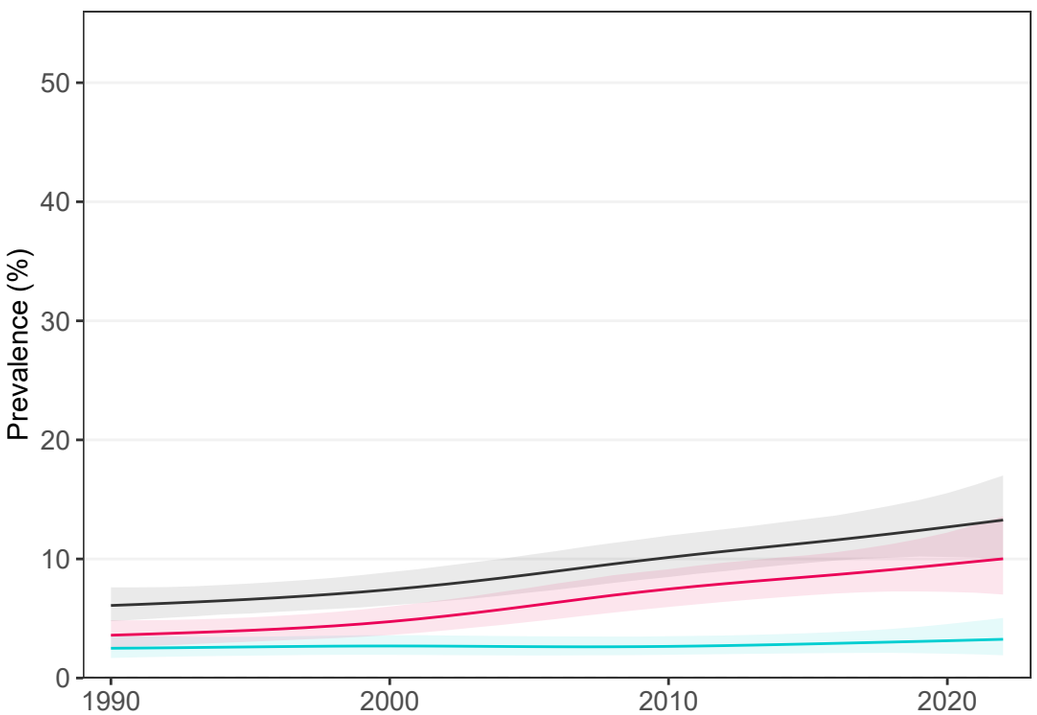


Bulgaria

School-aged children and adolescents

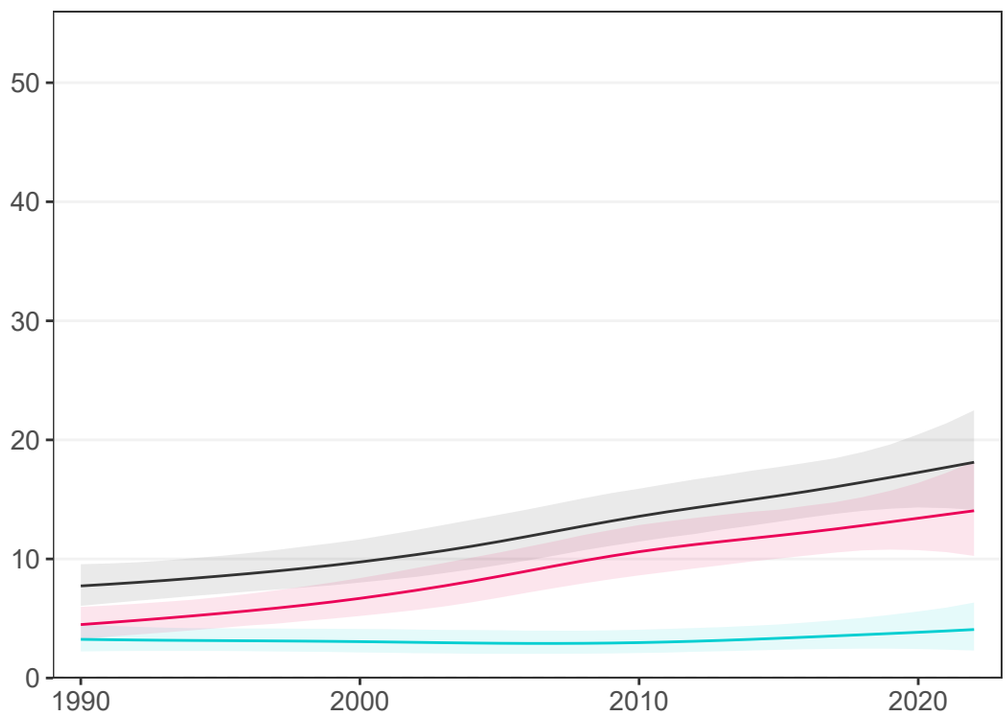
Girls

33 studies (5 national)



Boys

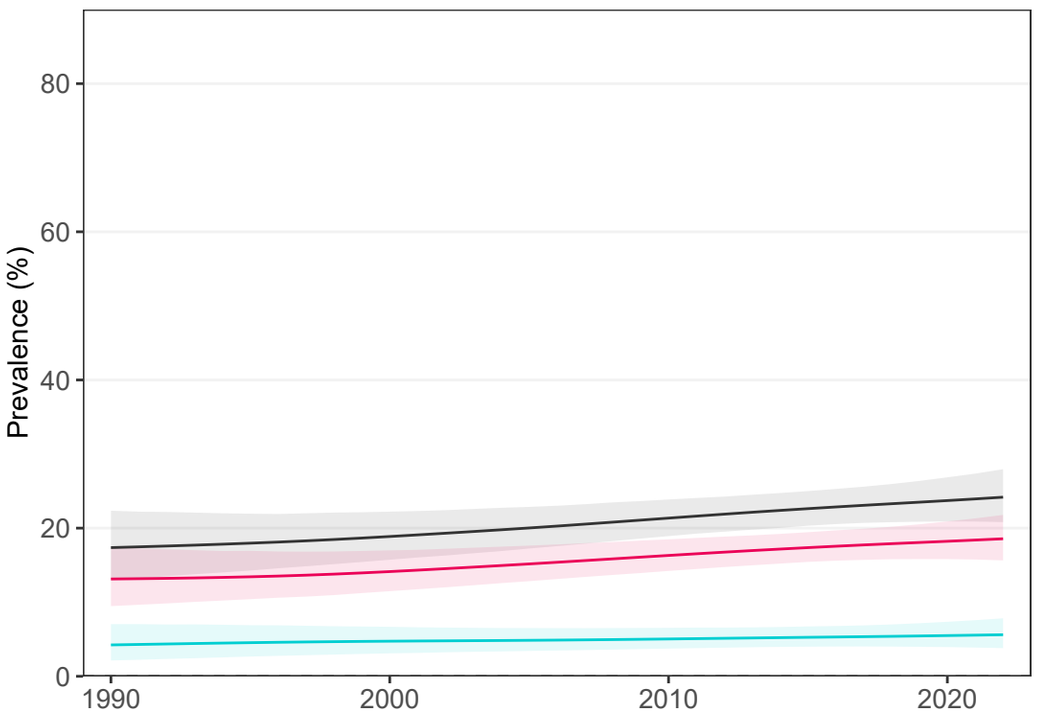
33 studies (5 national)



Adults

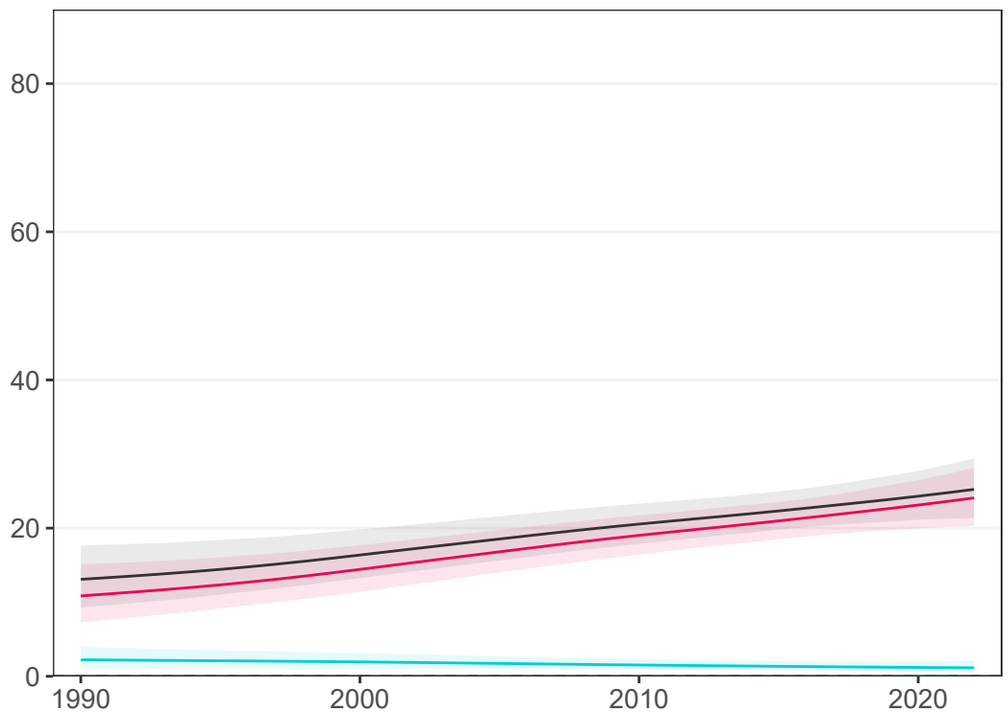
Women

5 studies (3 national)



Men

5 studies (3 national)

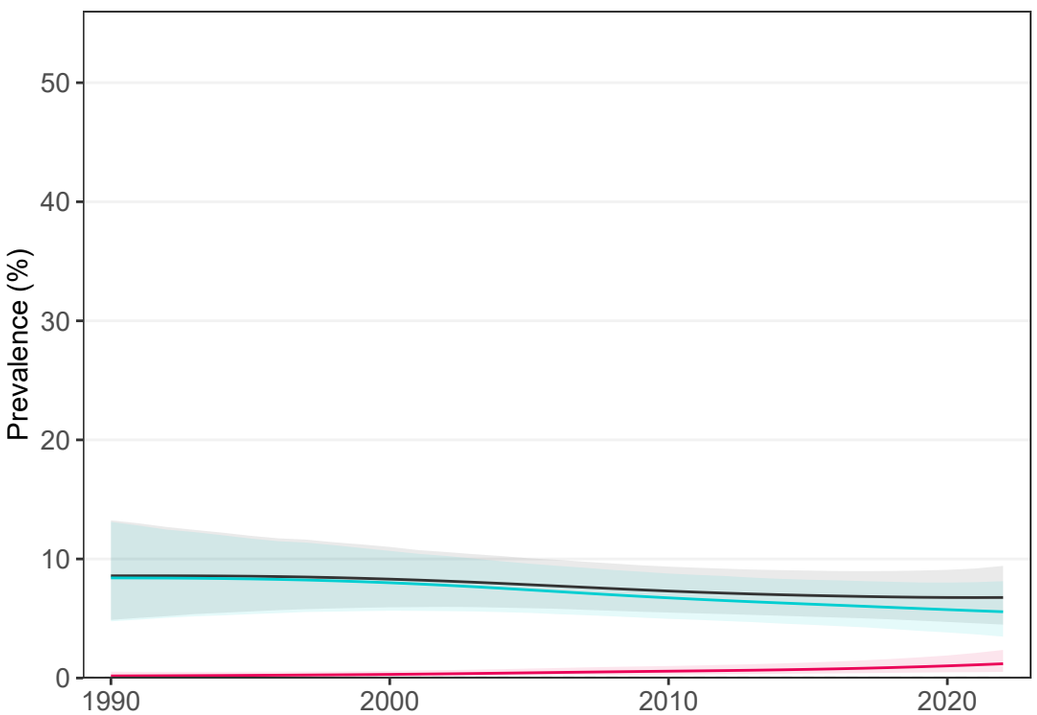


Burkina Faso

School-aged children and adolescents

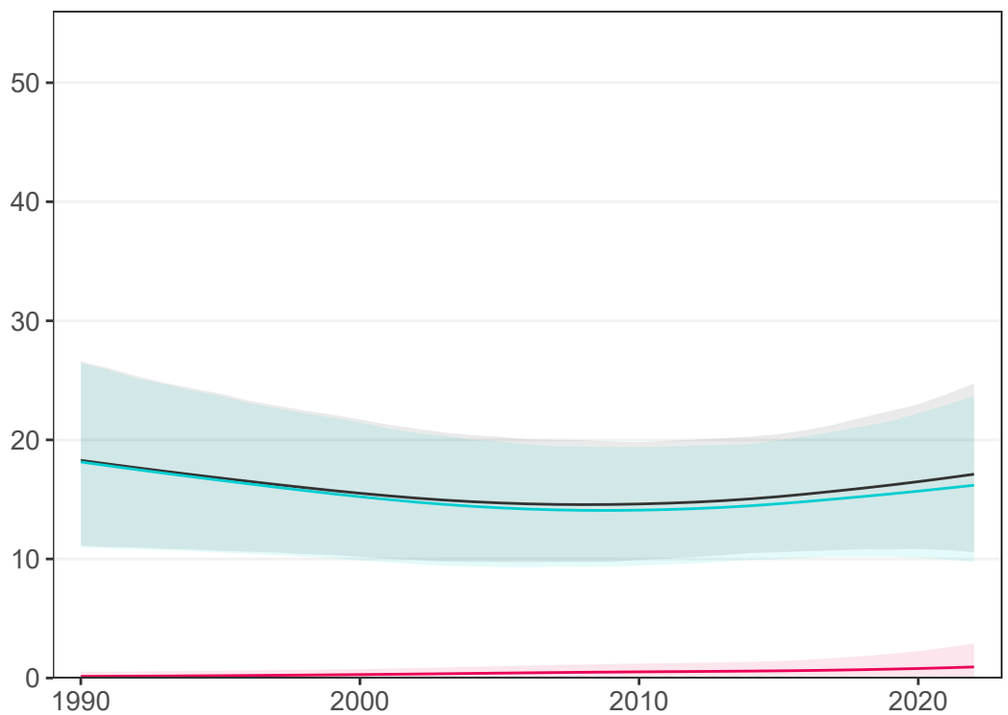
Girls

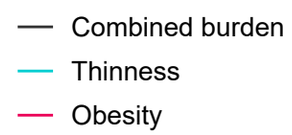
6 studies (4 national)



Boys

3 studies (1 national)

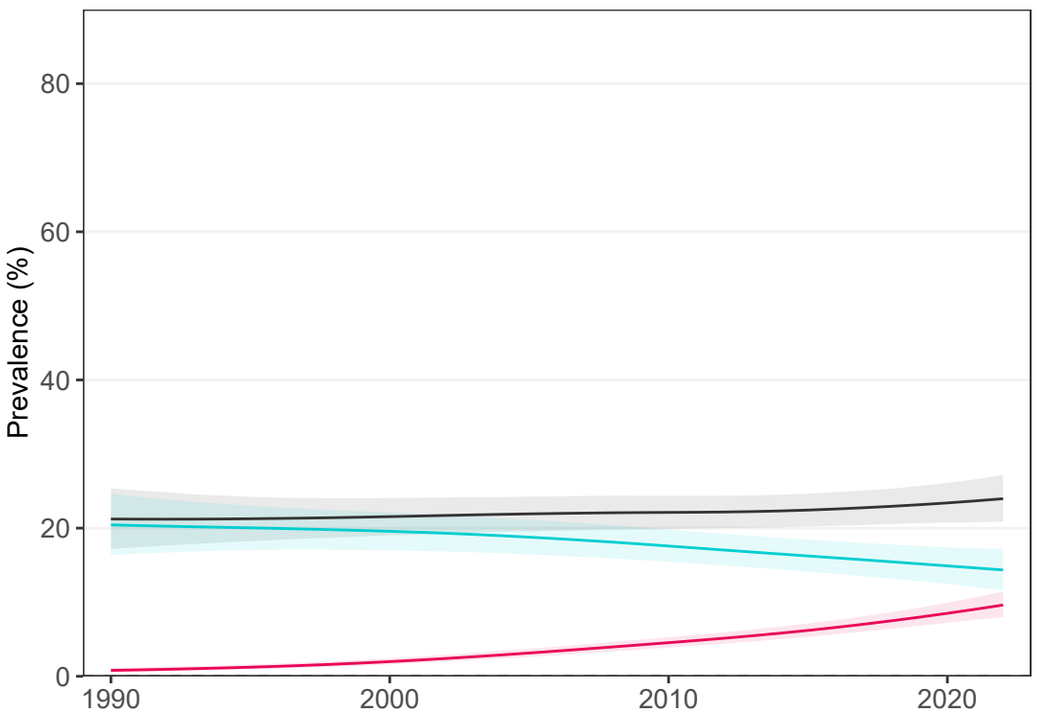




Adults

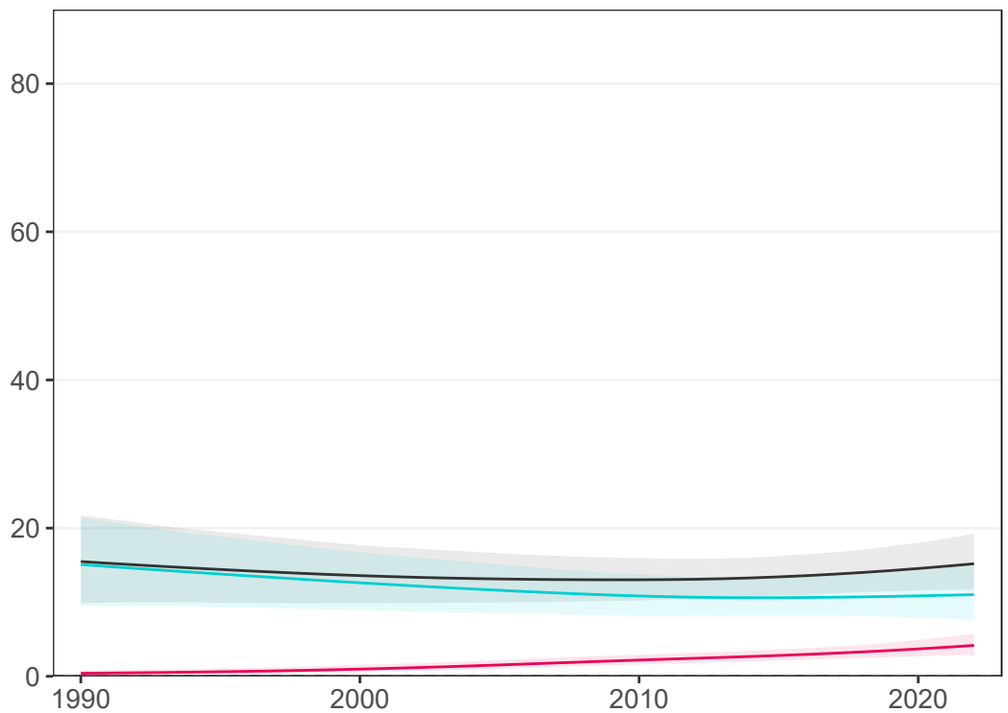
Women

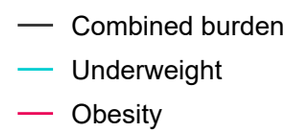
10 studies (7 national)



Men

5 studies (2 national)



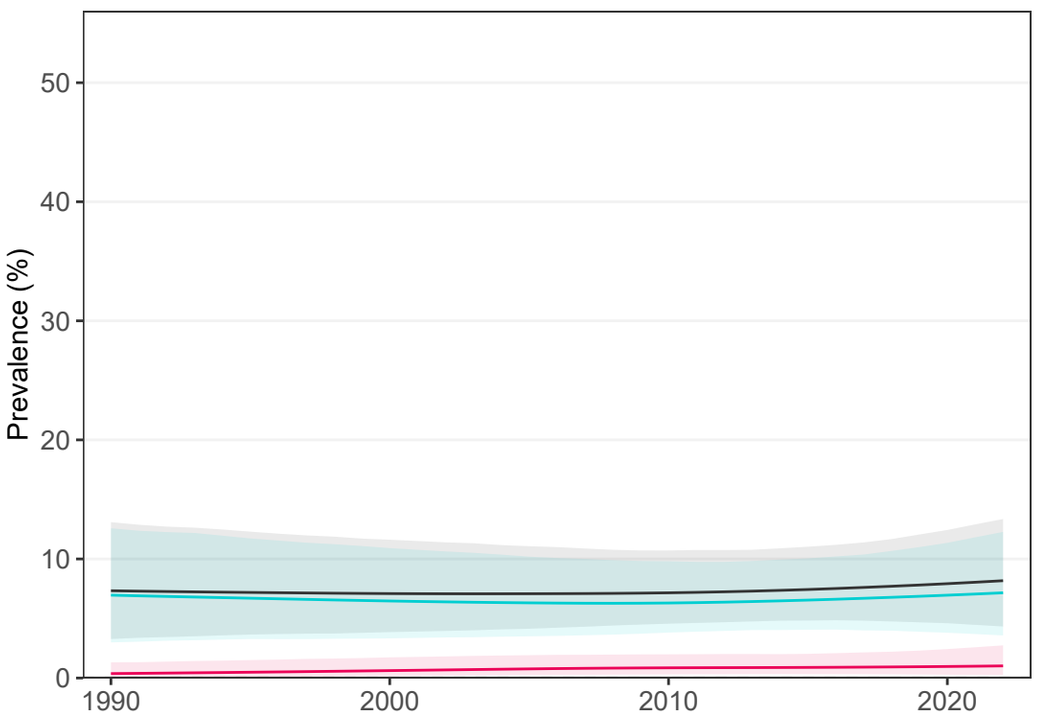


Burundi

School-aged children and adolescents

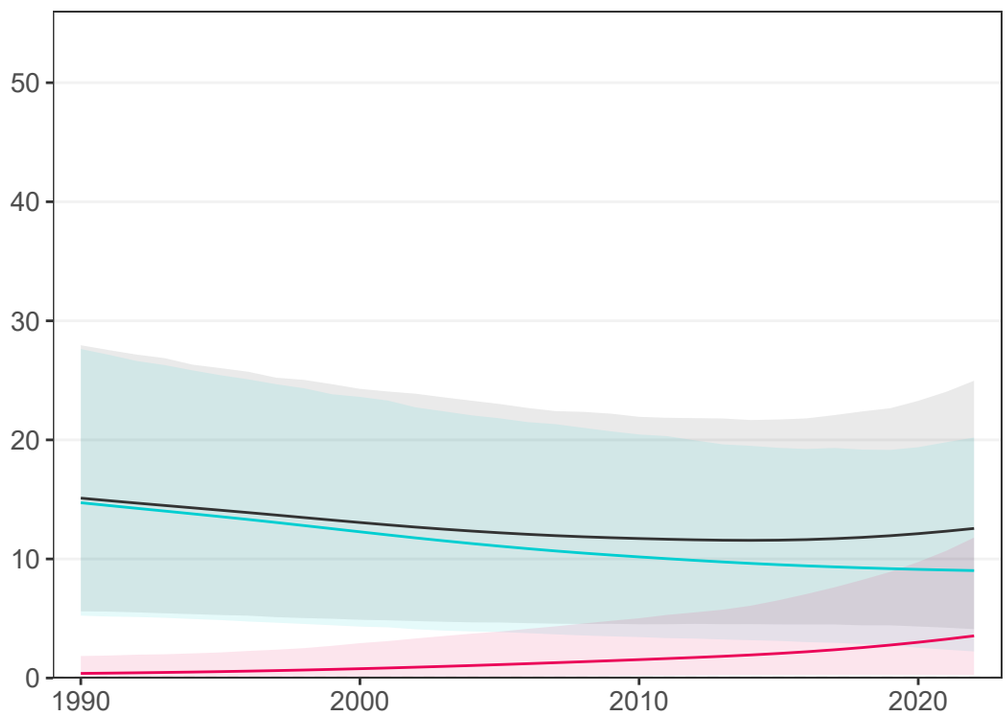
Girls

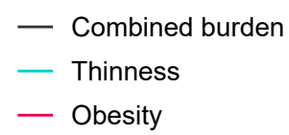
2 studies (2 national)



Boys

No studies

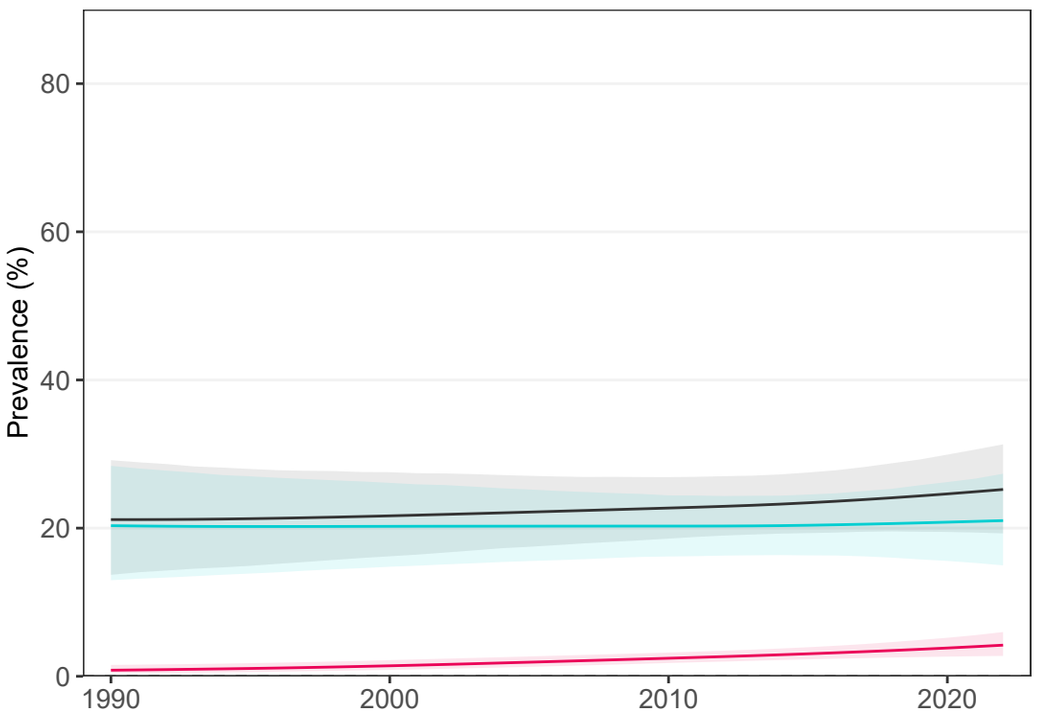




Adults

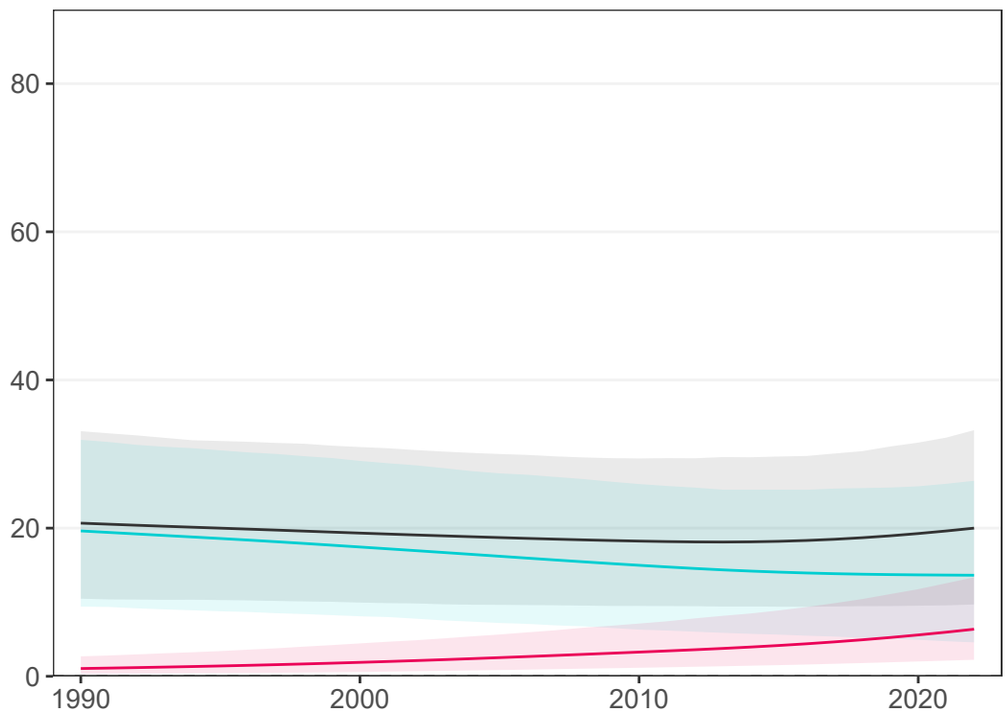
Women

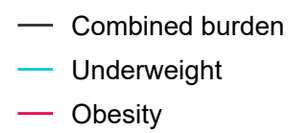
2 studies (2 national)



Men

No studies



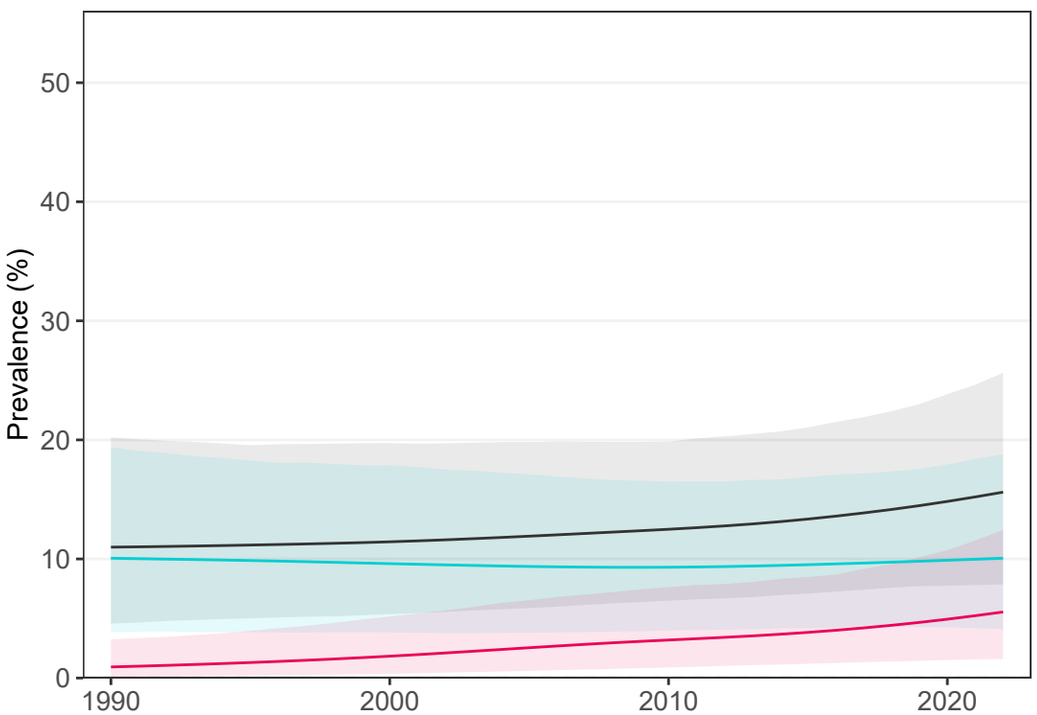


Cabo Verde

School-aged children and adolescents

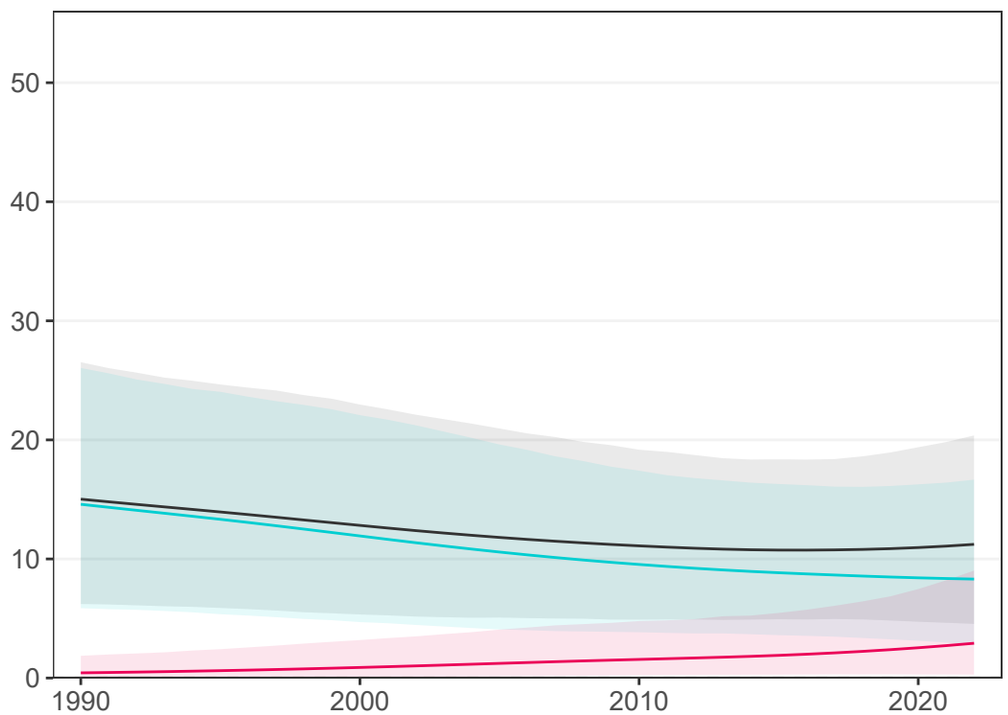
Girls

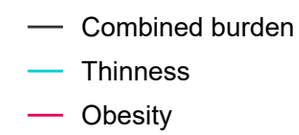
1 study (1 national)



Boys

1 study (1 national)

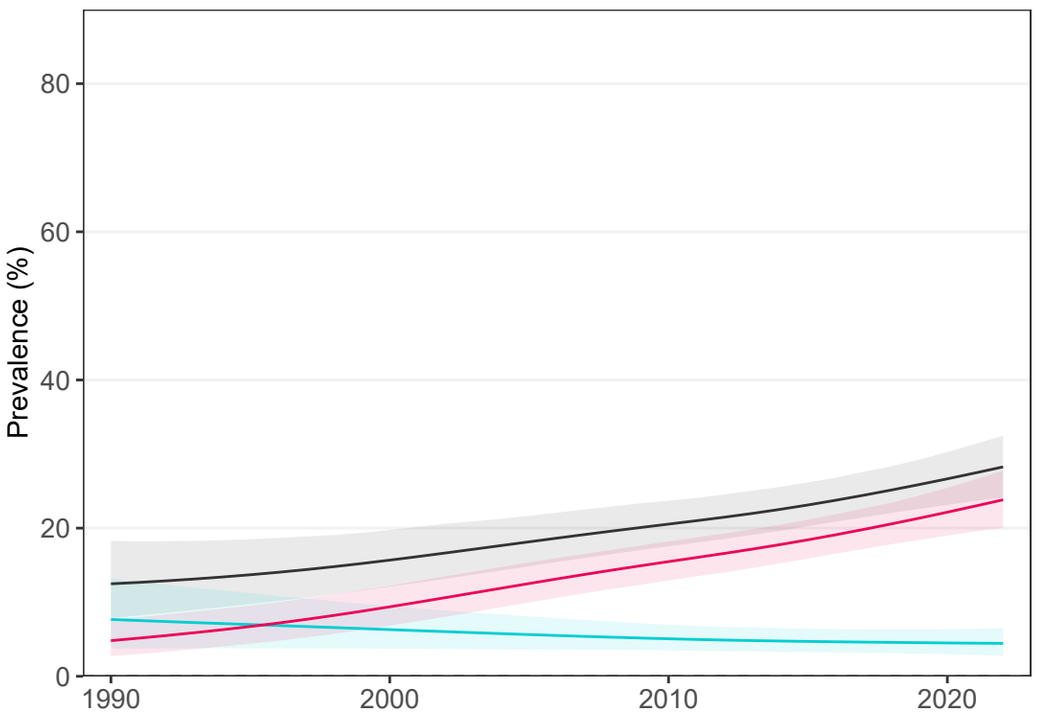




Adults

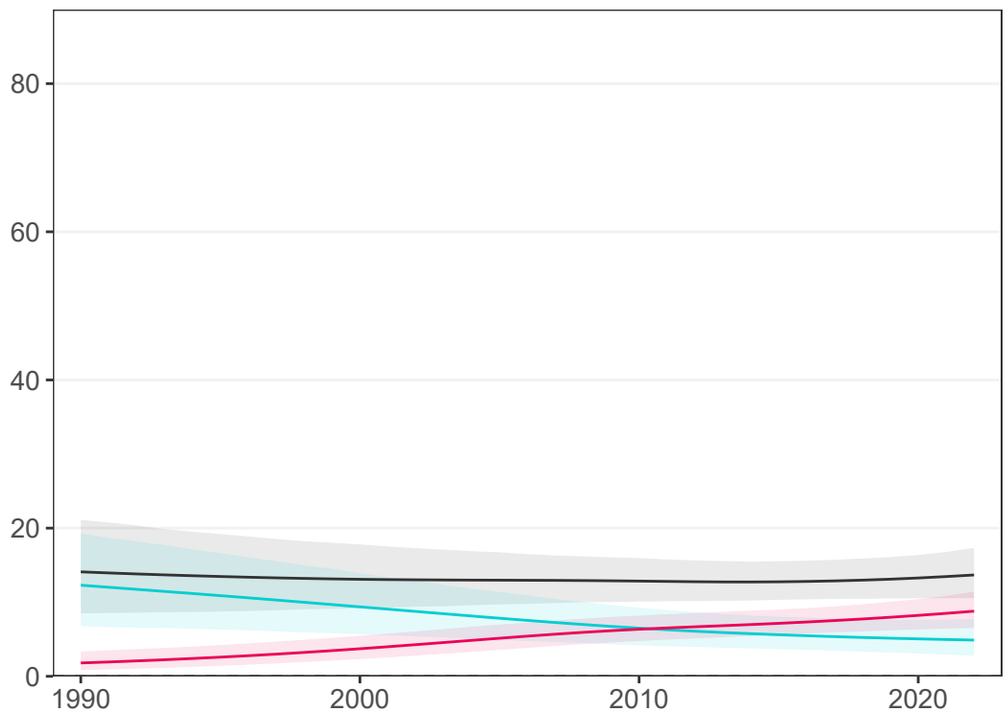
Women

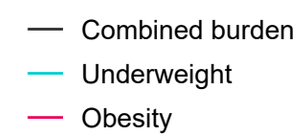
2 studies (2 national)



Men

2 studies (2 national)



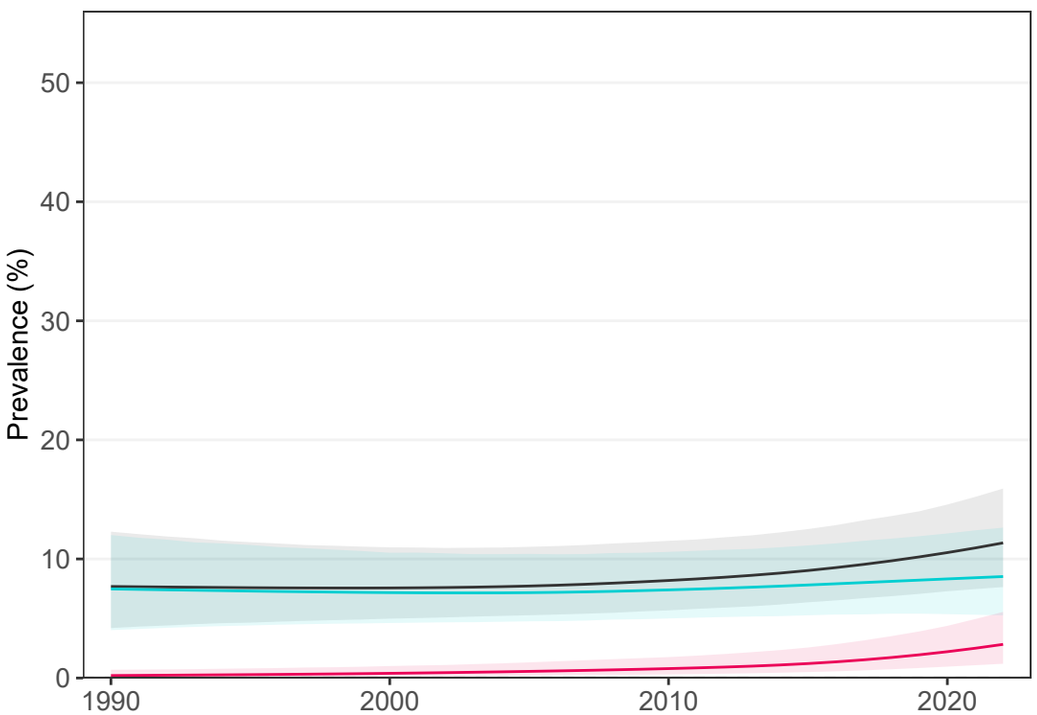


Cambodia

School-aged children and adolescents

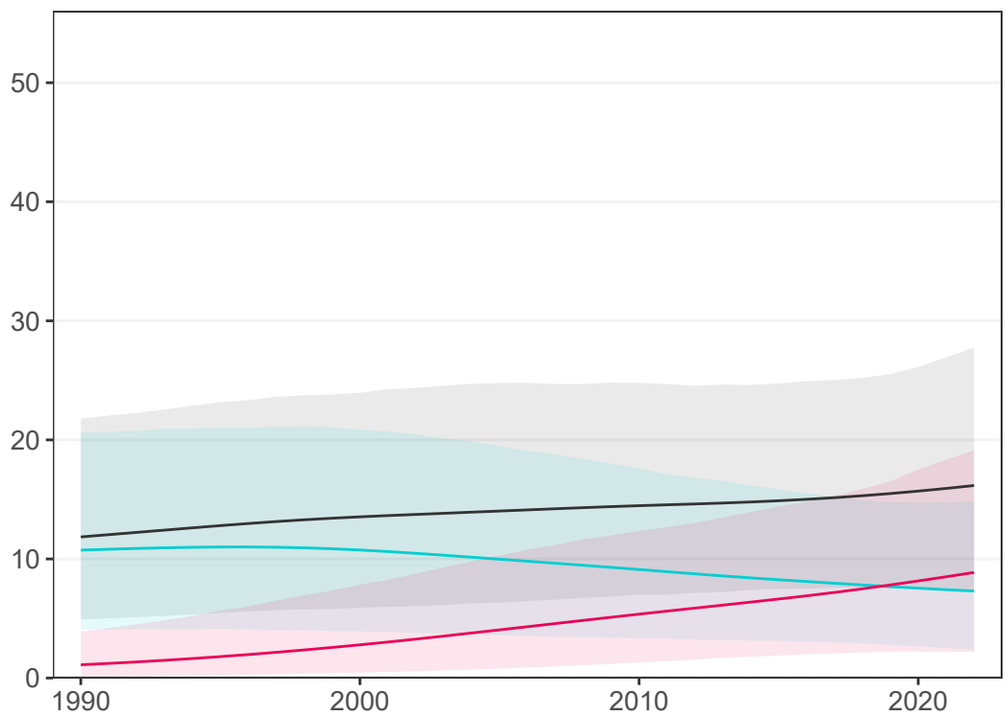
Girls

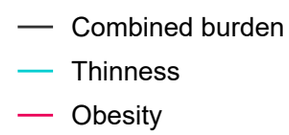
6 studies (6 national)



Boys

1 study (1 national)

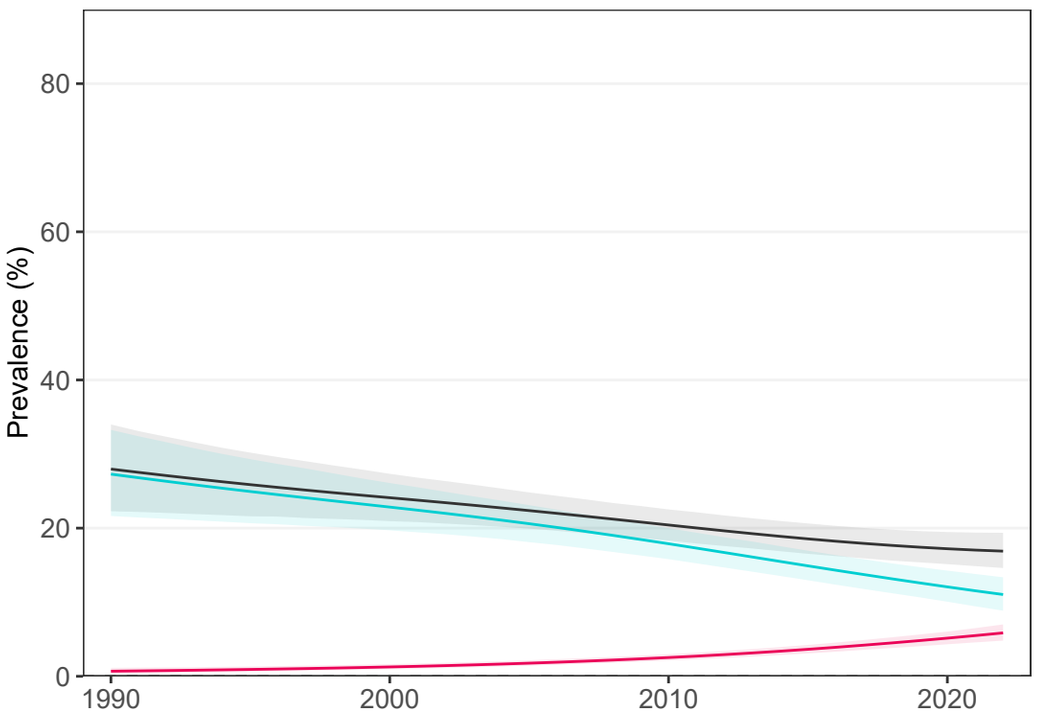




Adults

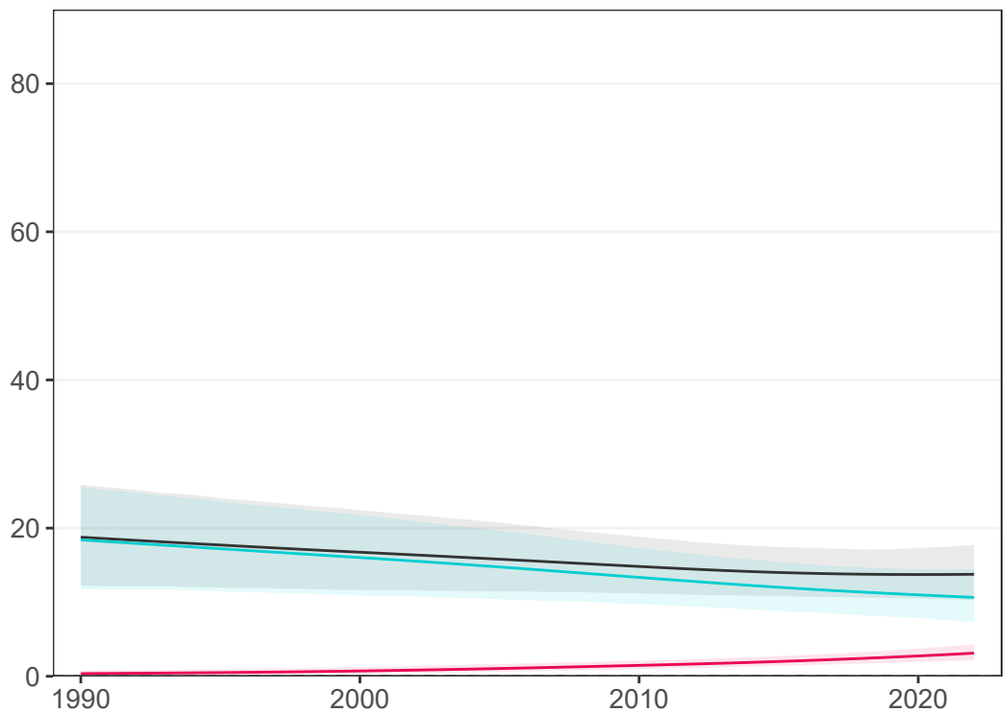
Women

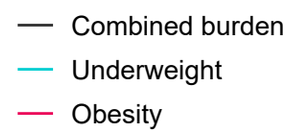
8 studies (8 national)



Men

2 studies (2 national)



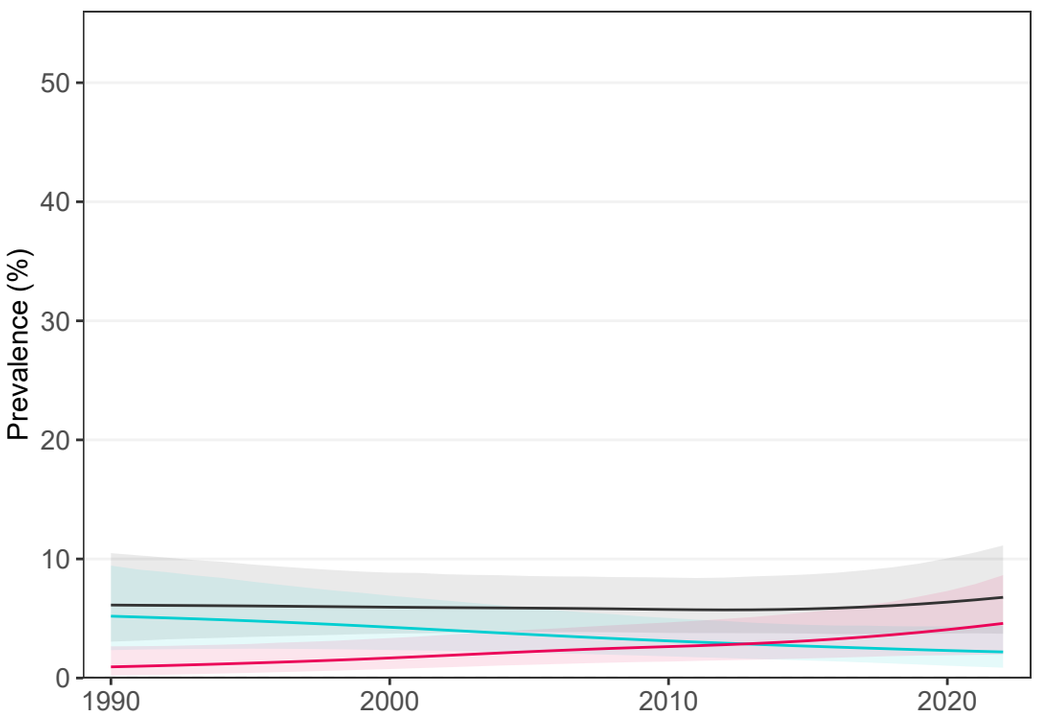


Cameroon

School-aged children and adolescents

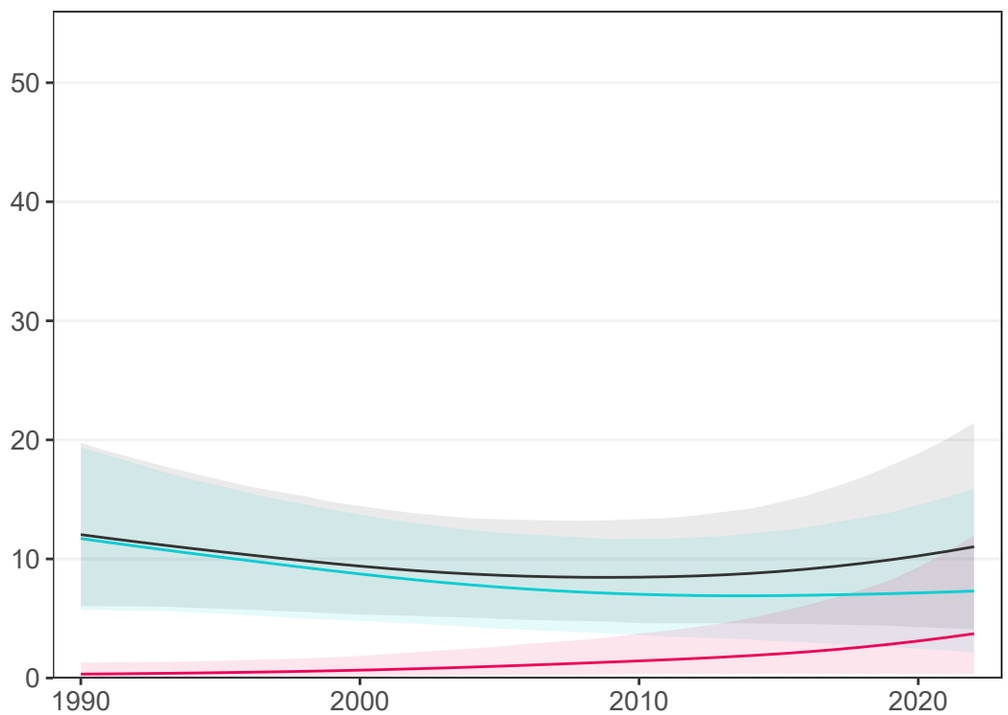
Girls

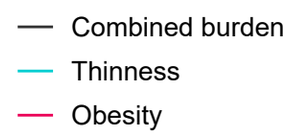
9 studies (4 national)



Boys

5 studies (0 national)

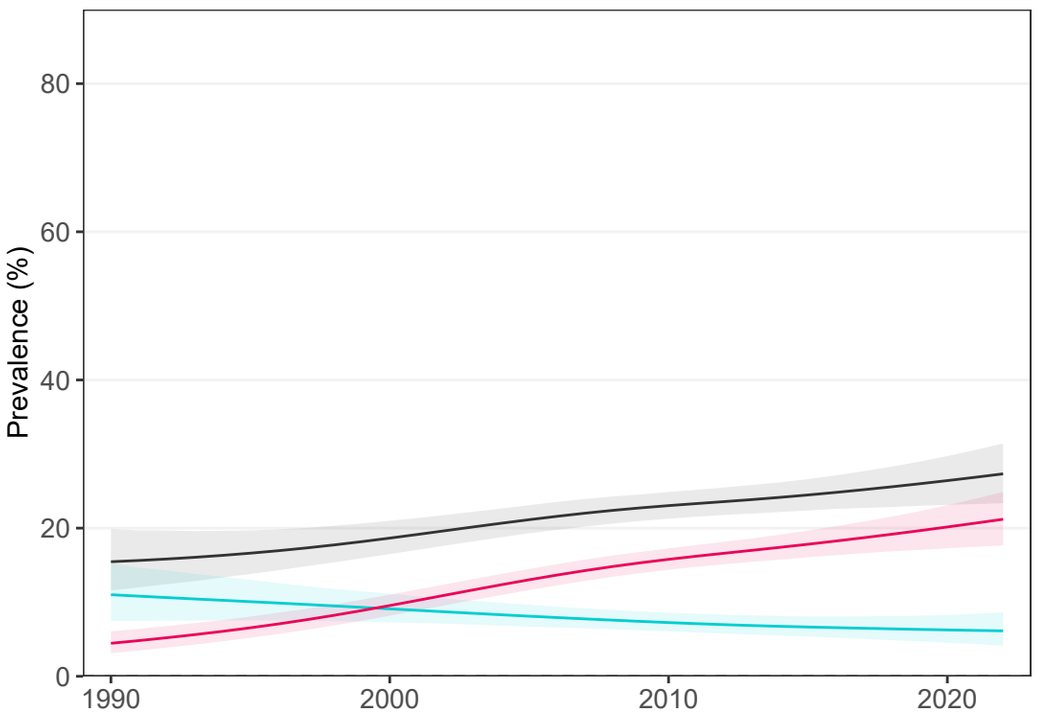




Adults

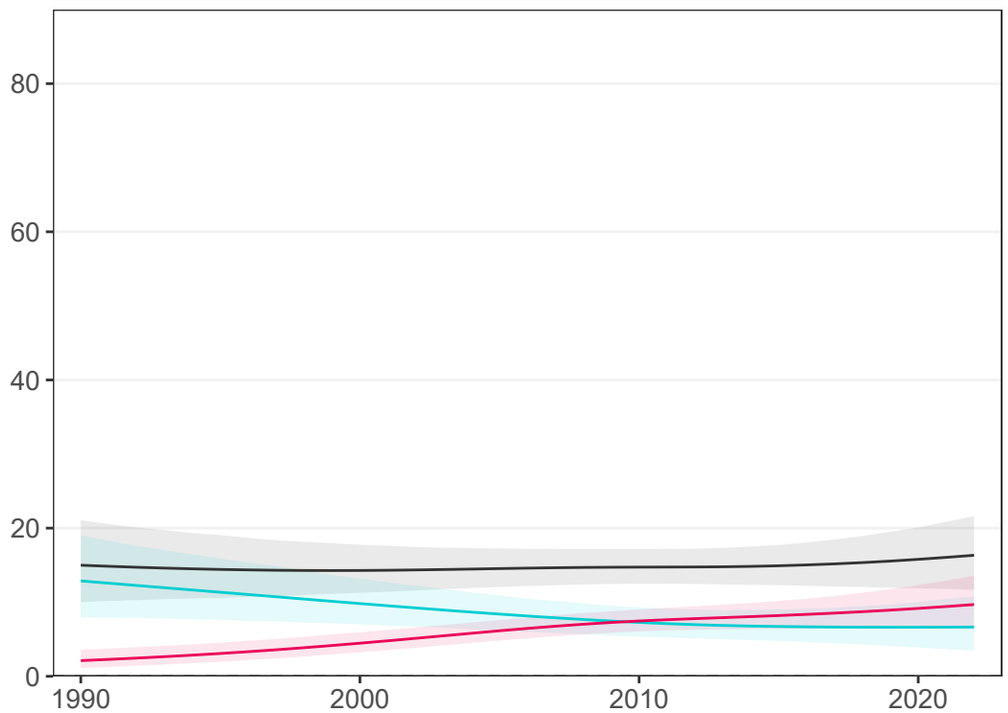
Women

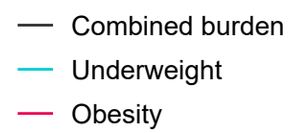
14 studies (5 national)



Men

9 studies (0 national)



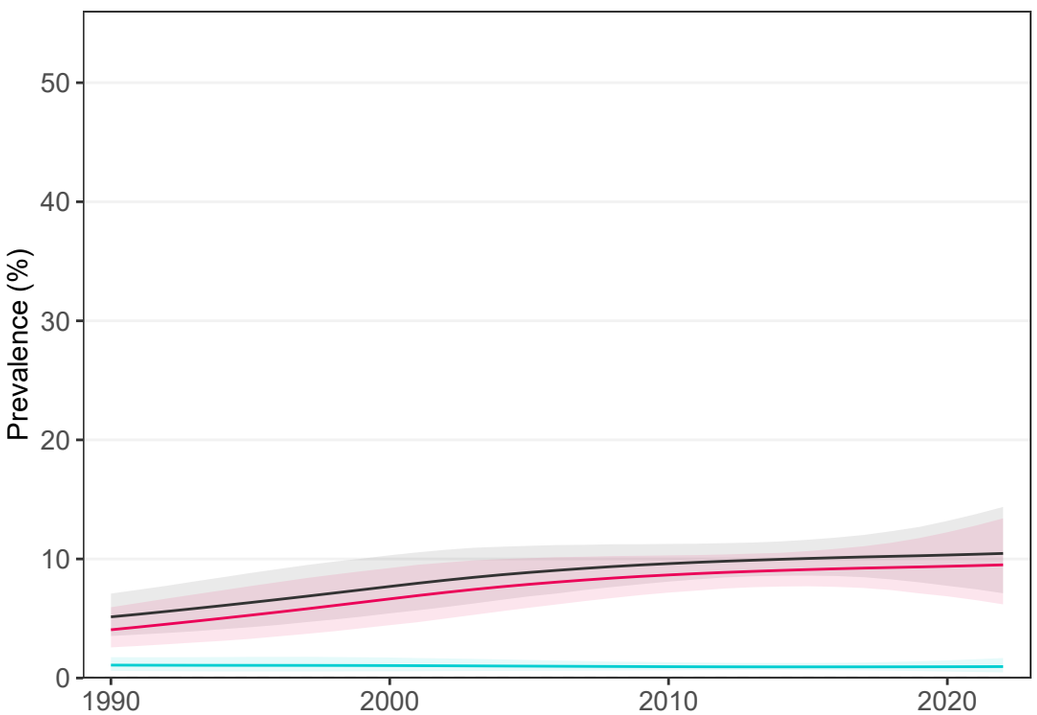


Canada

School-aged children and adolescents

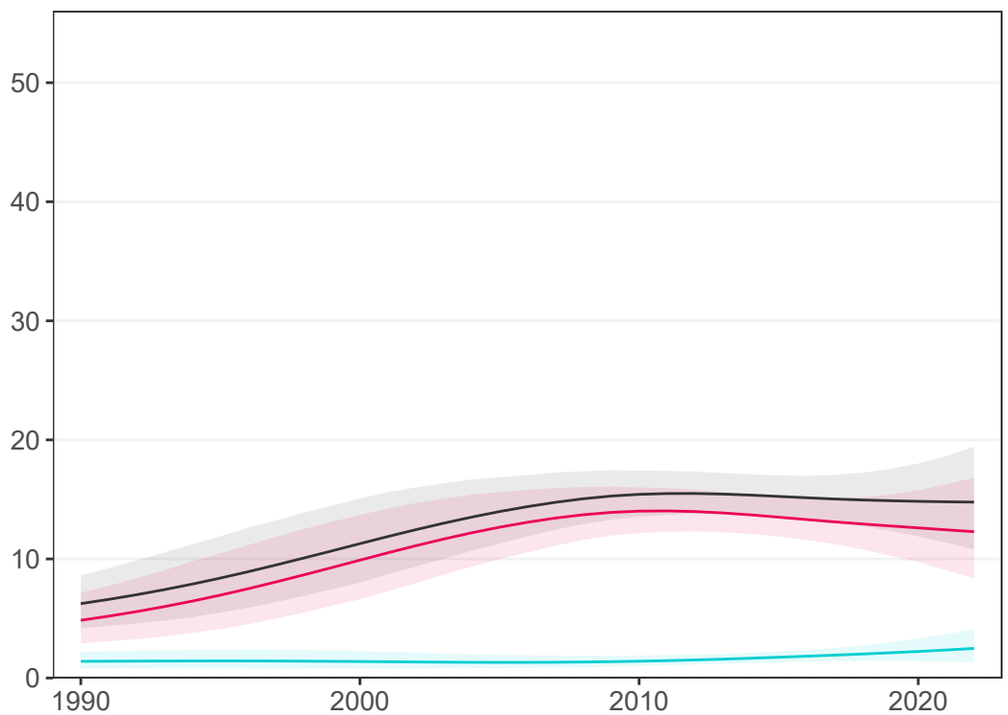
Girls

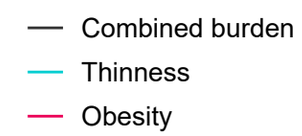
11 studies (8 national)



Boys

11 studies (8 national)

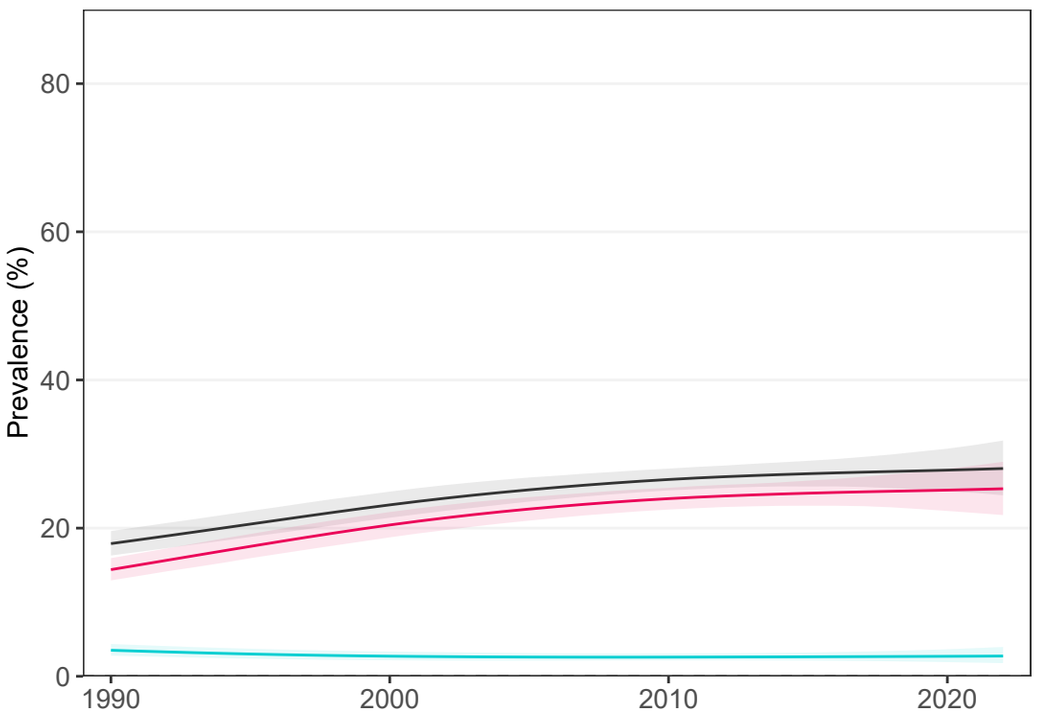




Adults

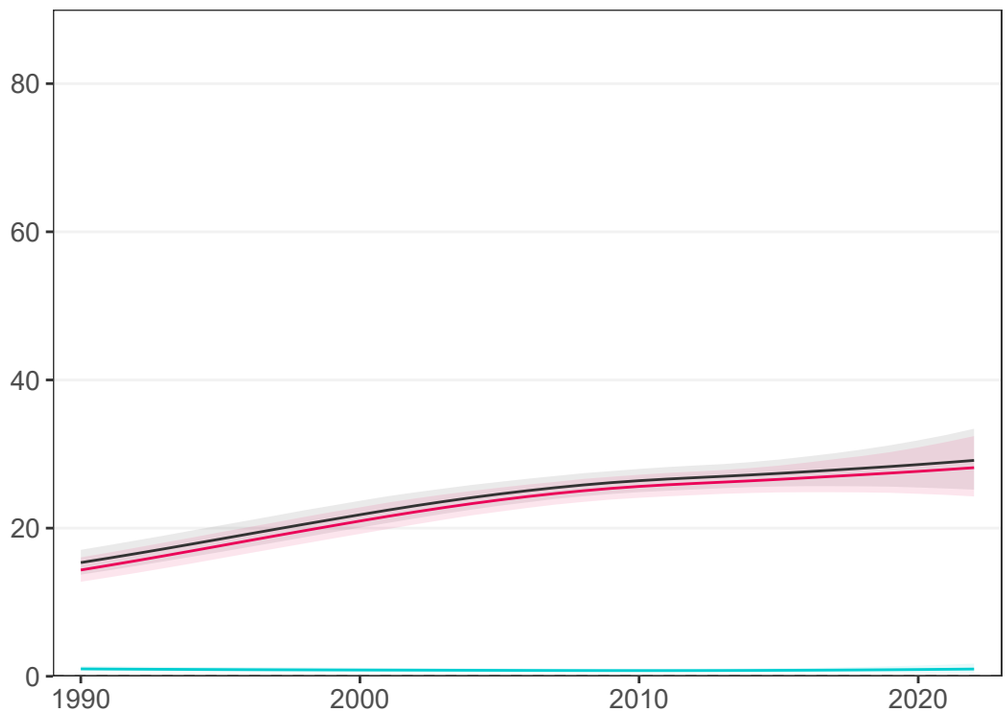
Women

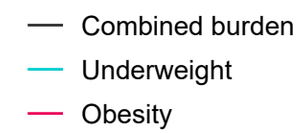
24 studies (10 national)



Men

24 studies (10 national)



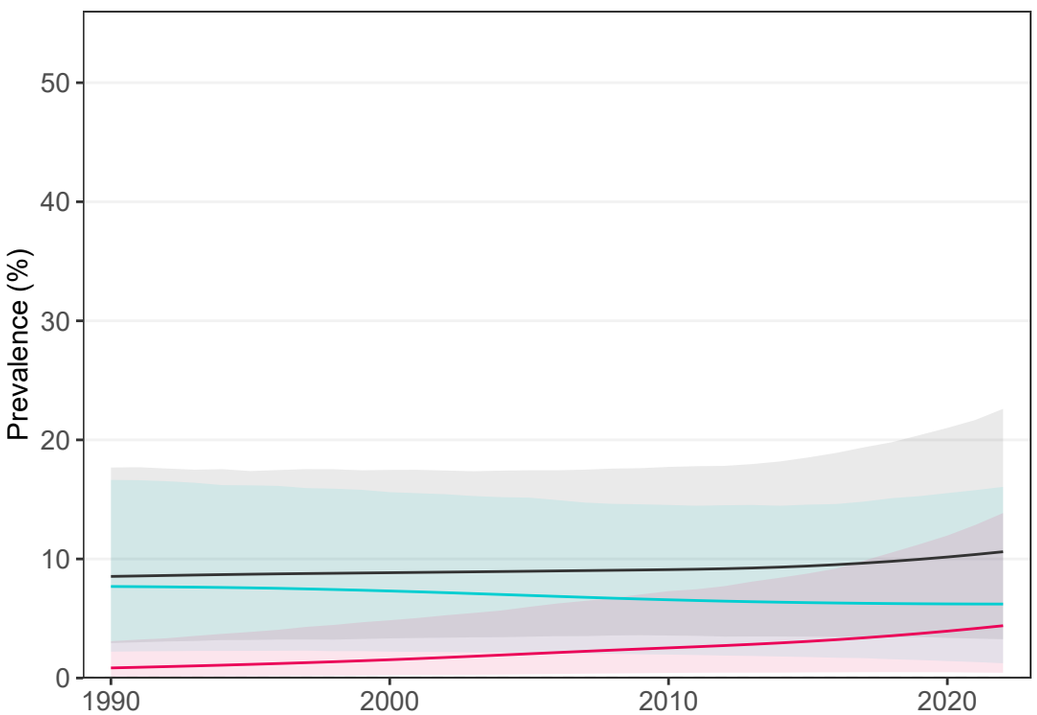


Central African Republic

School-aged children and adolescents

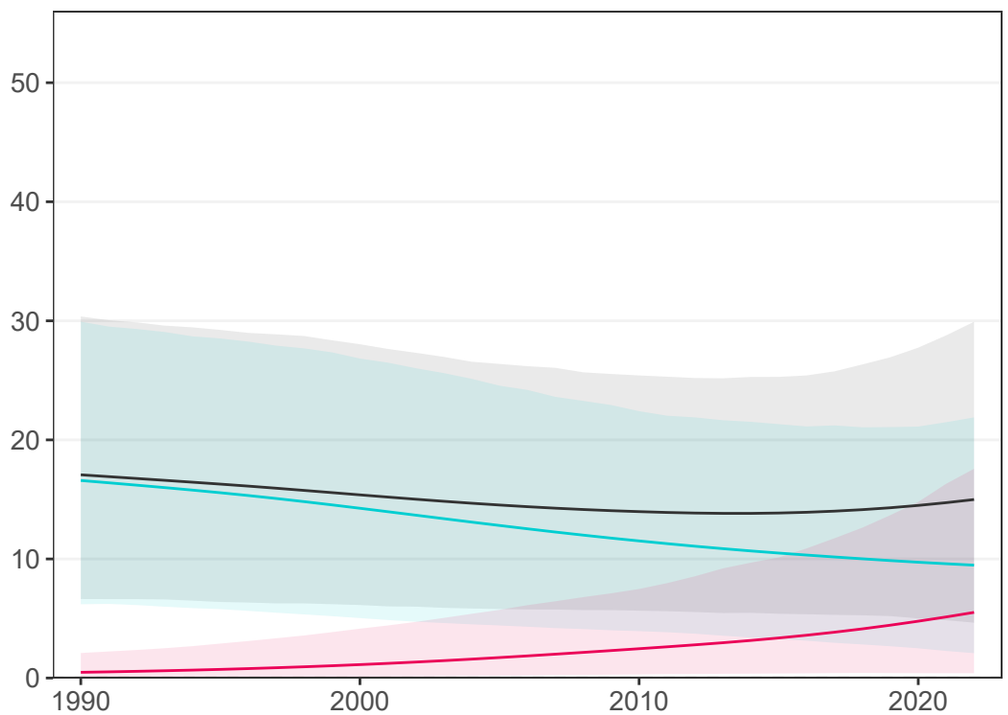
Girls

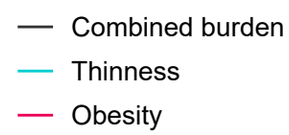
No studies



Boys

No studies

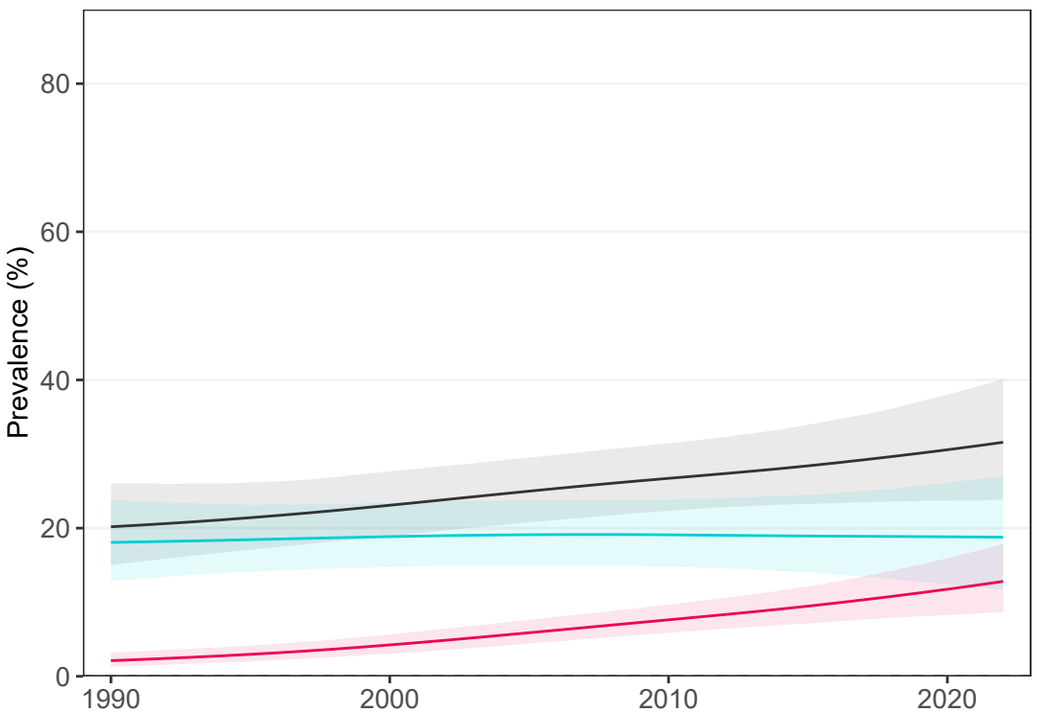




Adults

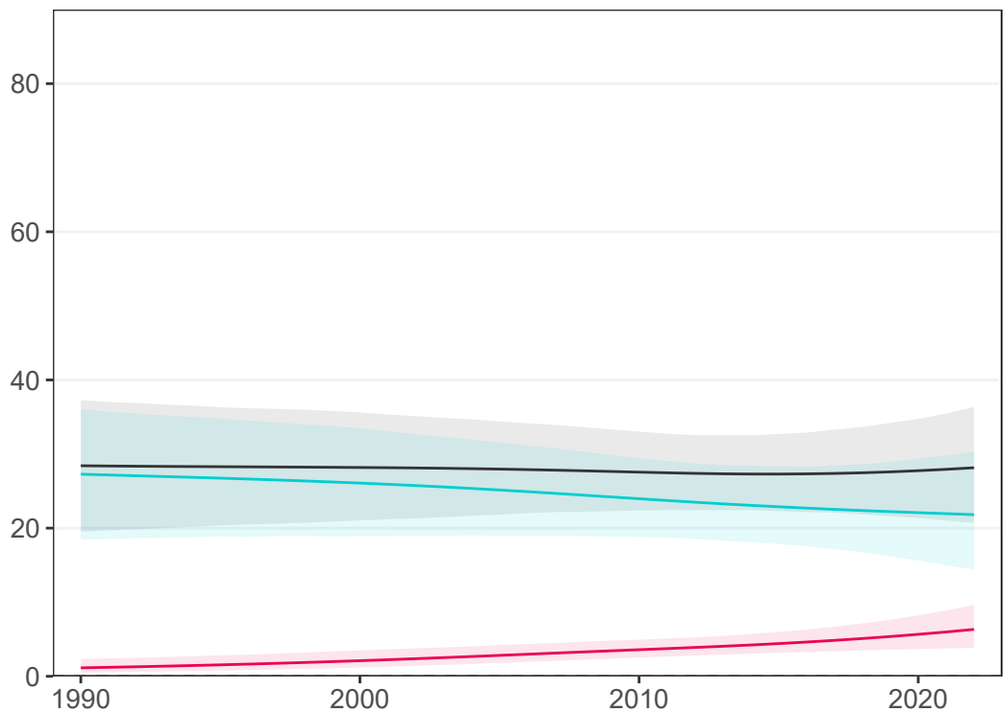
Women

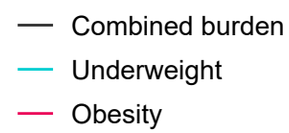
5 studies (1 national)



Men

4 studies (0 national)



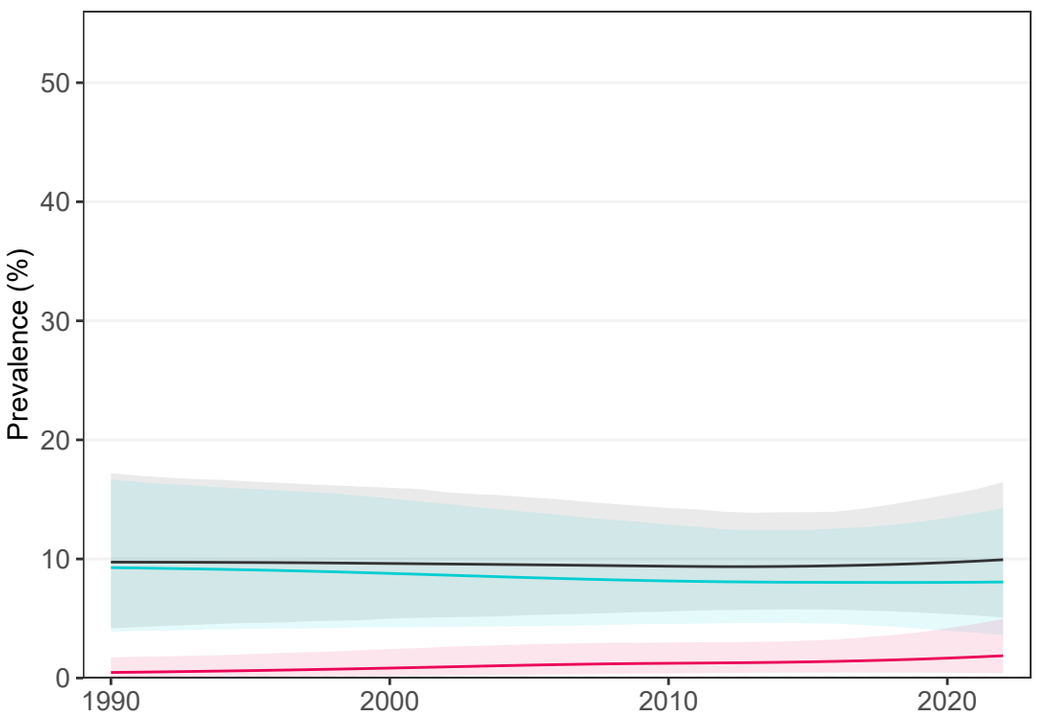


Chad

School-aged children and adolescents

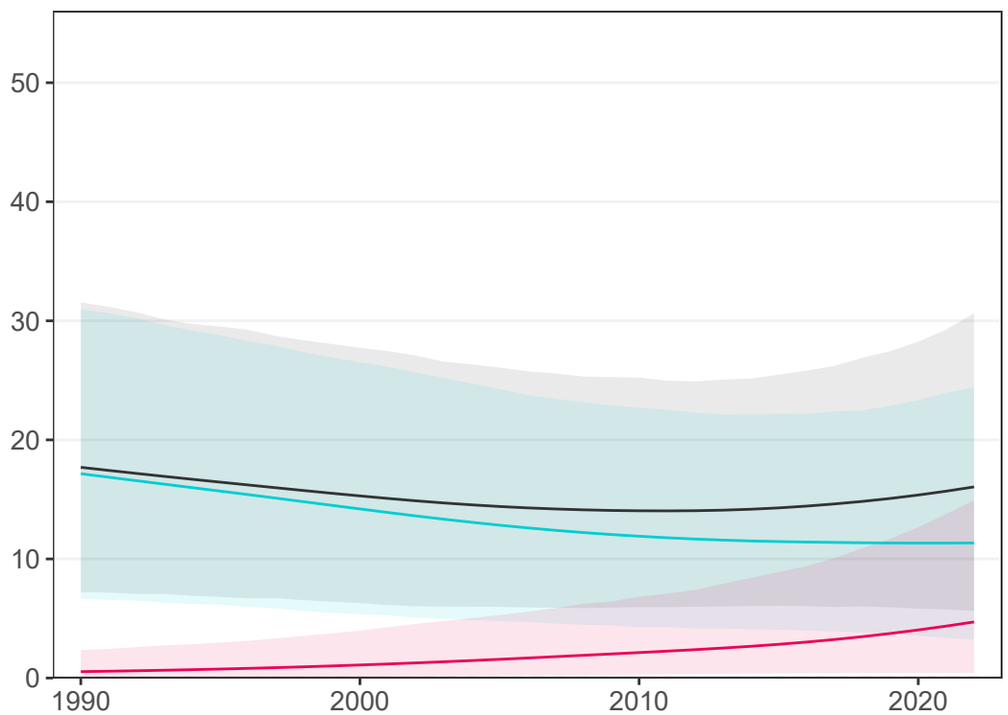
Girls

1 study (1 national)



Boys

No studies

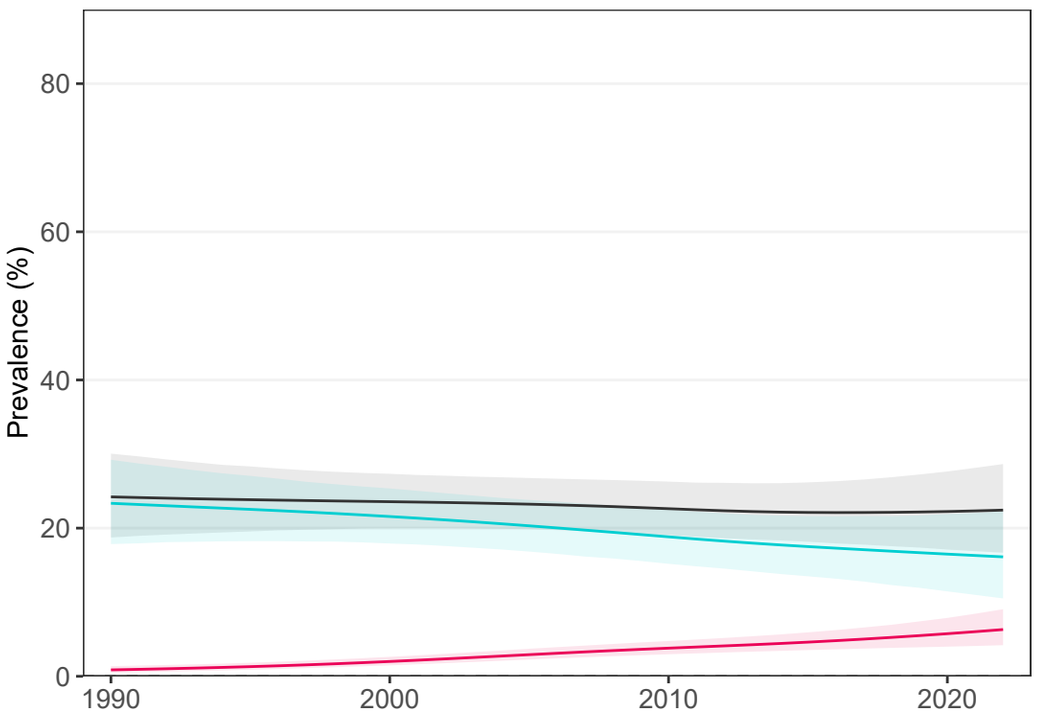


Combined burden
Thinness
Obesity

Adults

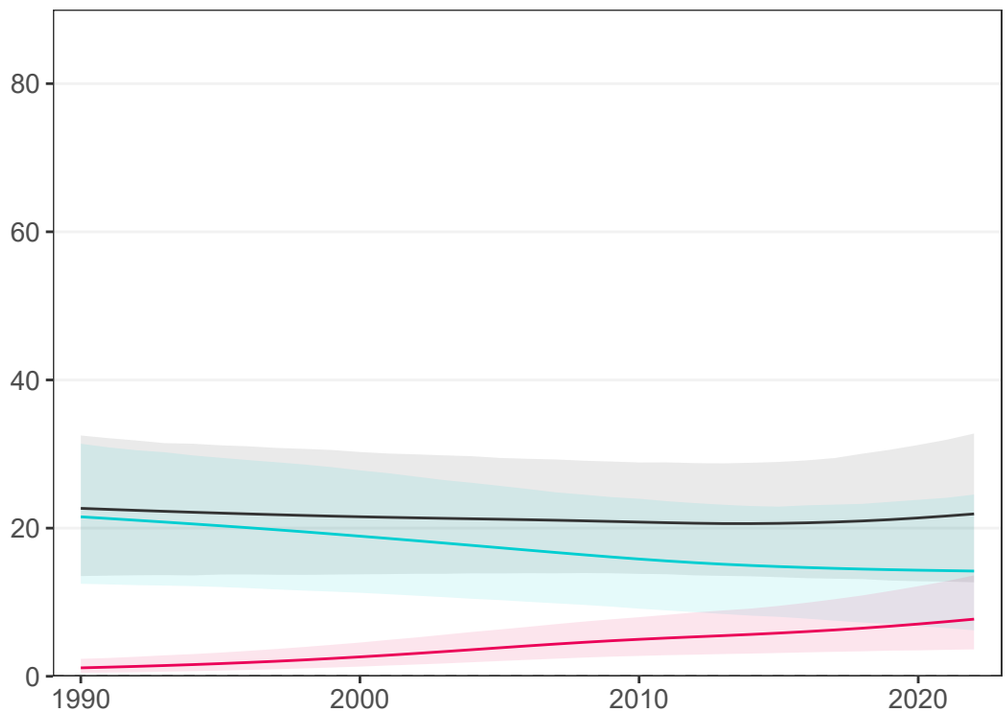
Women

4 studies (3 national)



Men

1 study (0 national)



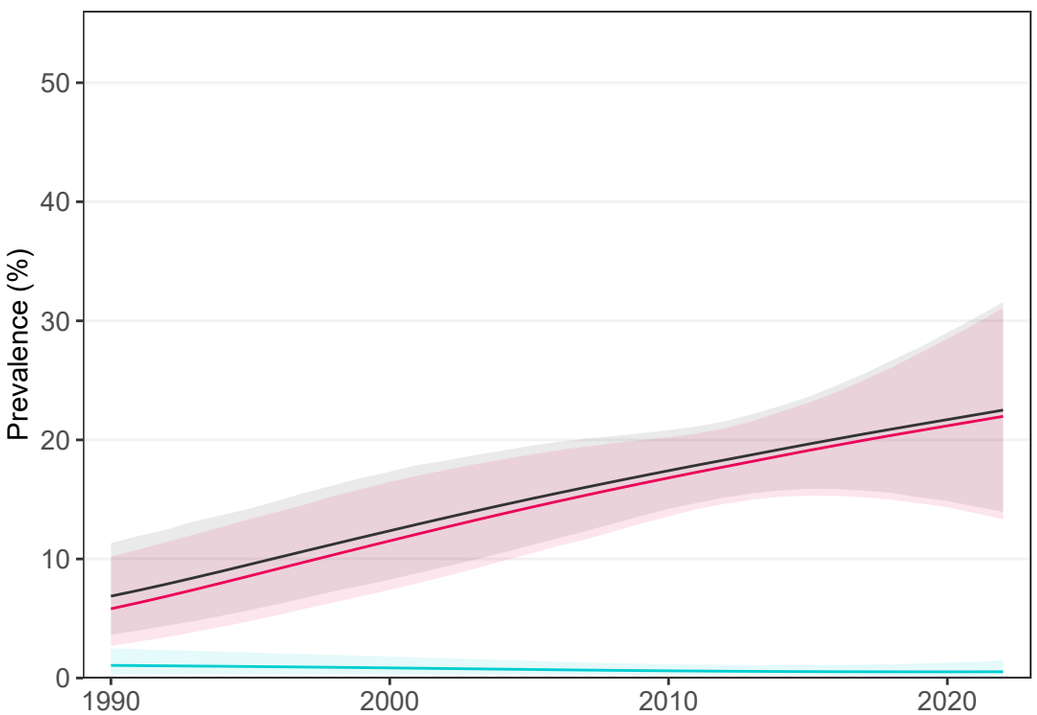
Combined burden
Underweight
Obesity

Chile

School-aged children and adolescents

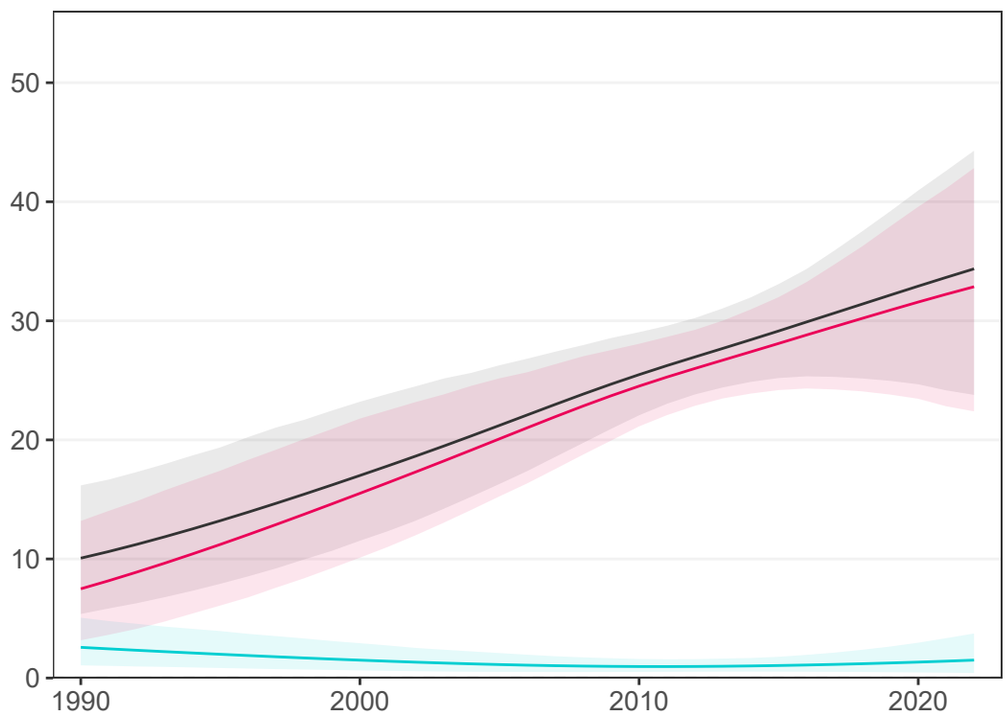
Girls

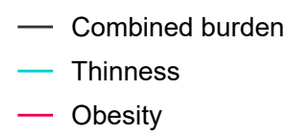
8 studies (6 national)



Boys

8 studies (6 national)

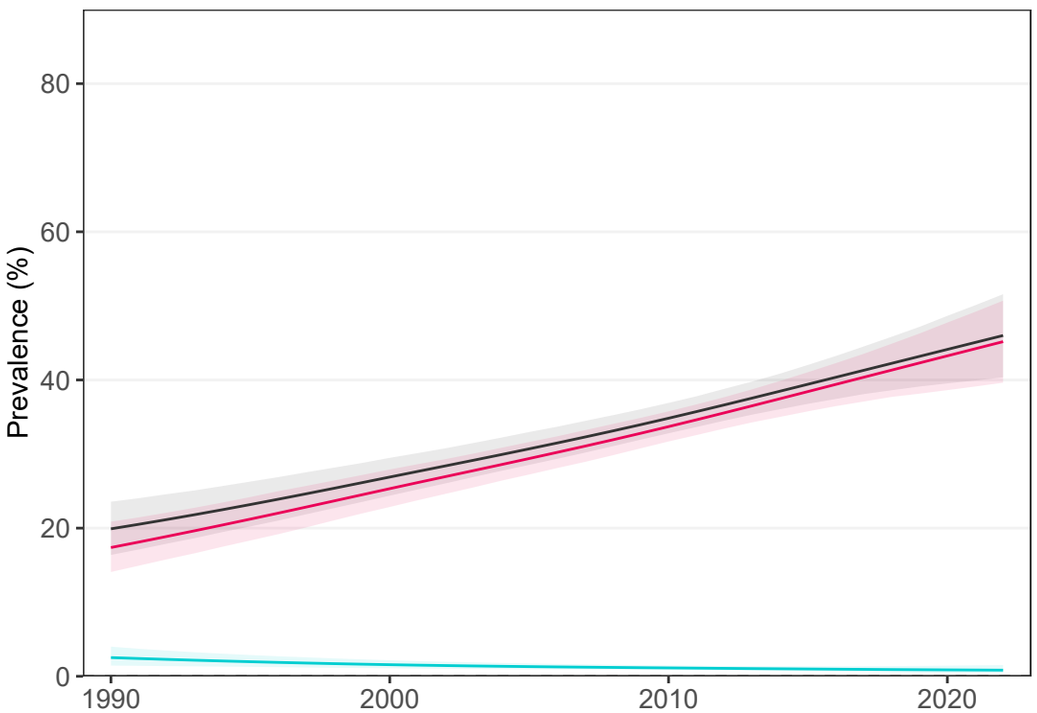




Adults

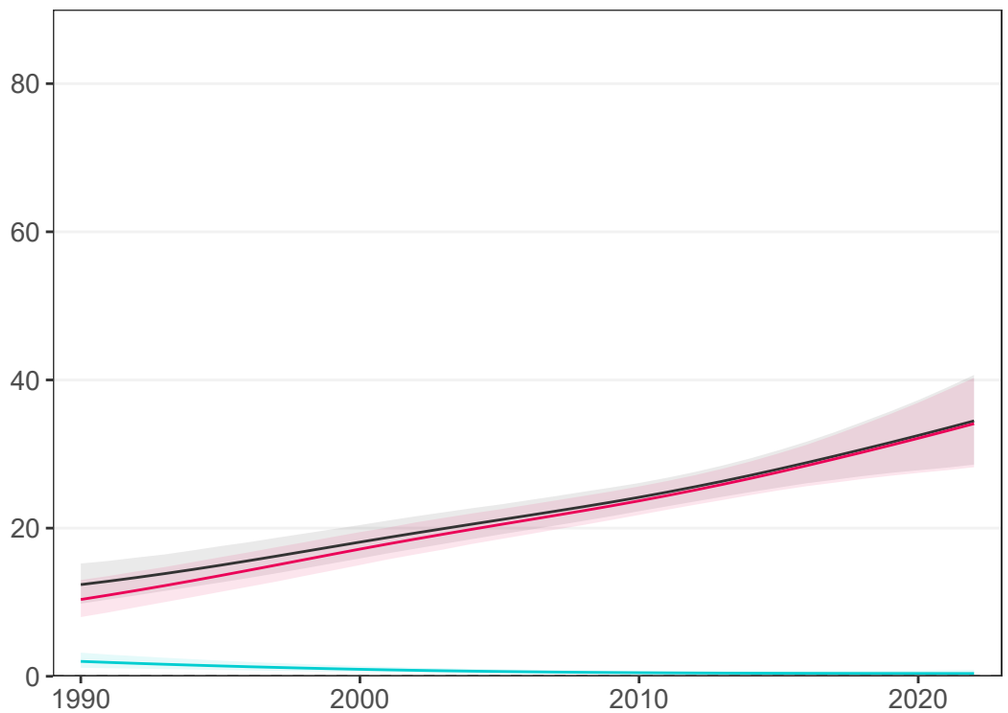
Women

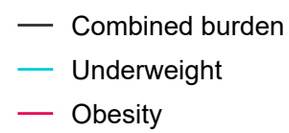
13 studies (5 national)



Men

14 studies (5 national)



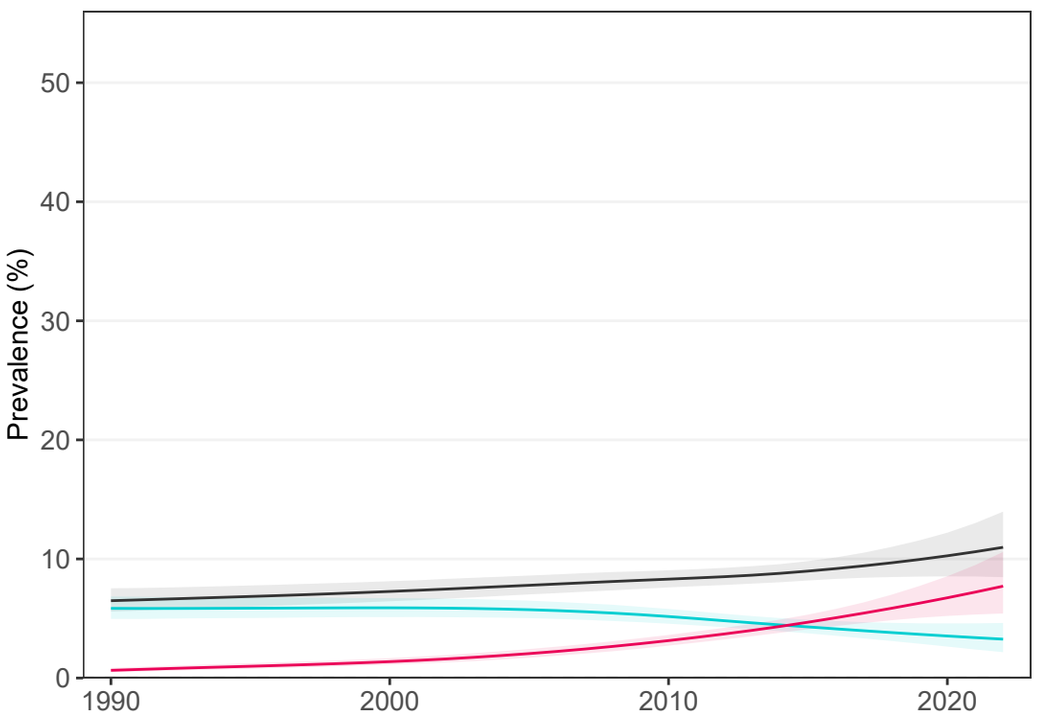


China

School-aged children and adolescents

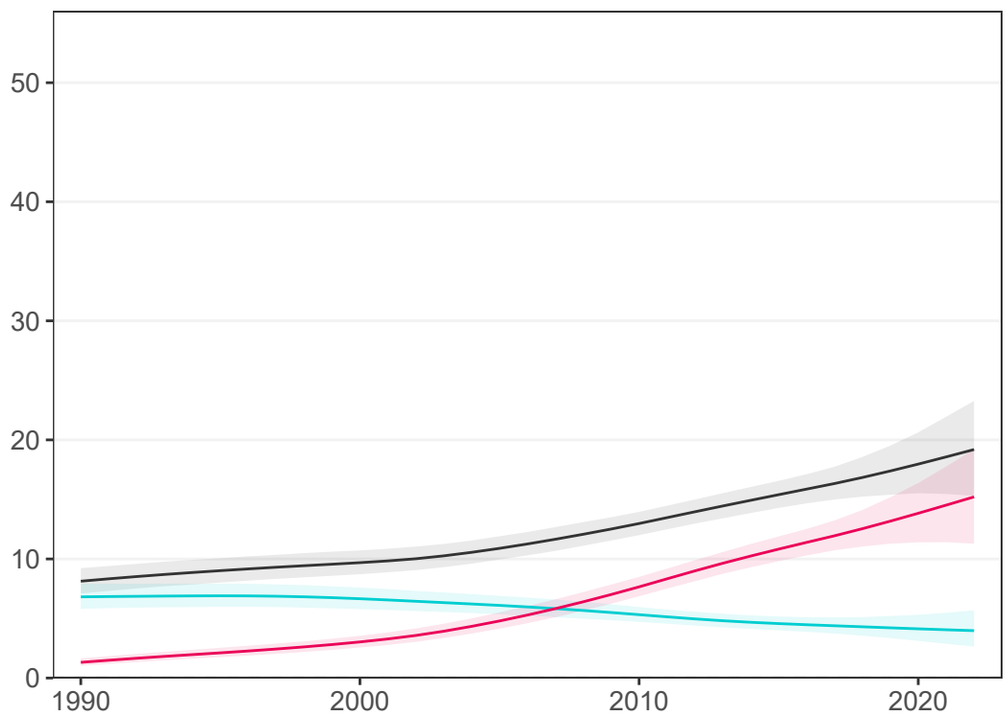
Girls

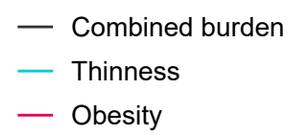
50 studies (27 national)



Boys

51 studies (27 national)

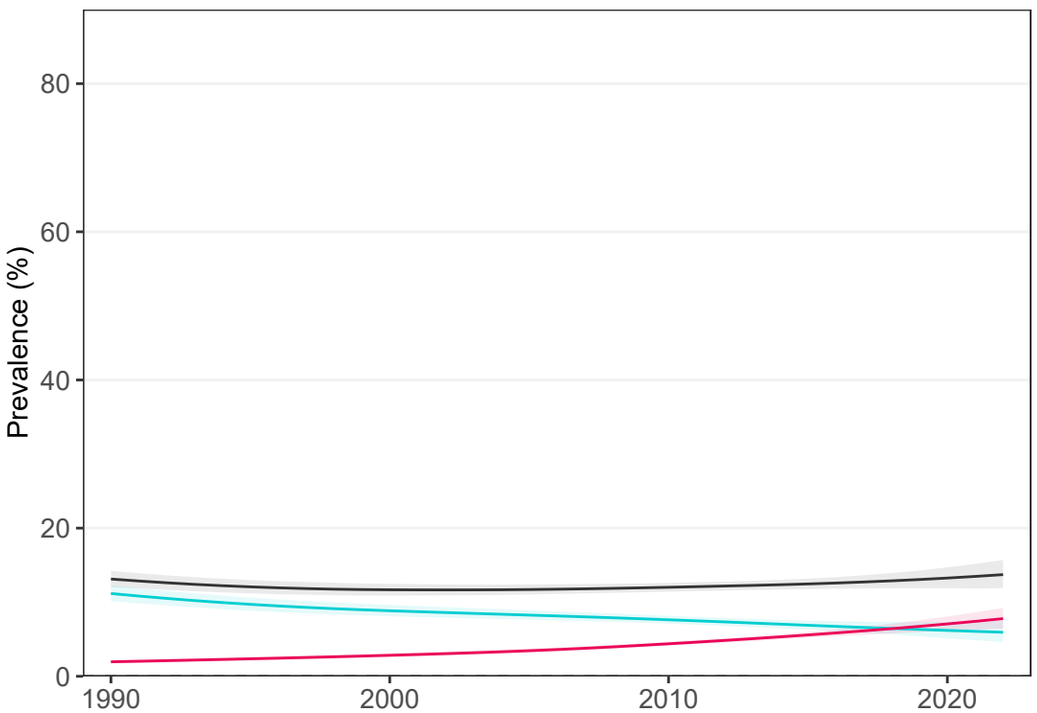




Adults

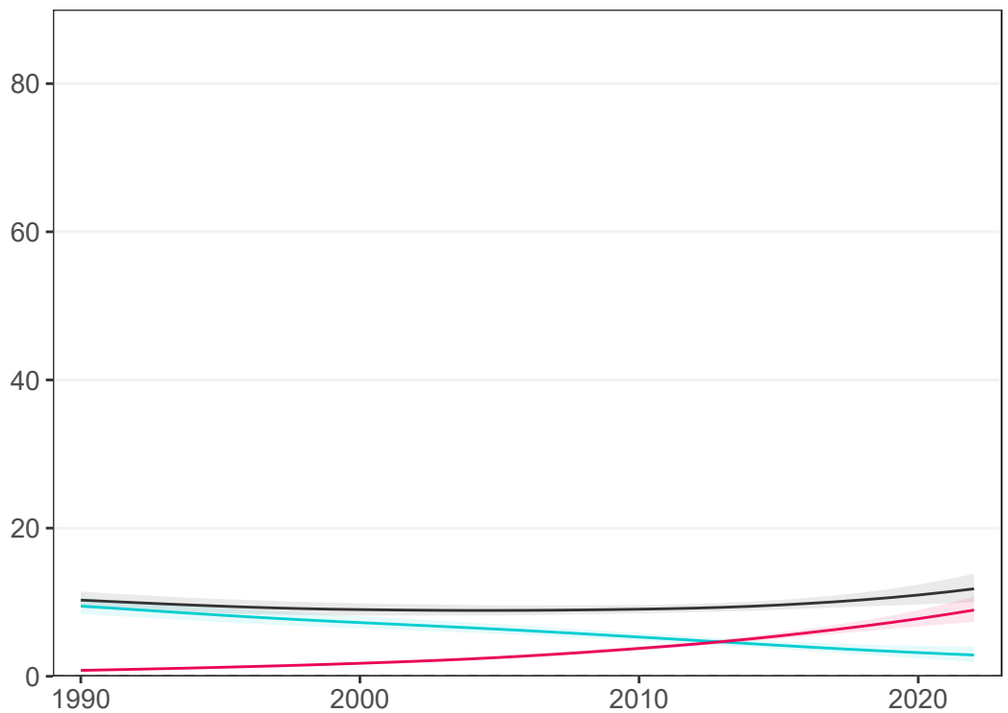
Women

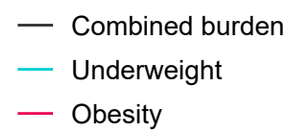
130 studies (47 national)



Men

134 studies (49 national)



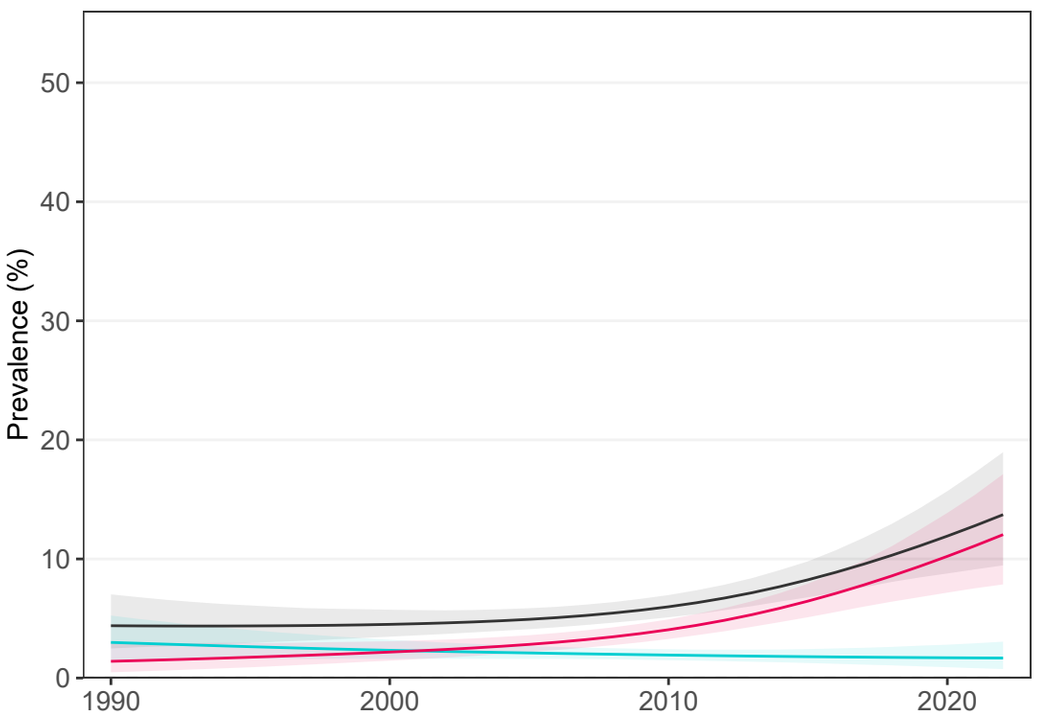


Colombia

School-aged children and adolescents

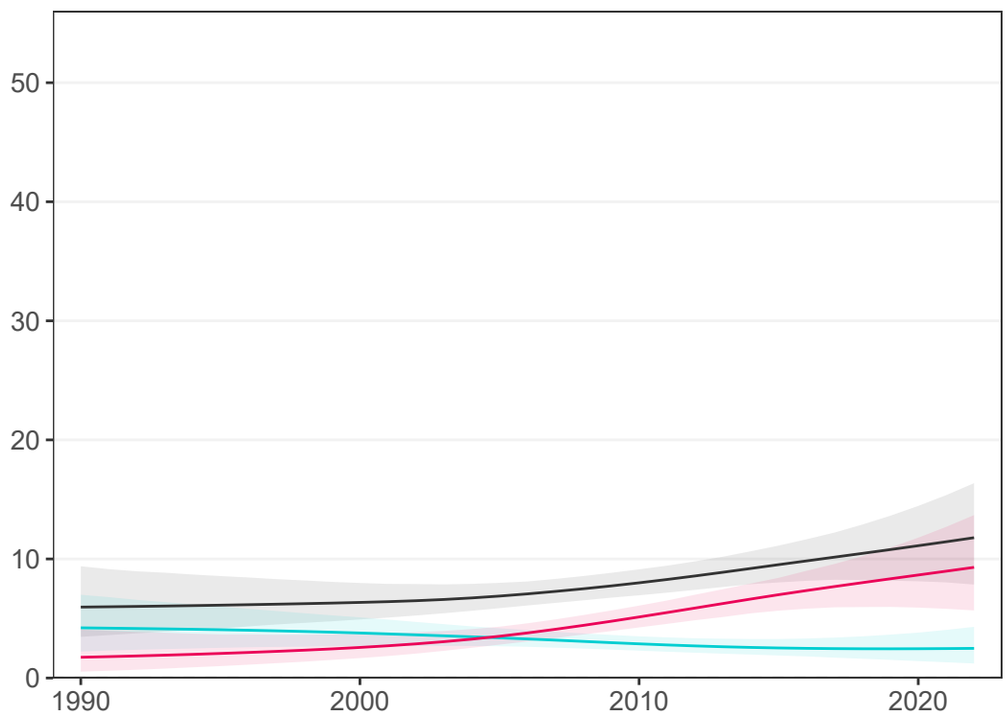
Girls

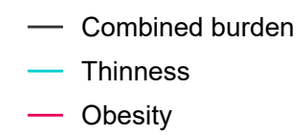
14 studies (6 national)



Boys

14 studies (6 national)

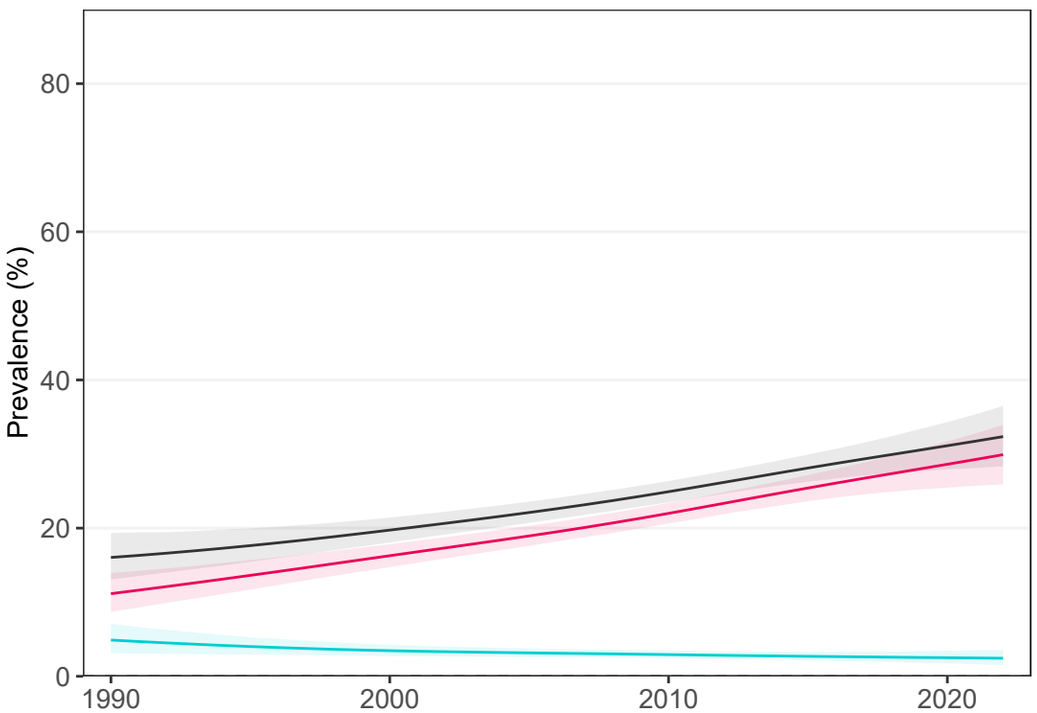




Adults

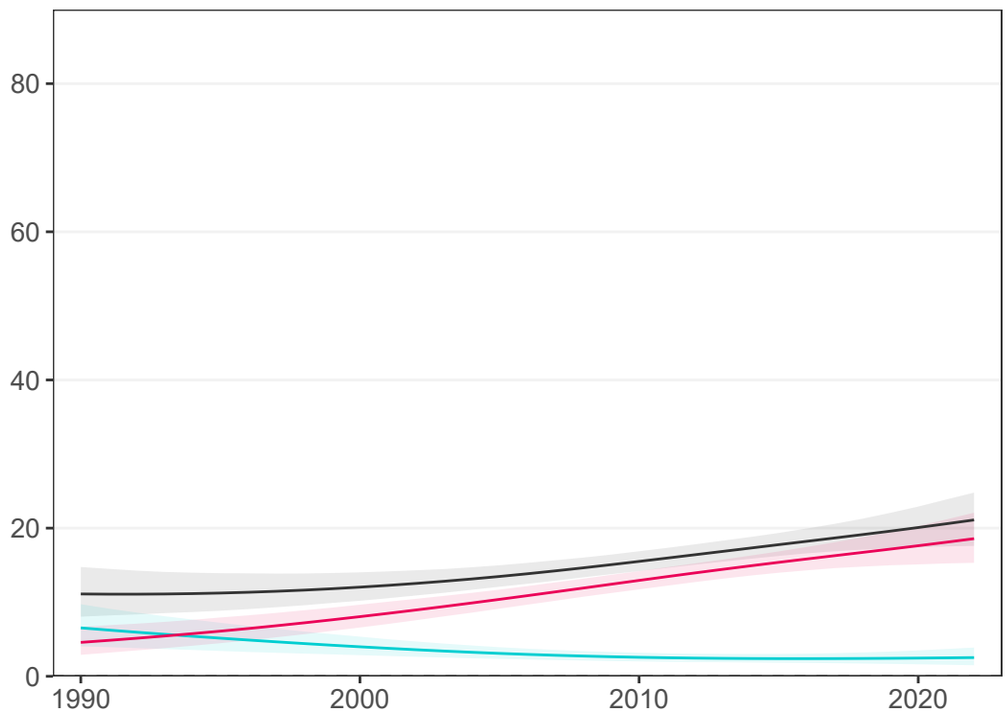
Women

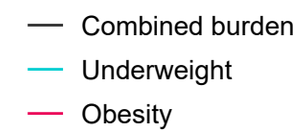
19 studies (9 national)



Men

16 studies (6 national)



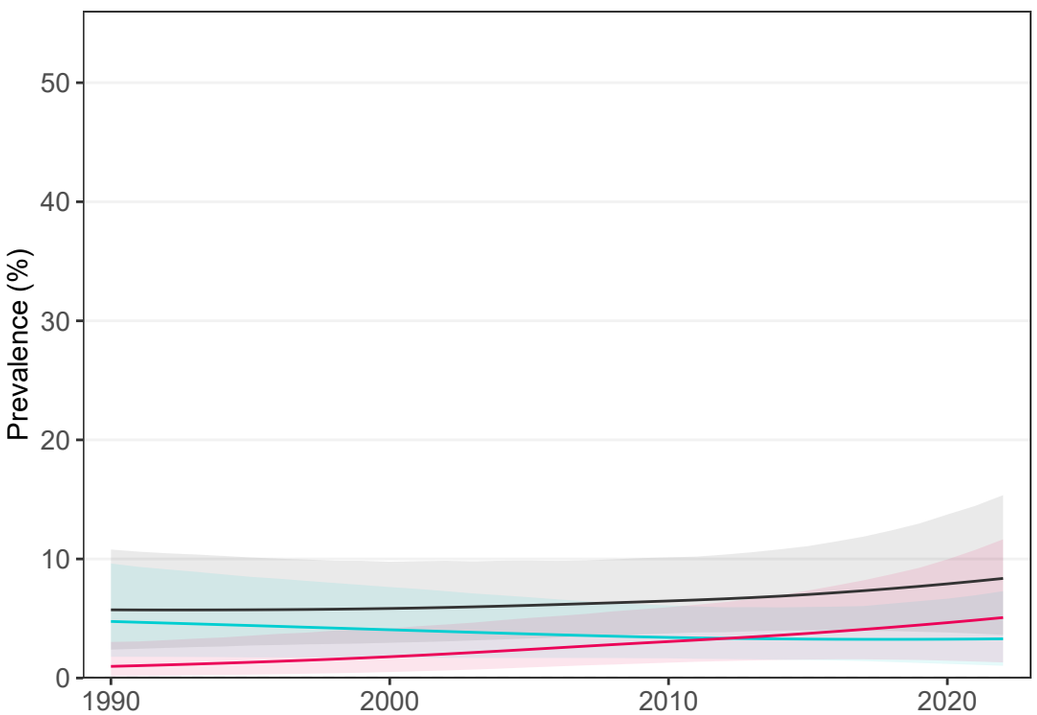


Comoros

School-aged children and adolescents

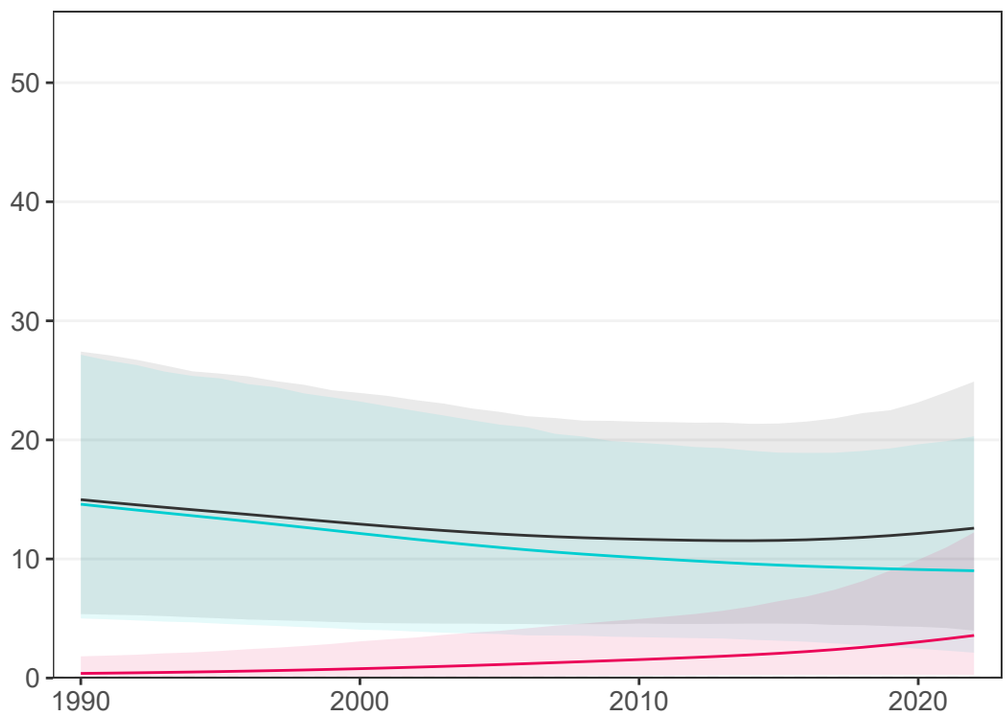
Girls

1 study (1 national)



Boys

No studies

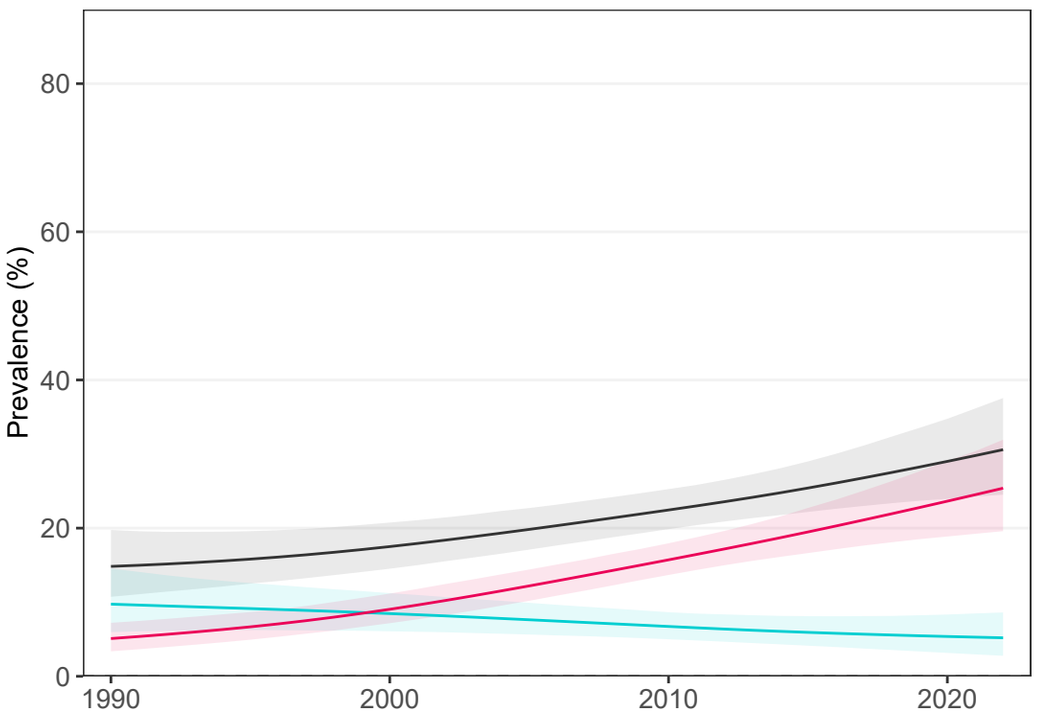


Combined burden
Thinness
Obesity

Adults

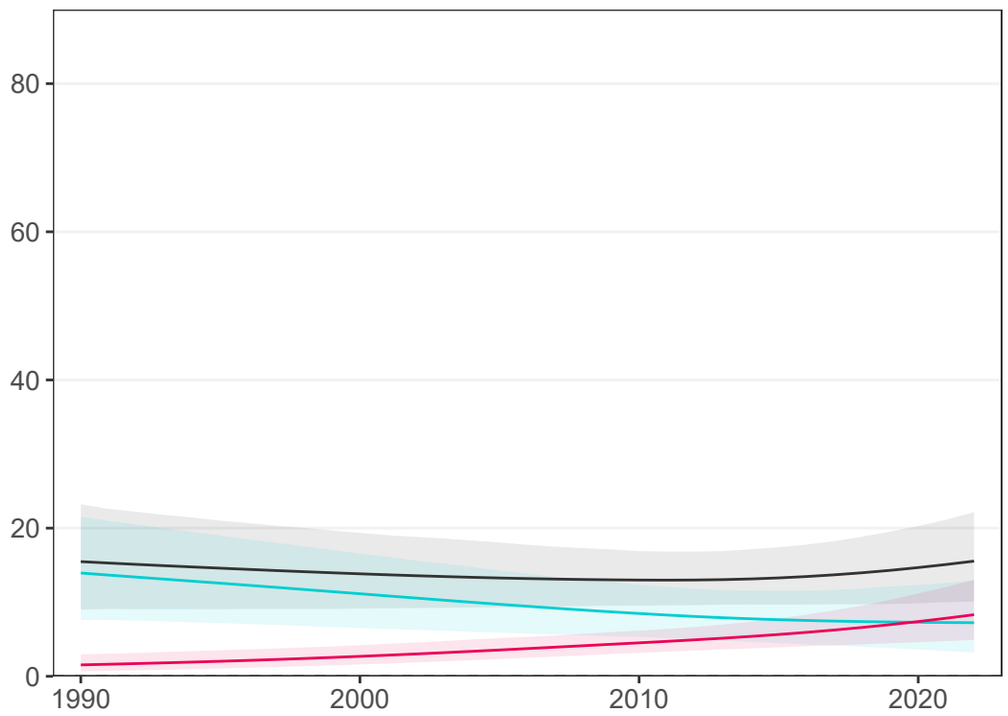
Women

3 studies (3 national)



Men

1 study (1 national)



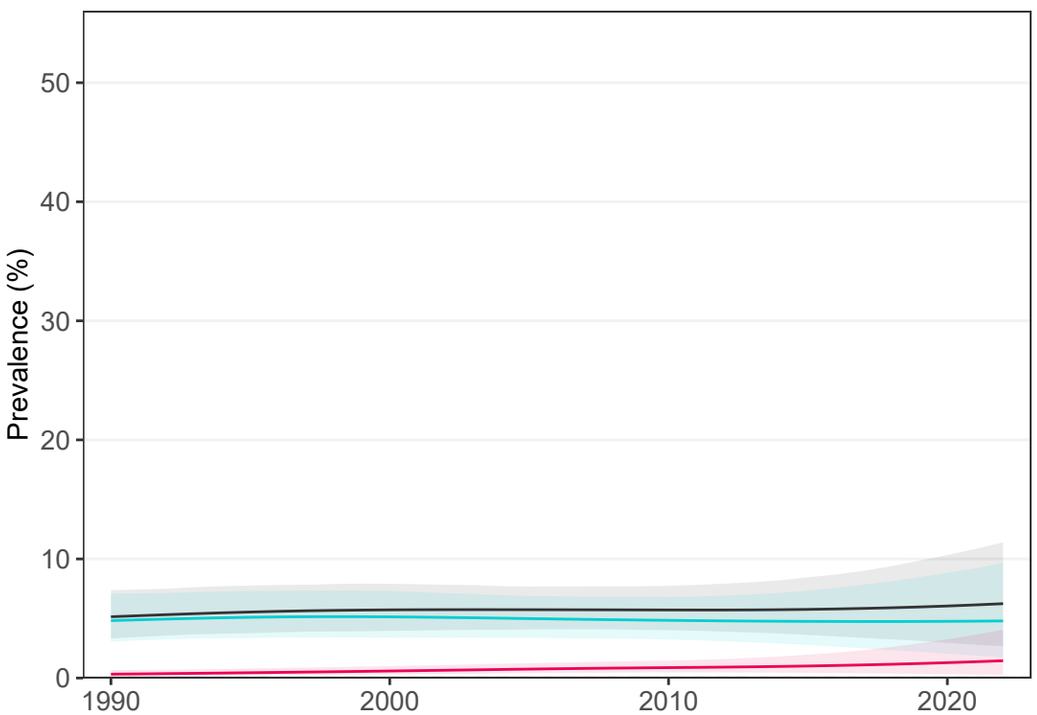
Combined burden
Underweight
Obesity

Congo

School-aged children and adolescents

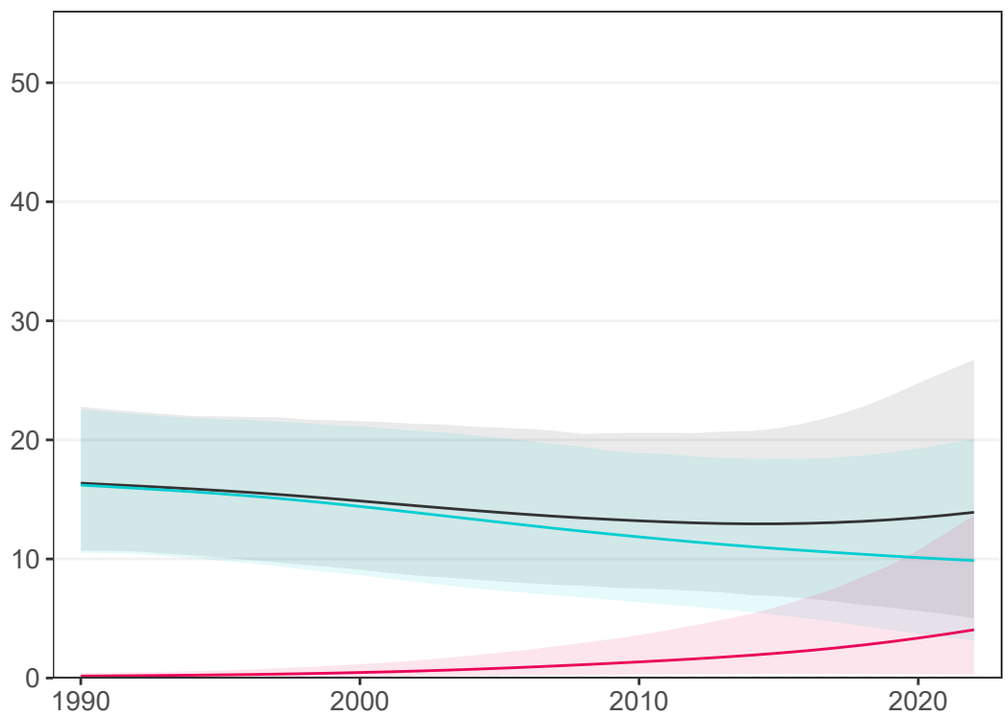
Girls

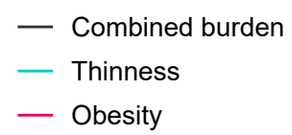
7 studies (3 national)



Boys

4 studies (0 national)

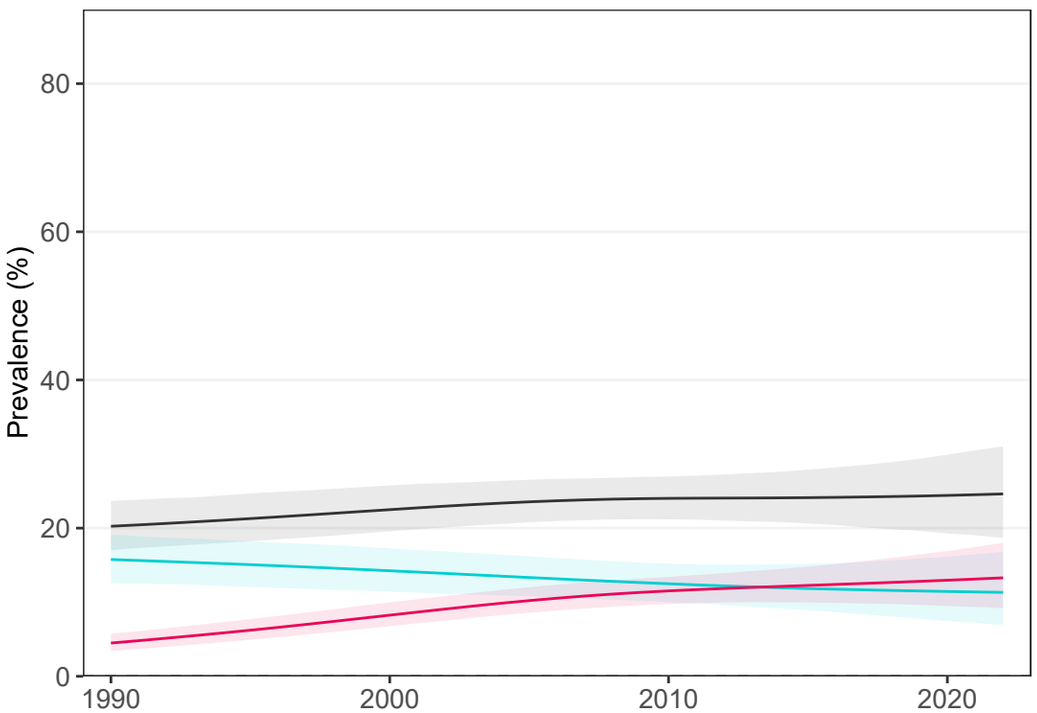




Adults

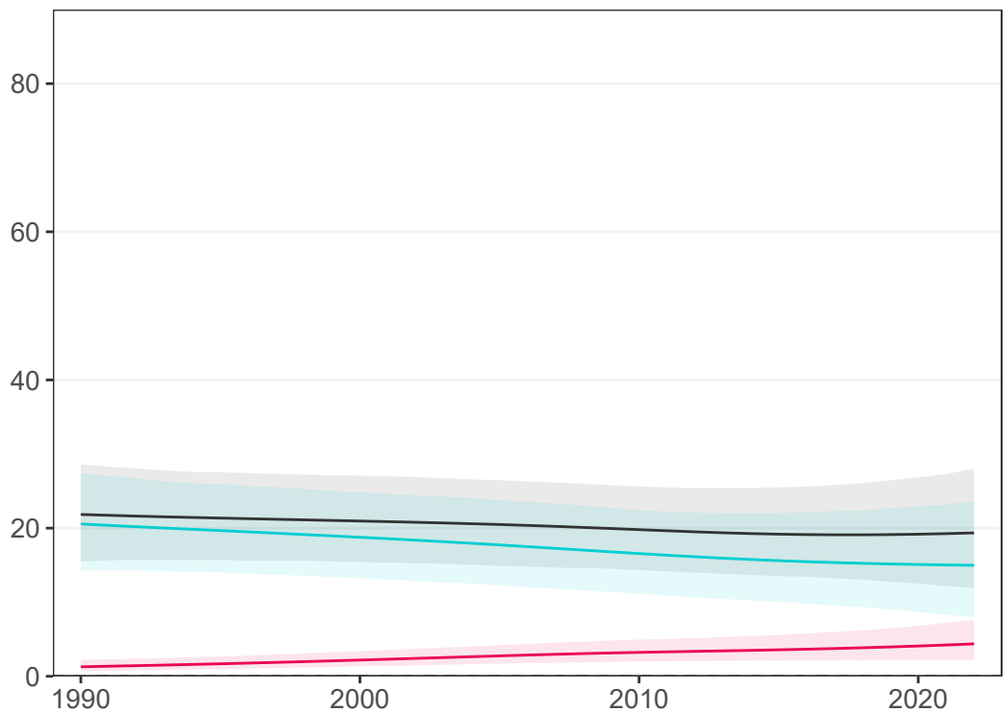
Women

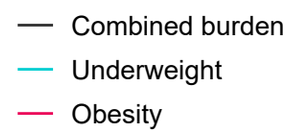
9 studies (3 national)



Men

4 studies (0 national)



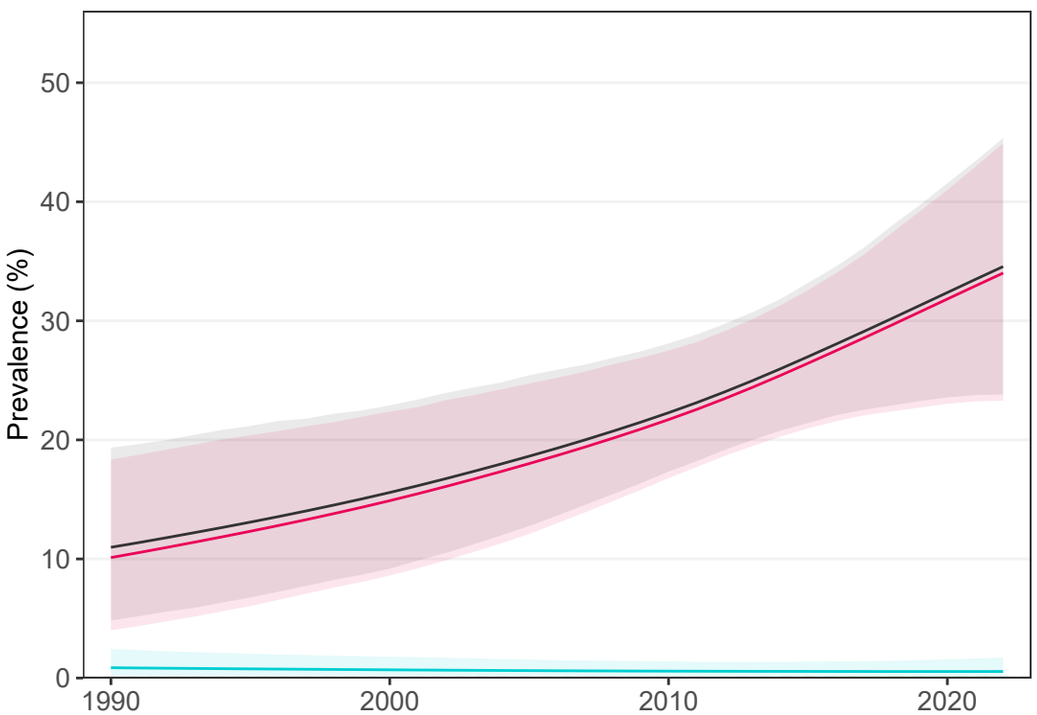


Cook Islands

School-aged children and adolescents

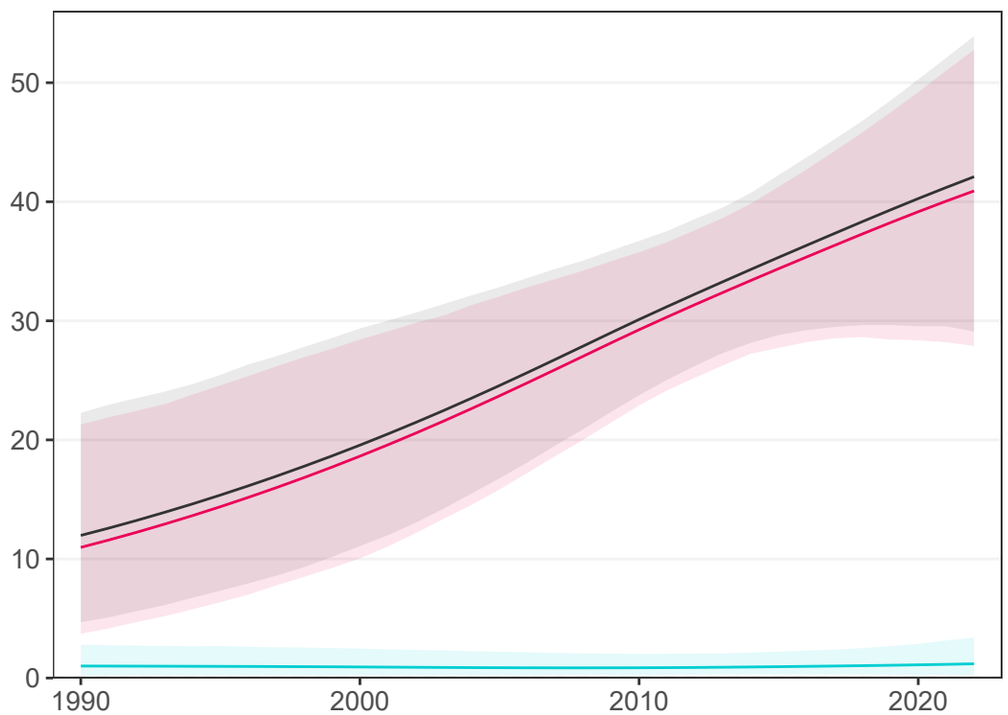
Girls

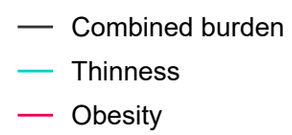
3 studies (3 national)



Boys

3 studies (3 national)

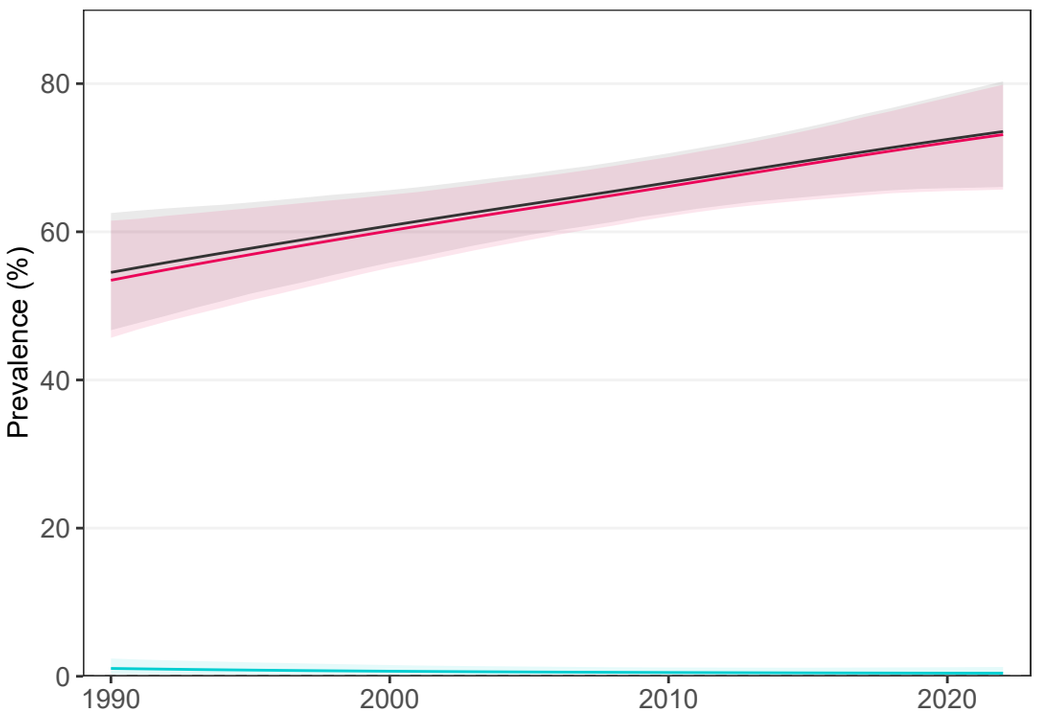




Adults

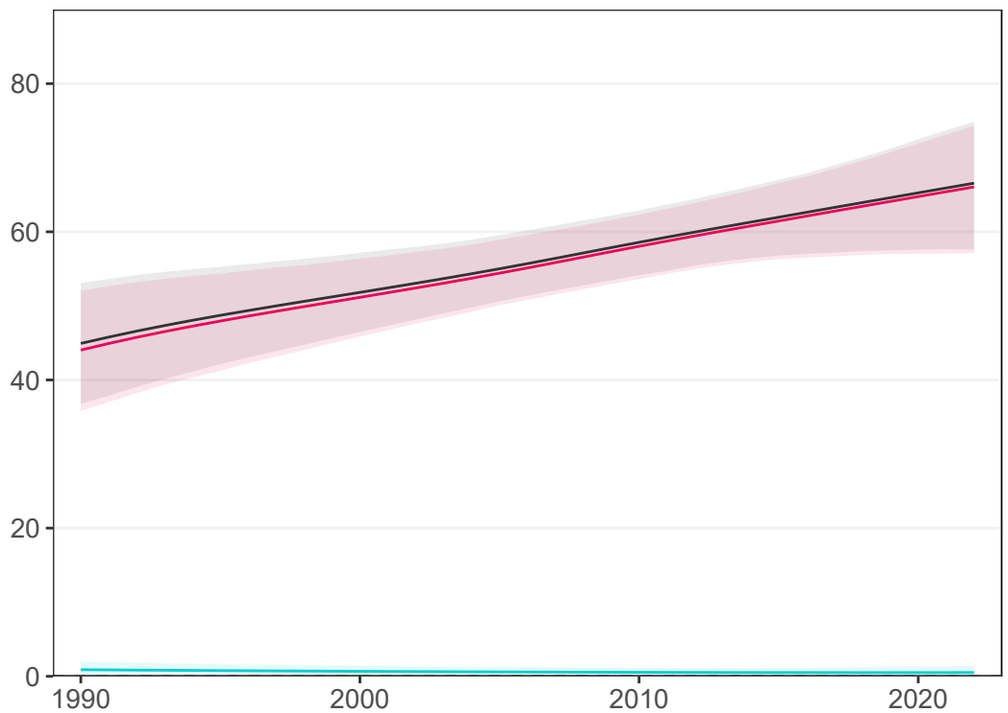
Women

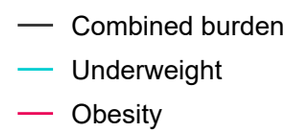
2 studies (2 national)



Men

2 studies (2 national)



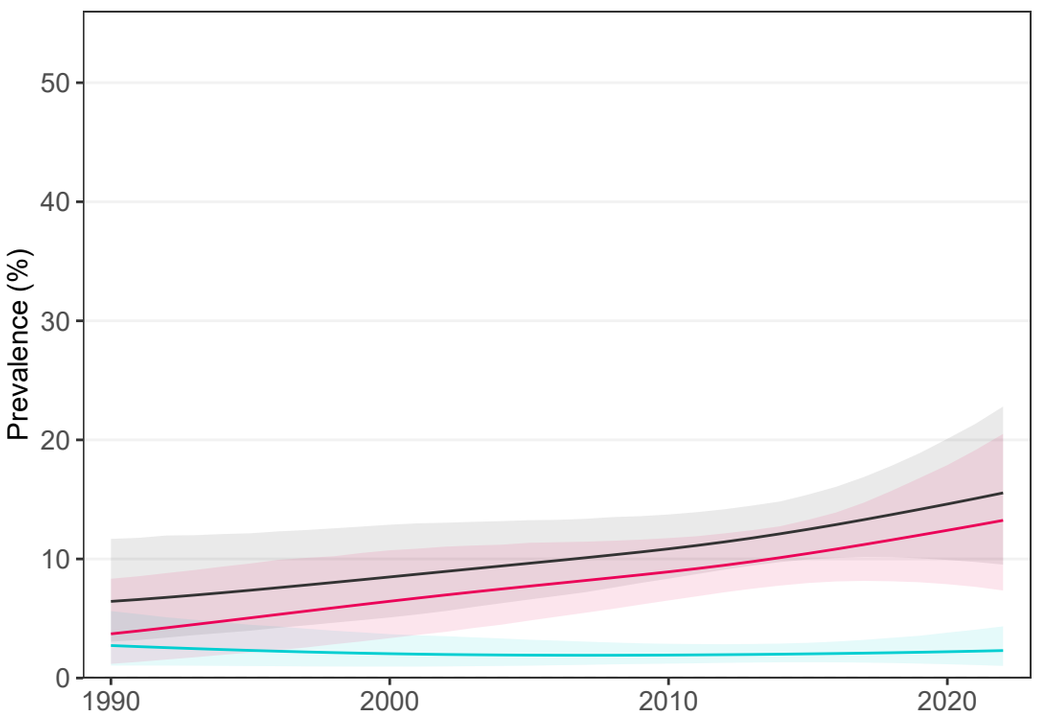


Costa Rica

School-aged children and adolescents

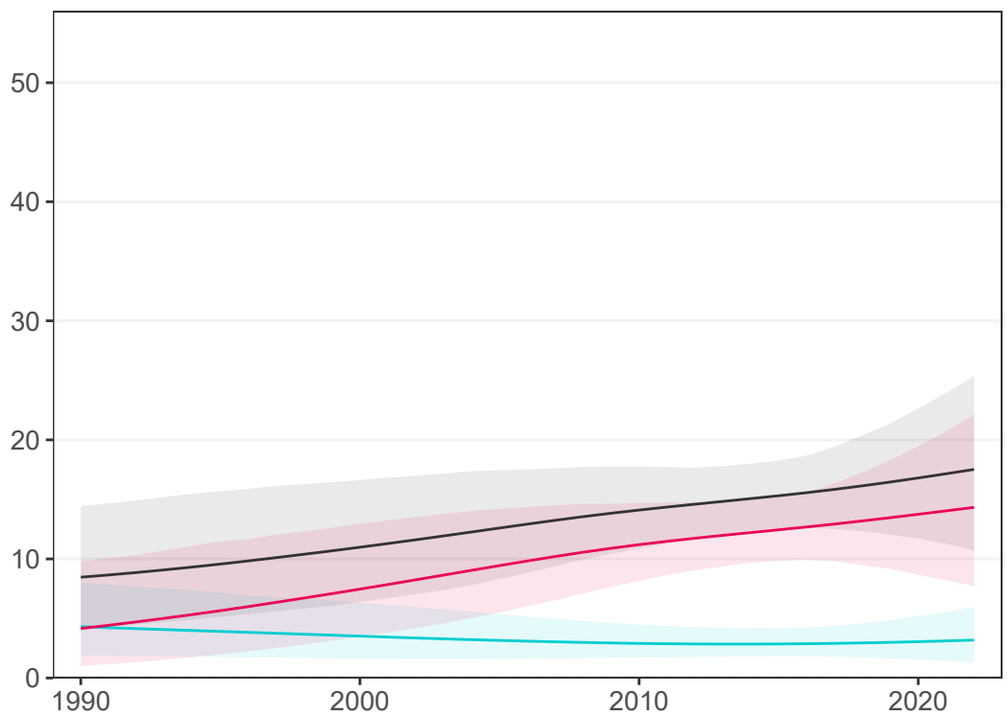
Girls

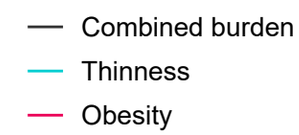
3 studies (3 national)



Boys

3 studies (3 national)

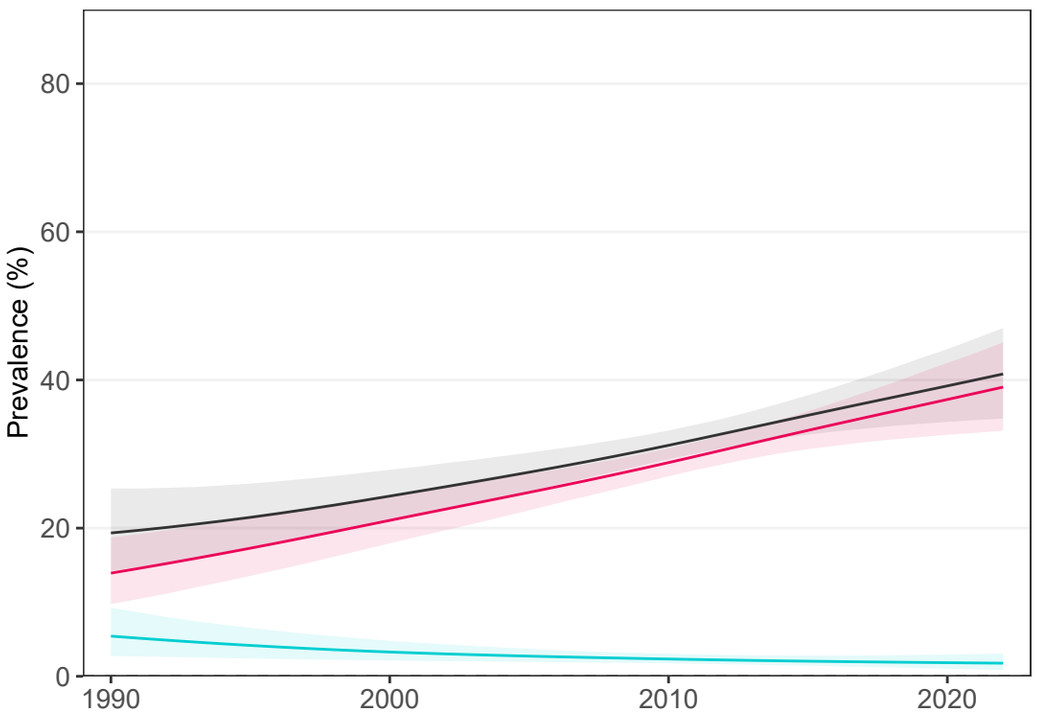




Adults

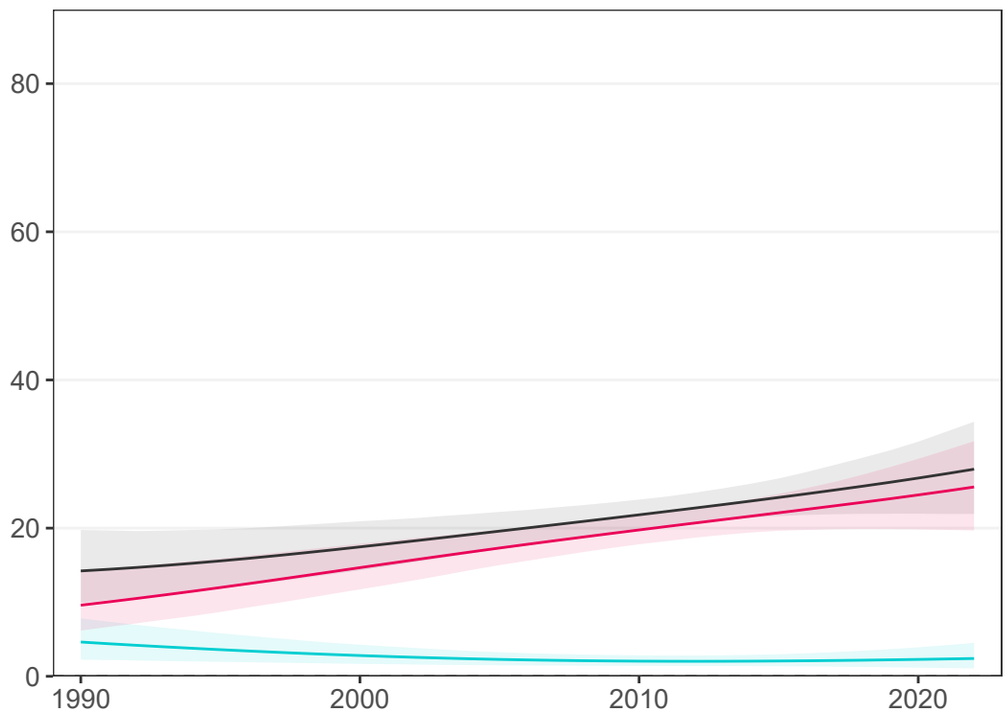
Women

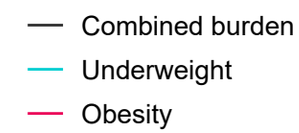
10 studies (9 national)



Men

9 studies (8 national)



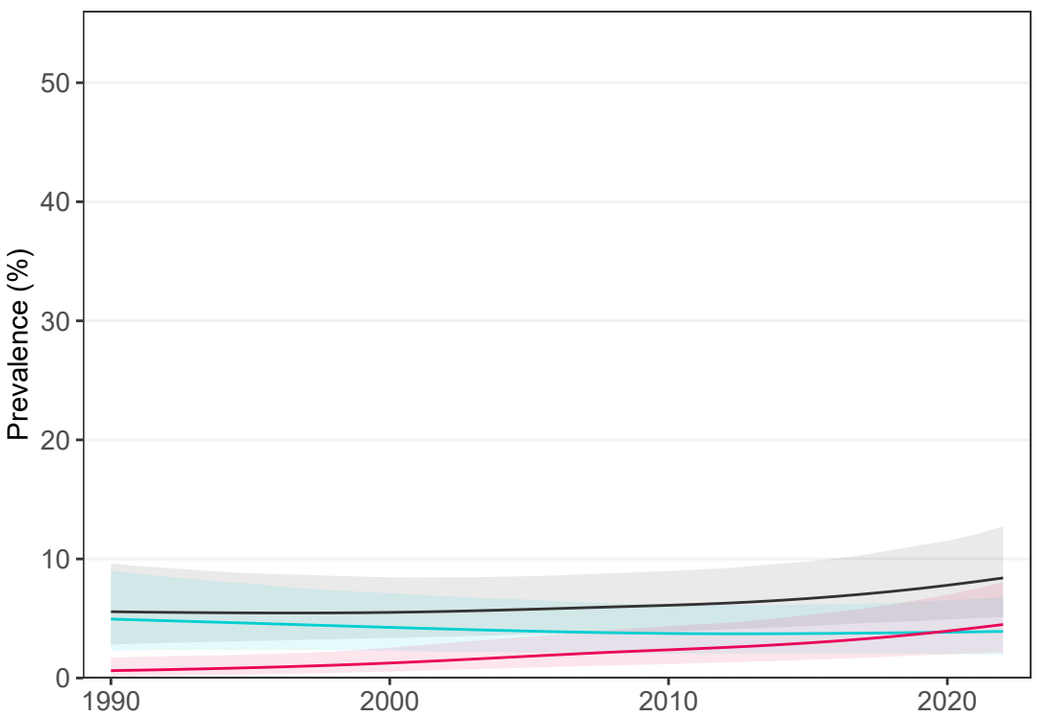


Cote d'Ivoire

School-aged children and adolescents

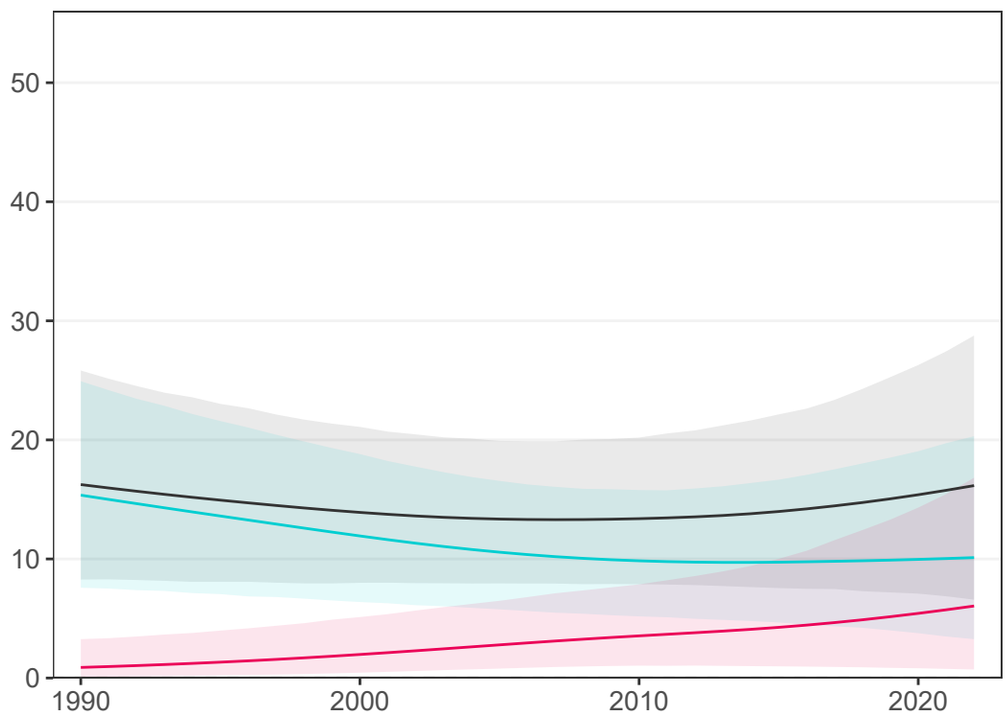
Girls

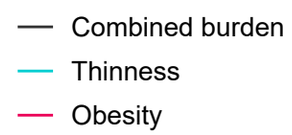
6 studies (3 national)



Boys

3 studies (0 national)

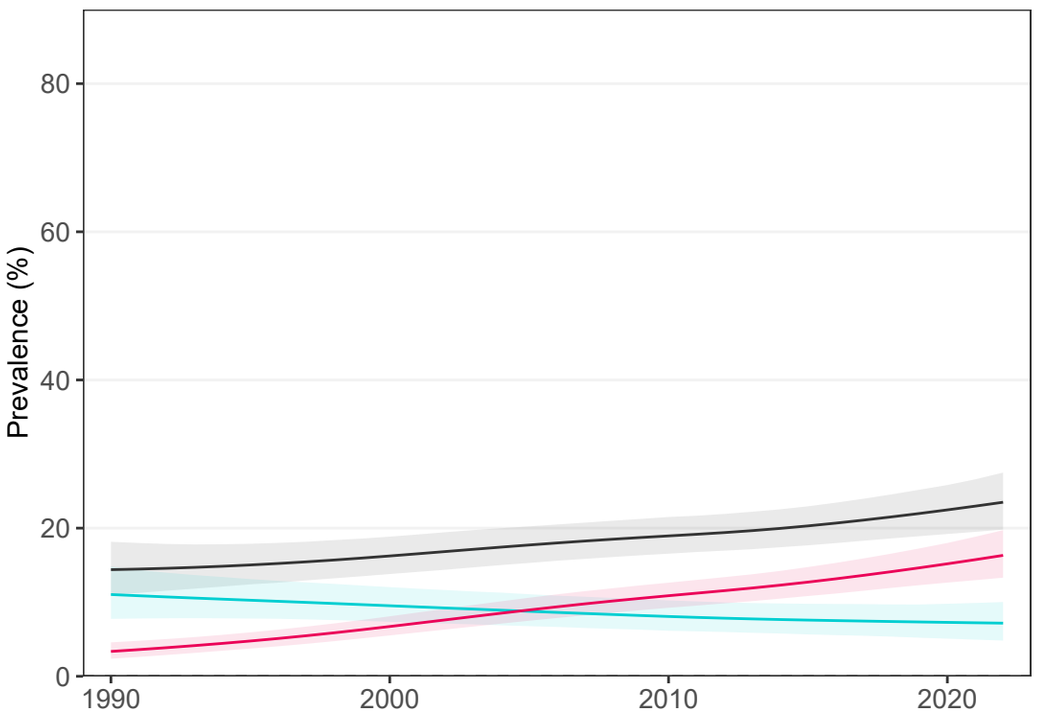




Adults

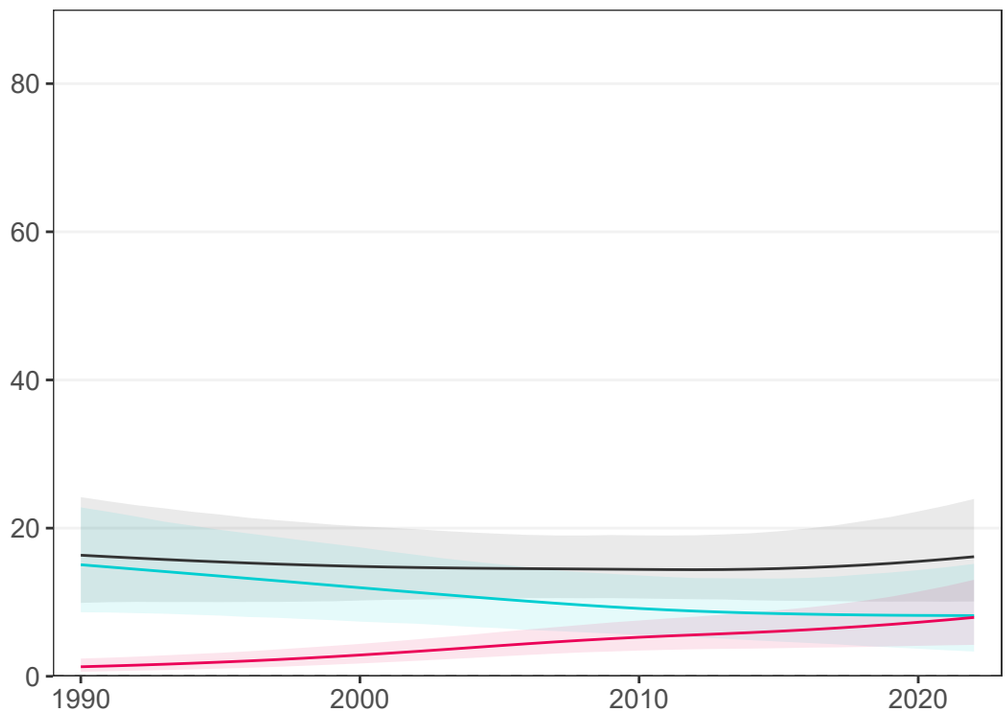
Women

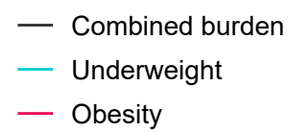
7 studies (4 national)



Men

3 studies (0 national)



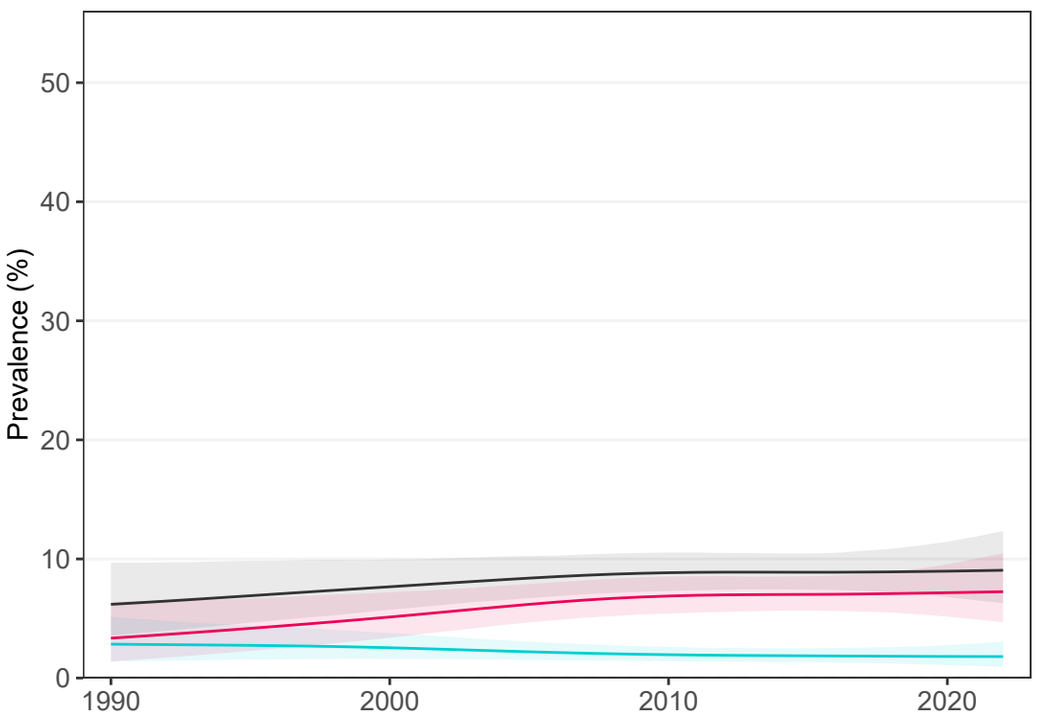


Croatia

School-aged children and adolescents

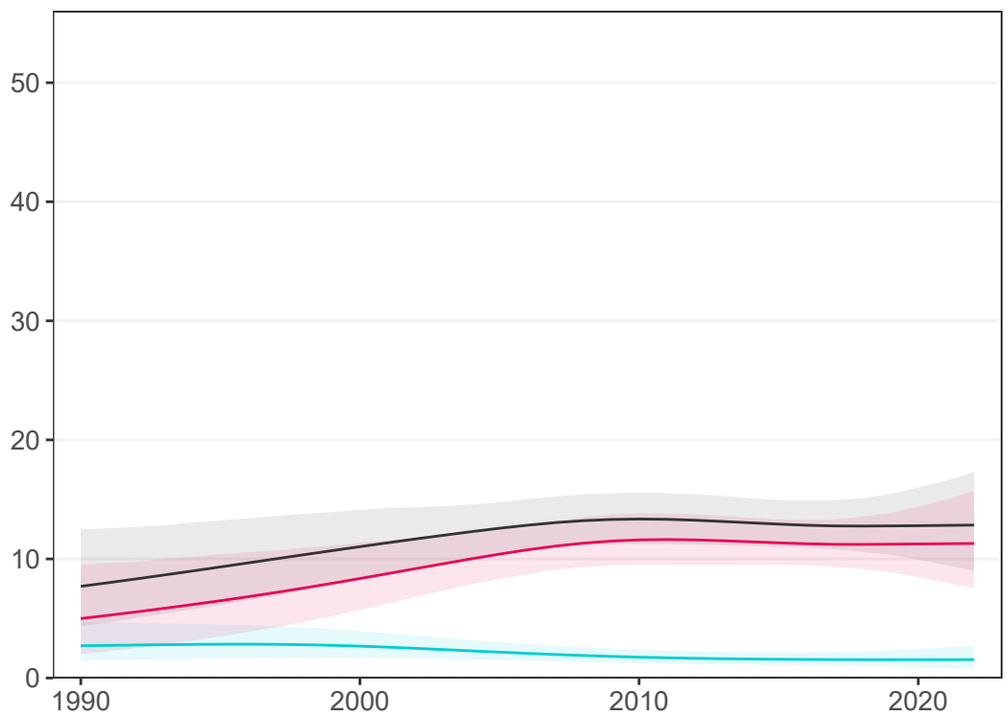
Girls

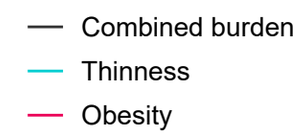
11 studies (6 national)



Boys

10 studies (6 national)

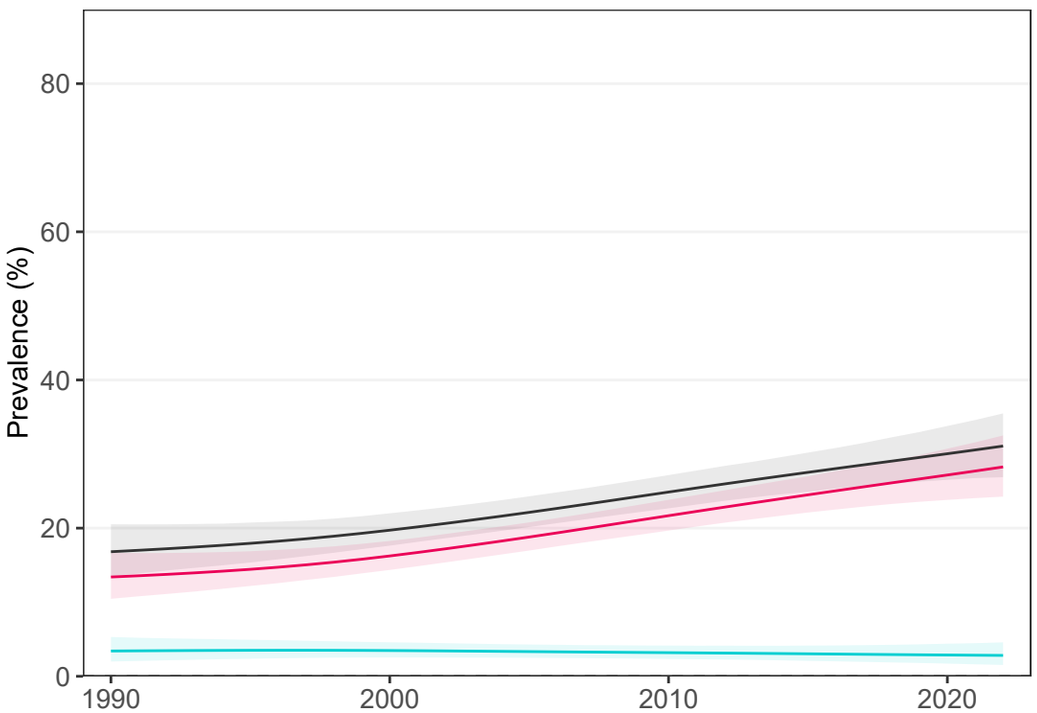




Adults

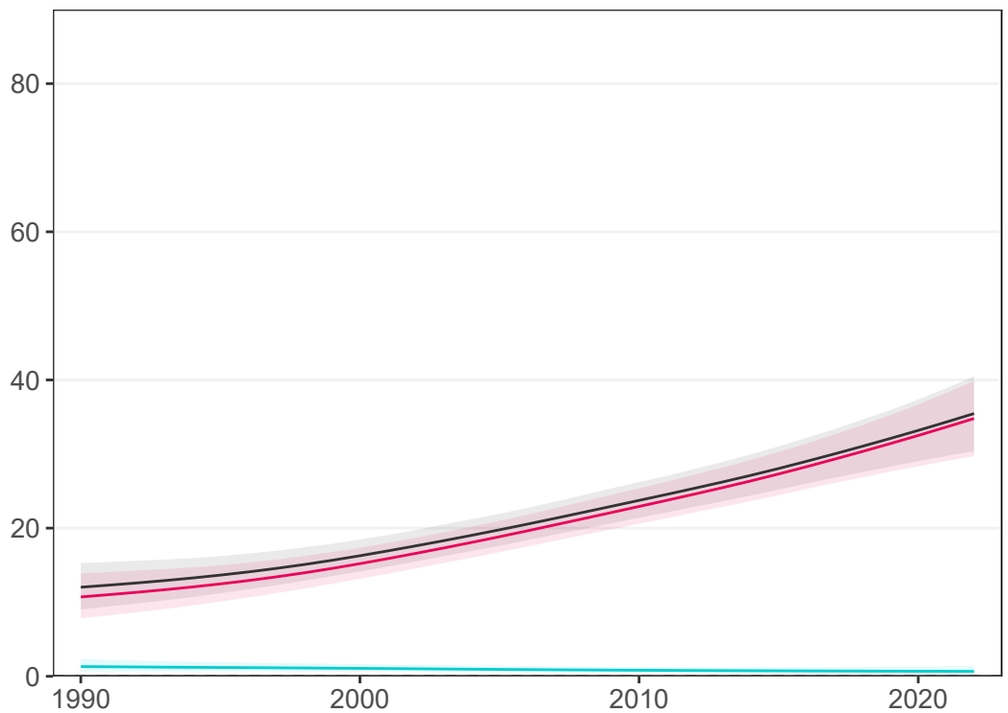
Women

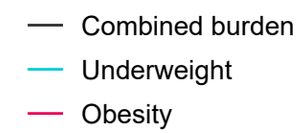
9 studies (4 national)



Men

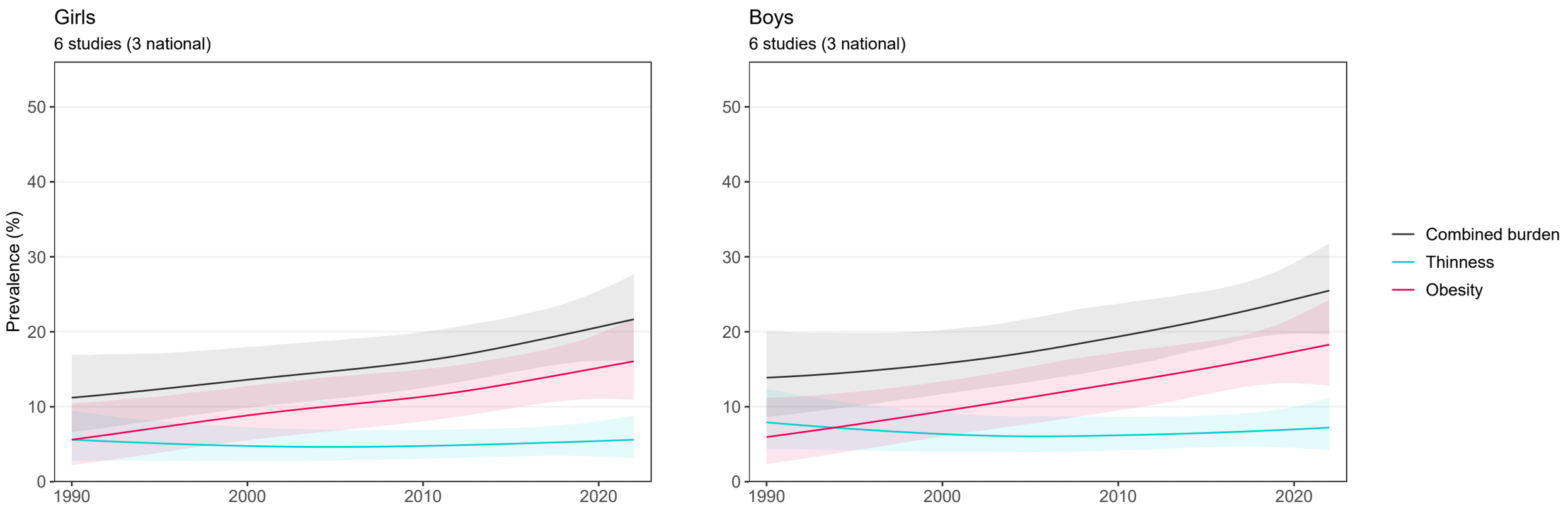
9 studies (4 national)



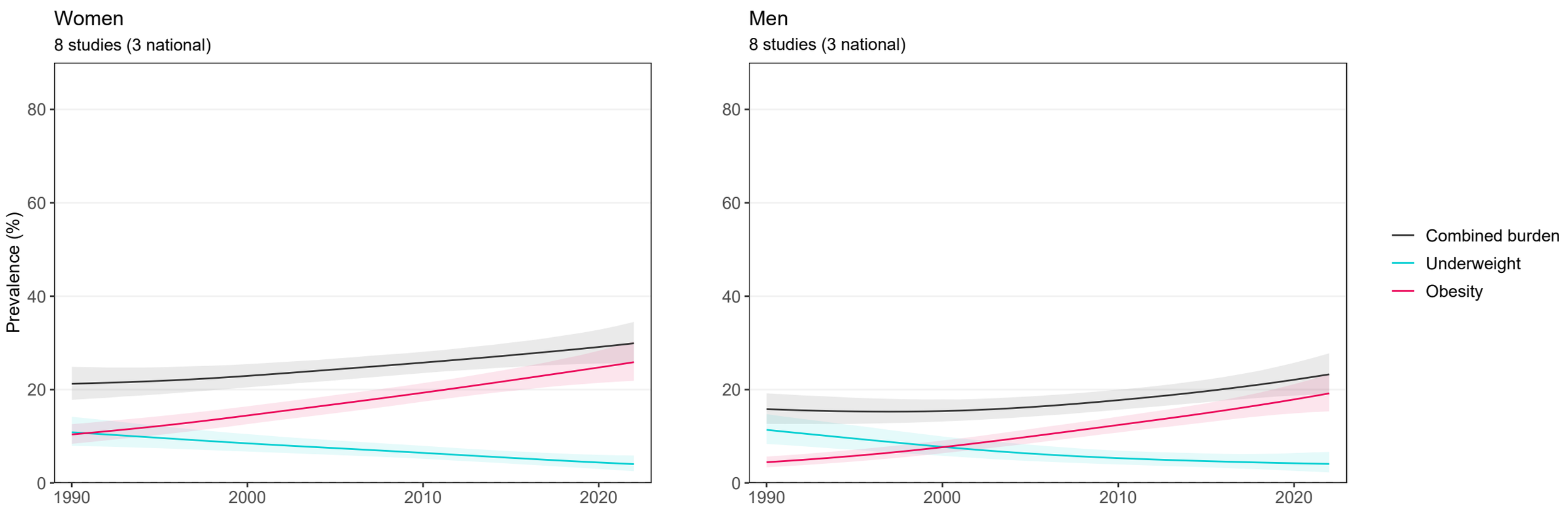


Cuba

School-aged children and adolescents



Adults

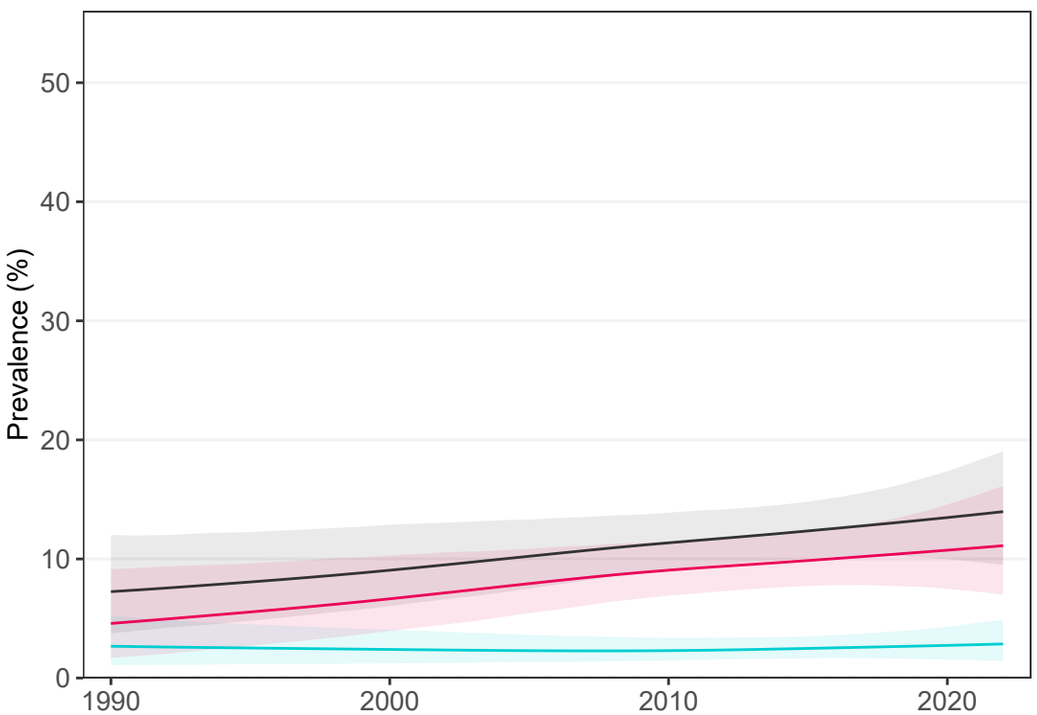


Cyprus

School-aged children and adolescents

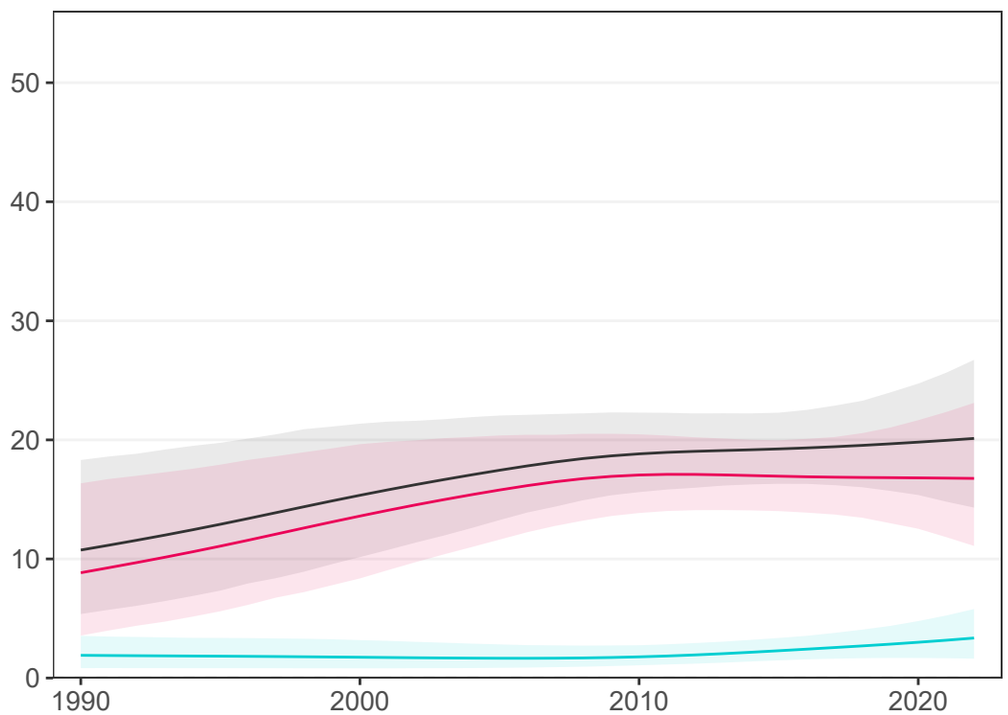
Girls

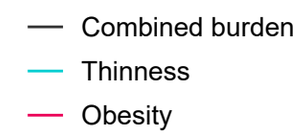
5 studies (3 national)



Boys

5 studies (3 national)

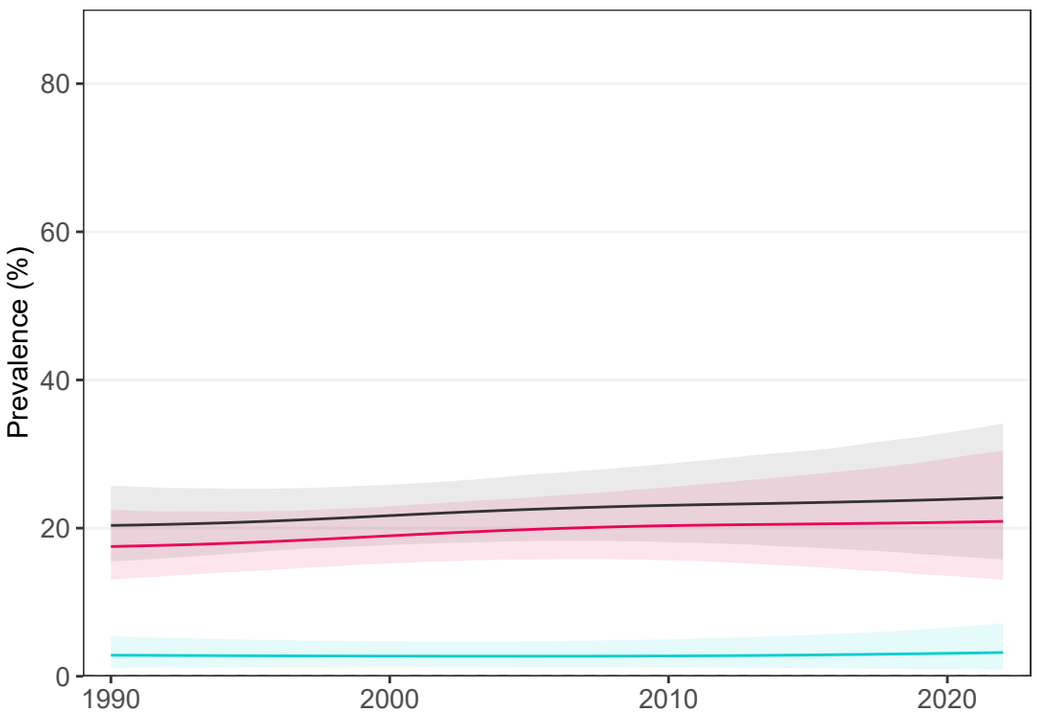




Adults

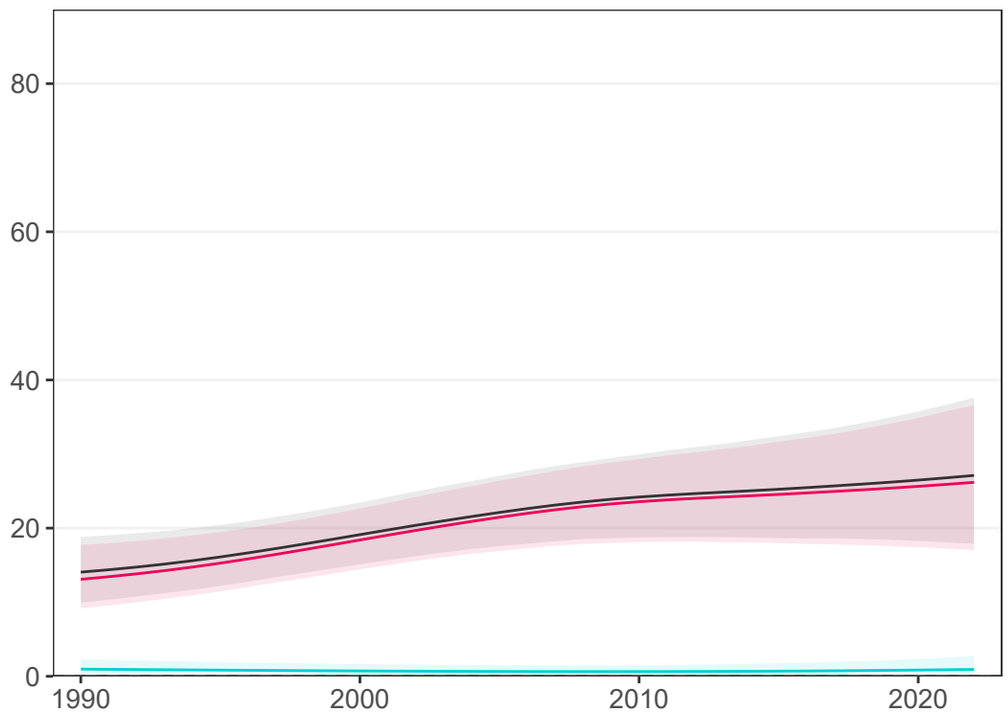
Women

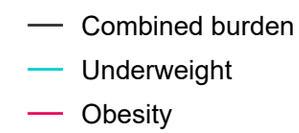
2 studies (2 national)



Men

2 studies (2 national)



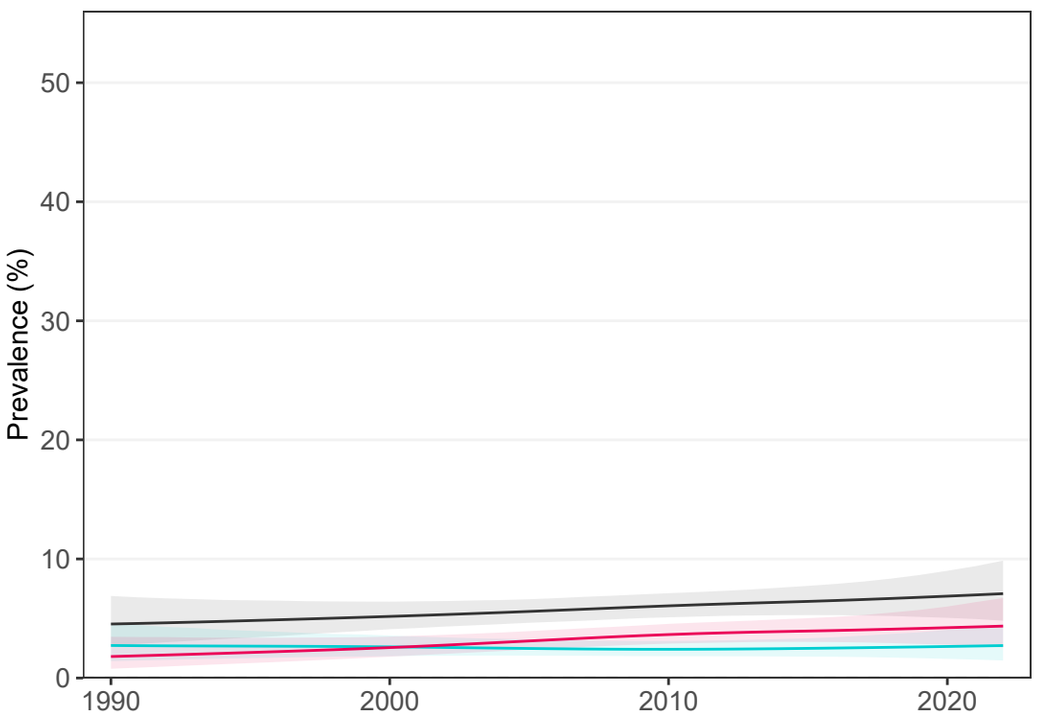


Czechia

School-aged children and adolescents

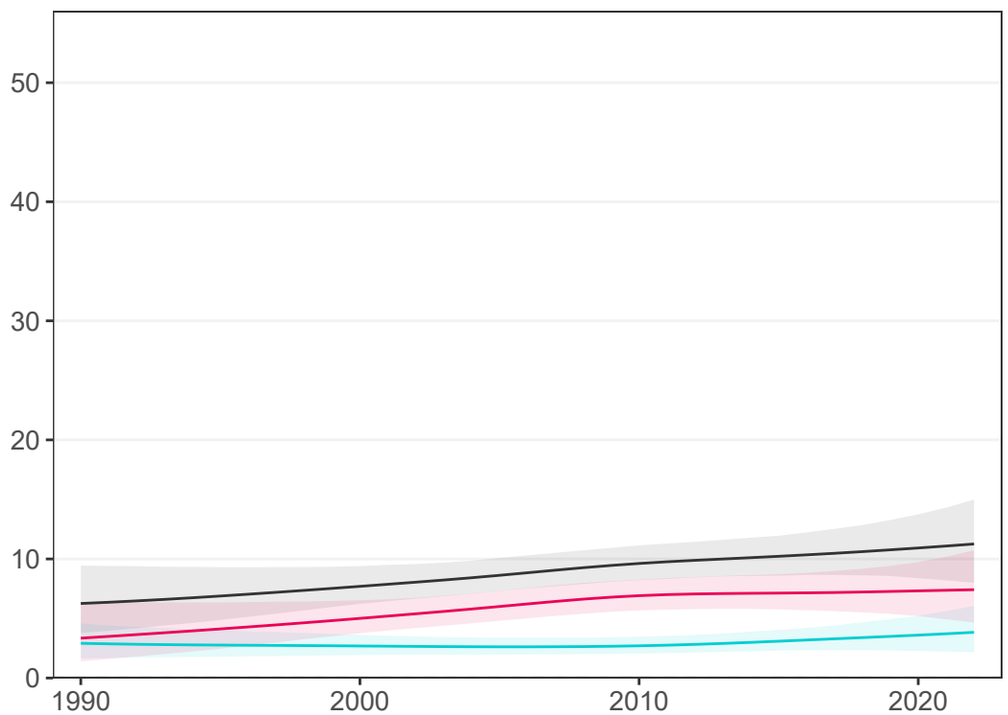
Girls

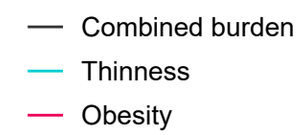
12 studies (6 national)



Boys

12 studies (6 national)

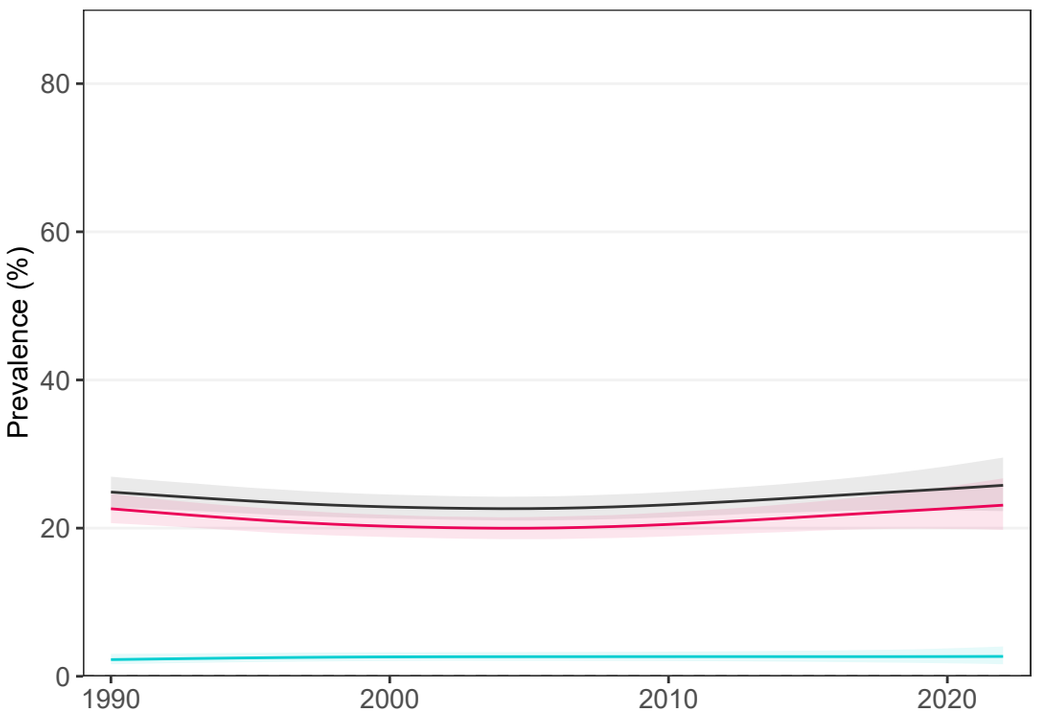




Adults

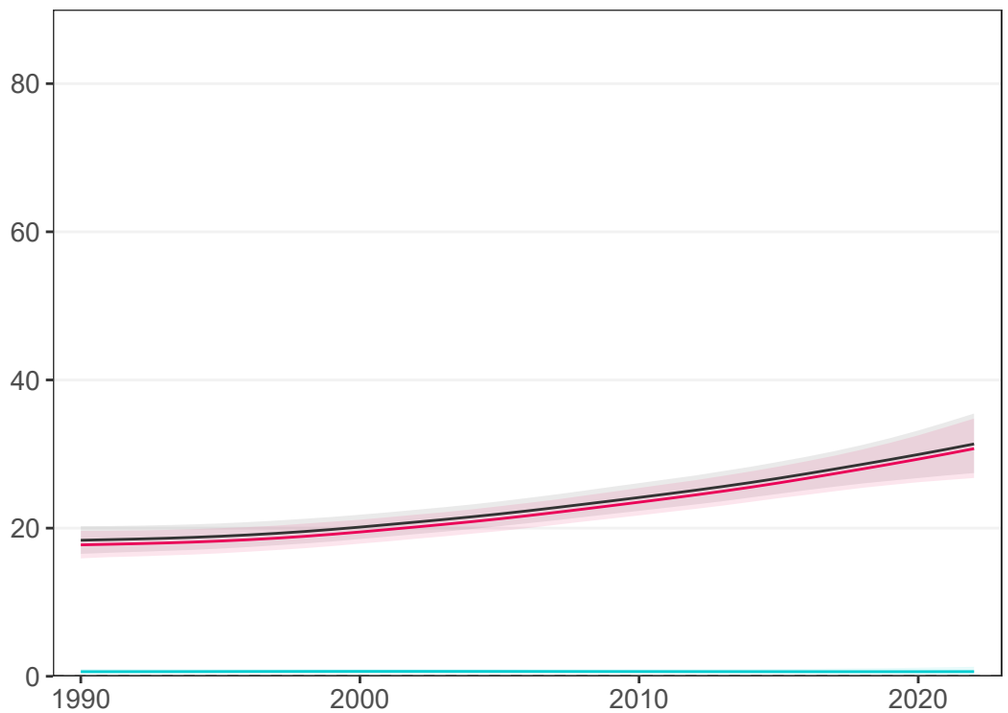
Women

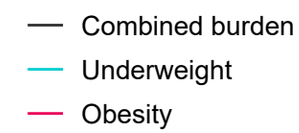
17 studies (13 national)



Men

17 studies (13 national)



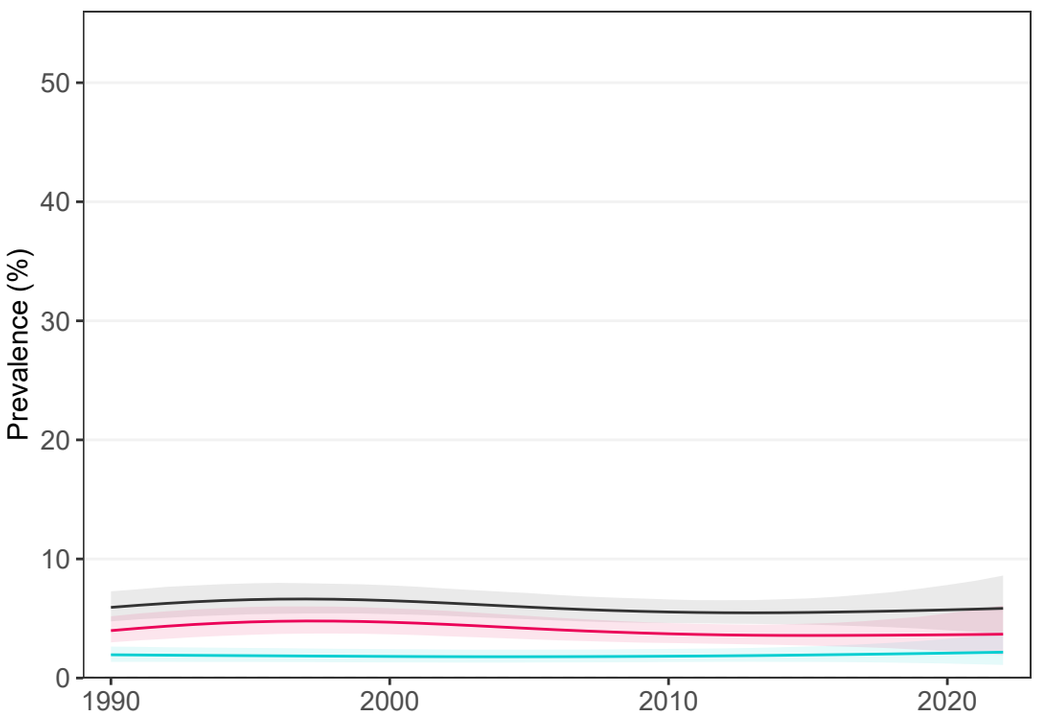


Denmark

School-aged children and adolescents

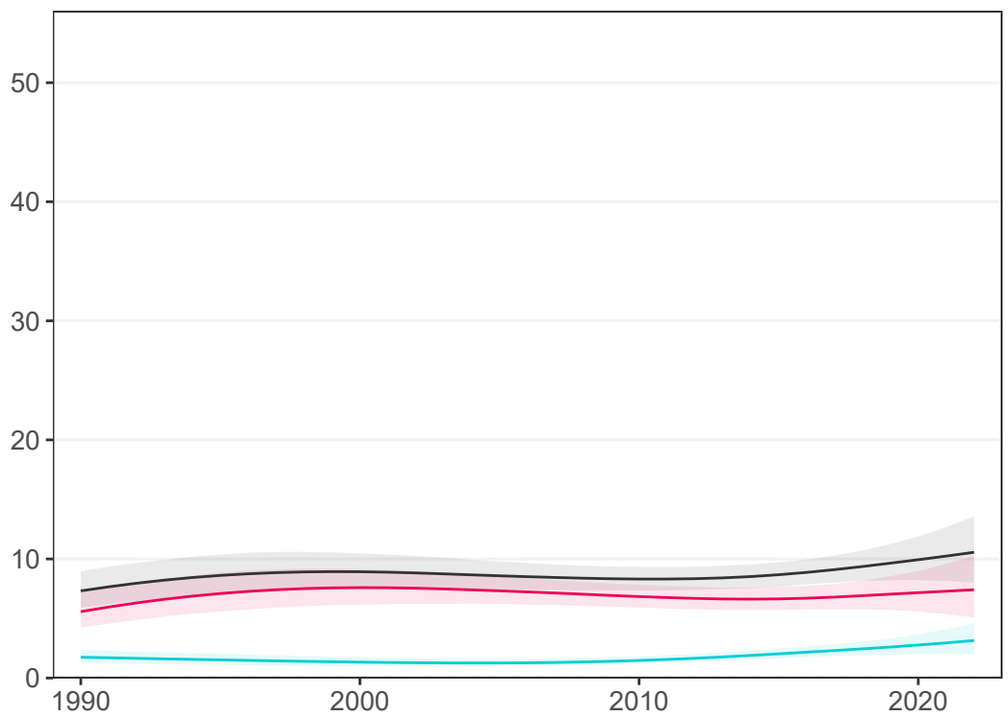
Girls

46 studies (3 national)



Boys

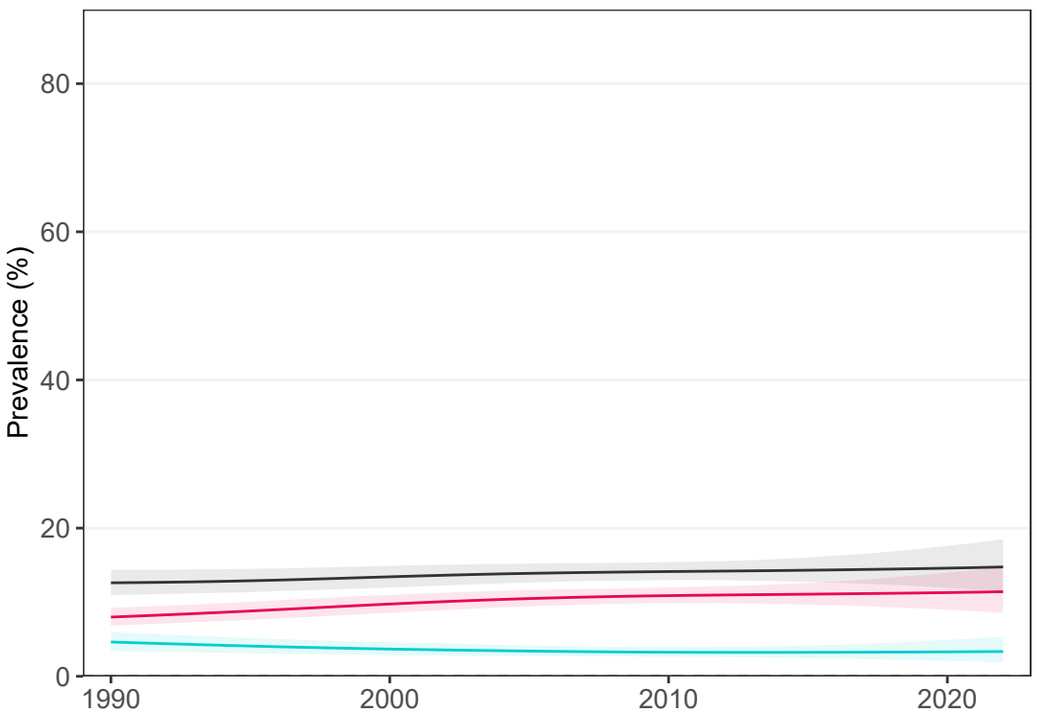
64 studies (21 national)



Adults

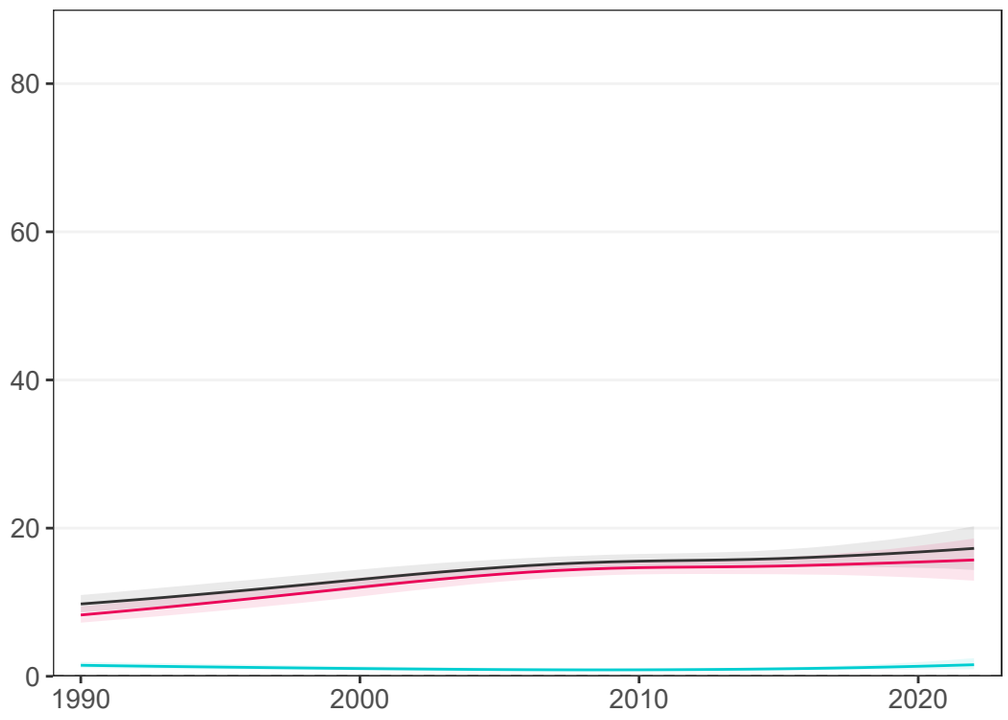
Women

33 studies (1 national)



Men

57 studies (23 national)

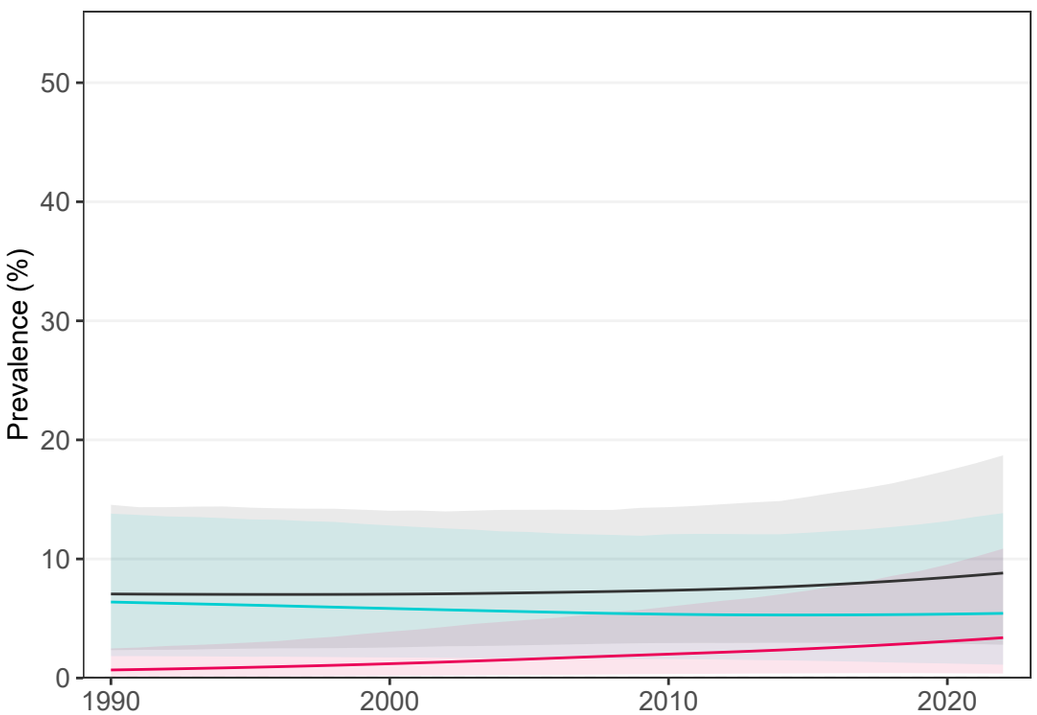


Djibouti

School-aged children and adolescents

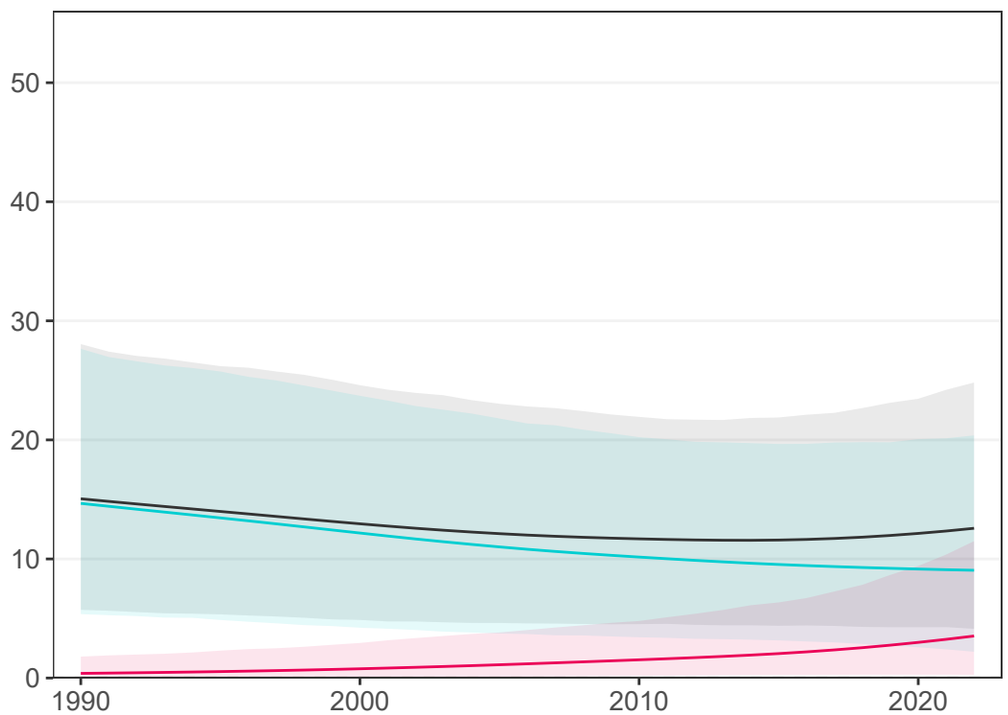
Girls

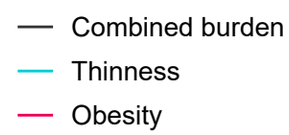
No studies



Boys

No studies

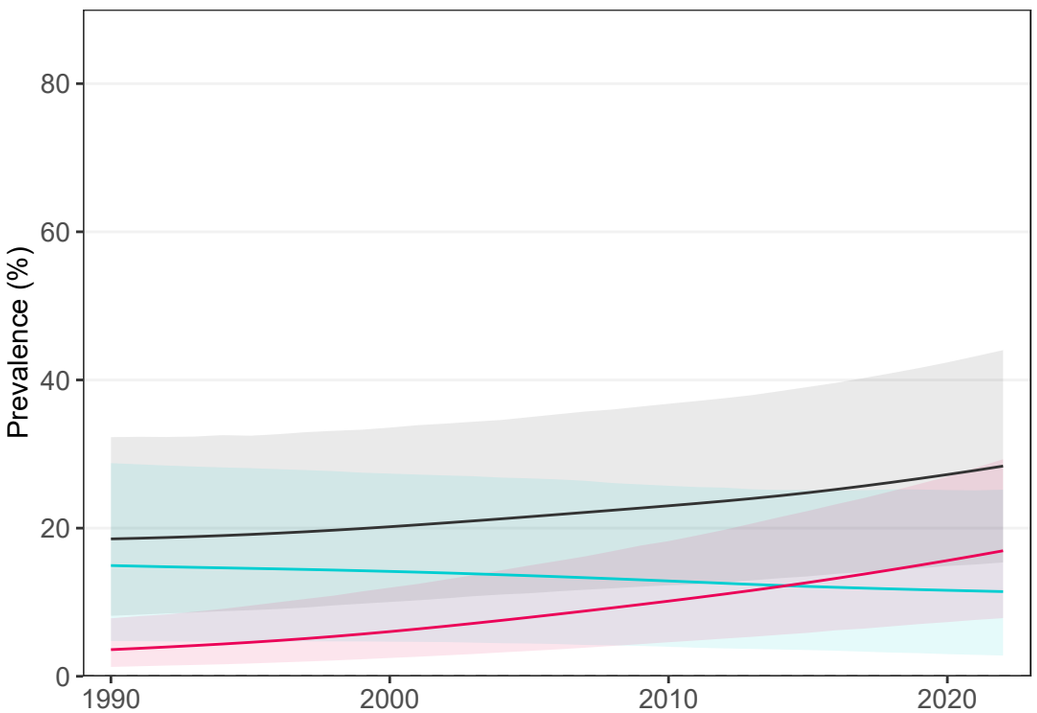




Adults

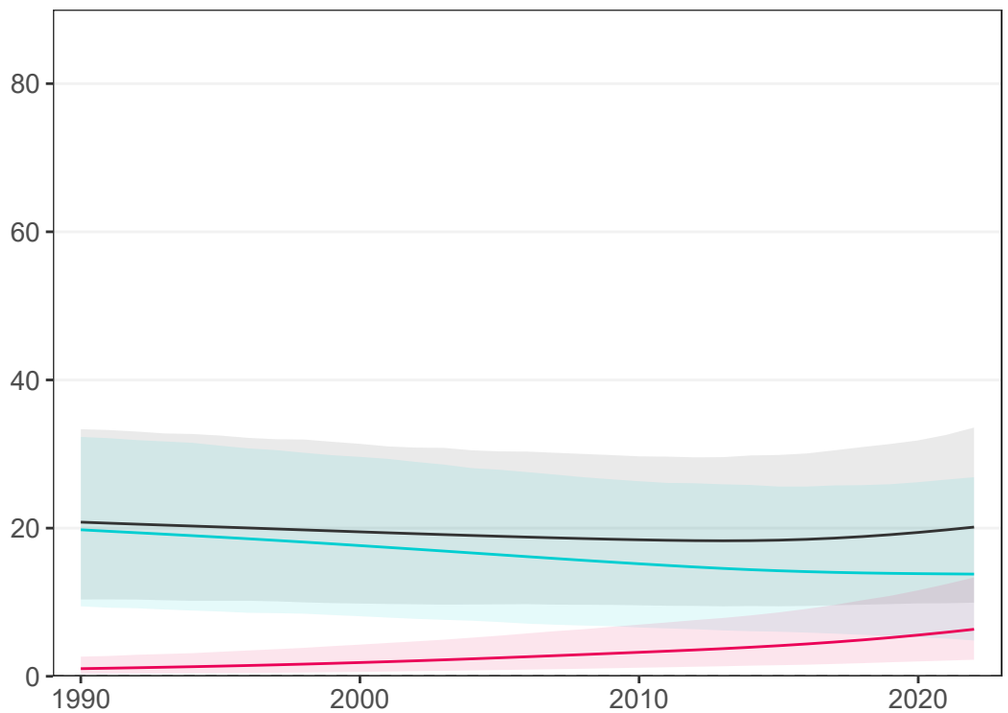
Women

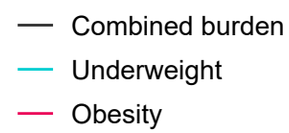
No studies



Men

No studies



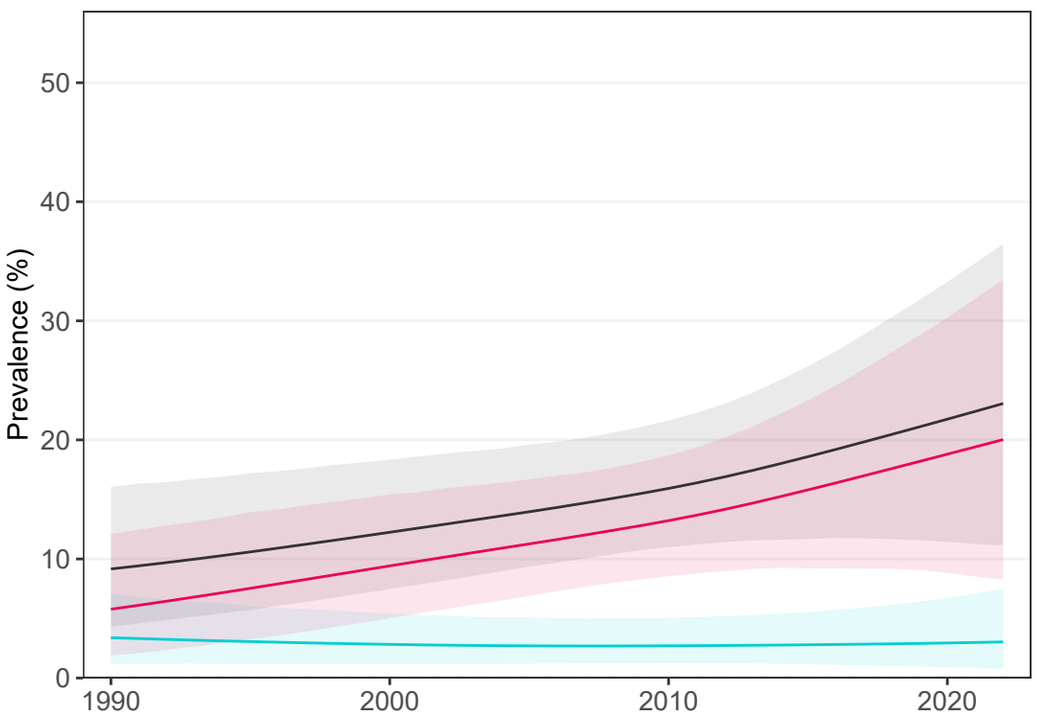


Dominica

School-aged children and adolescents

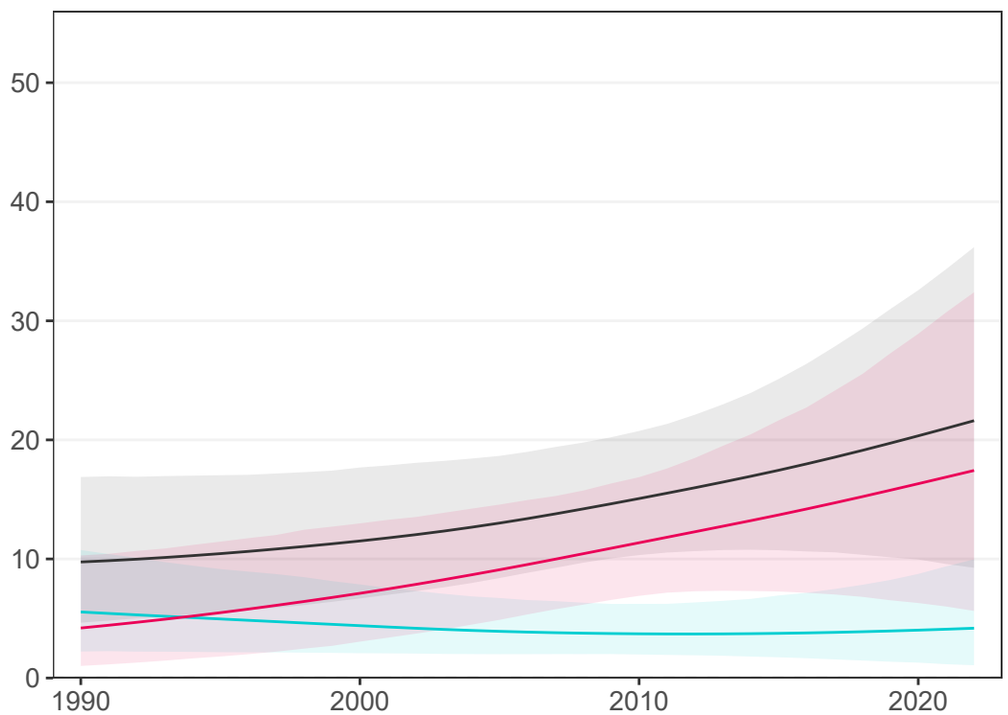
Girls

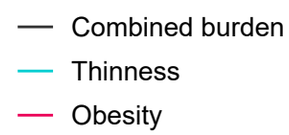
2 studies (2 national)



Boys

2 studies (2 national)

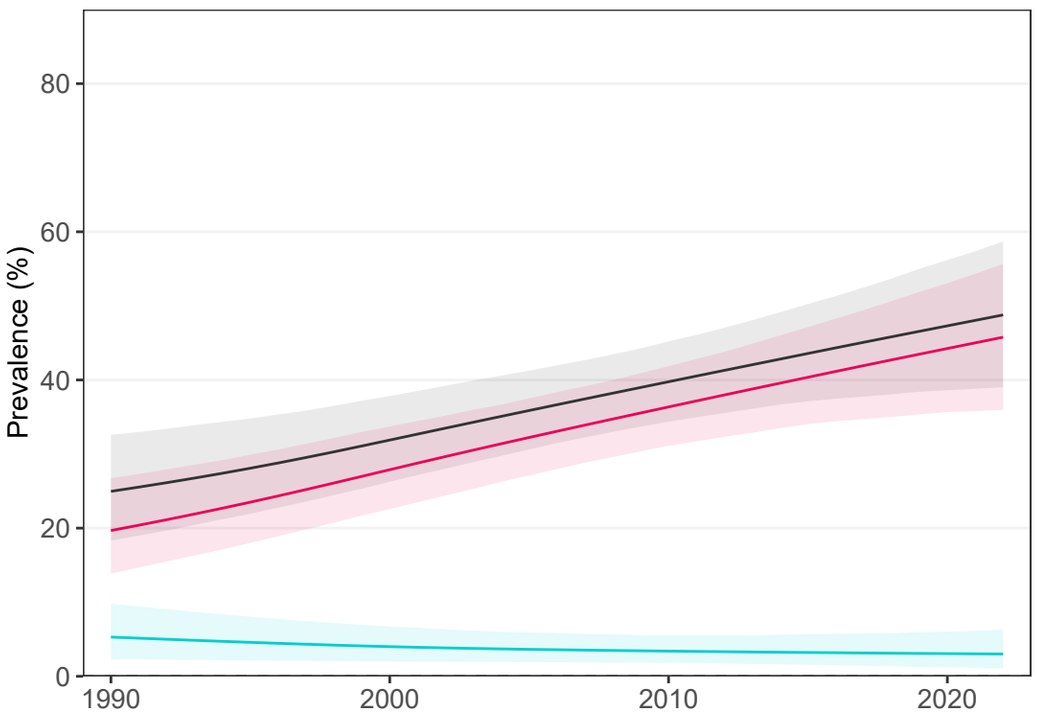




Adults

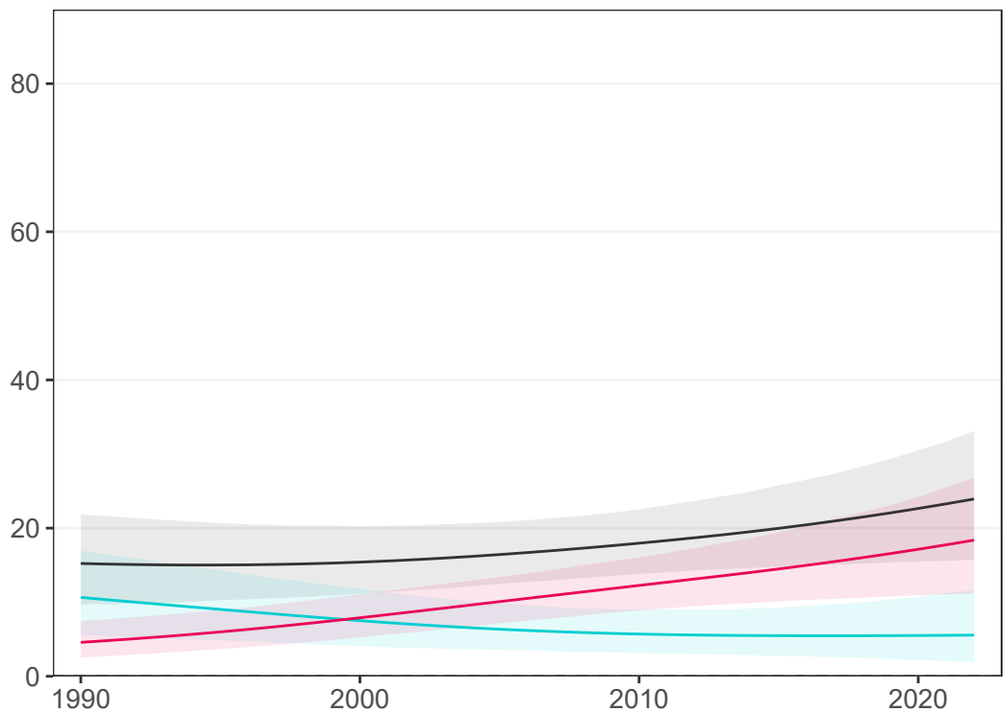
Women

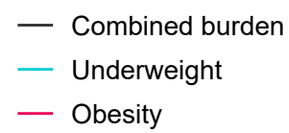
1 study (1 national)



Men

1 study (1 national)



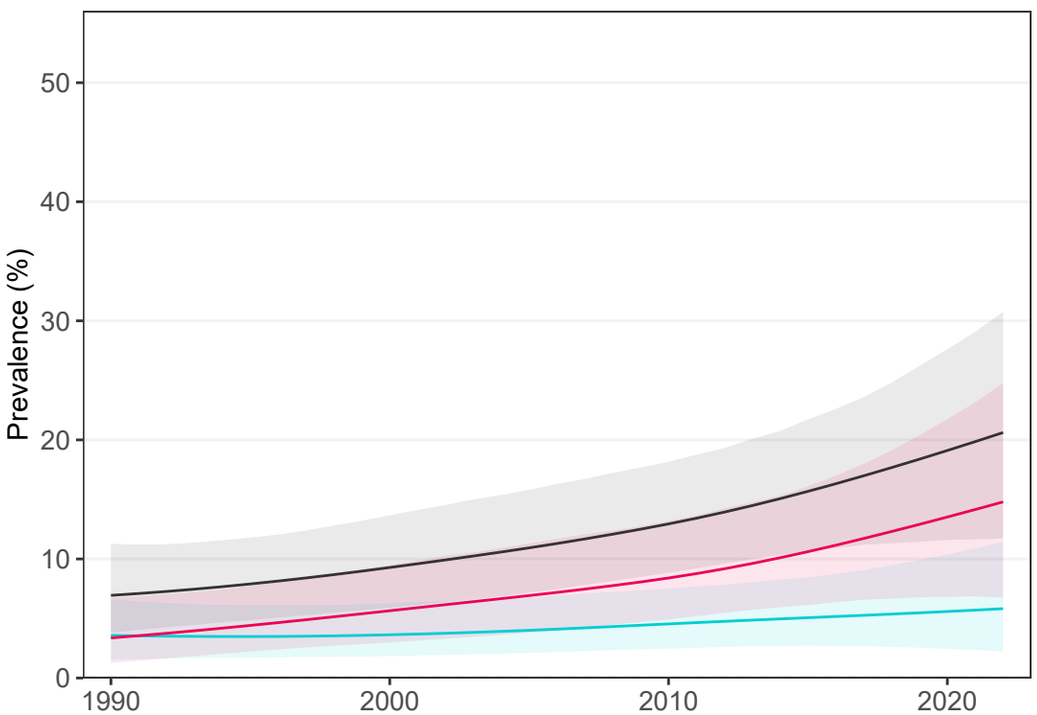


Dominican Republic

School-aged children and adolescents

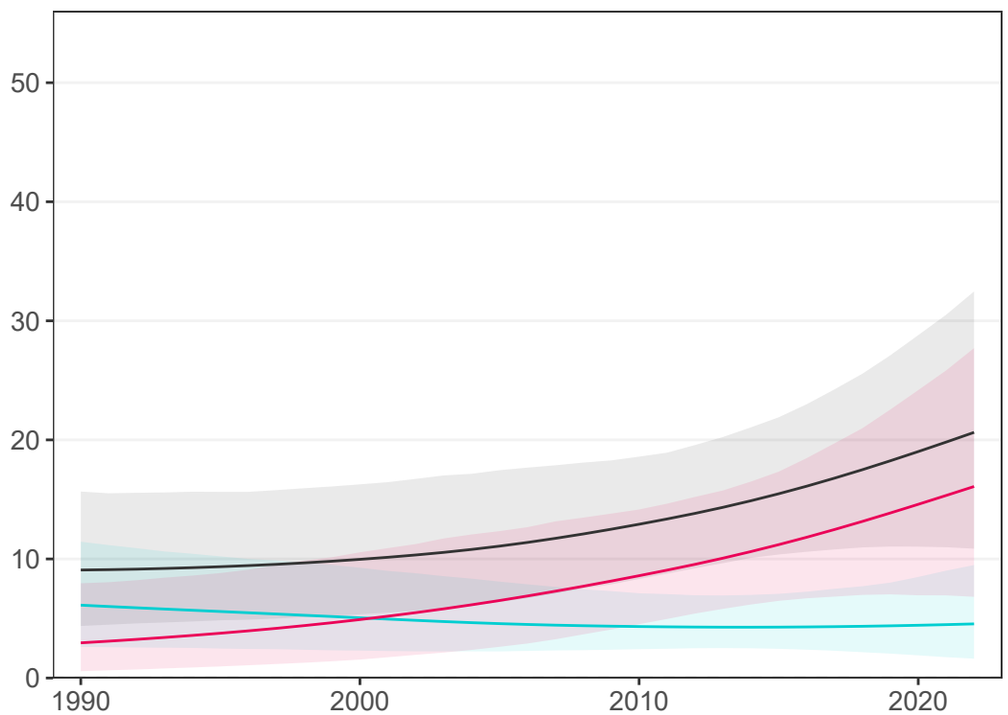
Girls

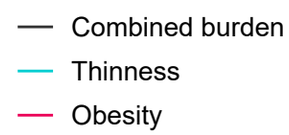
5 studies (5 national)



Boys

4 studies (4 national)

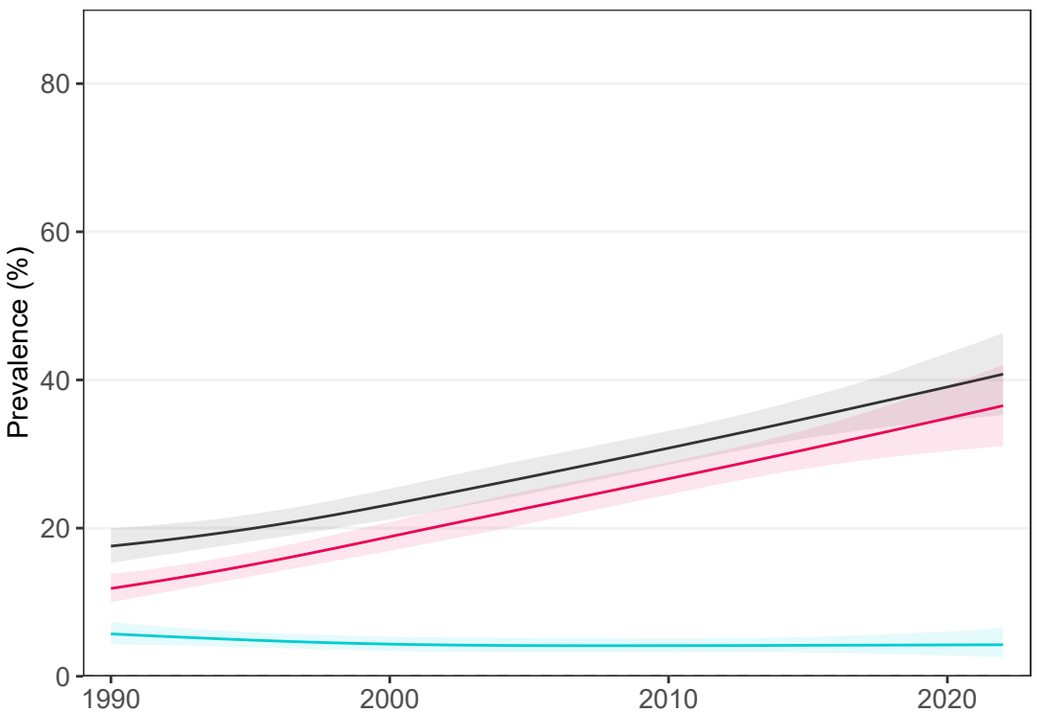




Adults

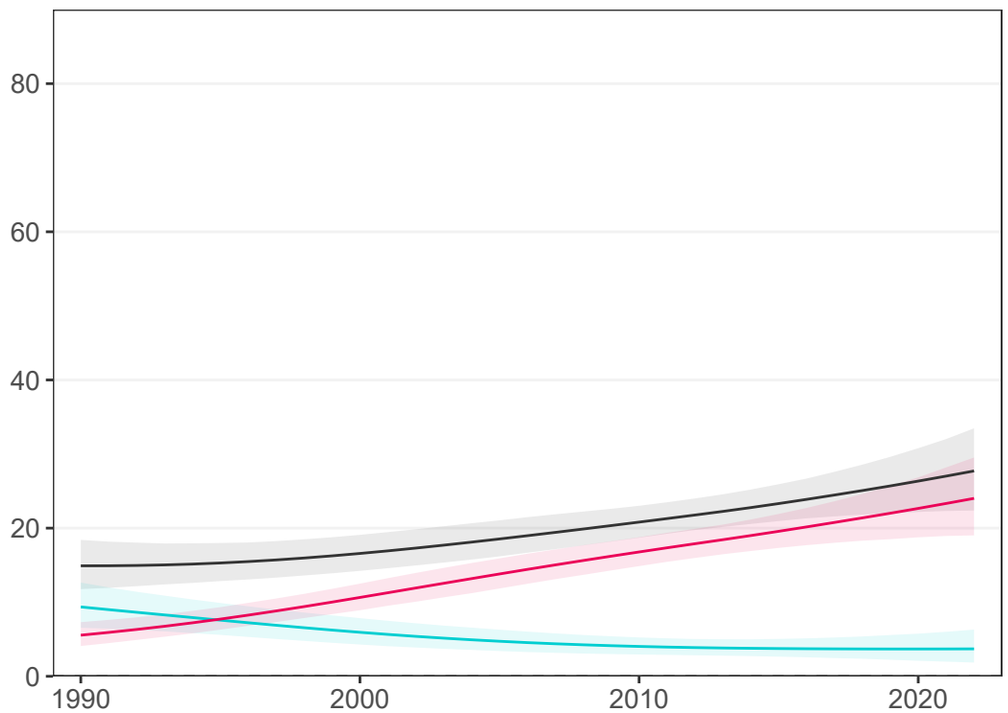
Women

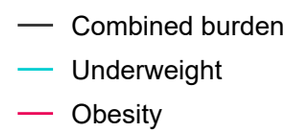
7 studies (7 national)



Men

5 studies (5 national)



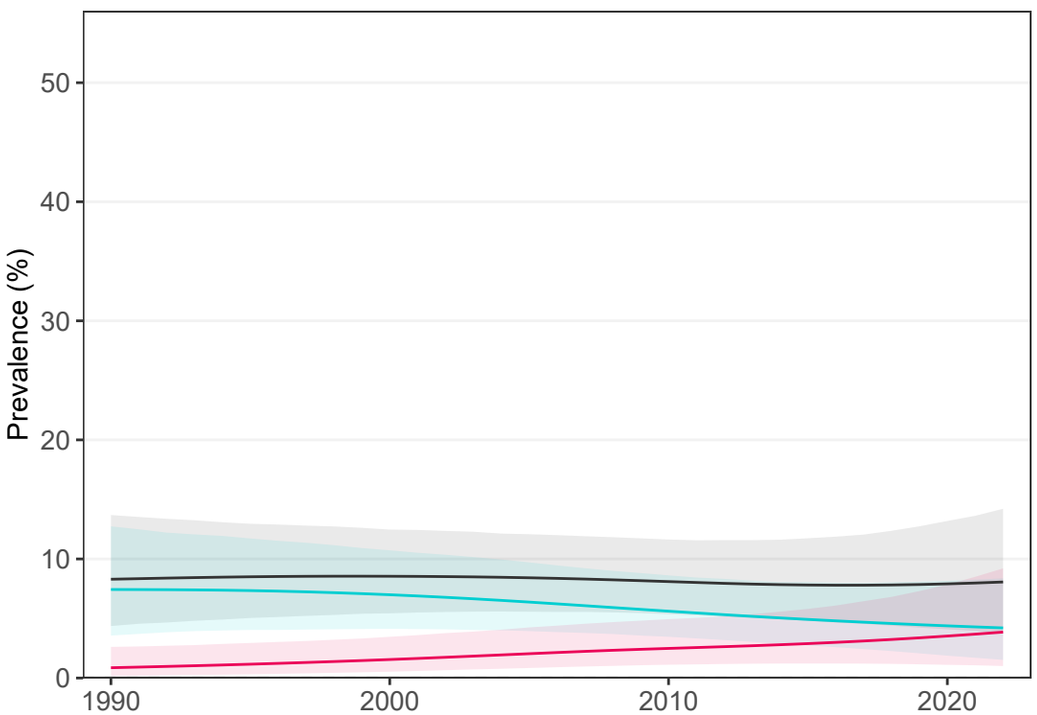


DR Congo

School-aged children and adolescents

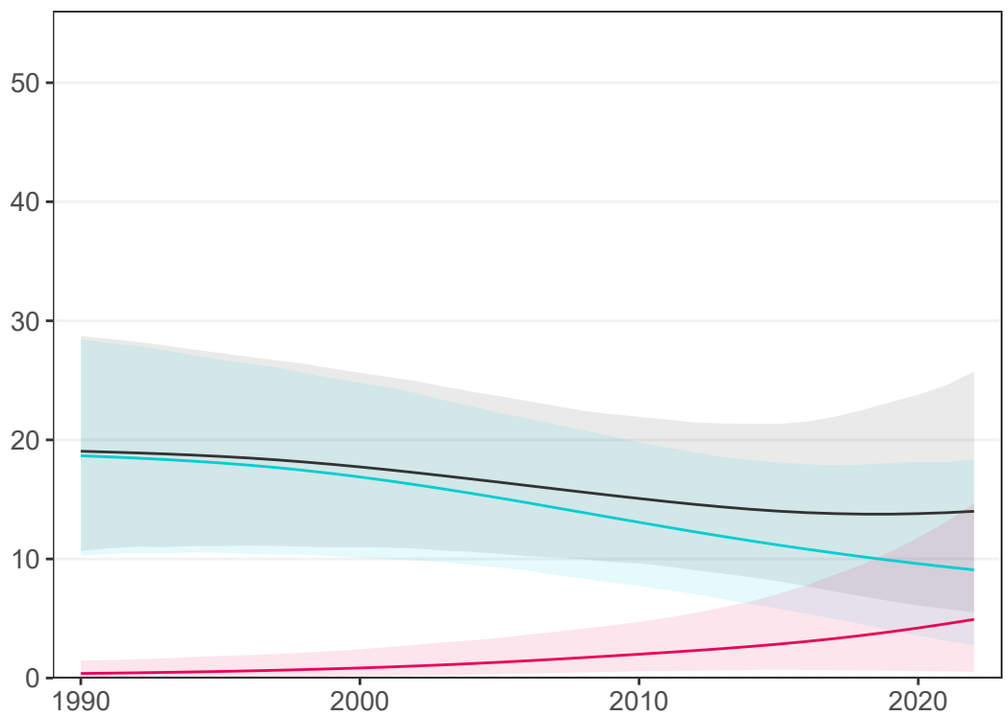
Girls

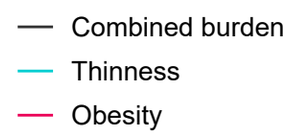
6 studies (3 national)



Boys

3 studies (0 national)

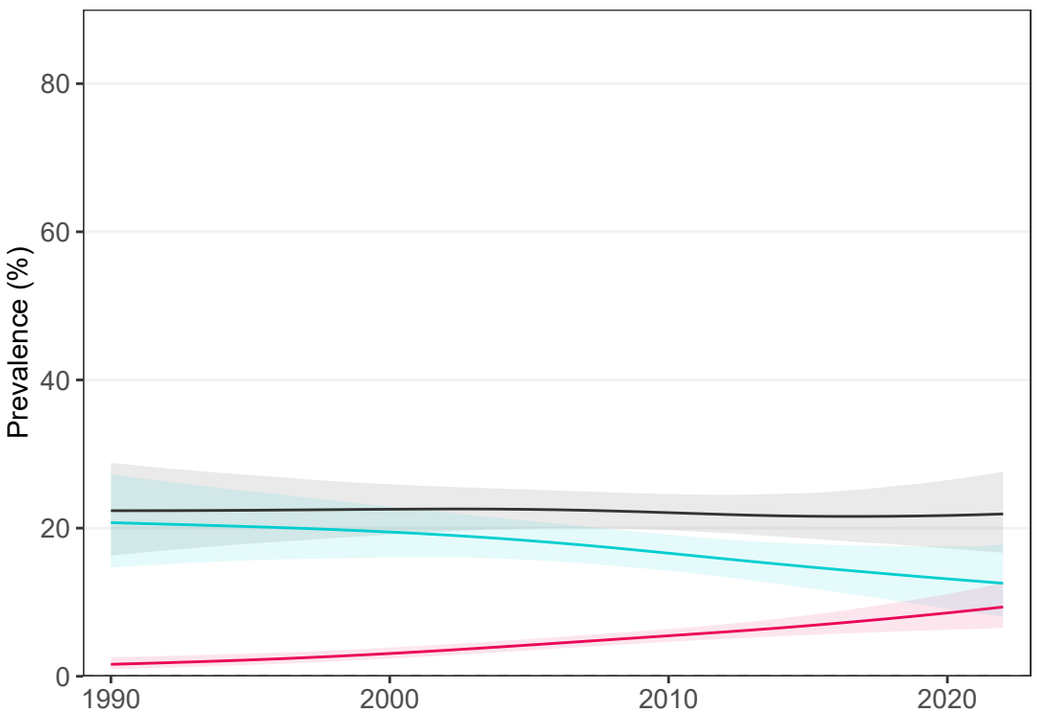




Adults

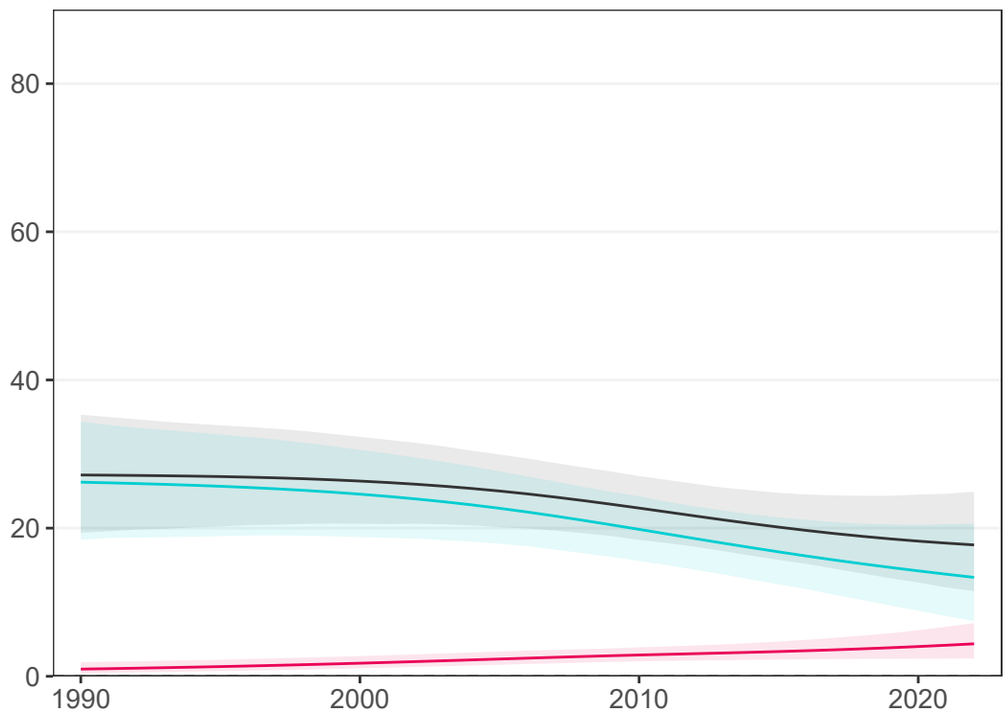
Women

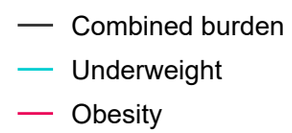
10 studies (3 national)



Men

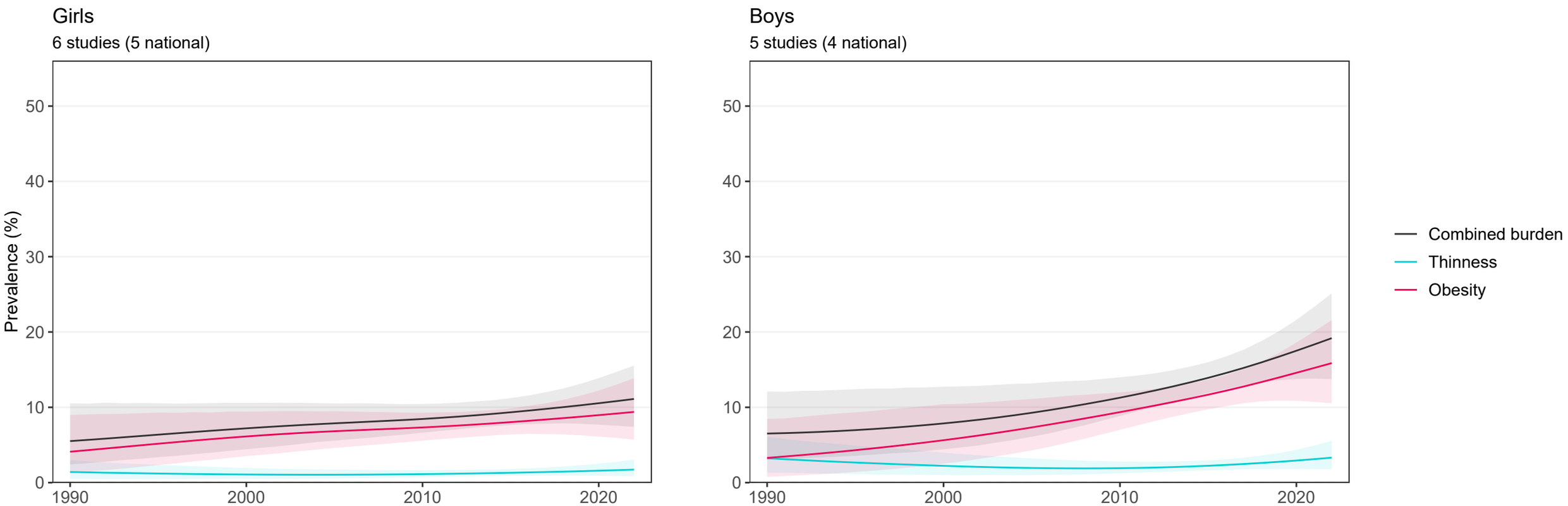
7 studies (0 national)



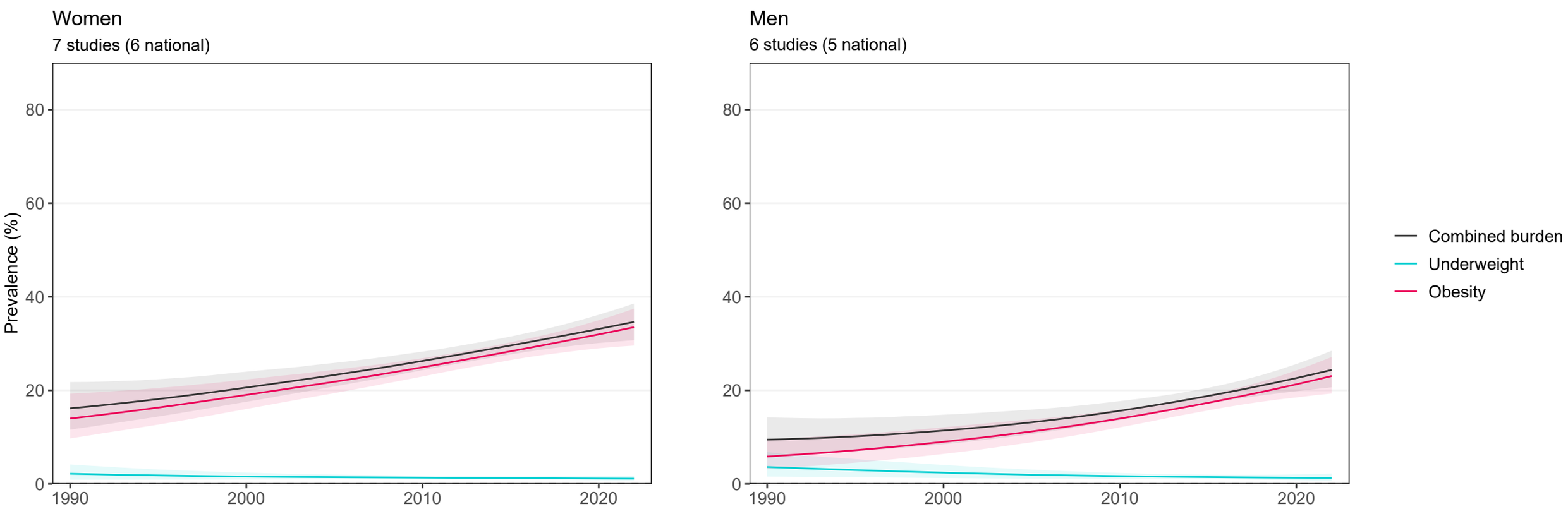


Ecuador

School-aged children and adolescents



Adults

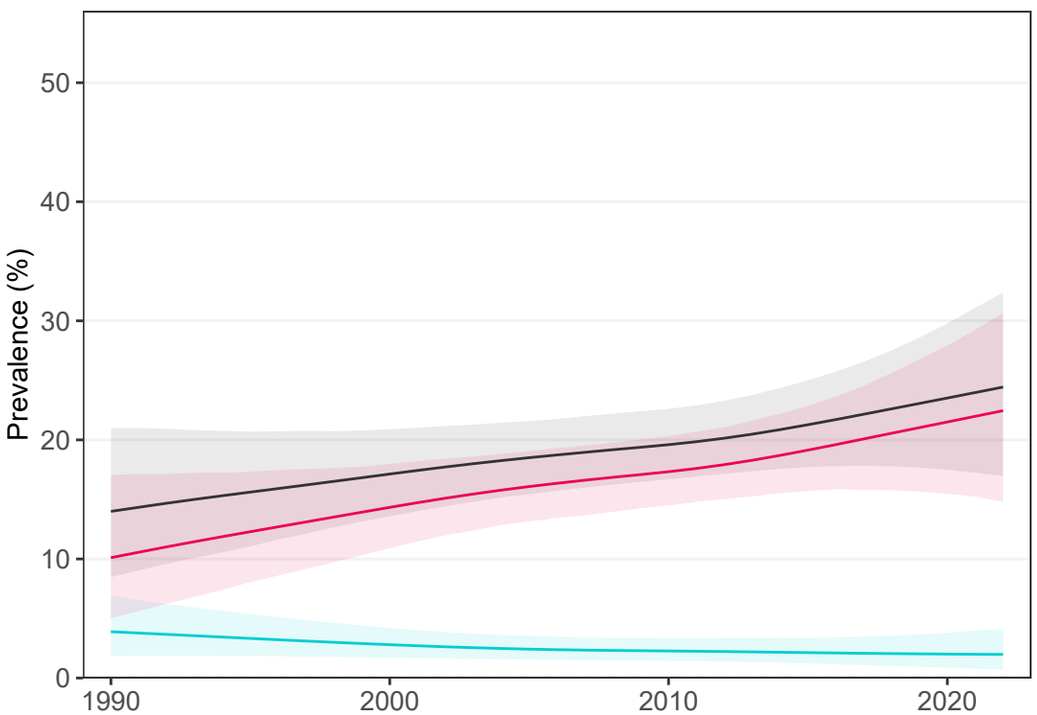


Egypt

School-aged children and adolescents

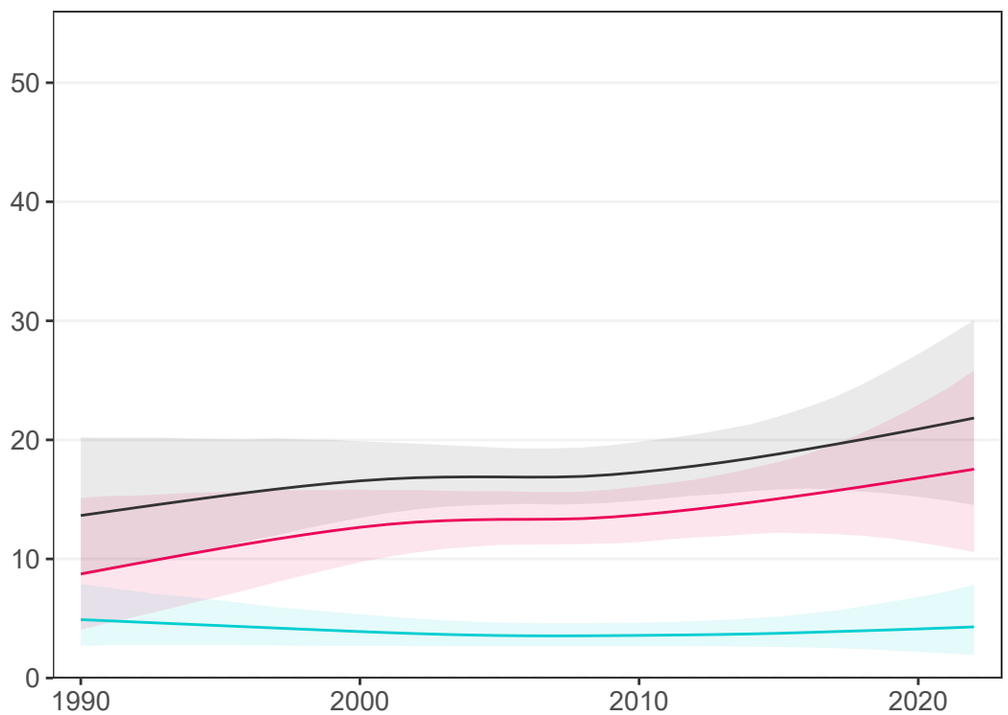
Girls

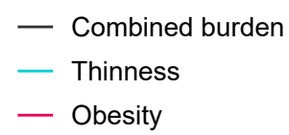
6 studies (6 national)



Boys

7 studies (7 national)

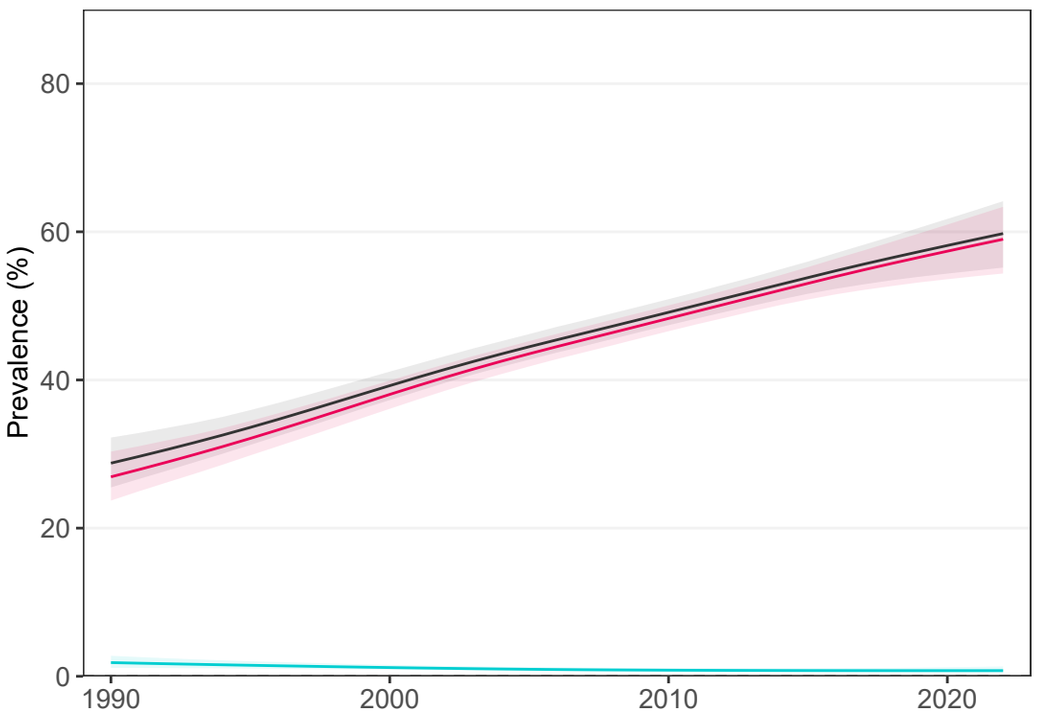




Adults

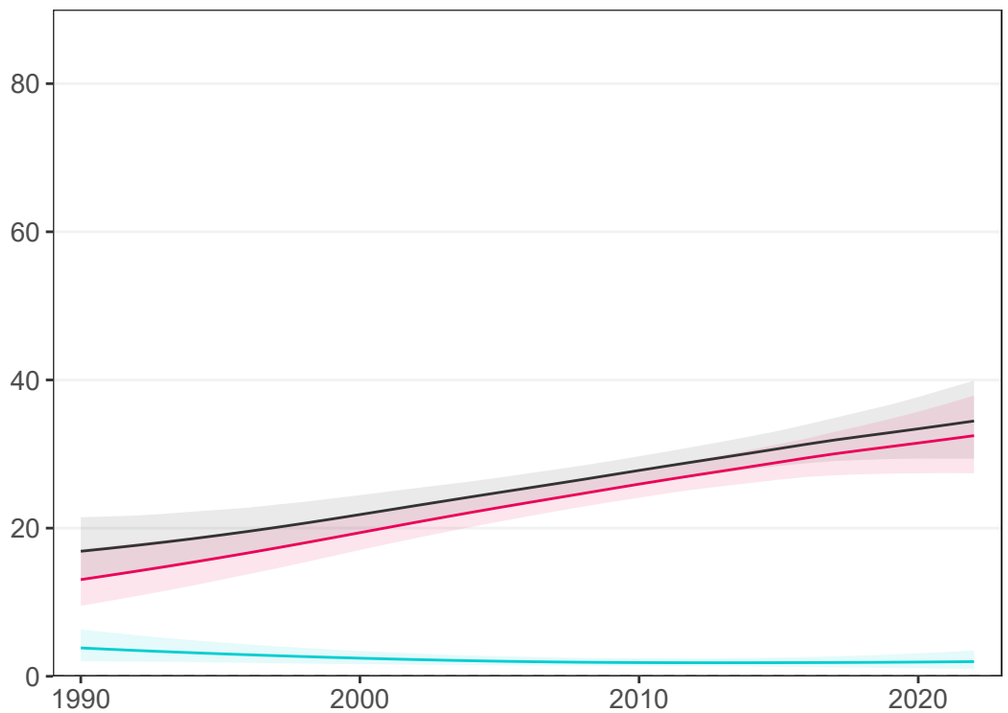
Women

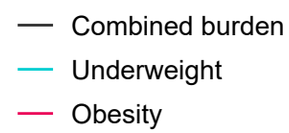
14 studies (12 national)



Men

8 studies (6 national)



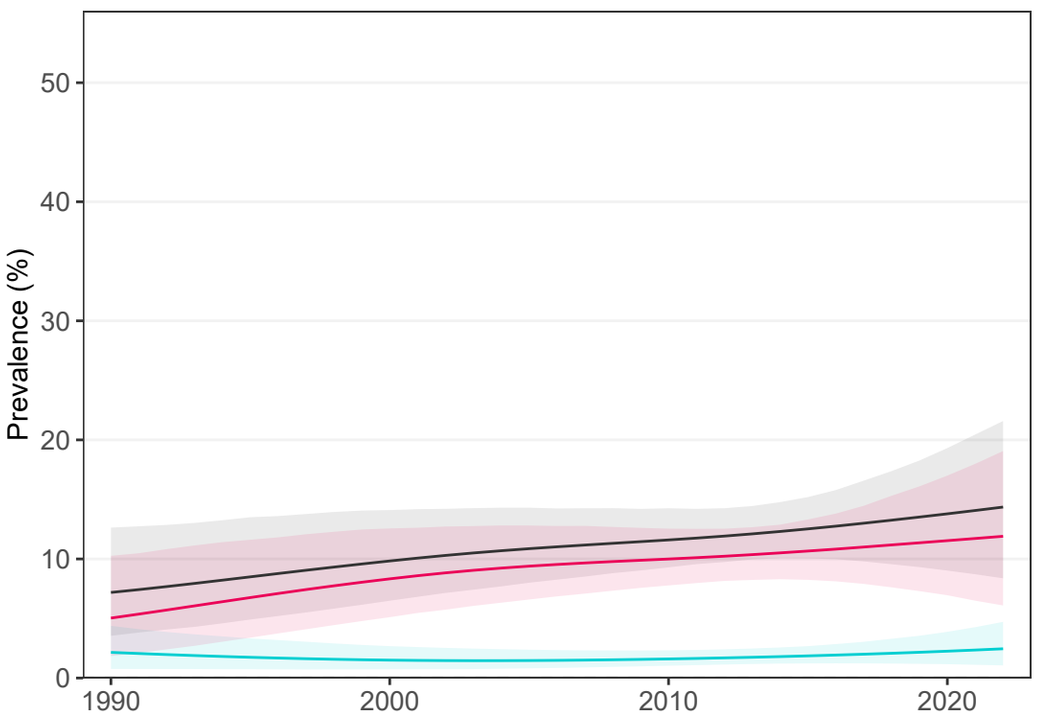


El Salvador

School-aged children and adolescents

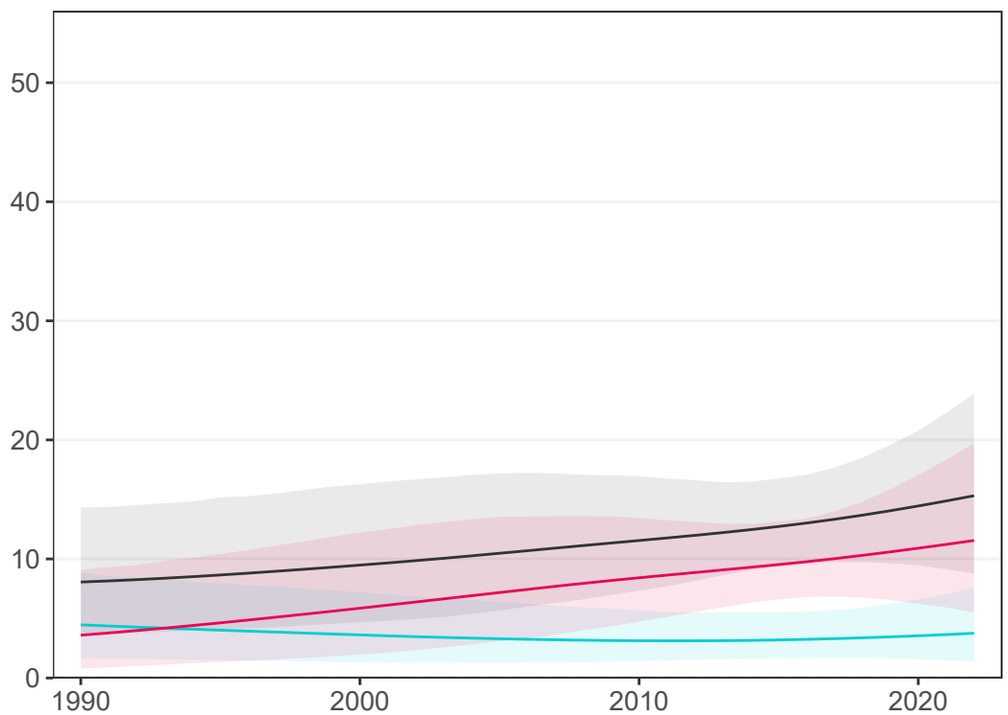
Girls

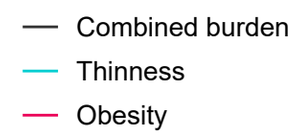
4 studies (4 national)



Boys

1 study (1 national)

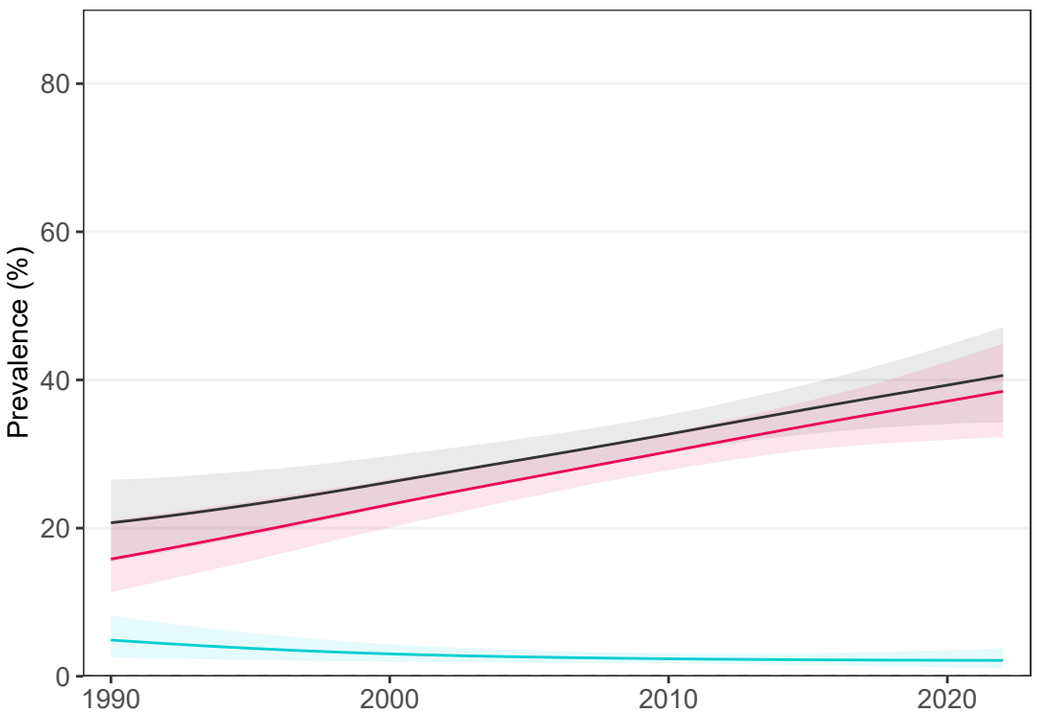




Adults

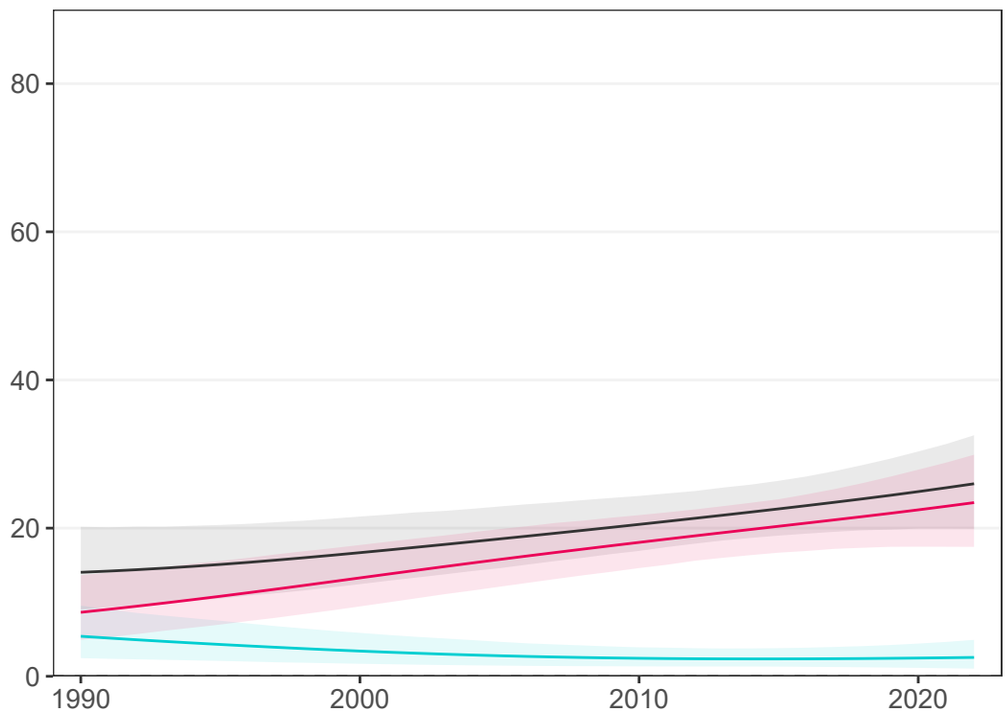
Women

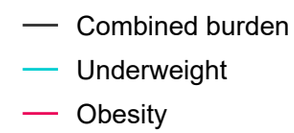
4 studies (3 national)



Men

2 studies (1 national)



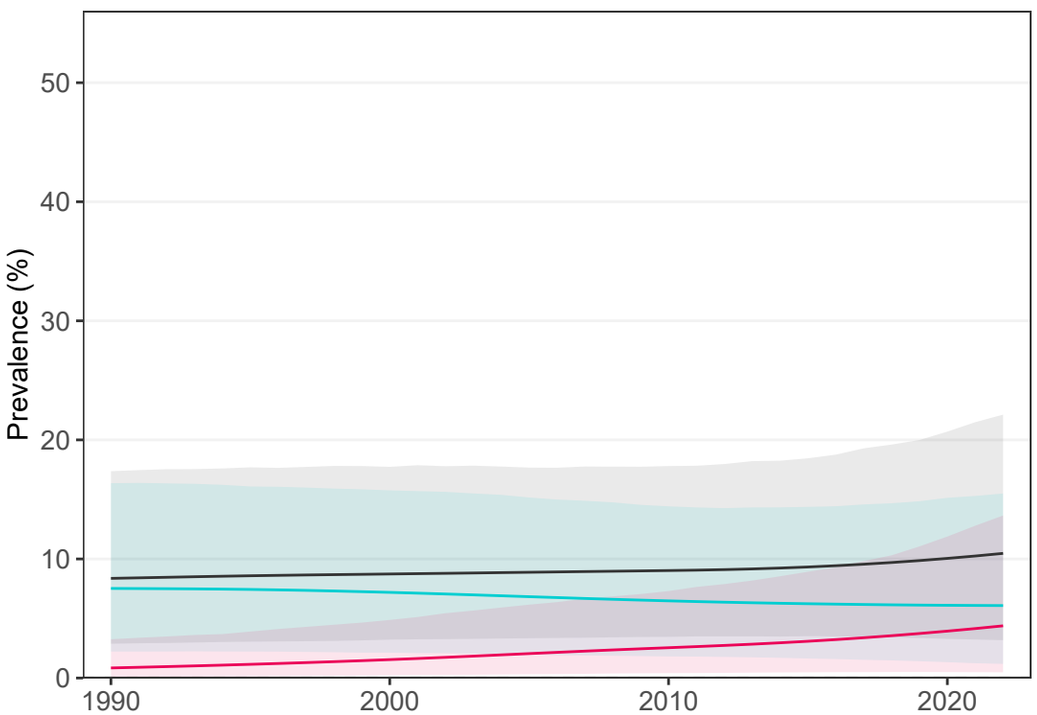


Equatorial Guinea

School-aged children and adolescents

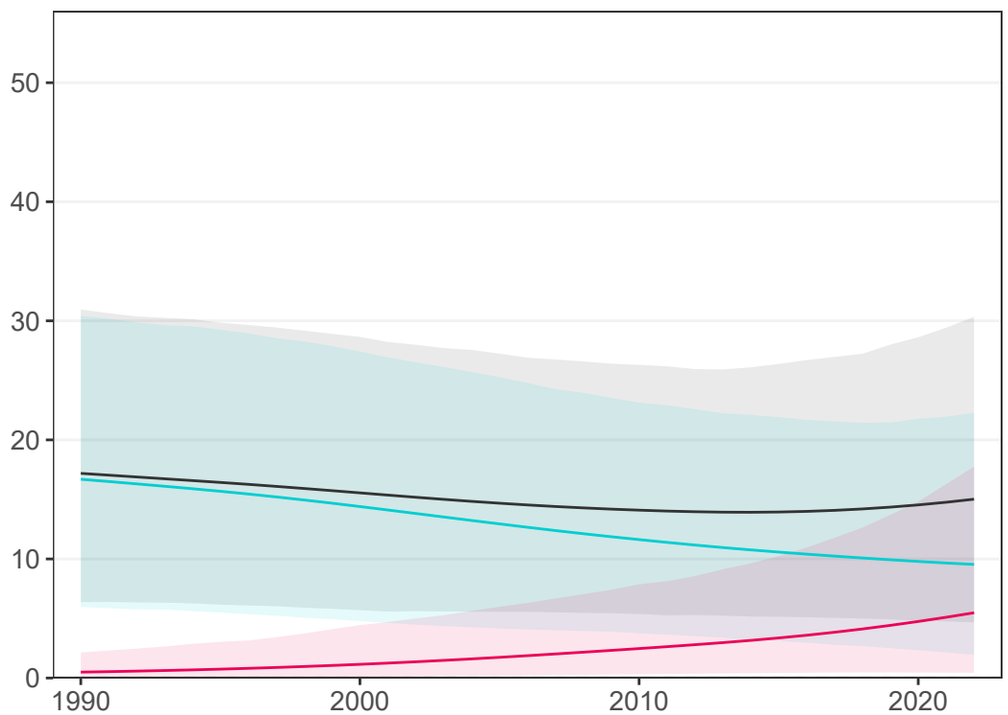
Girls

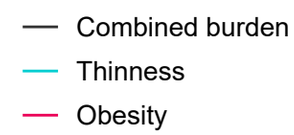
No studies



Boys

No studies

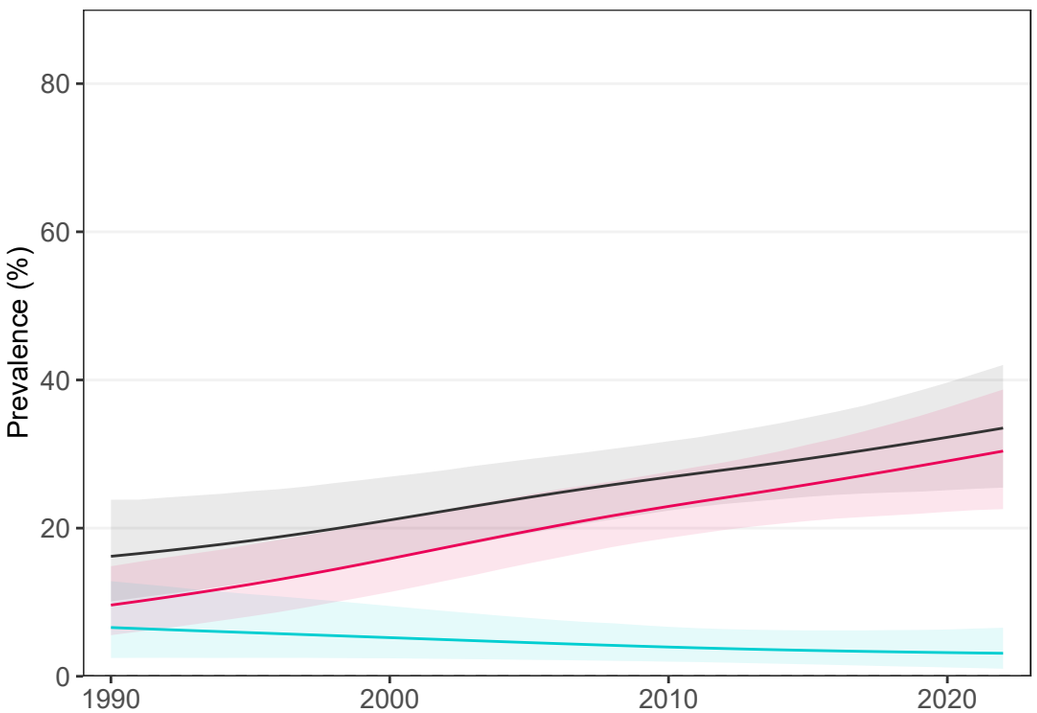




Adults

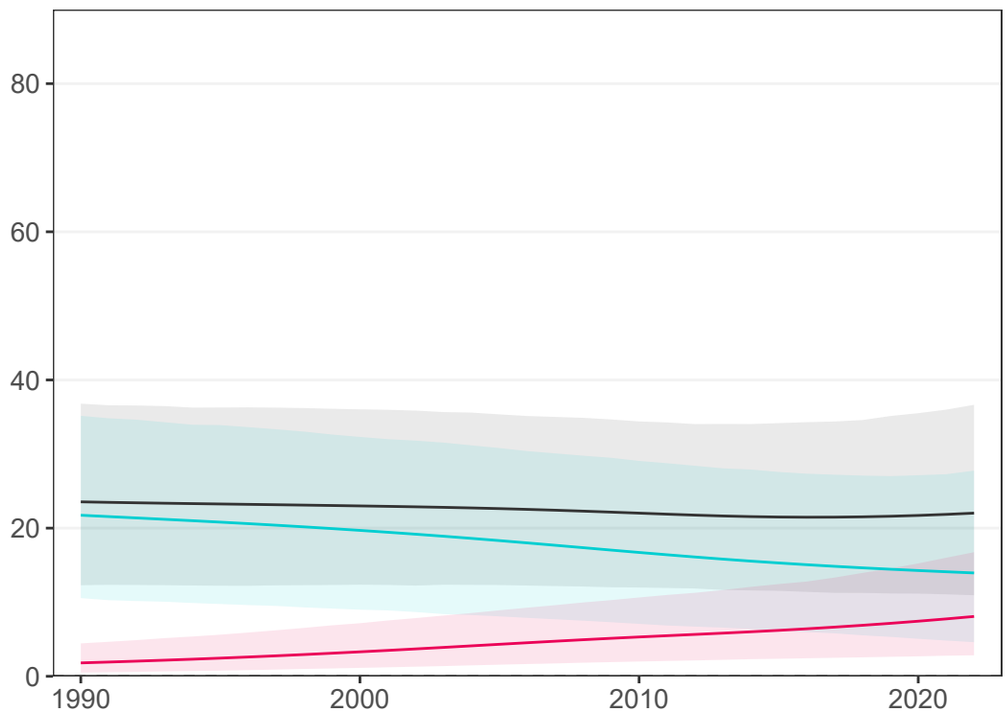
Women

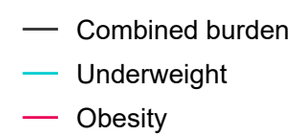
1 study (1 national)



Men

No studies



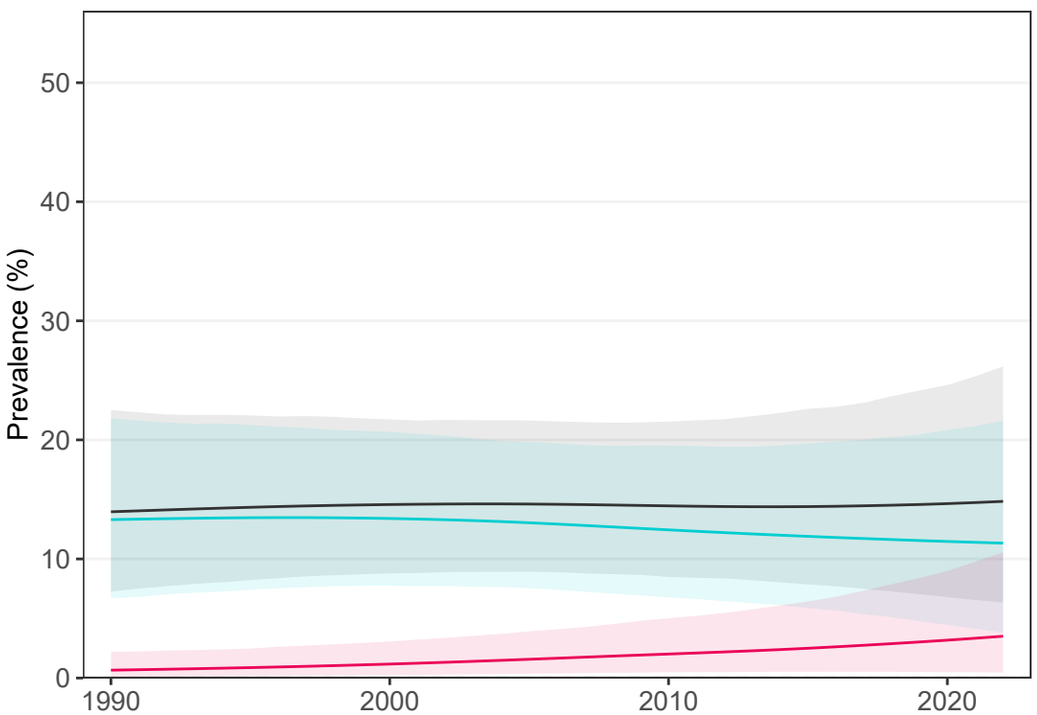


Eritrea

School-aged children and adolescents

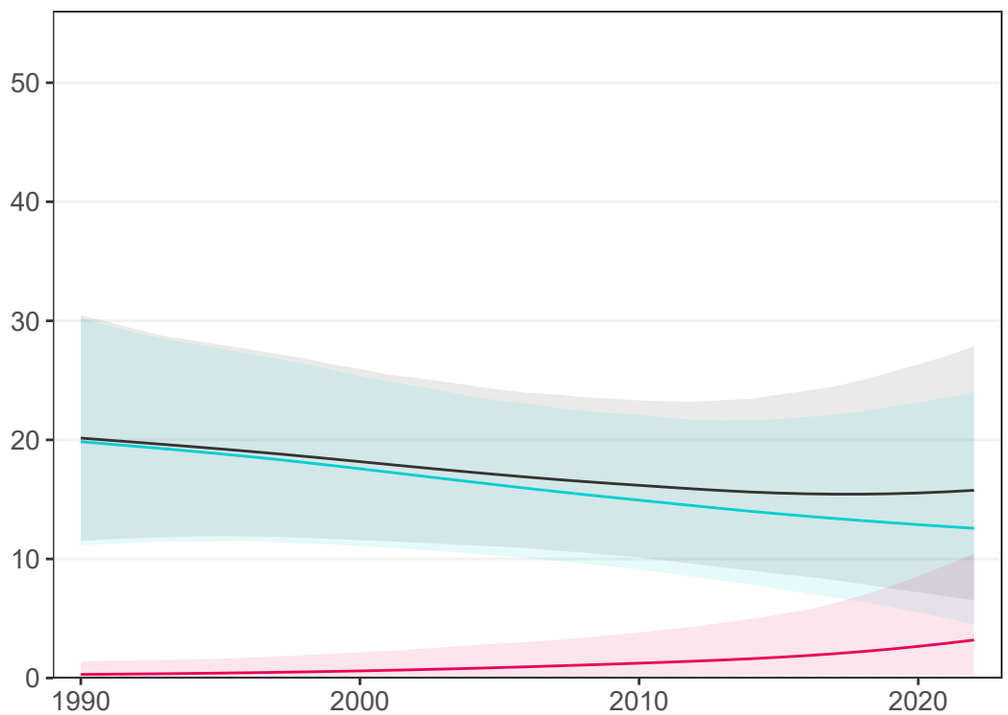
Girls

1 study (1 national)



Boys

1 study (1 national)

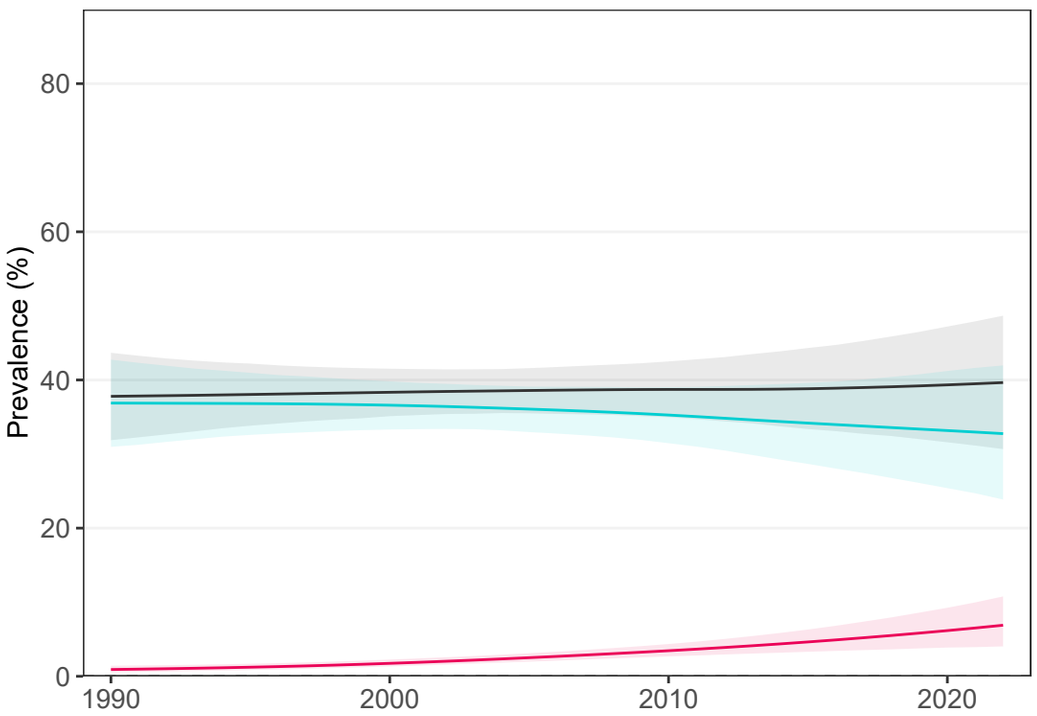


Combined burden
Thinness
Obesity

Adults

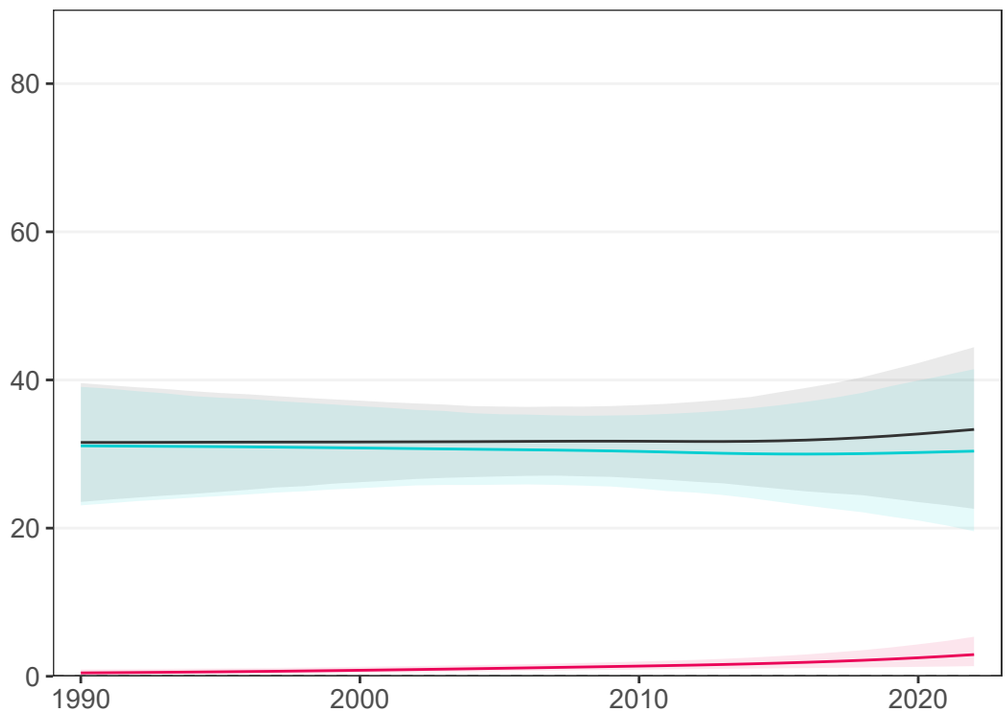
Women

4 studies (4 national)



Men

2 studies (2 national)



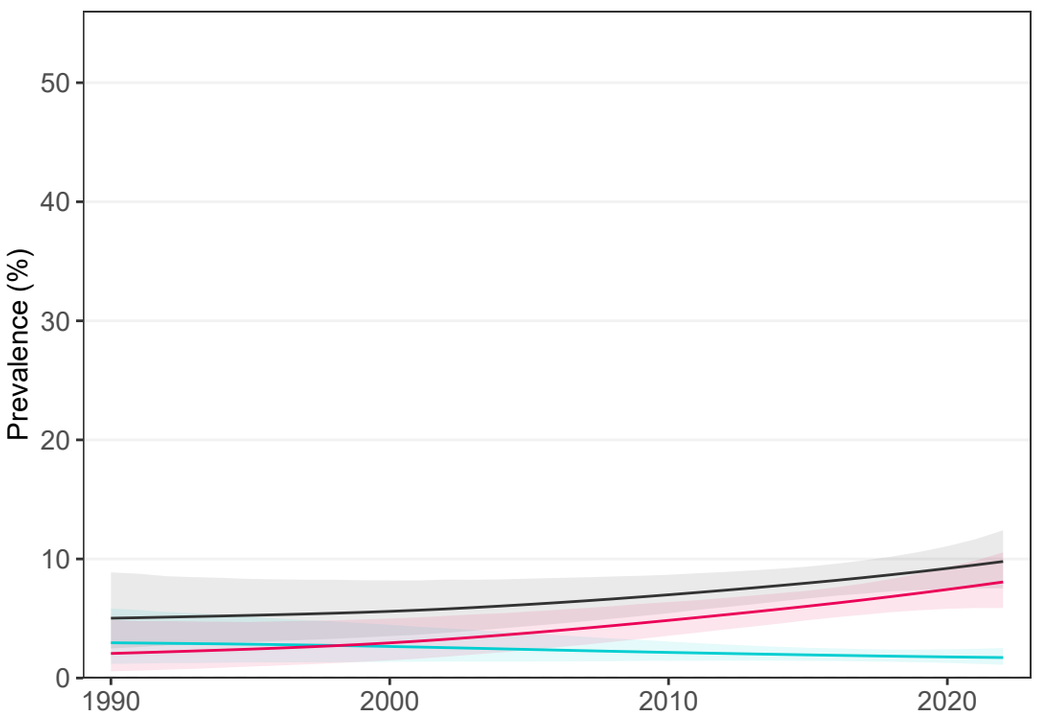
Combined burden
Underweight
Obesity

Estonia

School-aged children and adolescents

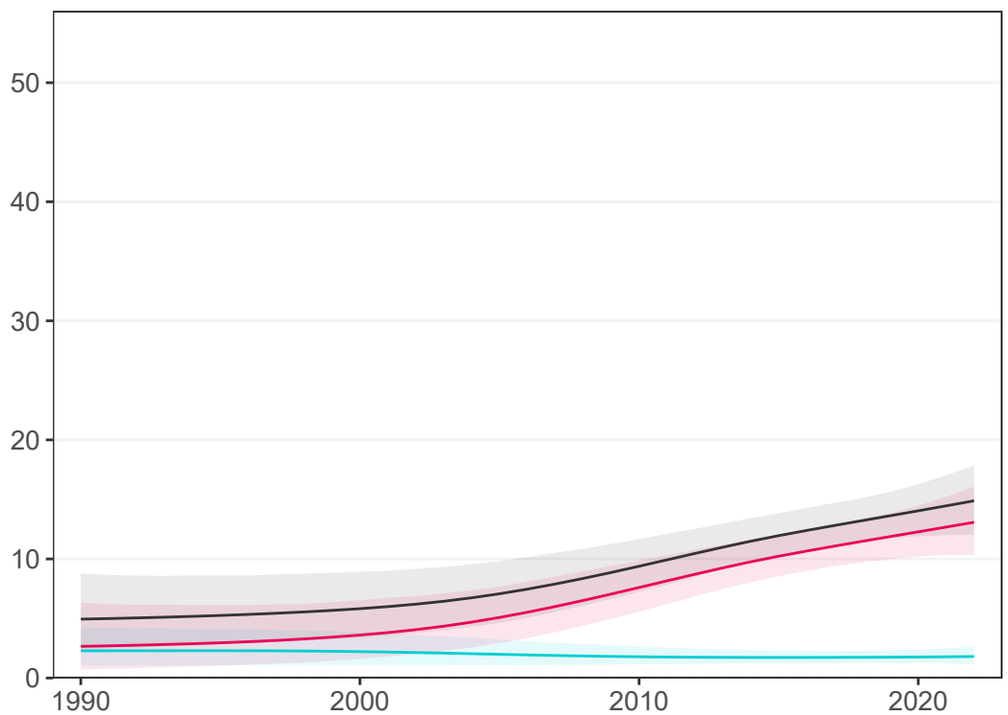
Girls

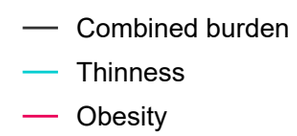
13 studies (12 national)



Boys

13 studies (12 national)

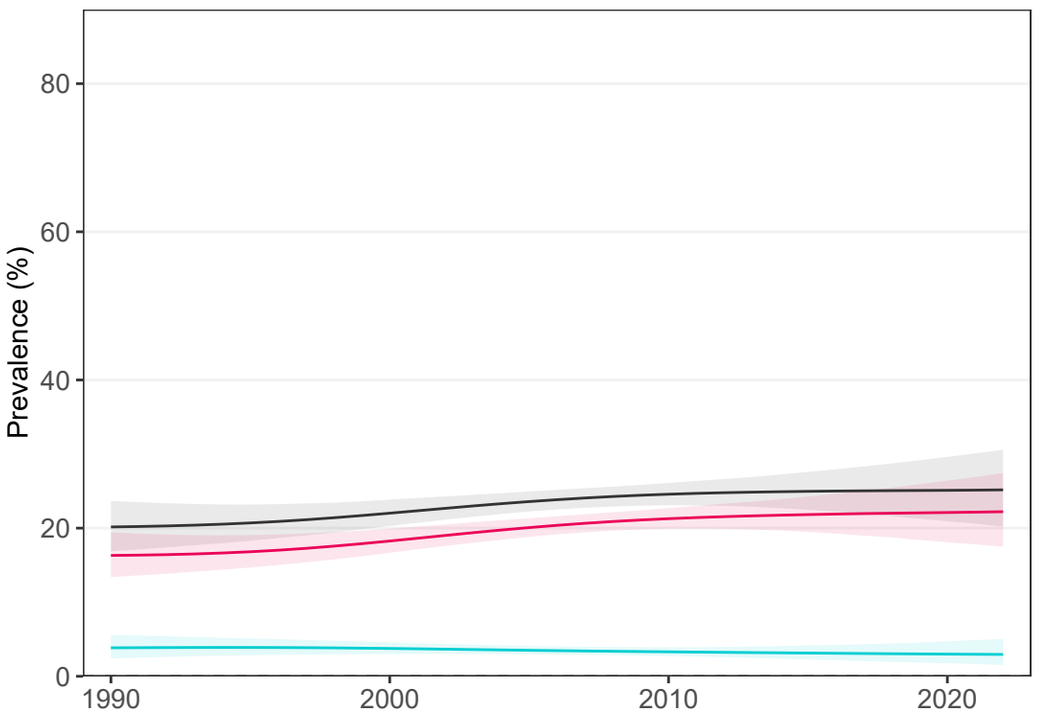




Adults

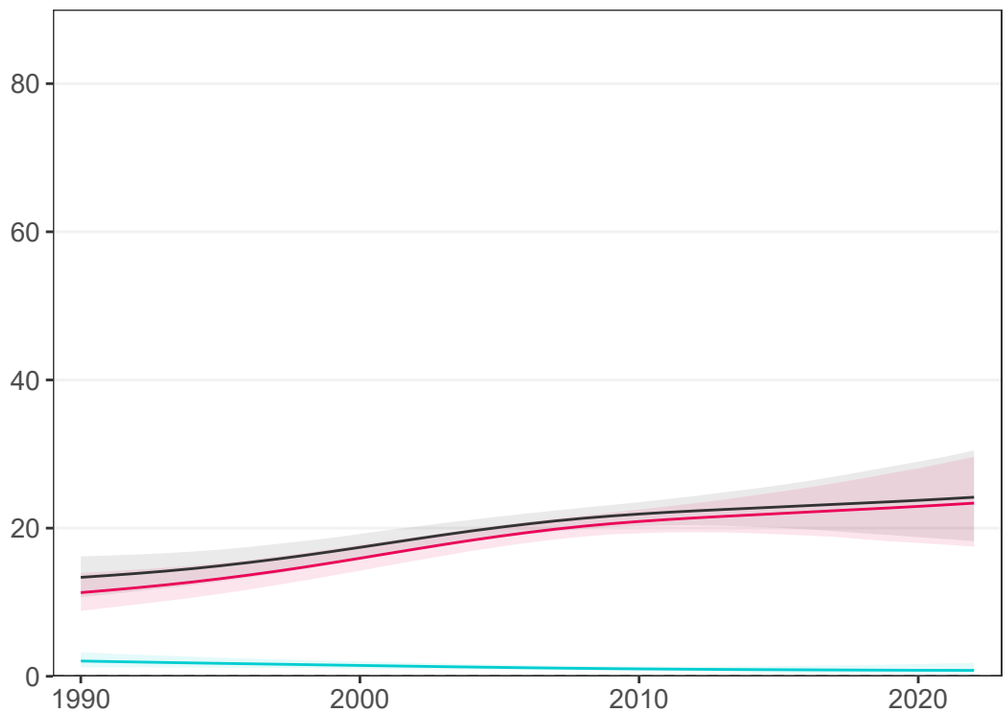
Women

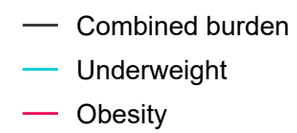
12 studies (9 national)



Men

14 studies (9 national)



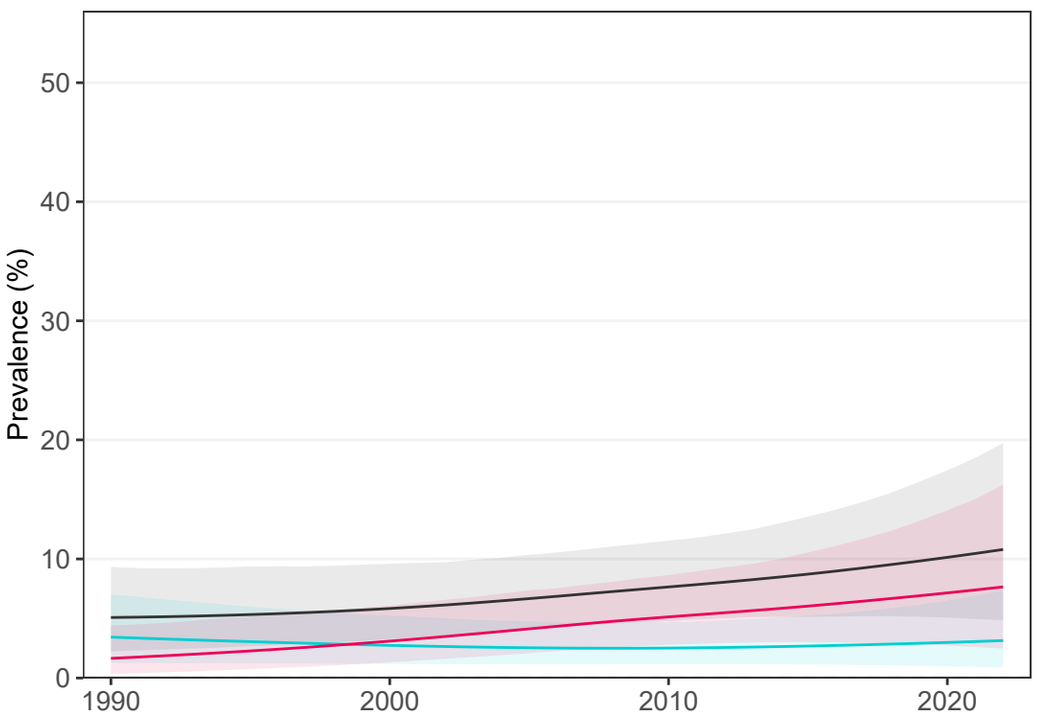


Eswatini

School-aged children and adolescents

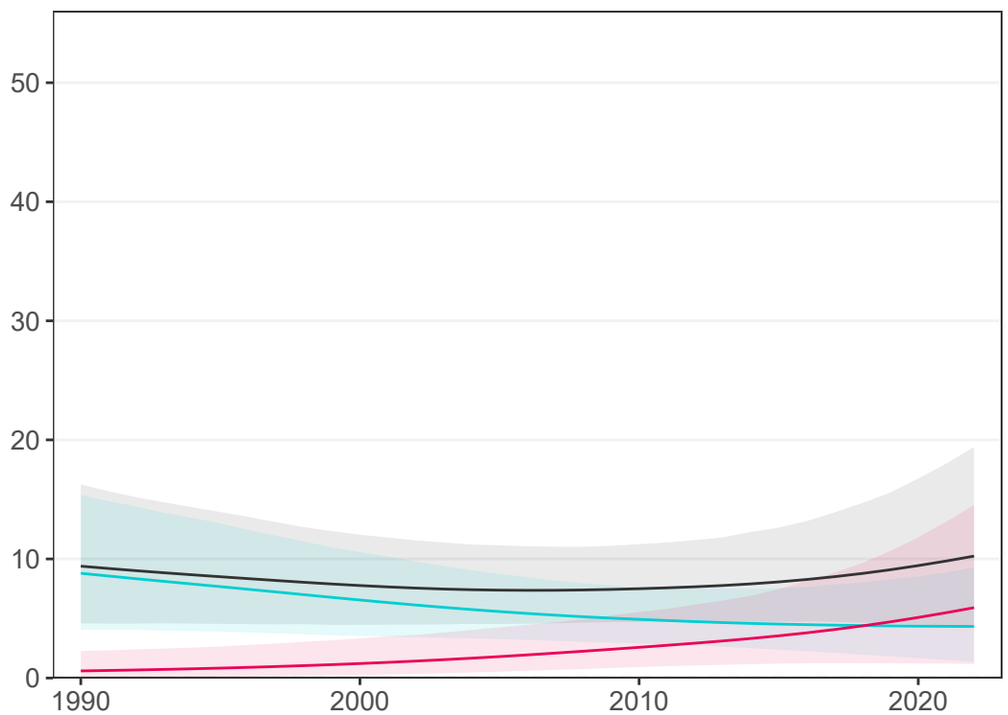
Girls

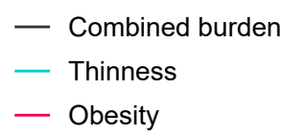
2 studies (2 national)



Boys

2 studies (2 national)

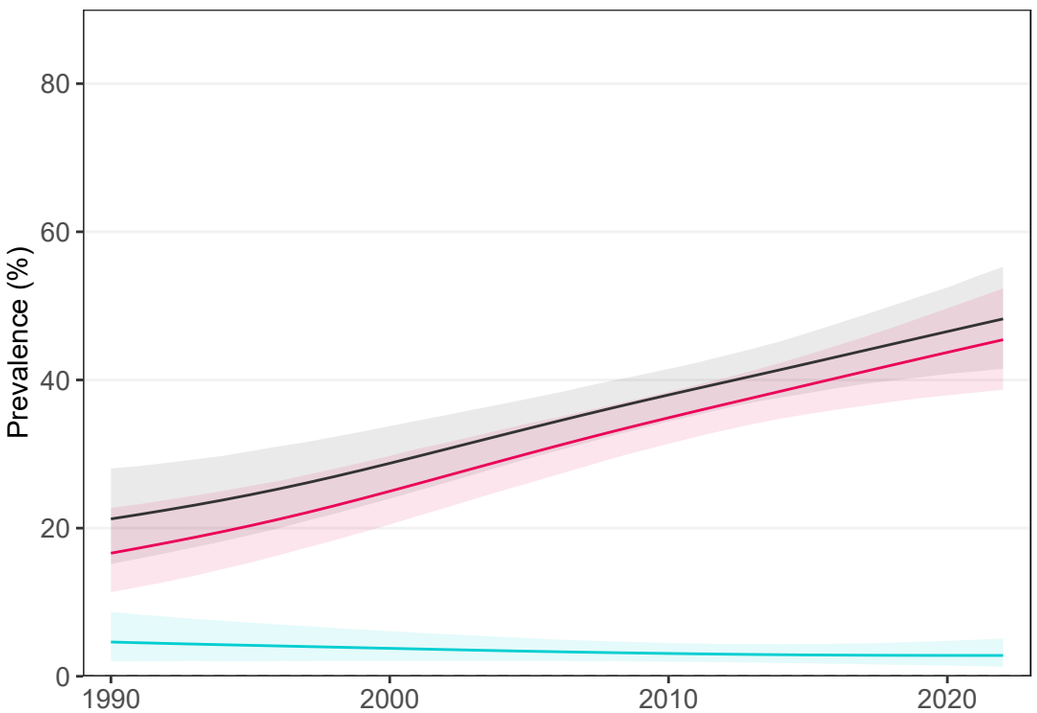




Adults

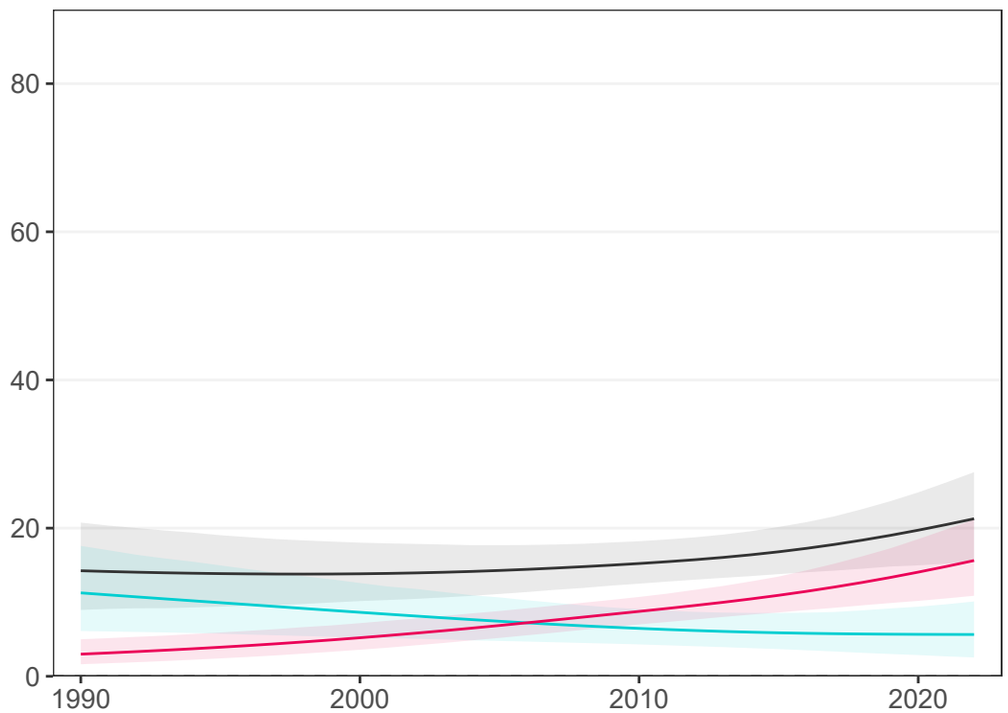
Women

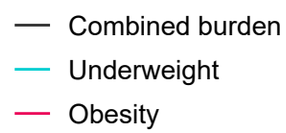
2 studies (2 national)



Men

2 studies (2 national)



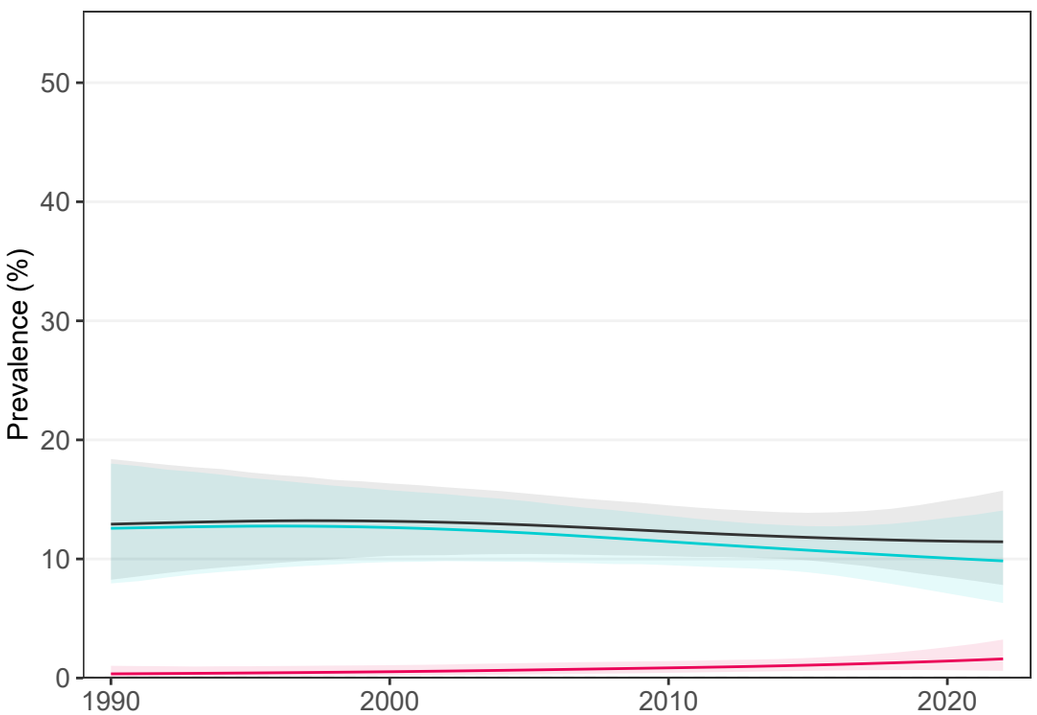


Ethiopia

School-aged children and adolescents

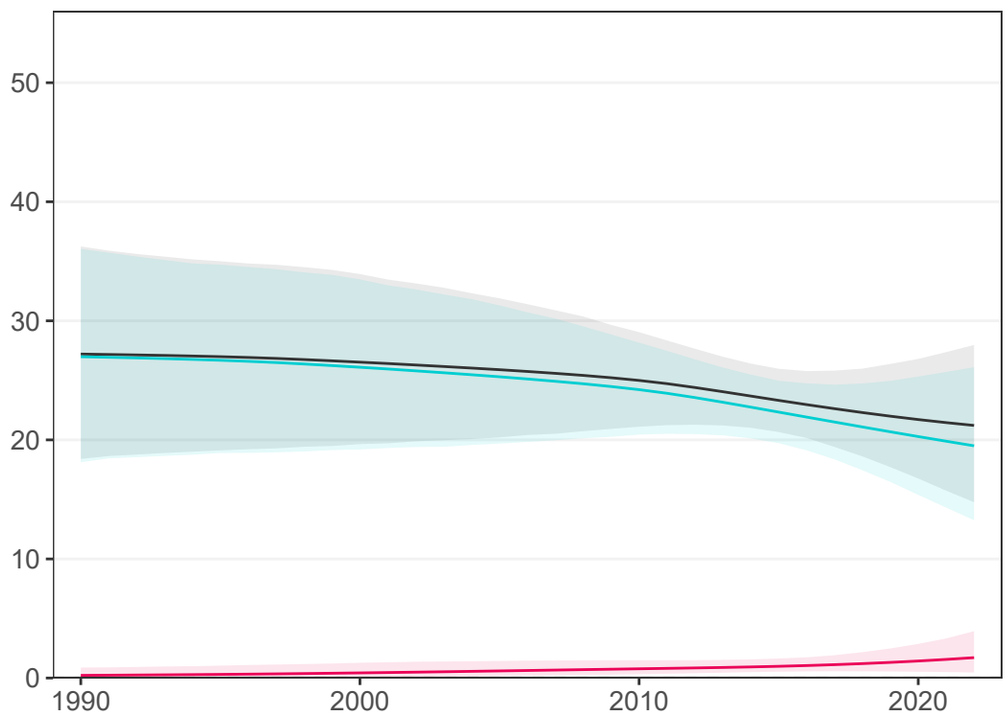
Girls

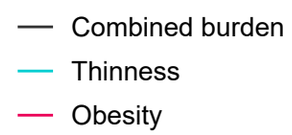
10 studies (6 national)



Boys

6 studies (4 national)

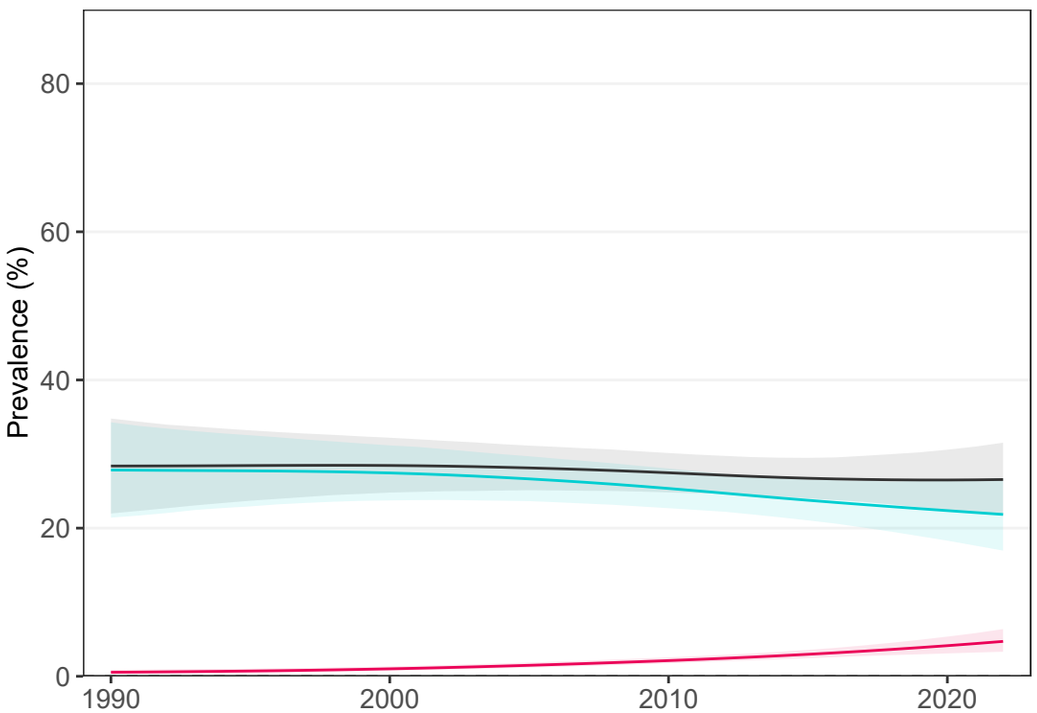




Adults

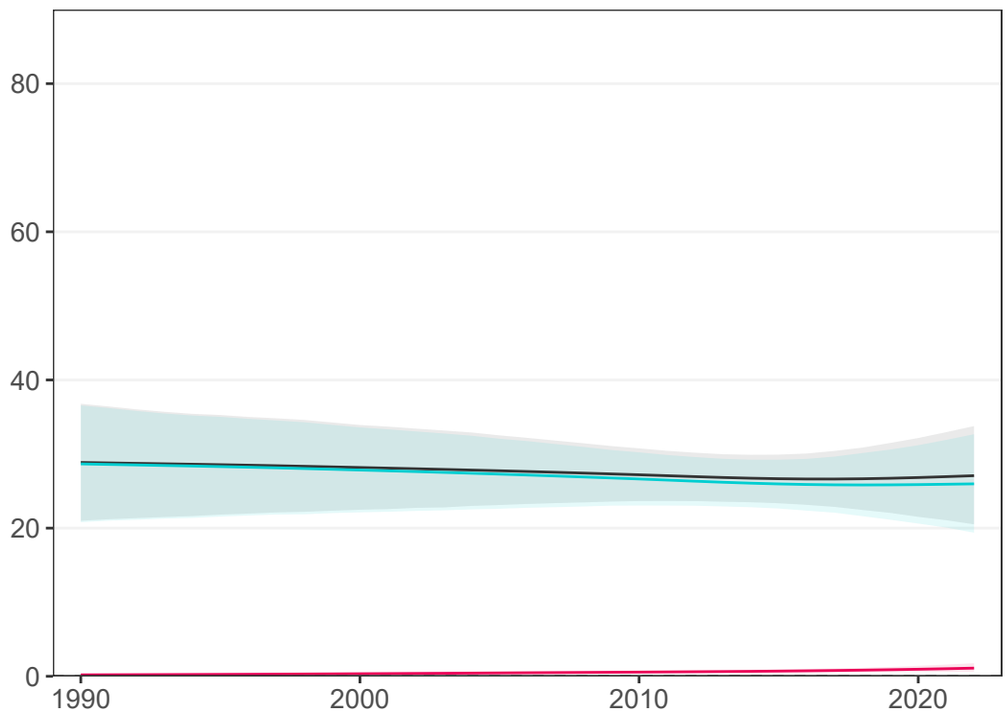
Women

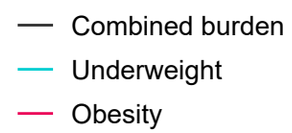
11 studies (6 national)



Men

7 studies (4 national)



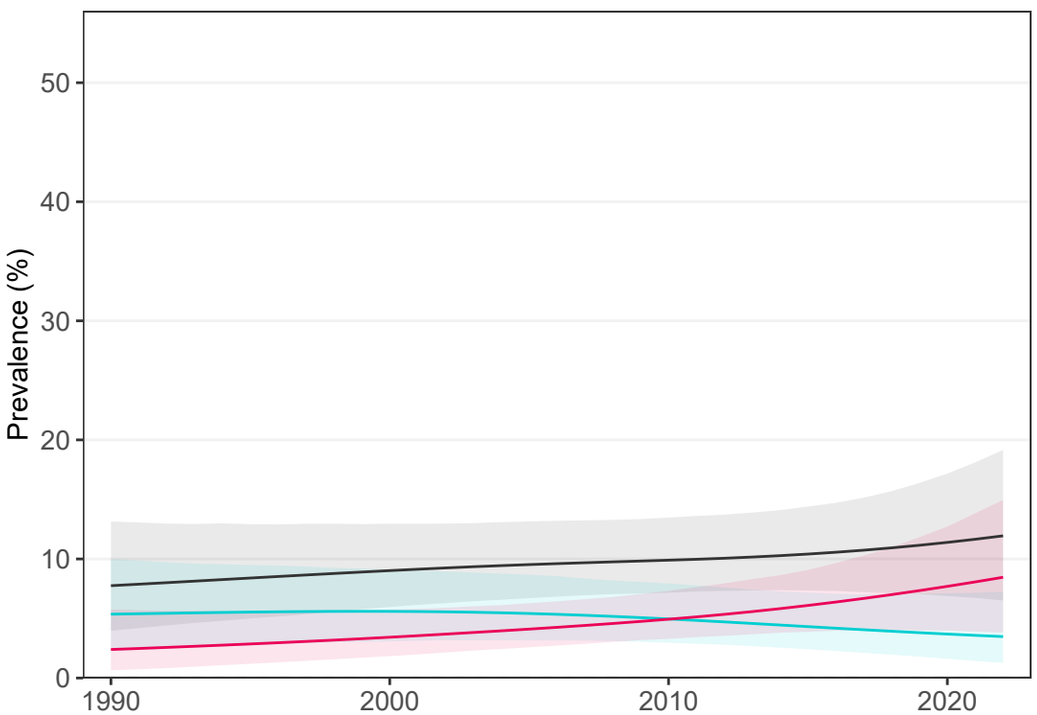


Fiji

School-aged children and adolescents

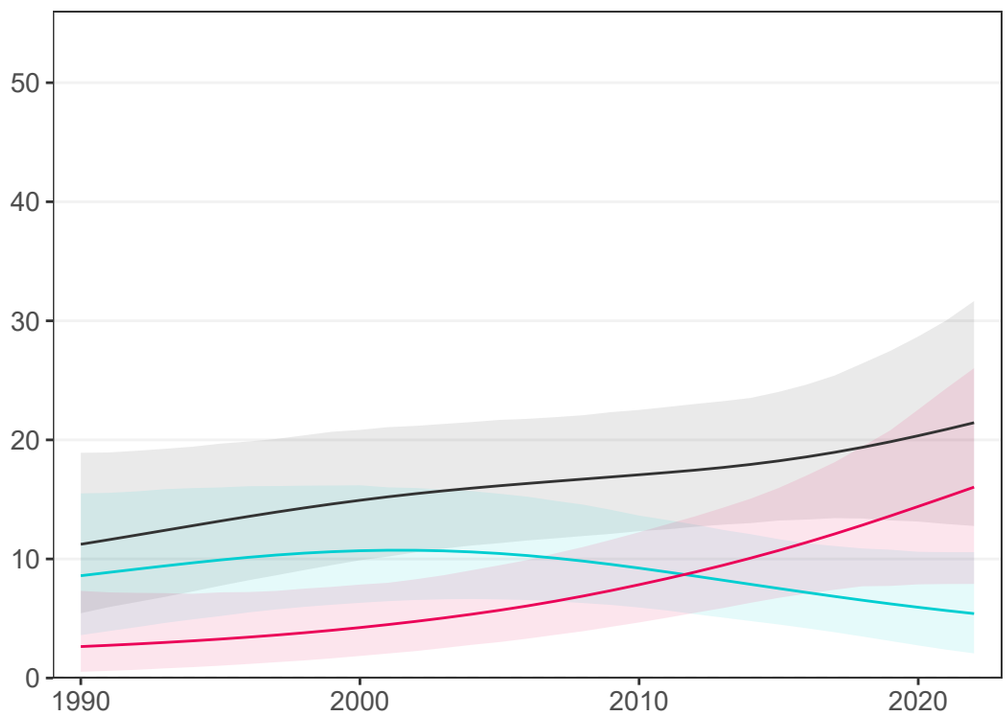
Girls

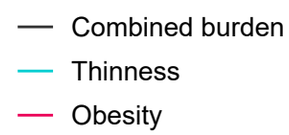
4 studies (2 national)



Boys

4 studies (2 national)

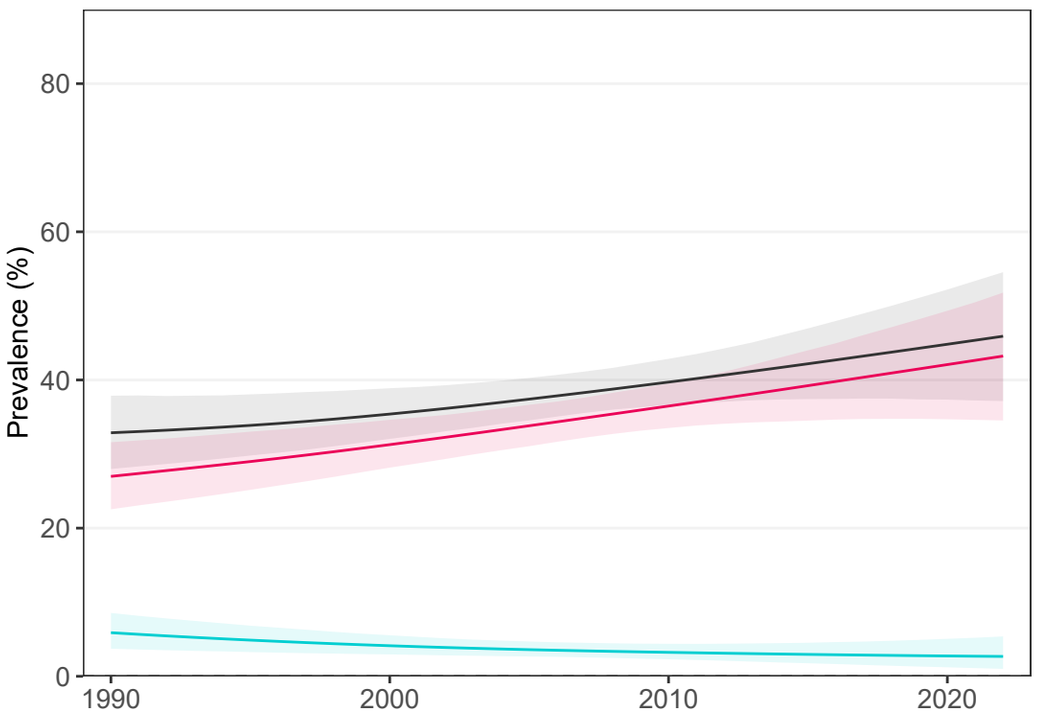




Adults

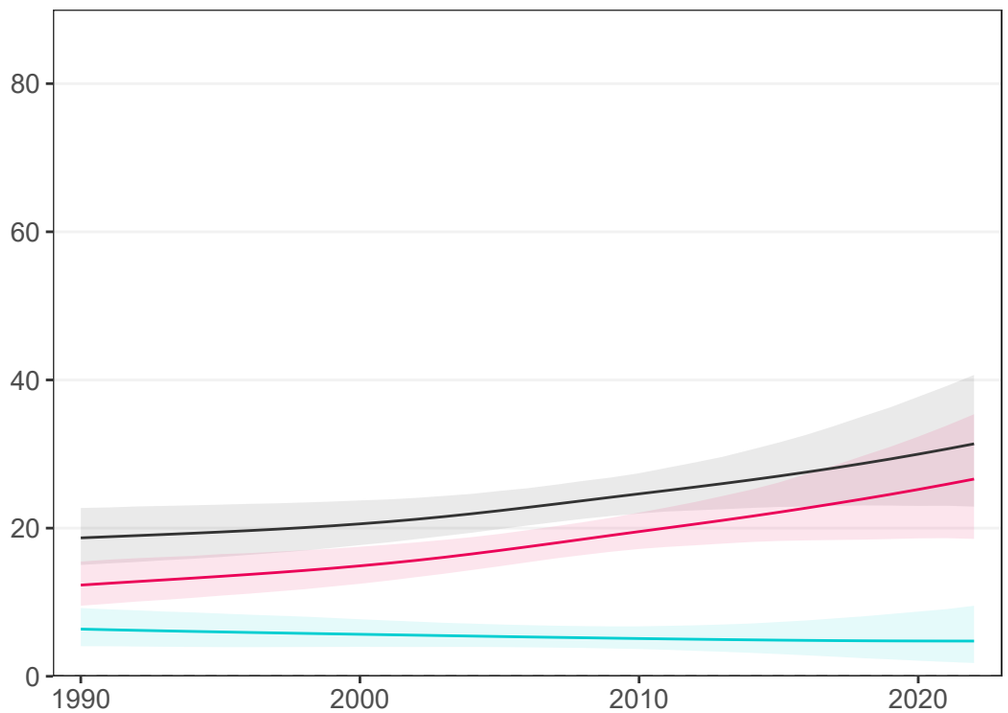
Women

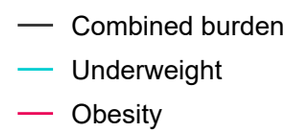
6 studies (3 national)



Men

6 studies (3 national)



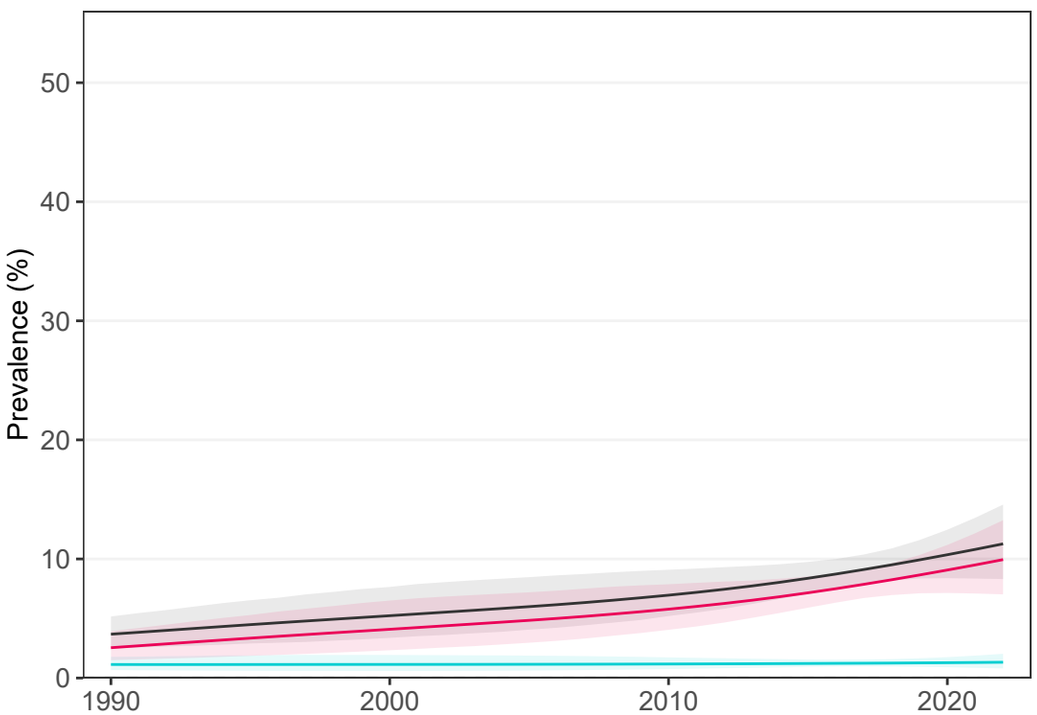


Finland

School-aged children and adolescents

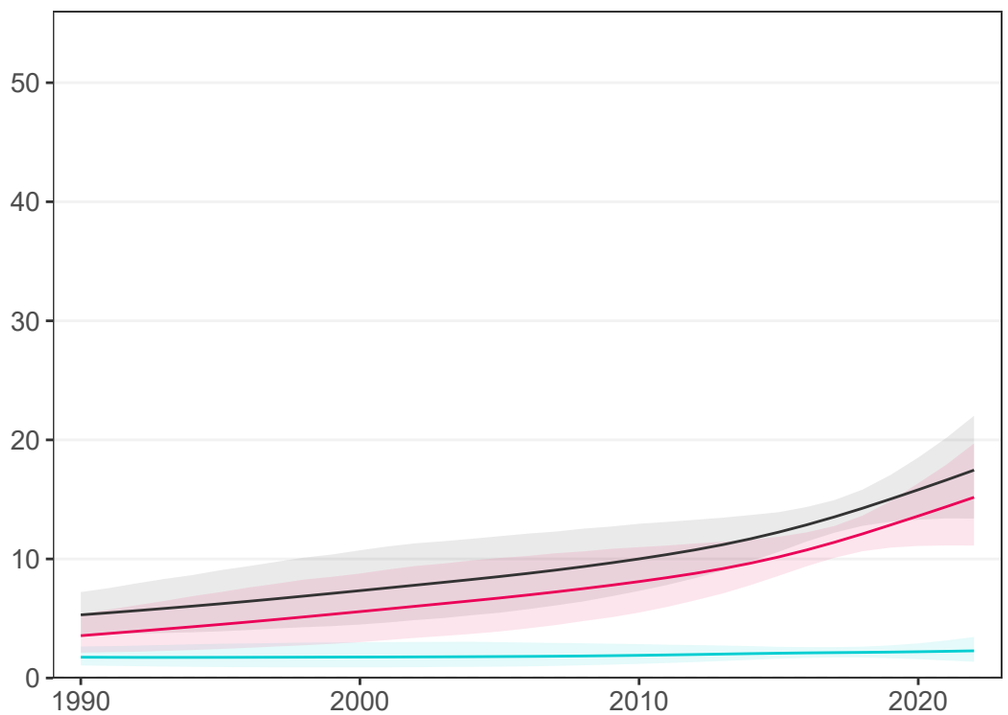
Girls

16 studies (14 national)



Boys

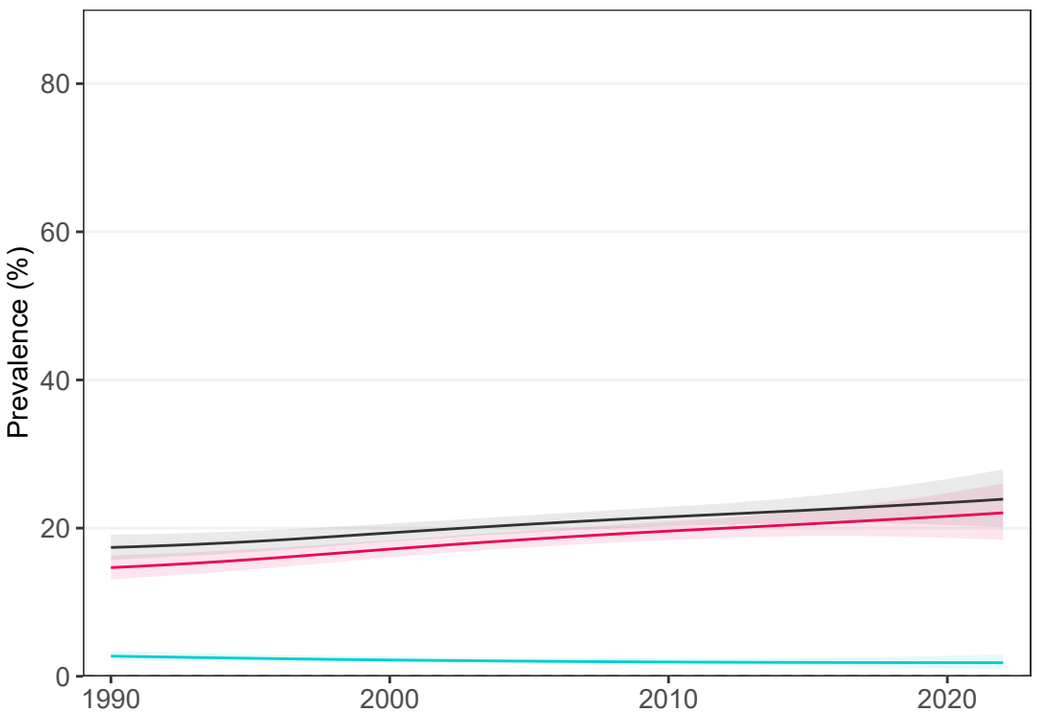
16 studies (14 national)



Adults

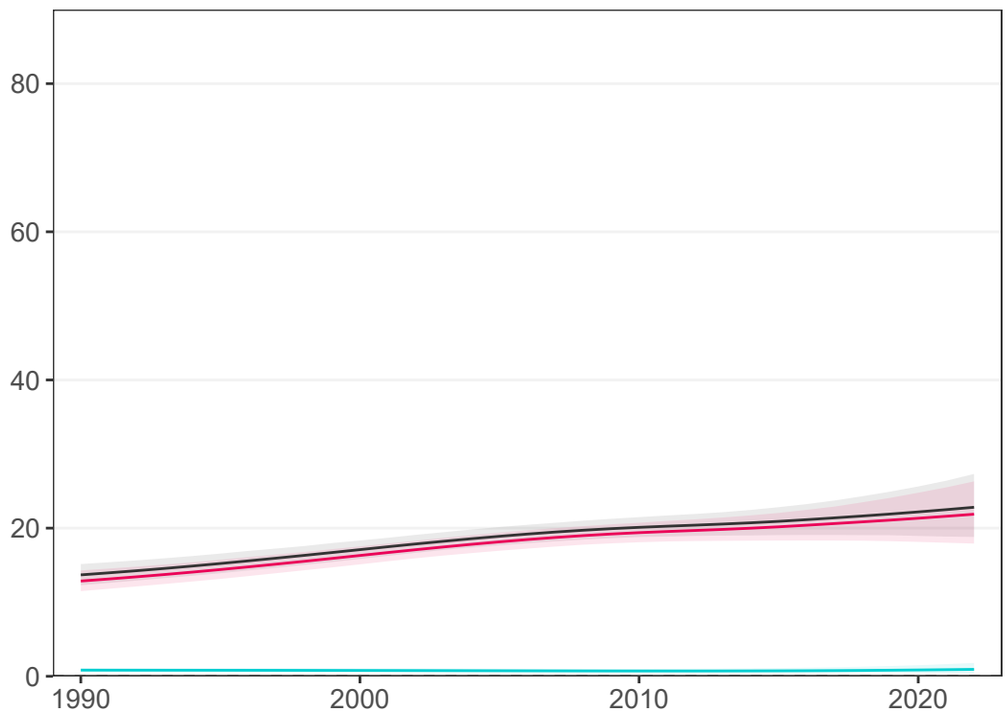
Women

39 studies (19 national)



Men

46 studies (20 national)

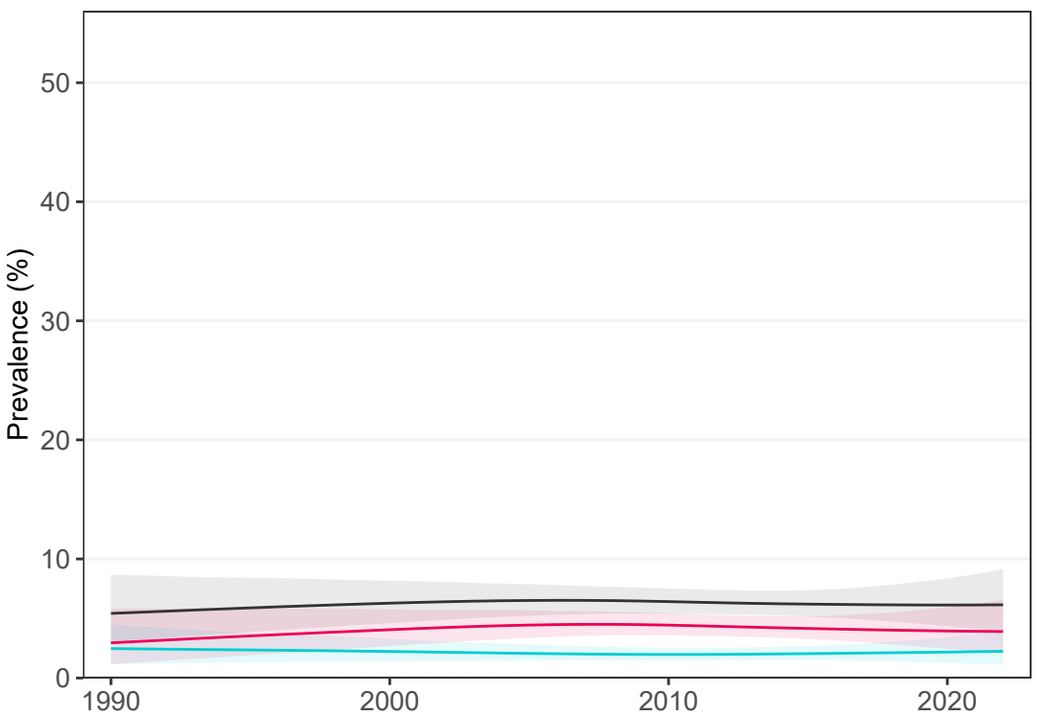


France

School-aged children and adolescents

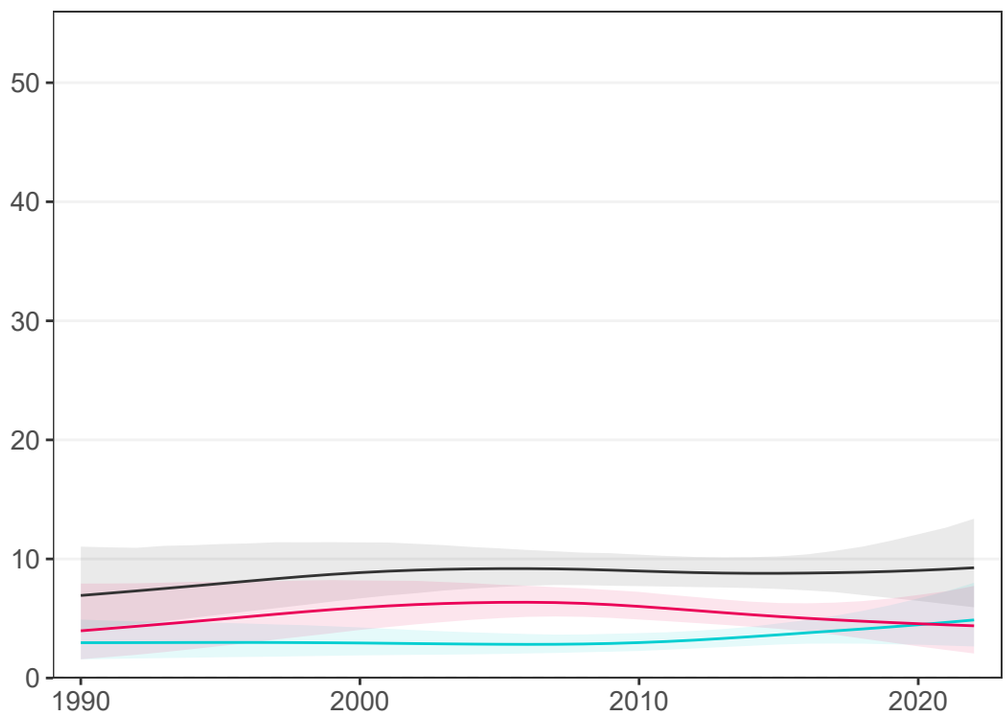
Girls

19 studies (9 national)



Boys

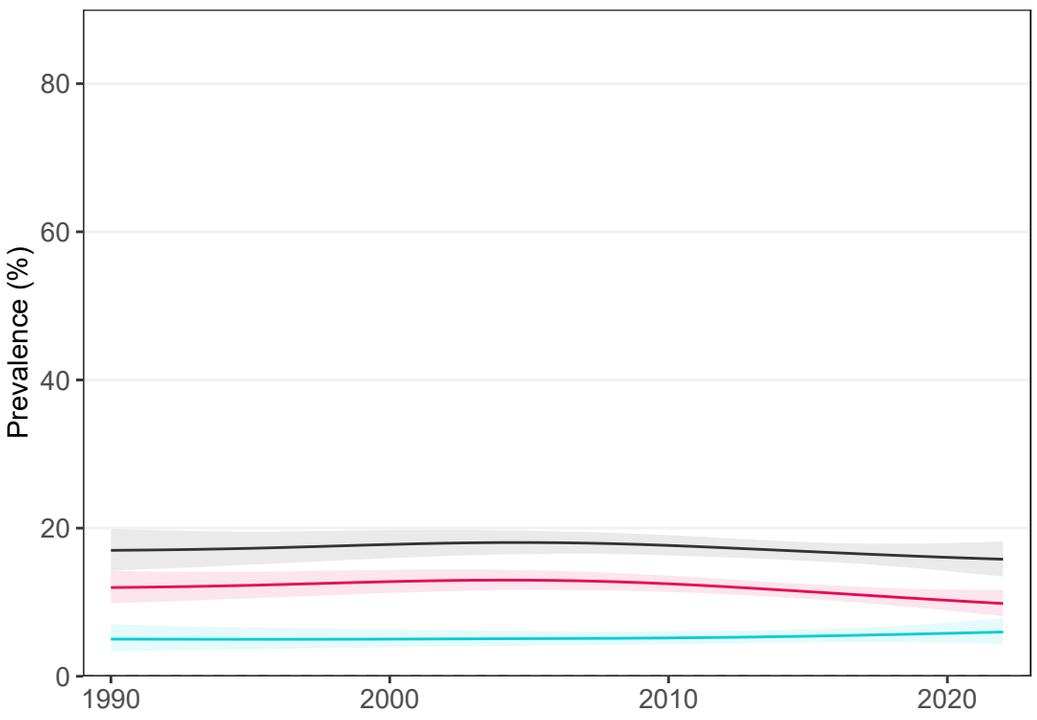
18 studies (9 national)



Adults

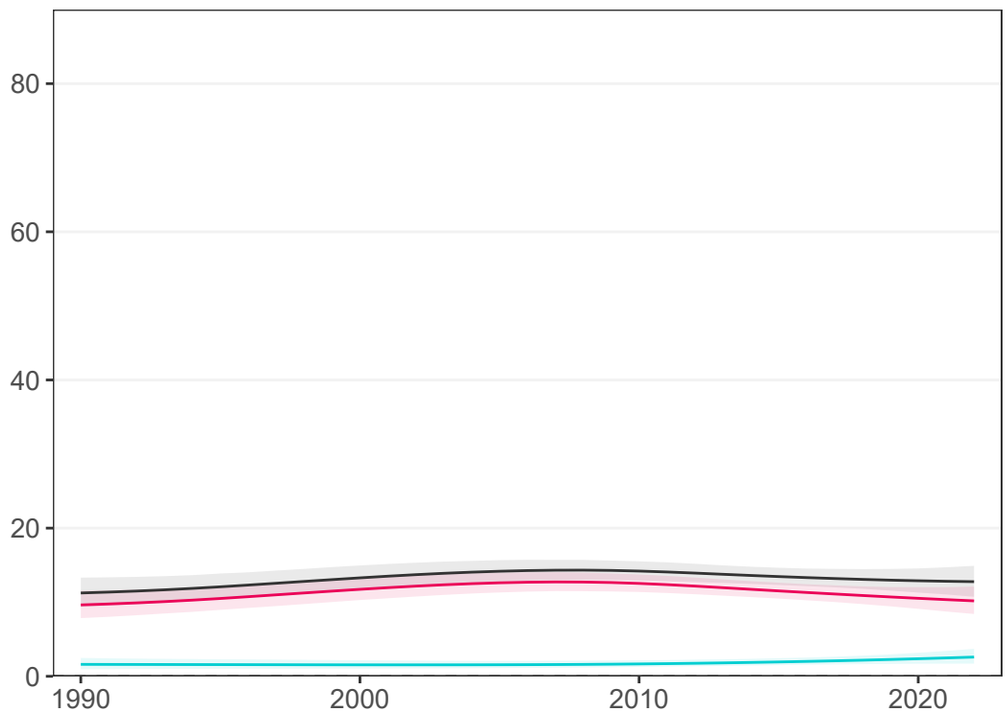
Women

24 studies (6 national)



Men

25 studies (6 national)

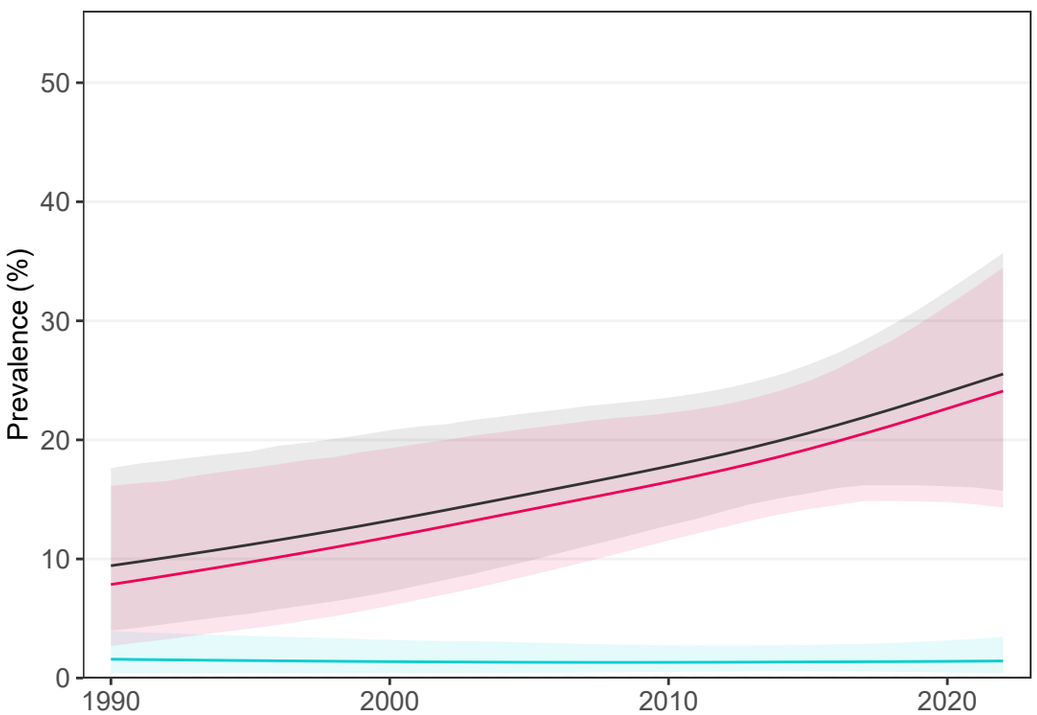


French Polynesia

School-aged children and adolescents

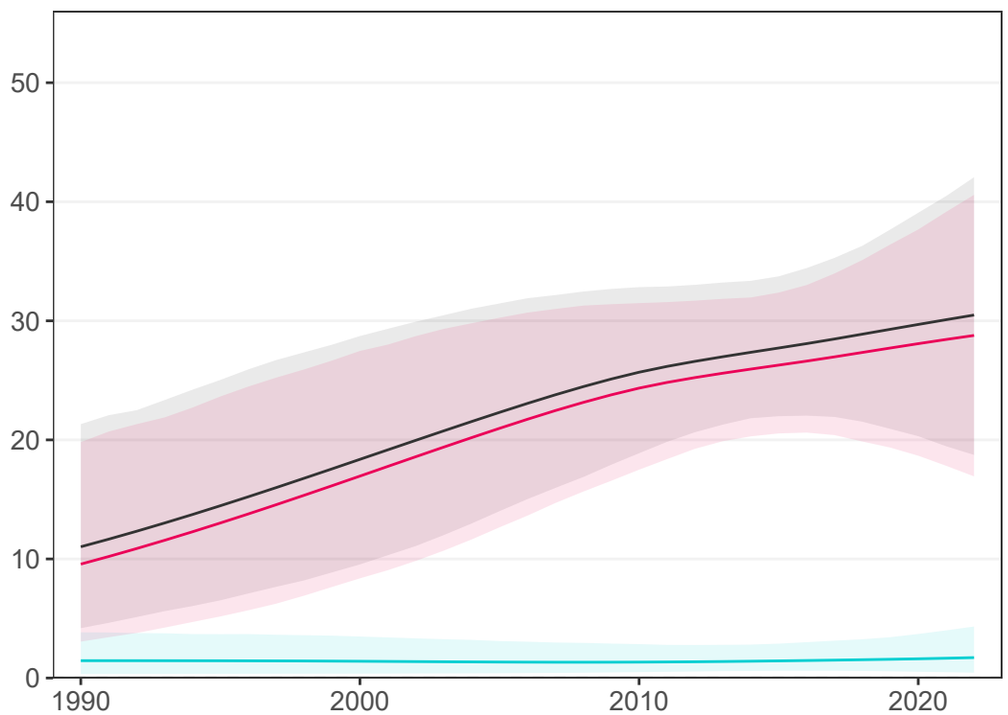
Girls

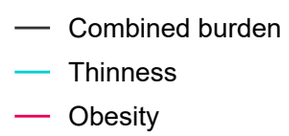
2 studies (2 national)



Boys

2 studies (2 national)

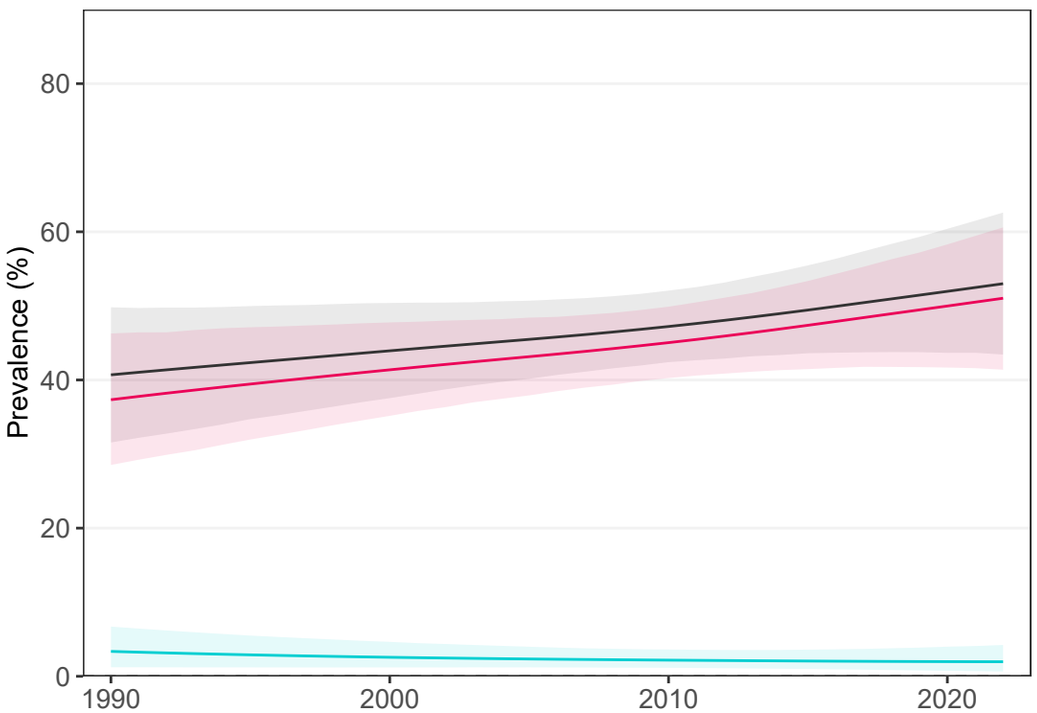




Adults

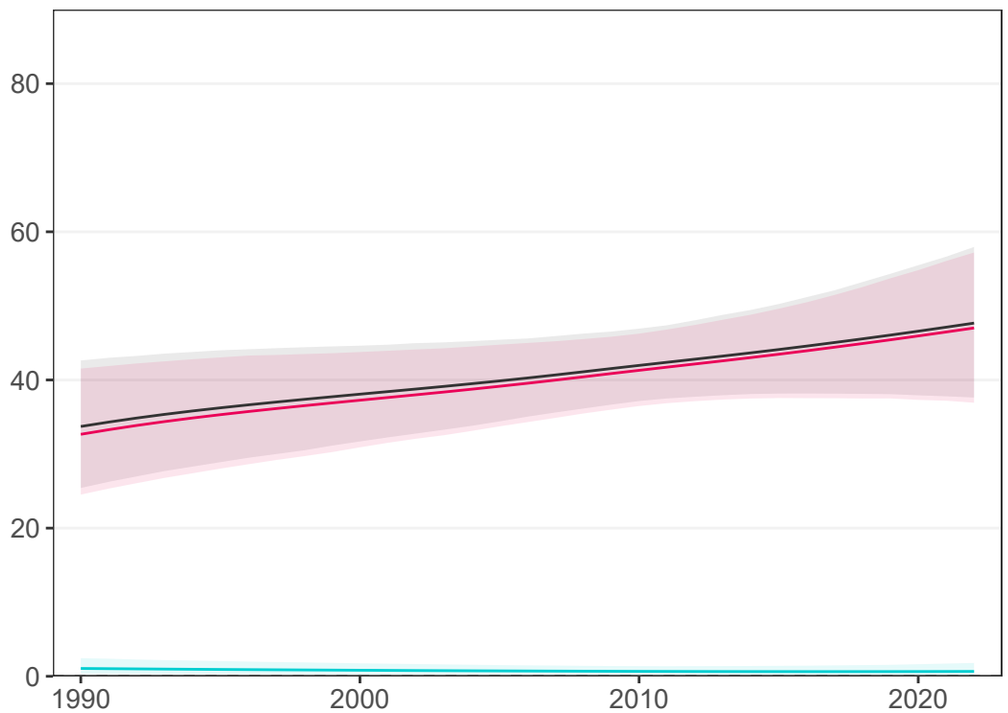
Women

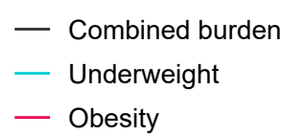
1 study (1 national)



Men

1 study (1 national)



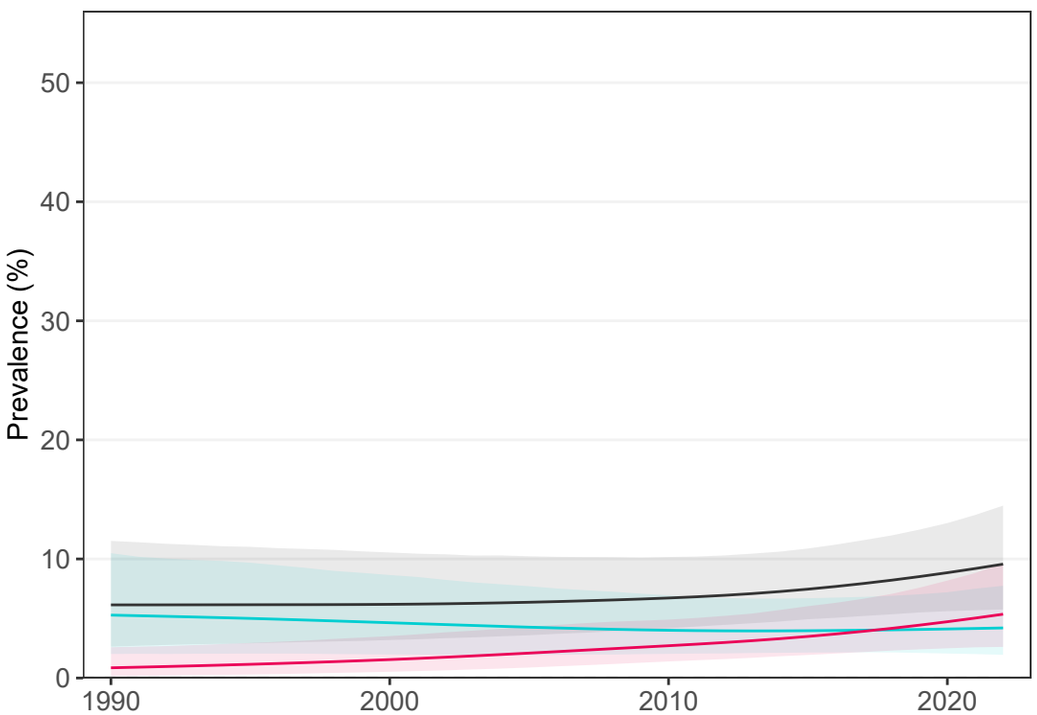


Gabon

School-aged children and adolescents

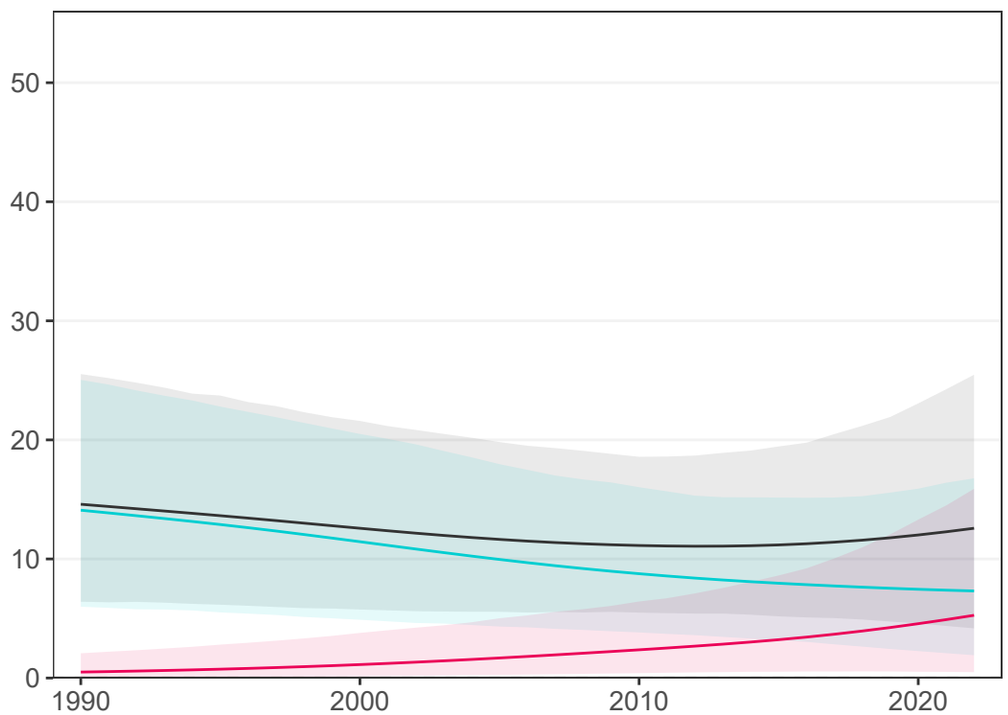
Girls

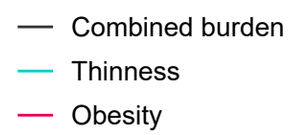
3 studies (2 national)



Boys

1 study (0 national)

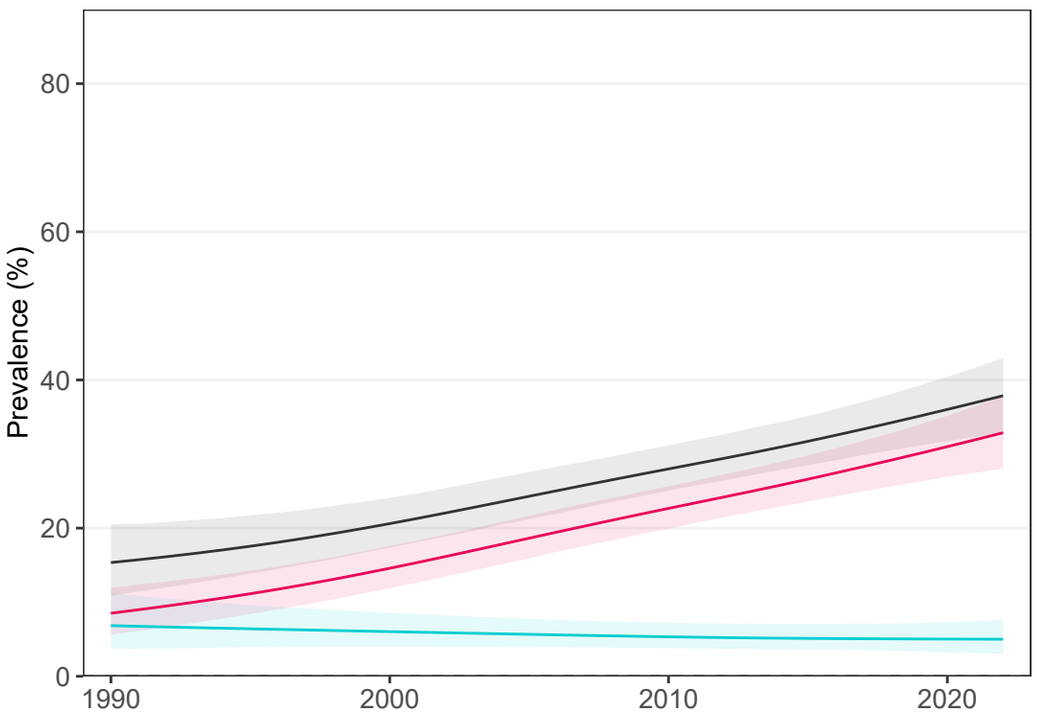




Adults

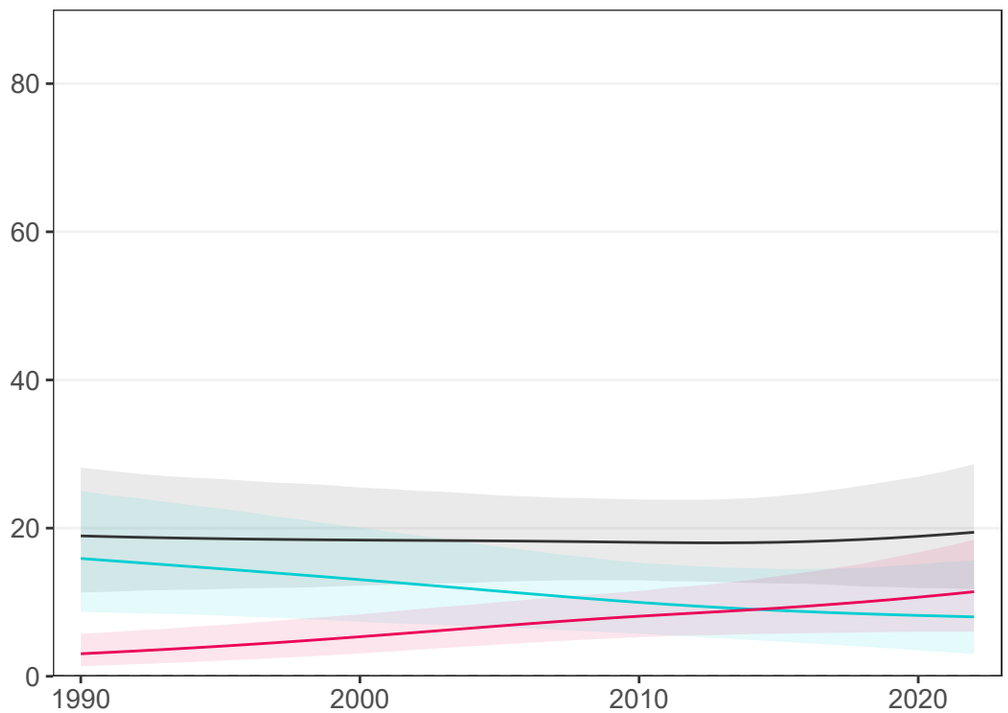
Women

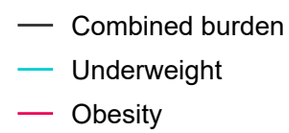
4 studies (3 national)



Men

1 study (0 national)



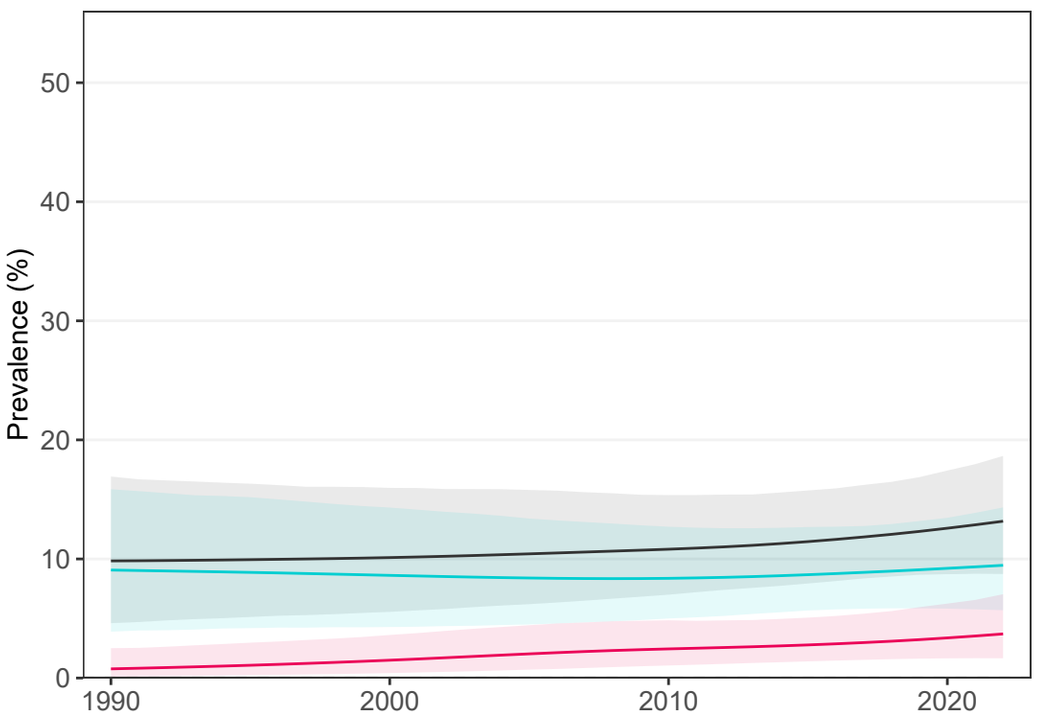


Gambia

School-aged children and adolescents

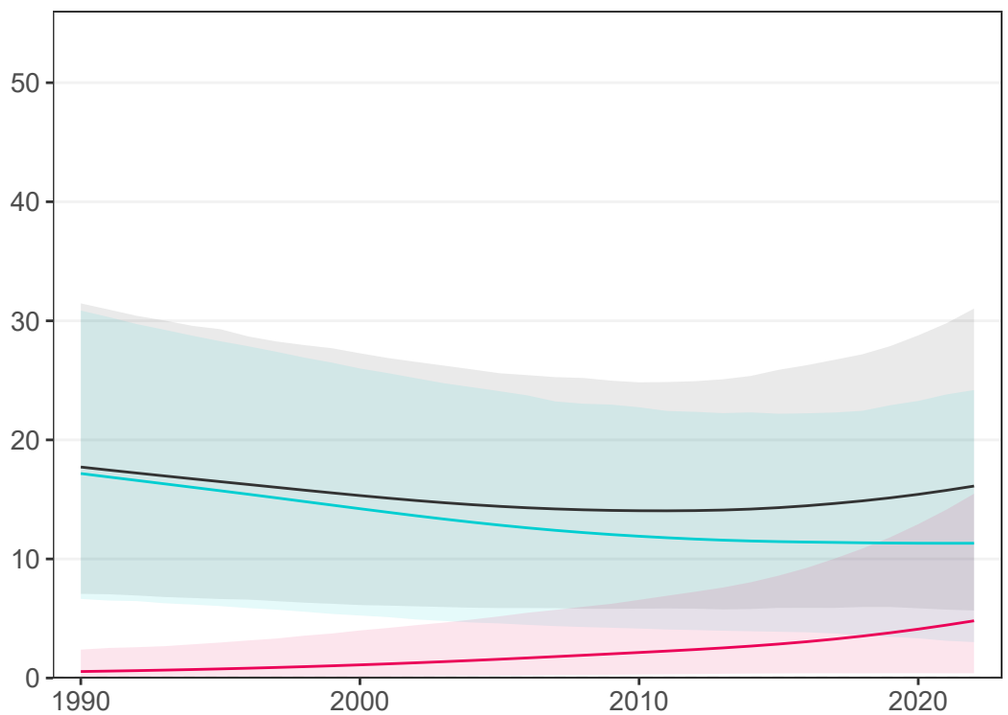
Girls

3 studies (3 national)



Boys

No studies

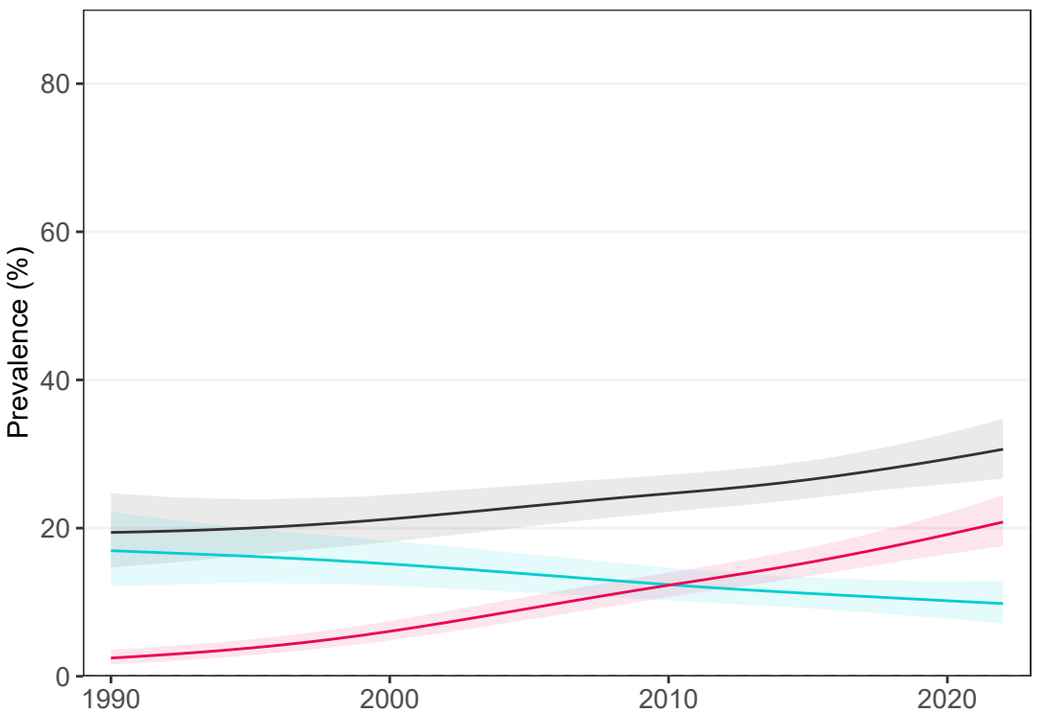


Combined burden
Thinness
Obesity

Adults

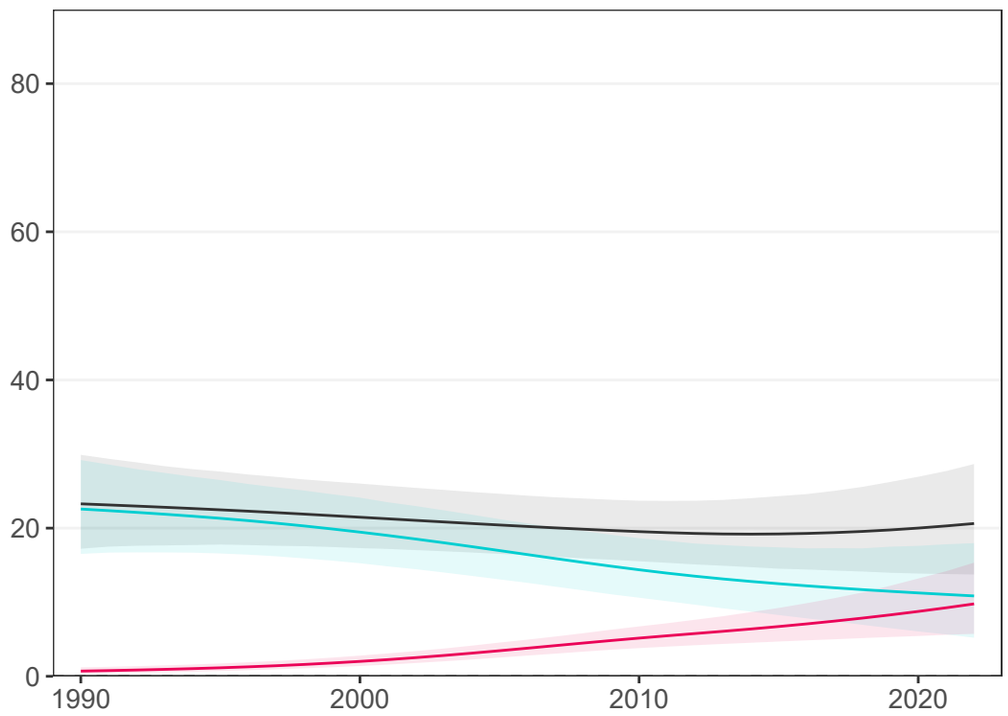
Women

6 studies (5 national)



Men

3 studies (2 national)



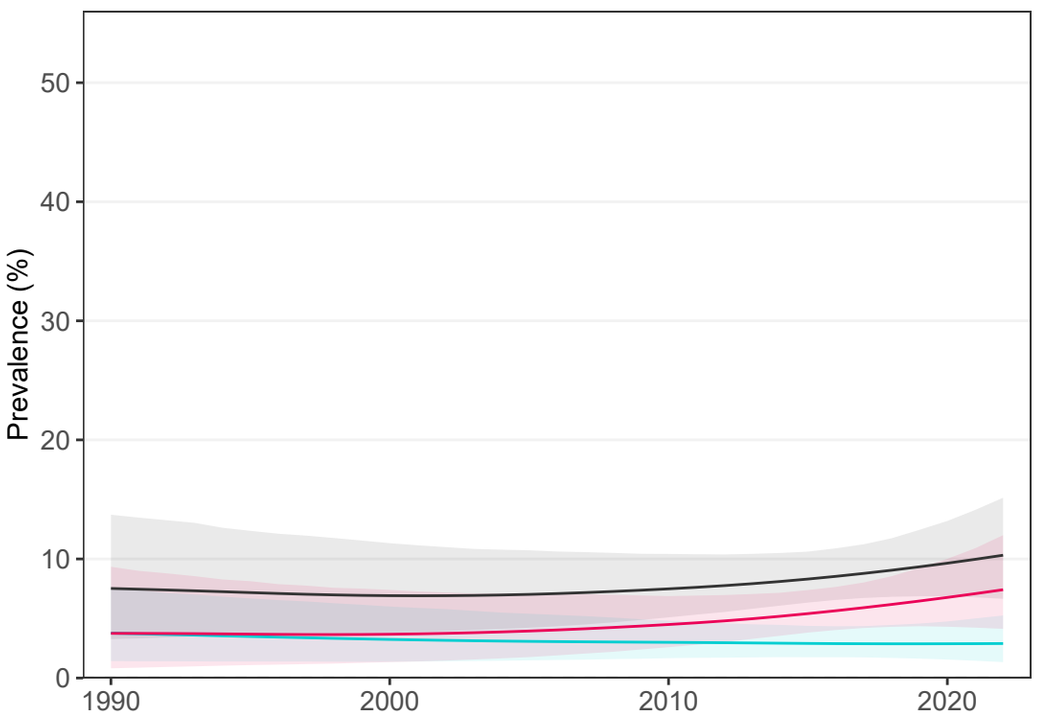
Combined burden
Underweight
Obesity

Georgia

School-aged children and adolescents

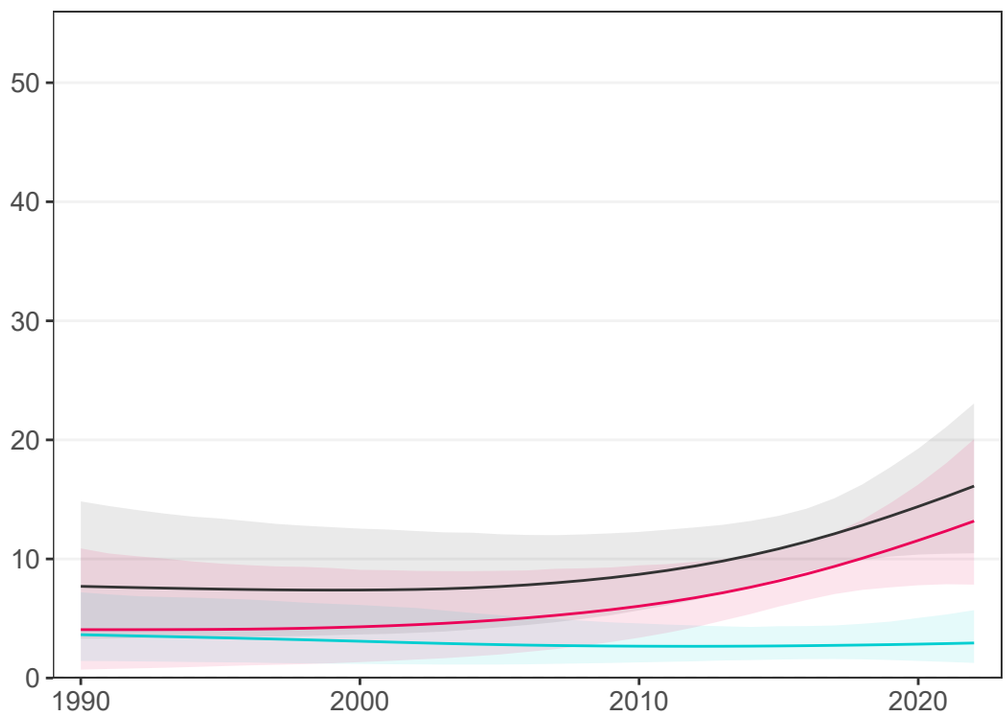
Girls

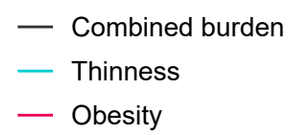
4 studies (4 national)



Boys

4 studies (4 national)

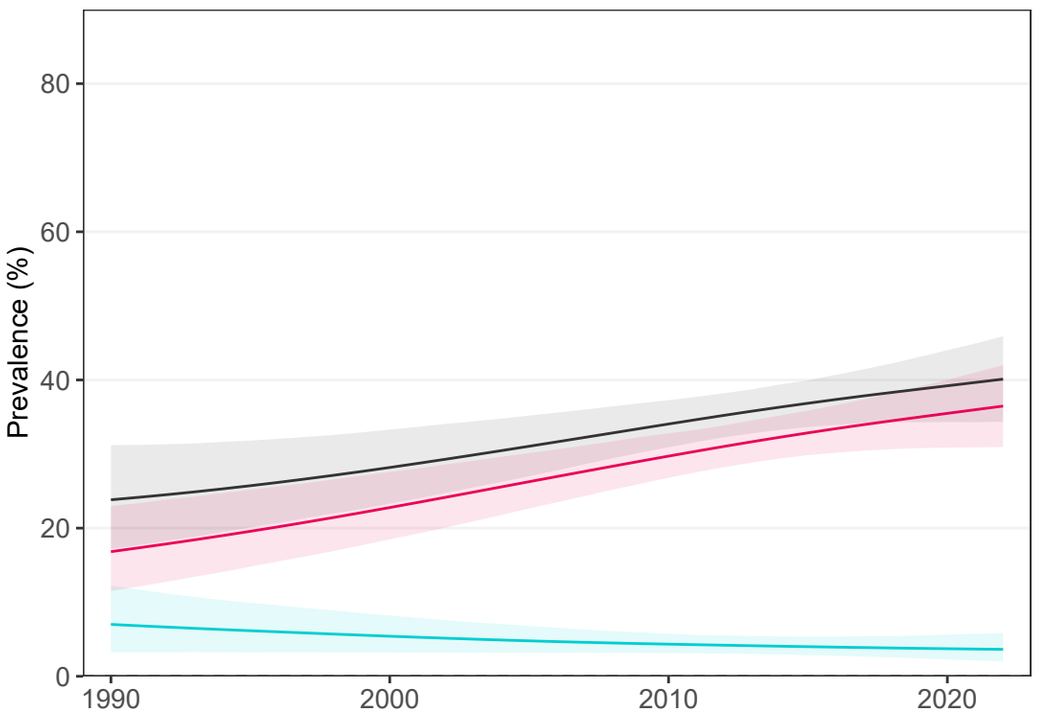




Adults

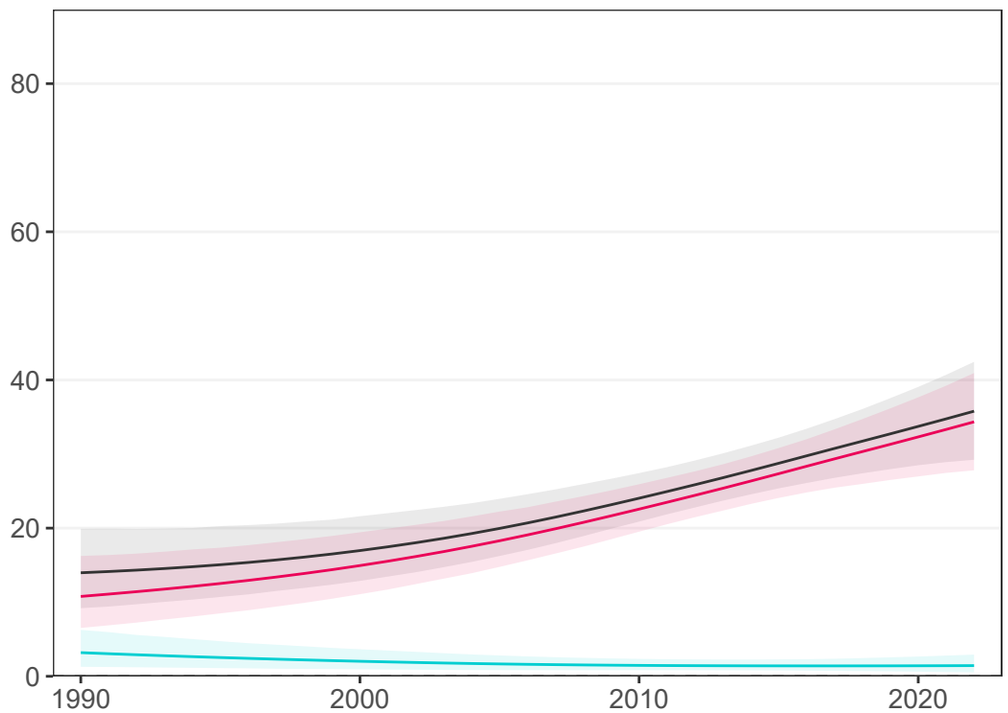
Women

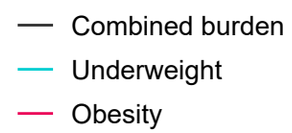
2 studies (2 national)



Men

2 studies (2 national)



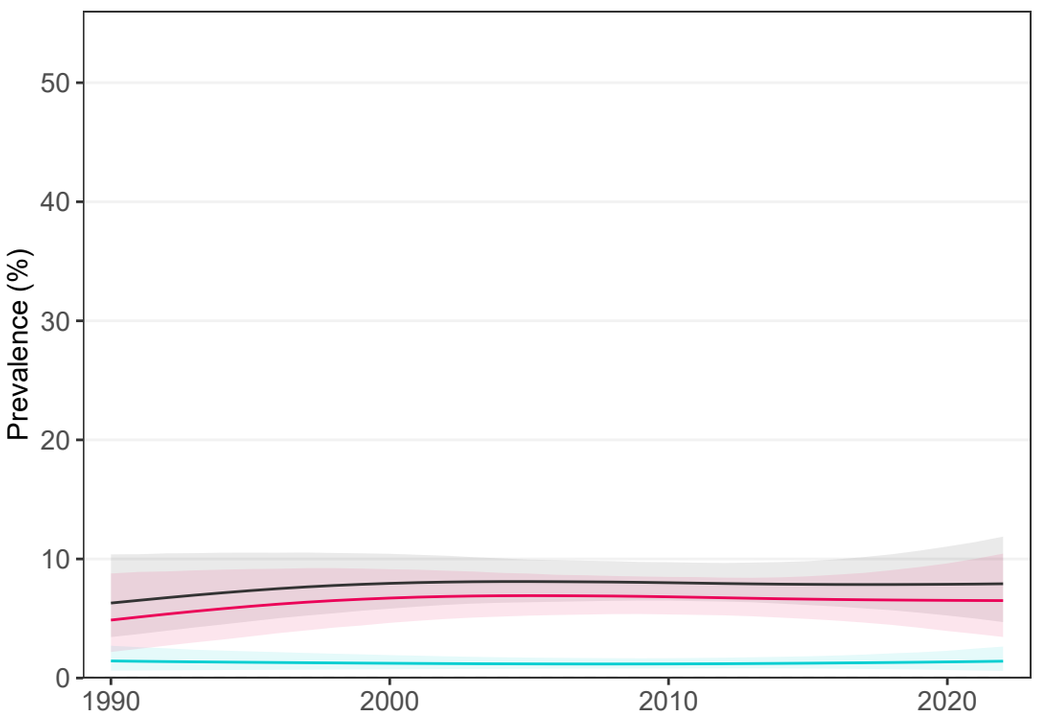


Germany

School-aged children and adolescents

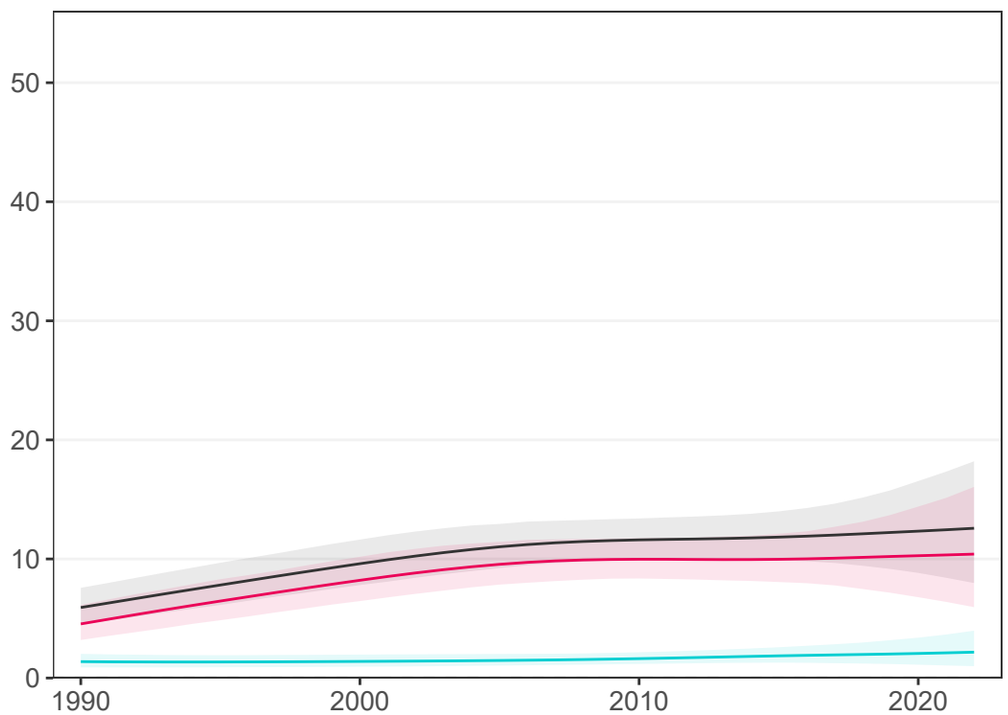
Girls

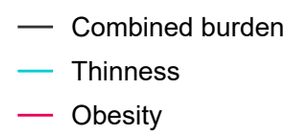
10 studies (4 national)



Boys

29 studies (16 national)

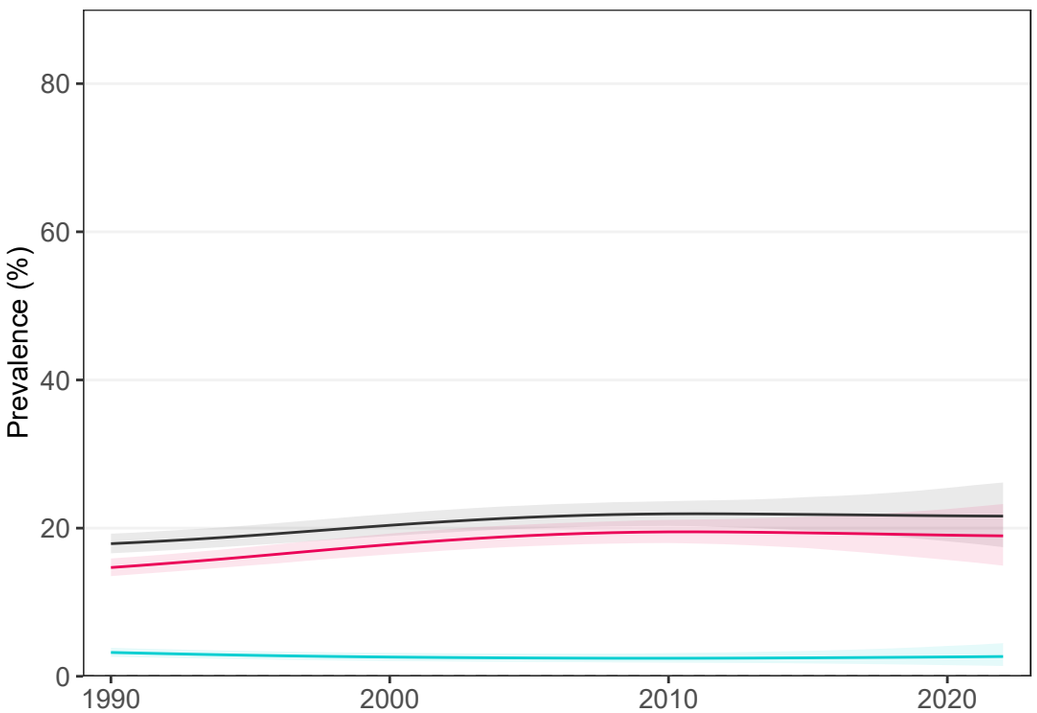




Adults

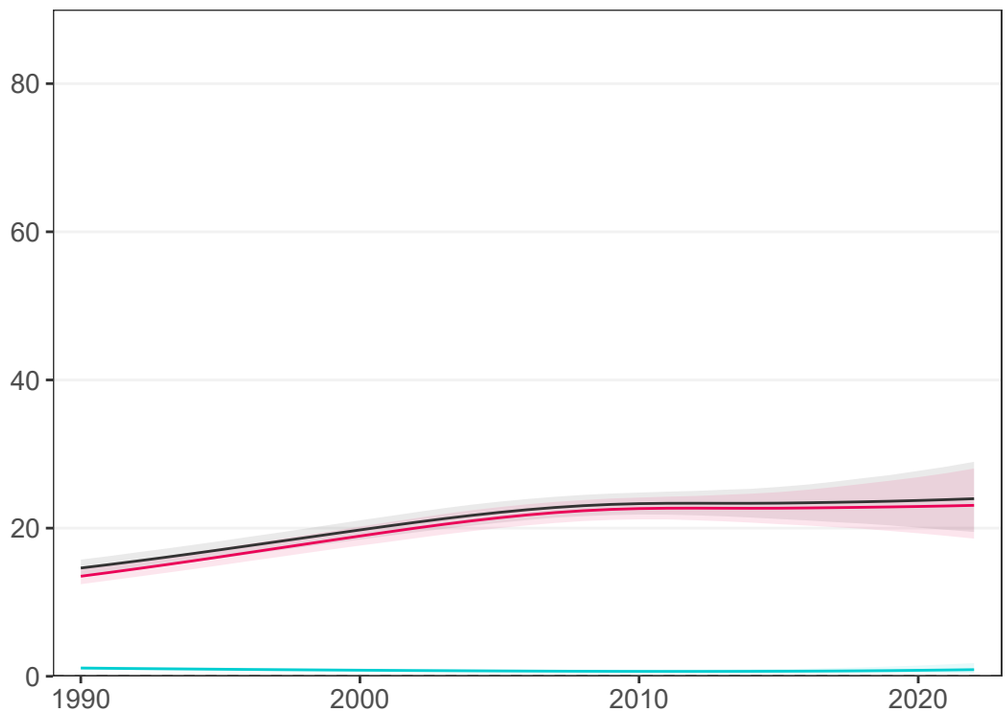
Women

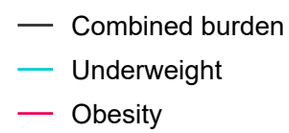
63 studies (2 national)



Men

82 studies (14 national)



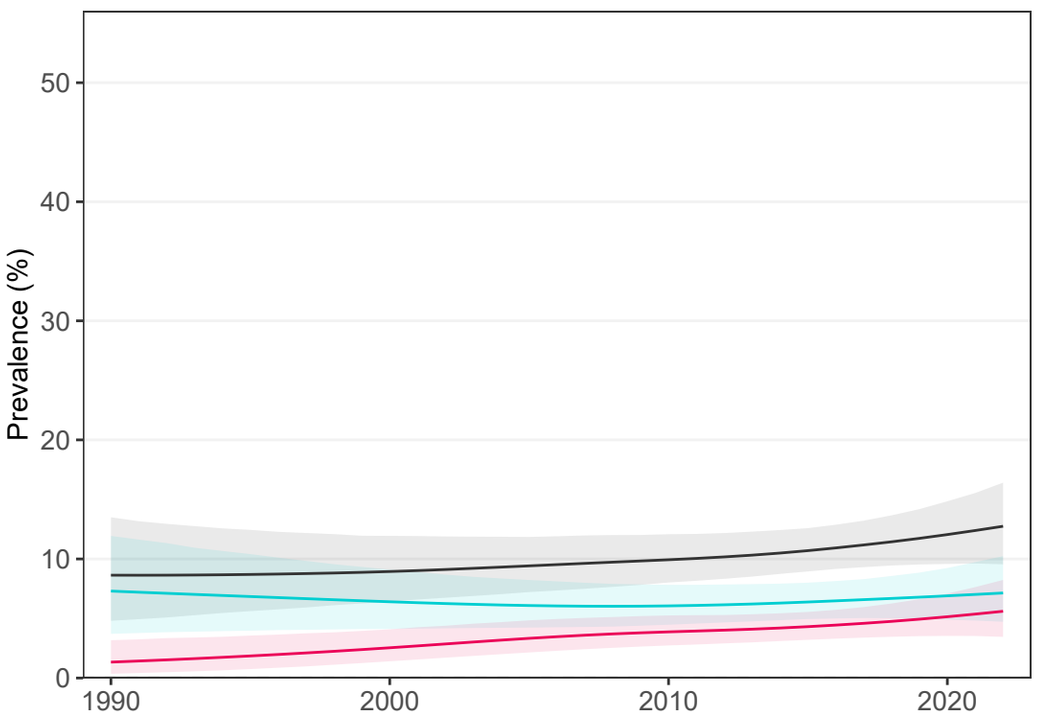


Ghana

School-aged children and adolescents

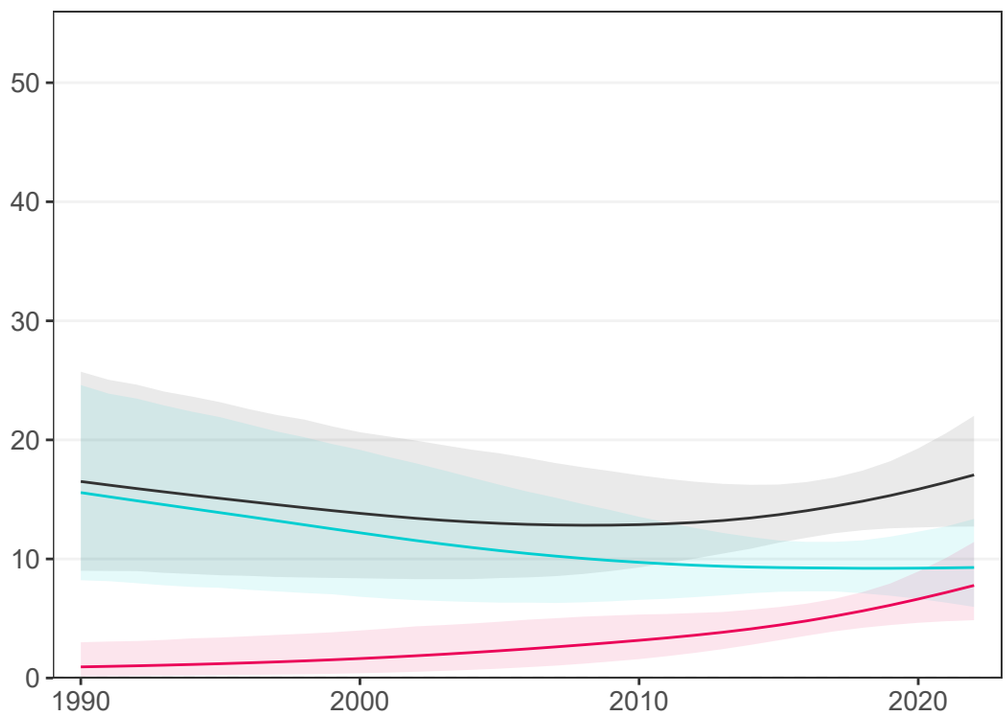
Girls

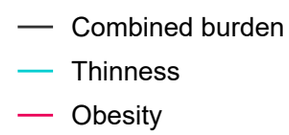
9 studies (5 national)



Boys

5 studies (2 national)

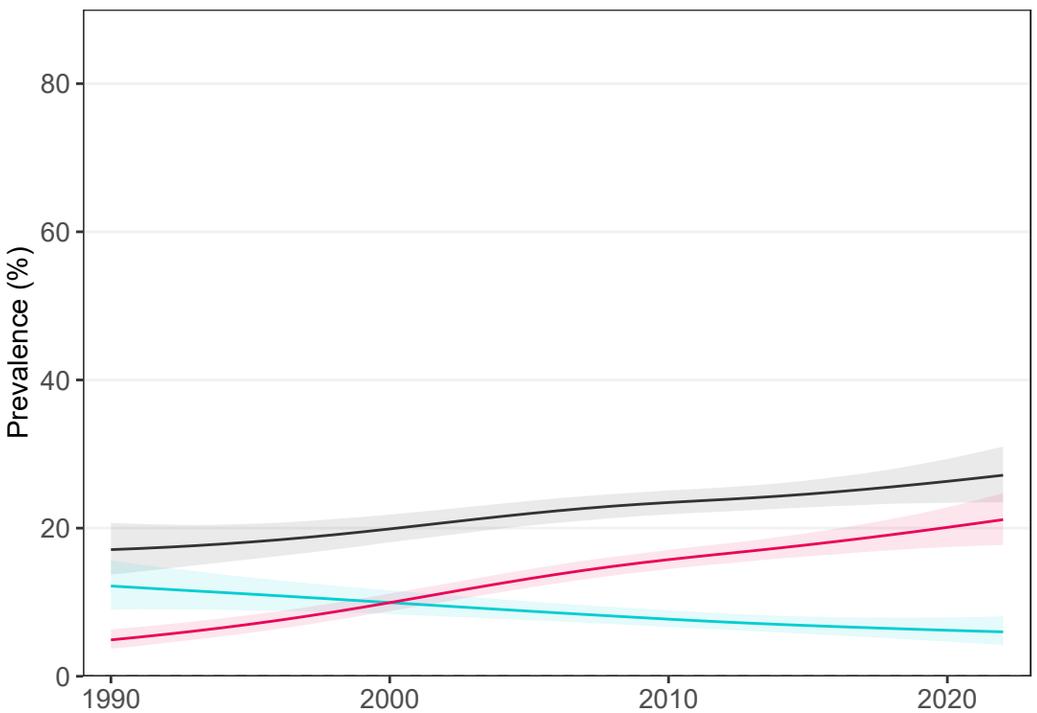




Adults

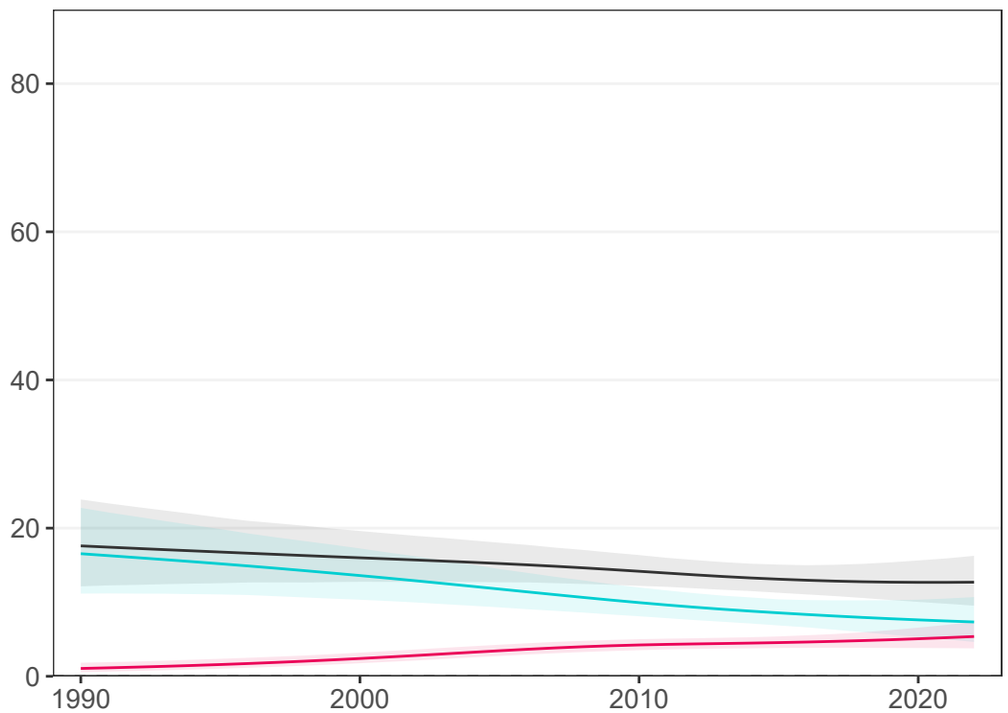
Women

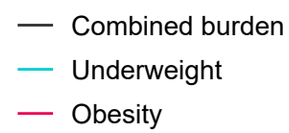
19 studies (8 national)



Men

12 studies (3 national)



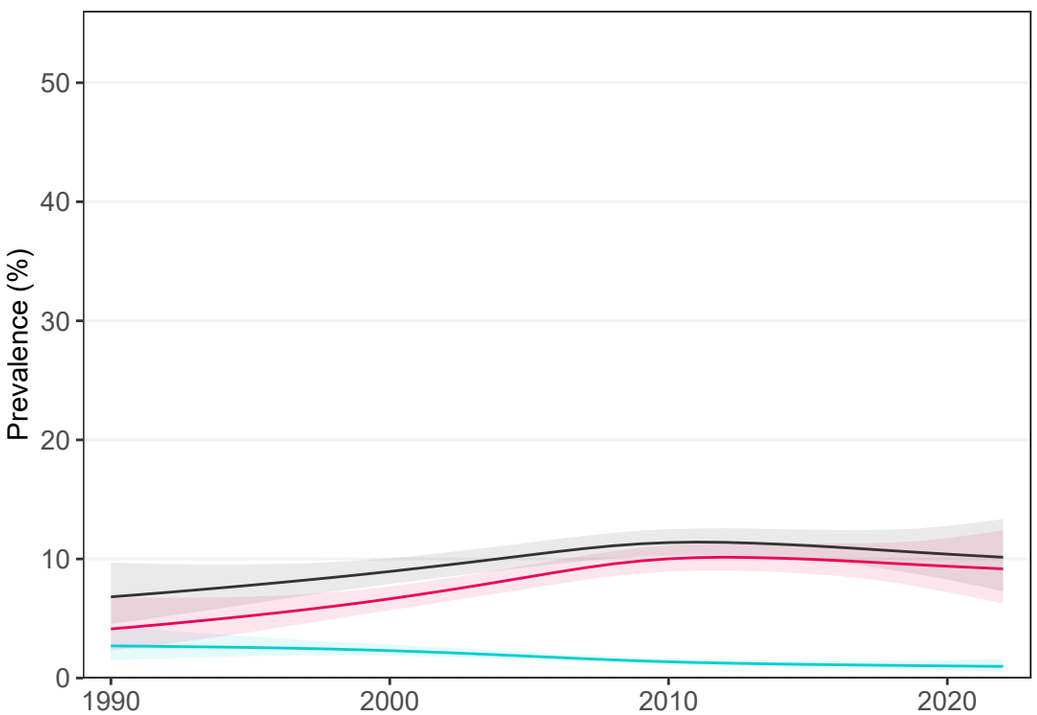


Greece

School-aged children and adolescents

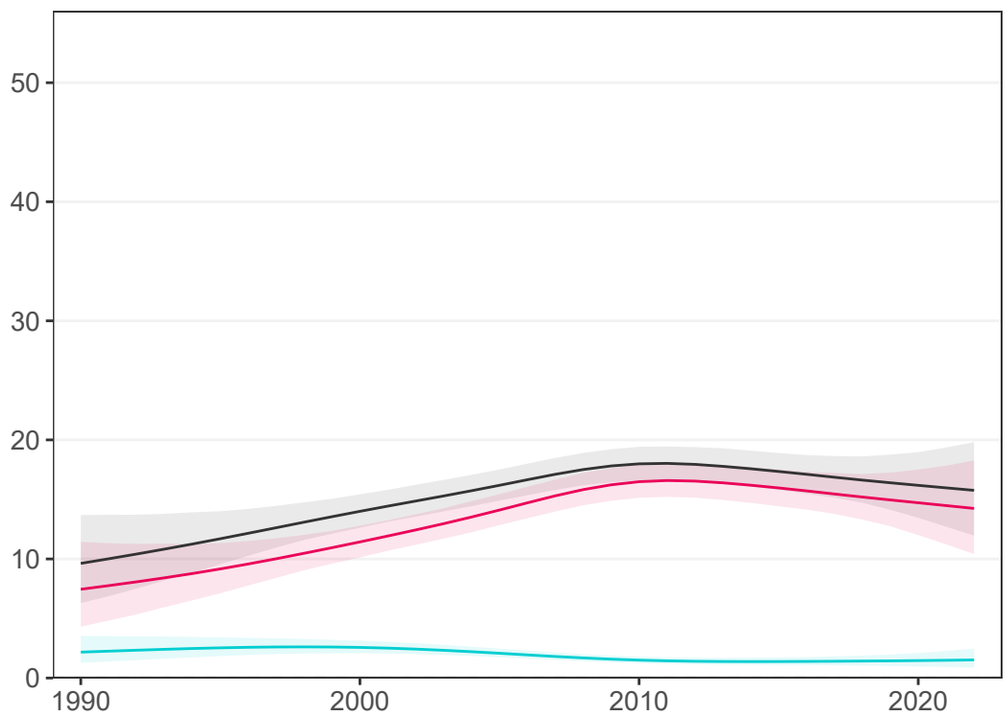
Girls

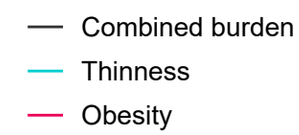
38 studies (24 national)



Boys

37 studies (24 national)

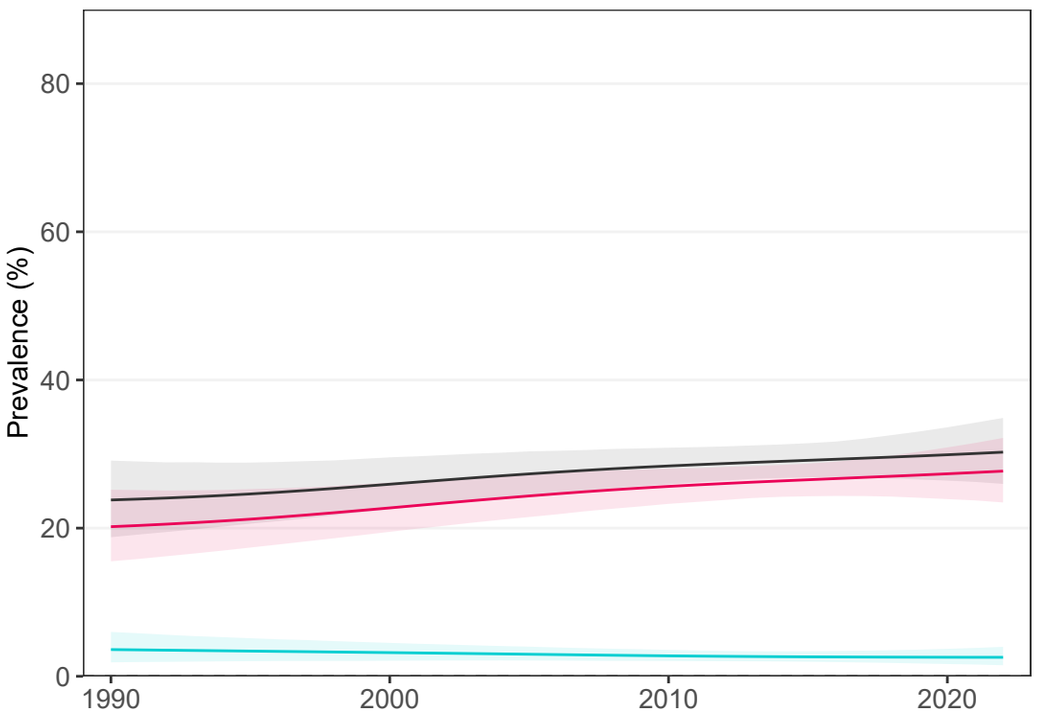




Adults

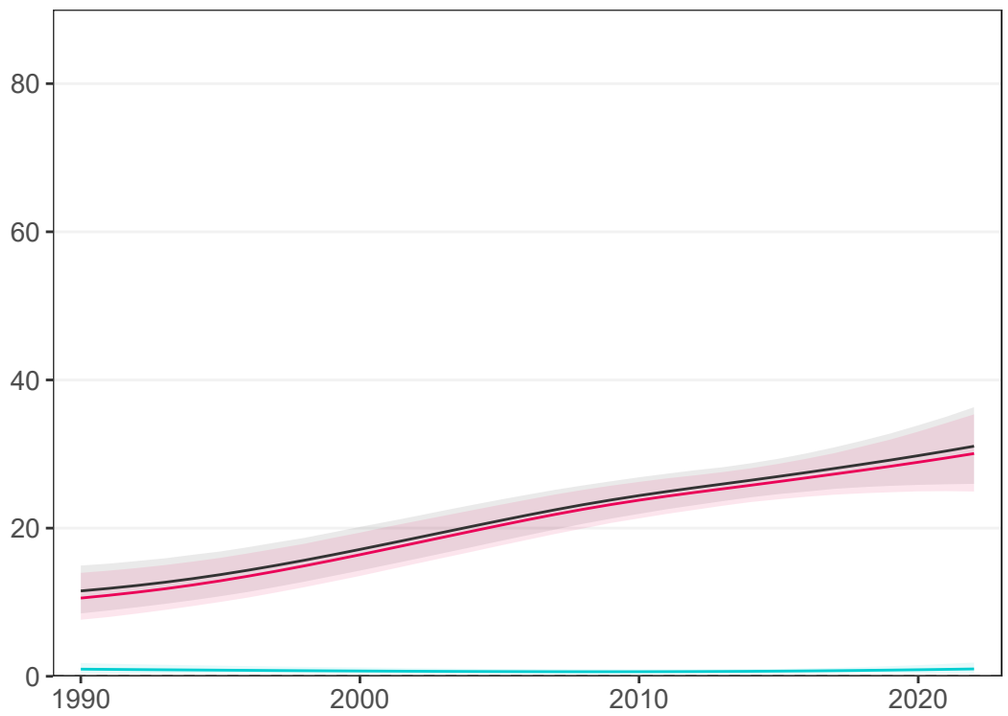
Women

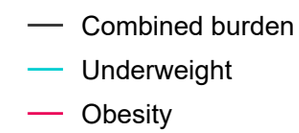
13 studies (6 national)



Men

13 studies (5 national)



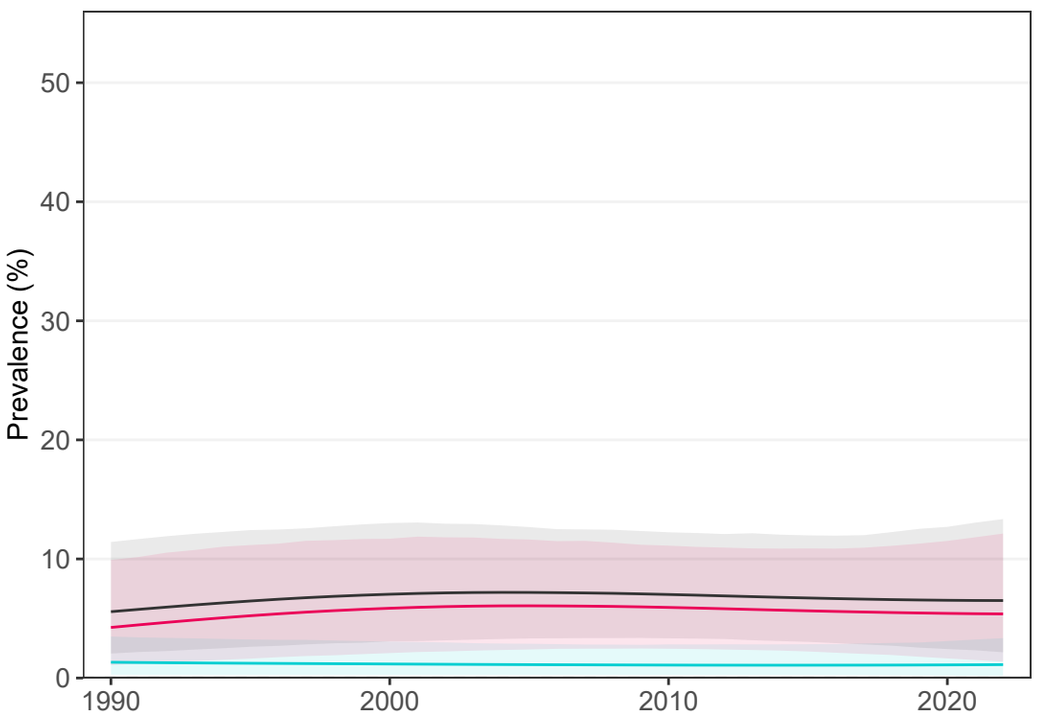


Greenland

School-aged children and adolescents

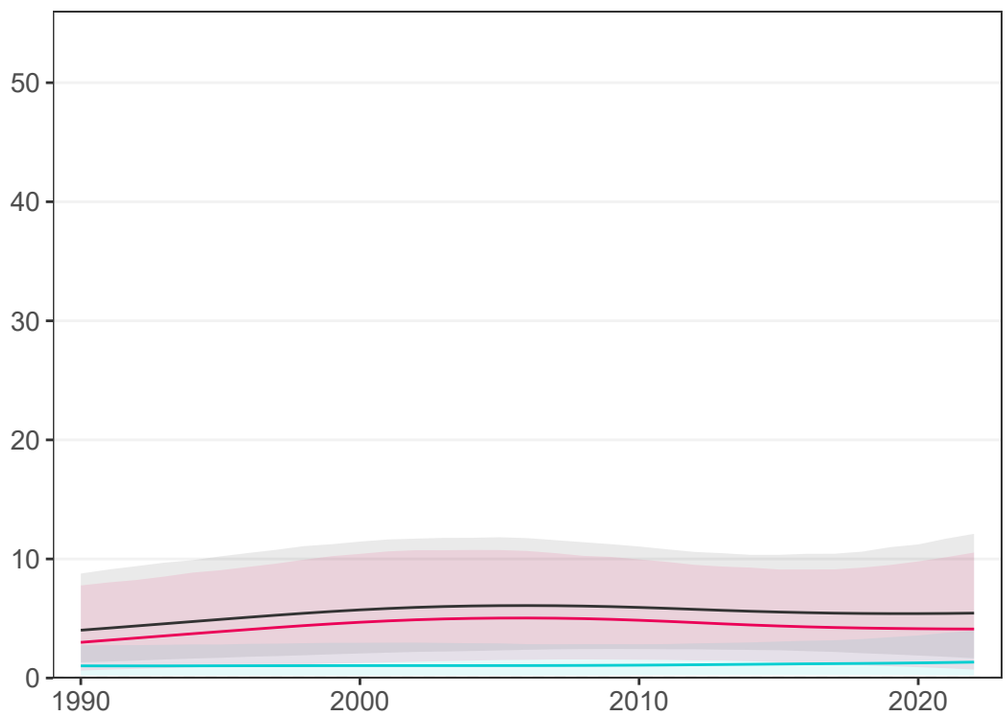
Girls

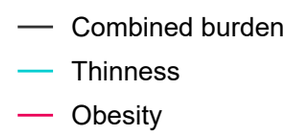
2 studies (2 national)



Boys

2 studies (2 national)

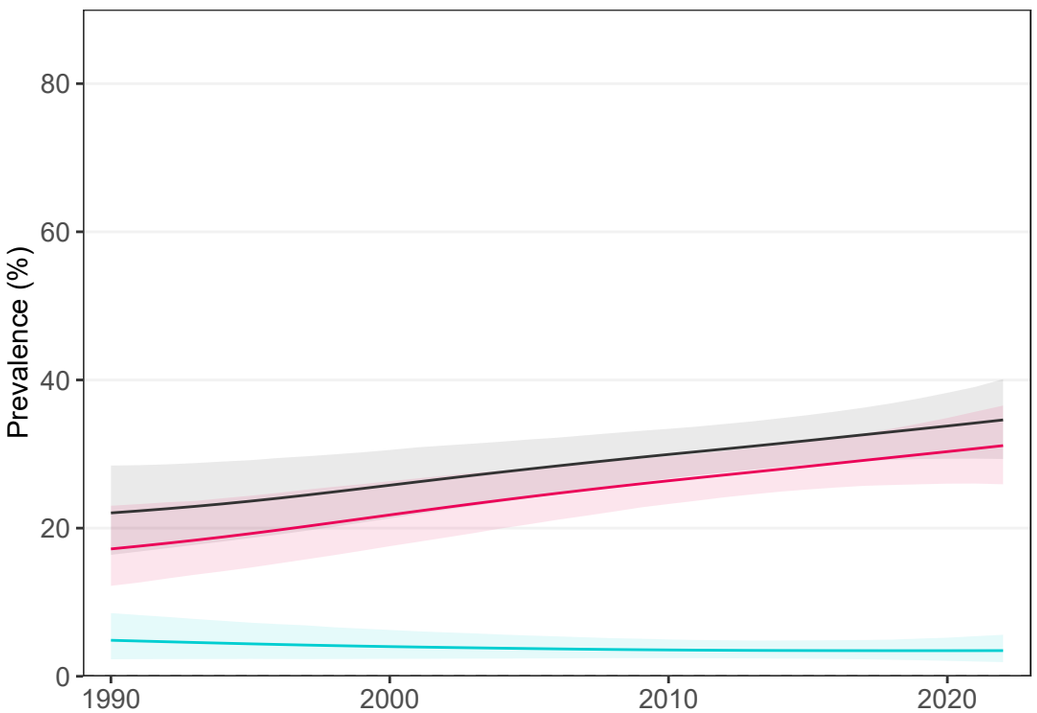




Adults

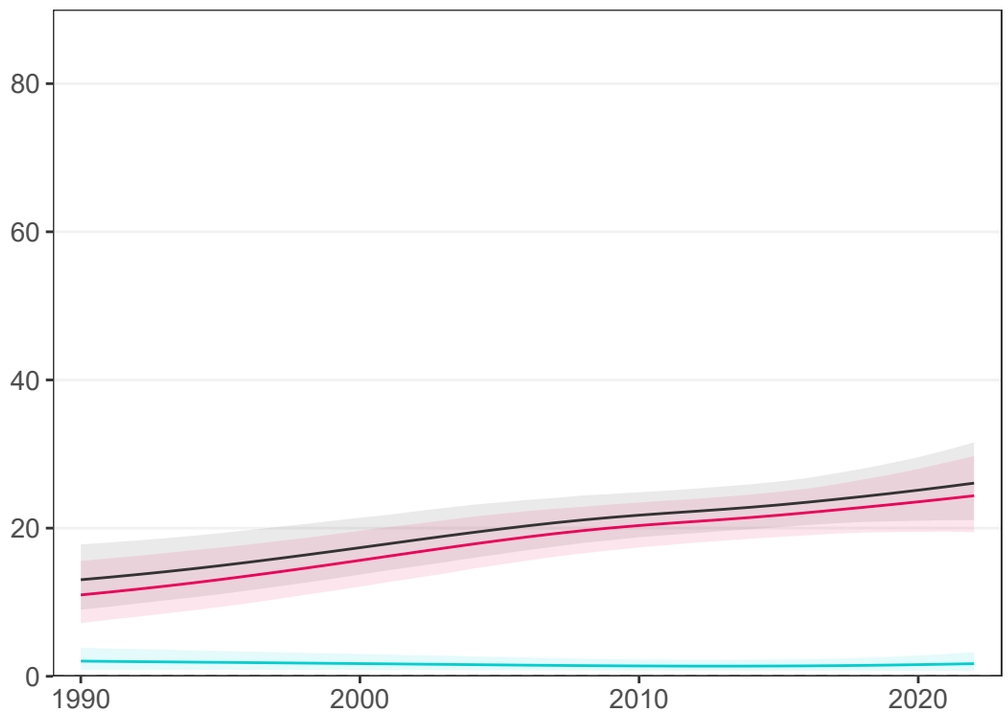
Women

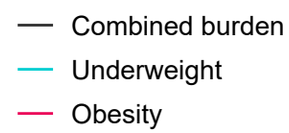
2 studies (2 national)



Men

2 studies (2 national)



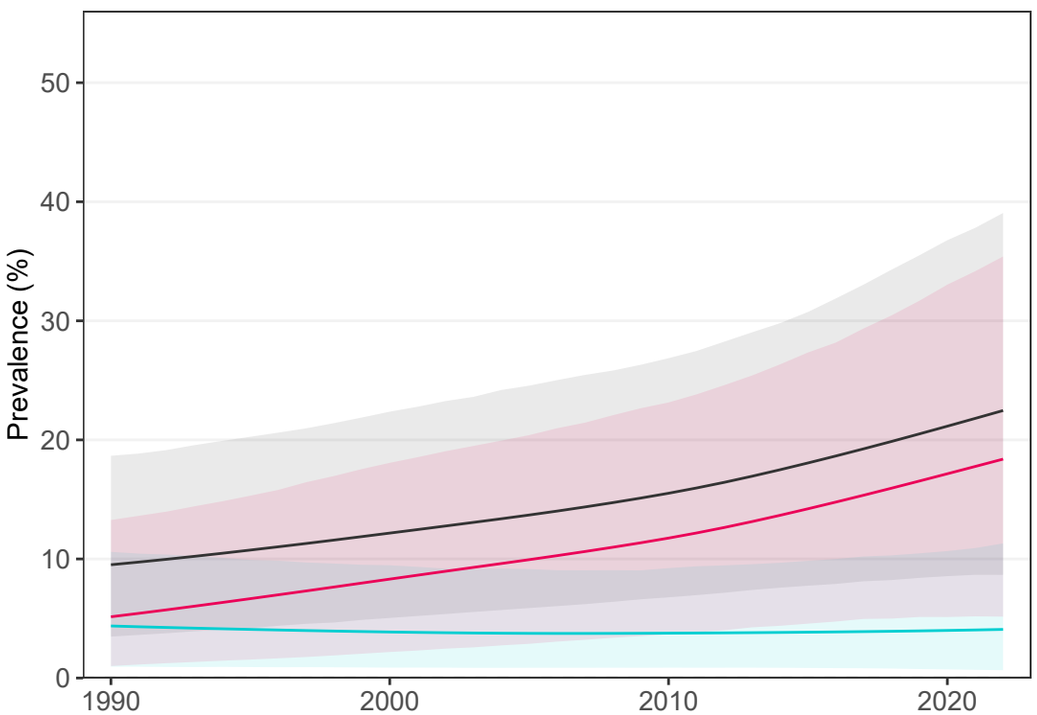


Grenada

School-aged children and adolescents

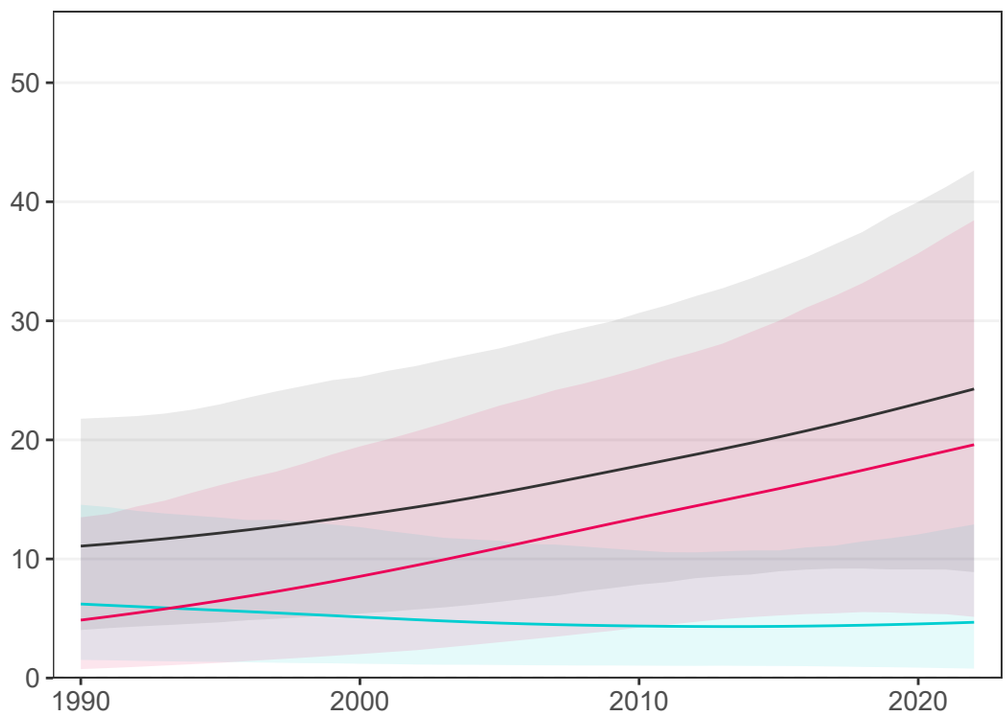
Girls

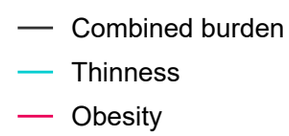
No studies



Boys

No studies

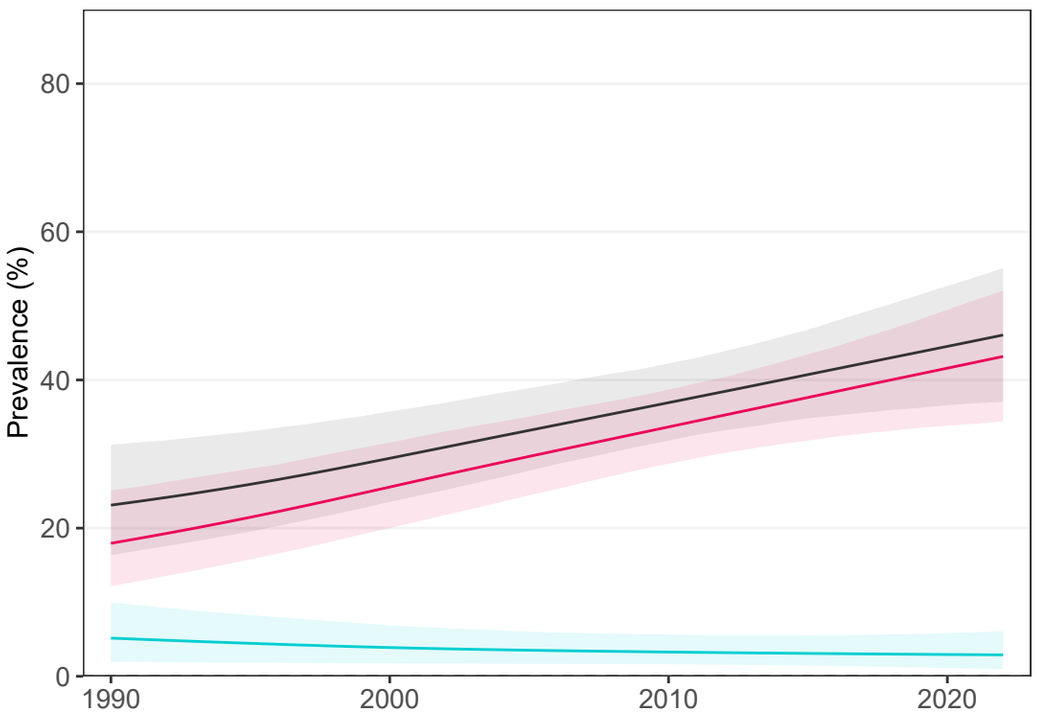




Adults

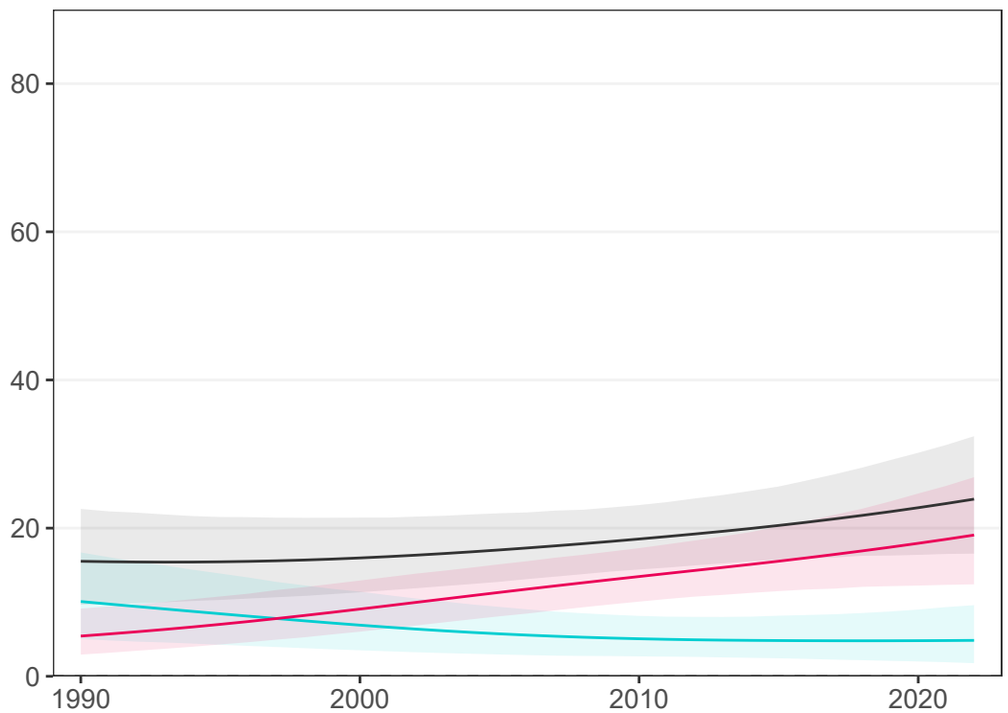
Women

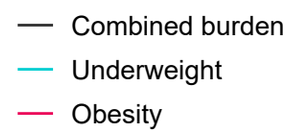
1 study (1 national)



Men

1 study (1 national)



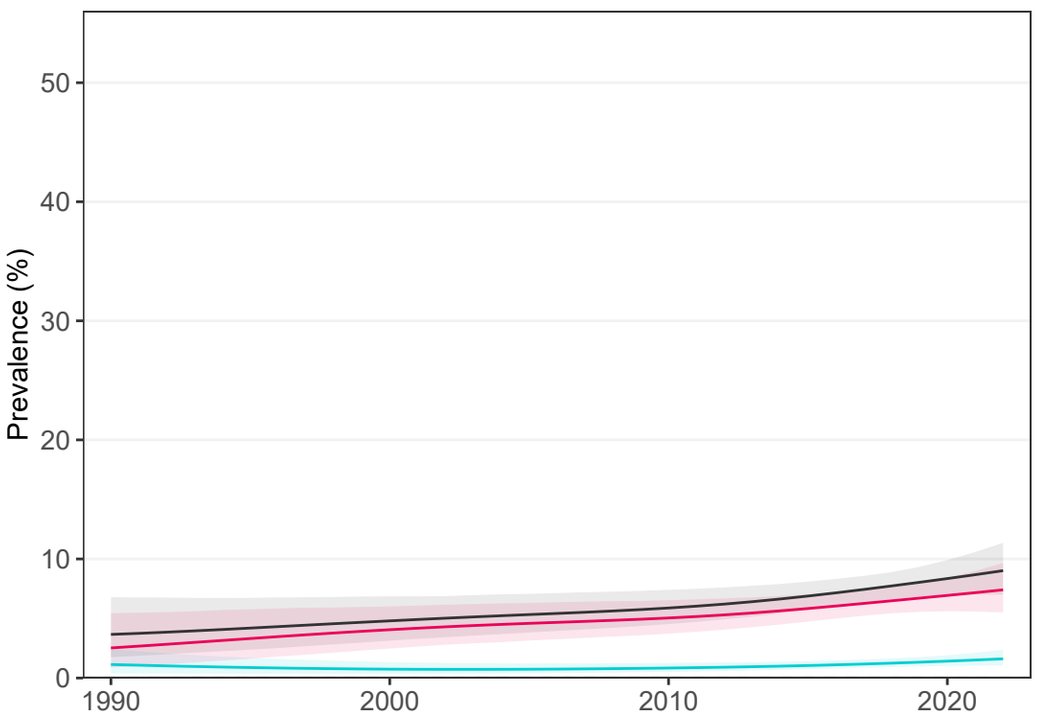


Guatemala

School-aged children and adolescents

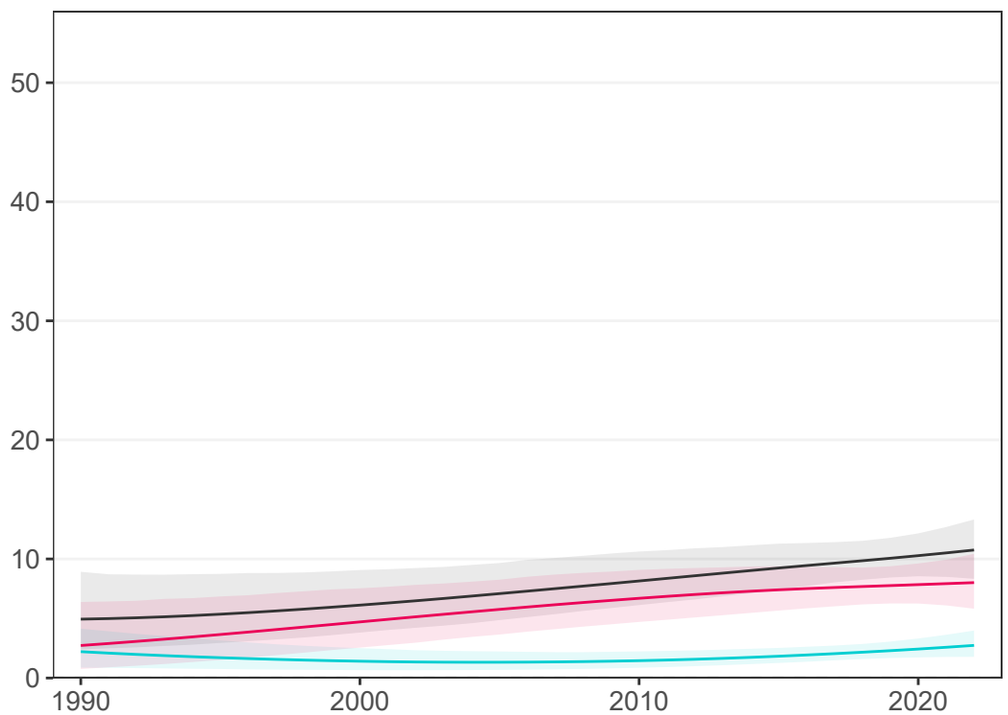
Girls

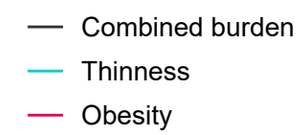
13 studies (10 national)



Boys

7 studies (4 national)

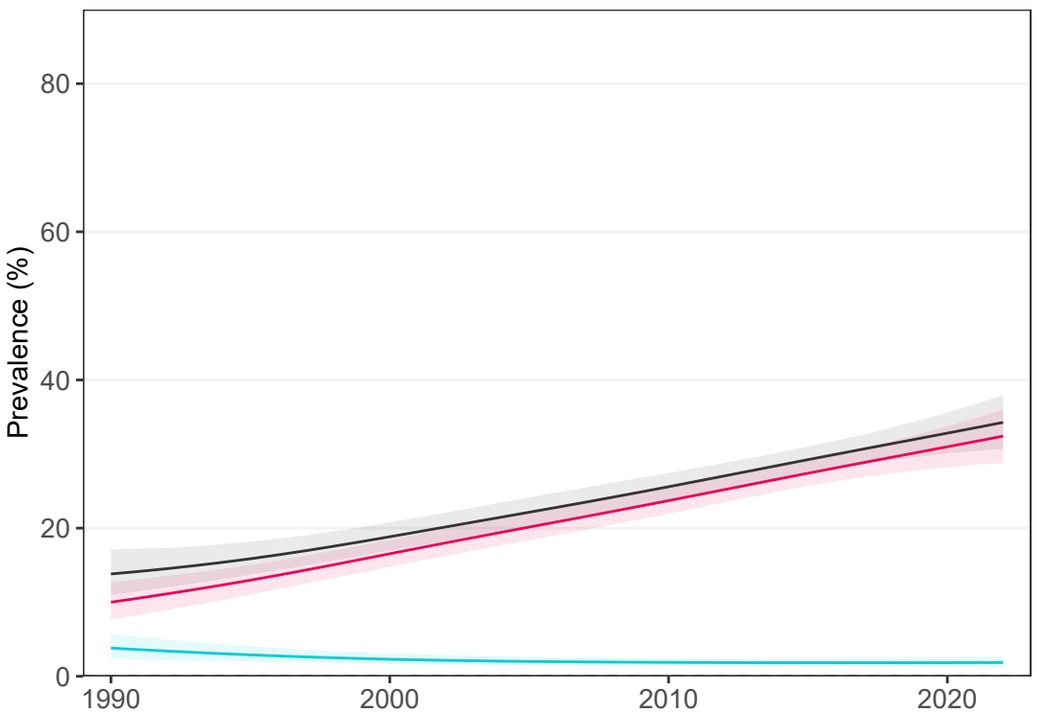




Adults

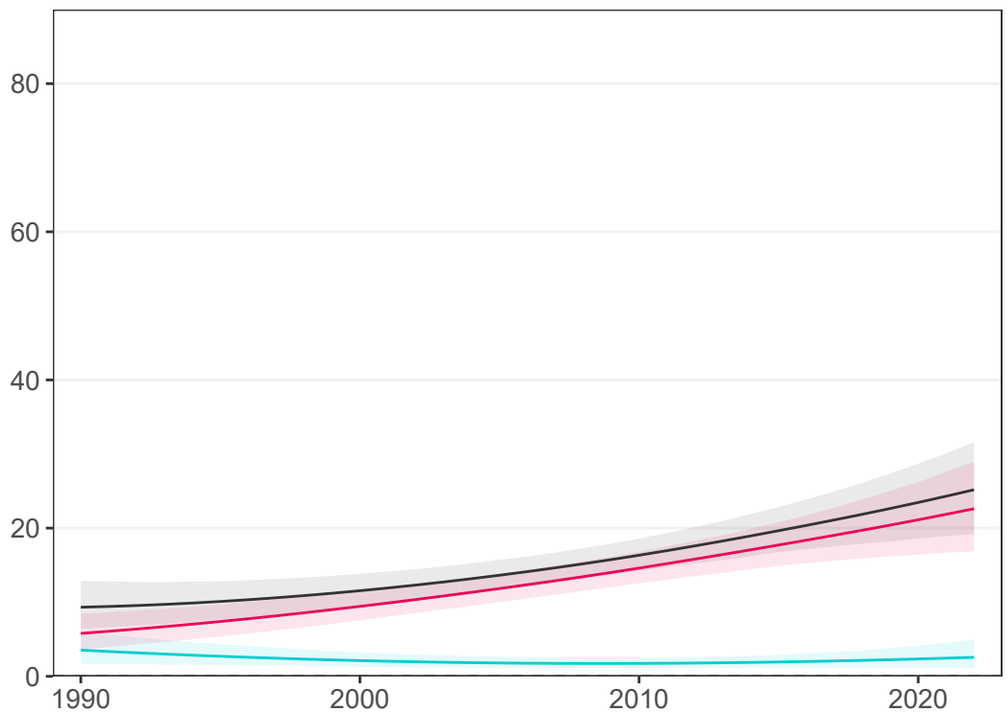
Women

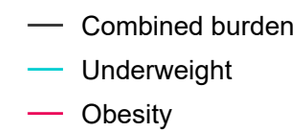
15 studies (10 national)



Men

7 studies (2 national)



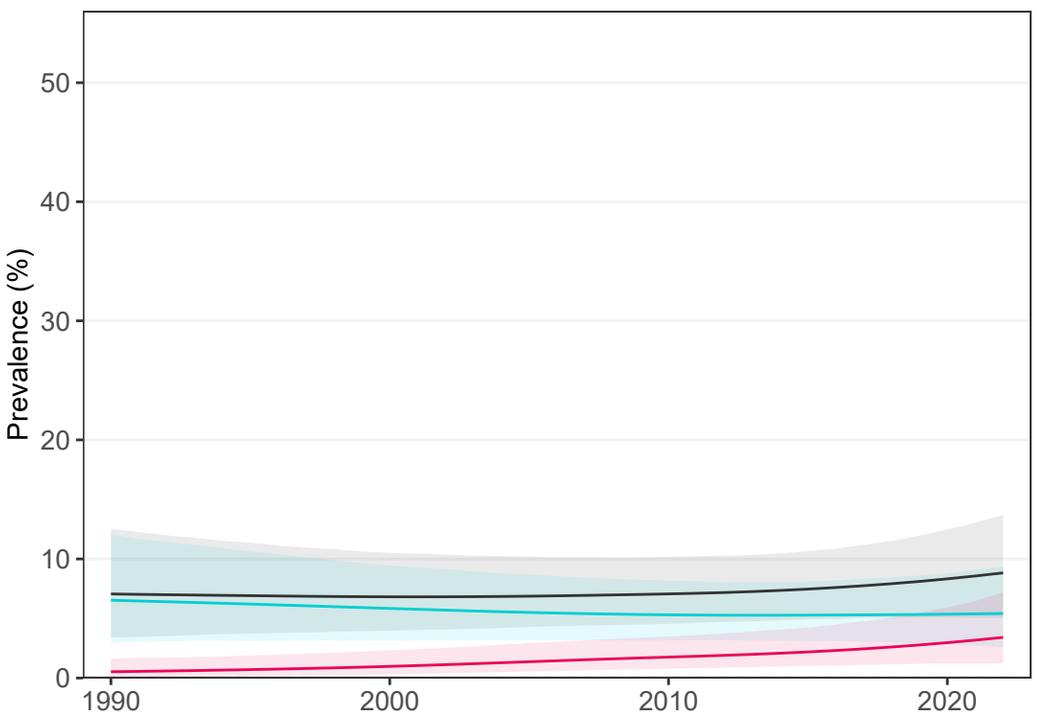


Guinea

School-aged children and adolescents

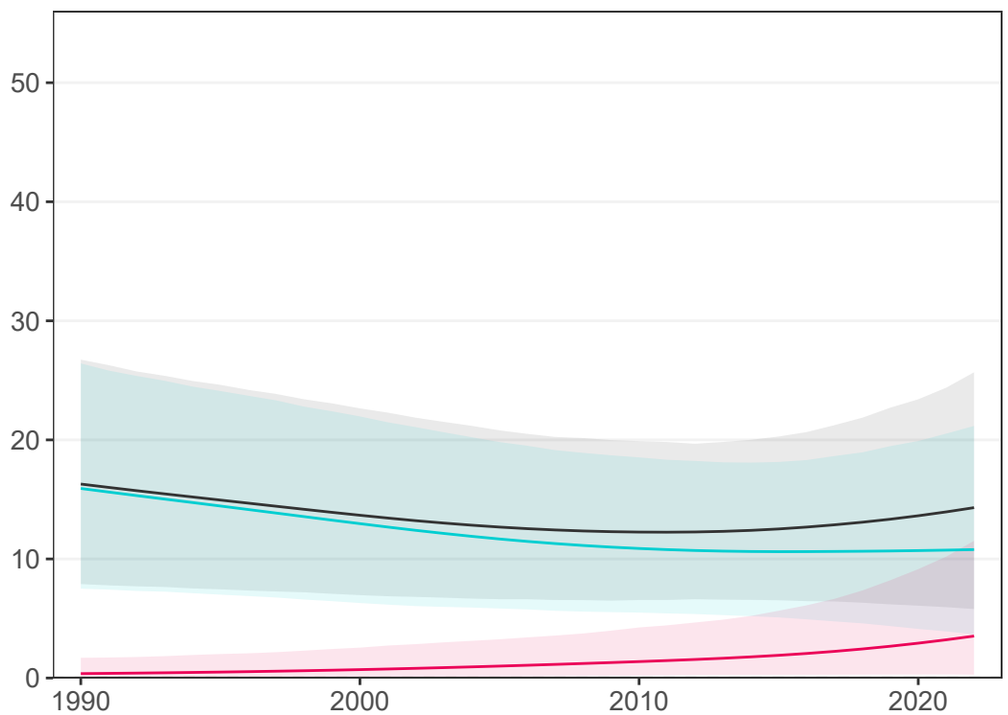
Girls

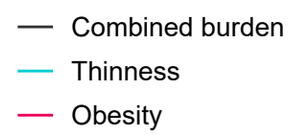
4 studies (3 national)



Boys

1 study (0 national)

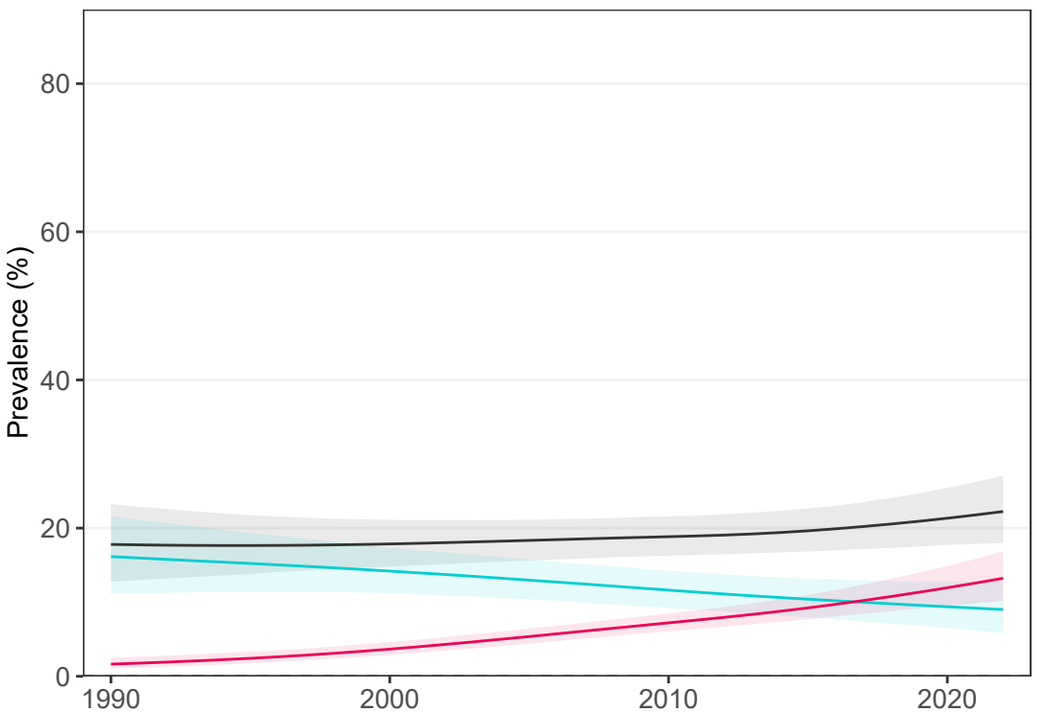




Adults

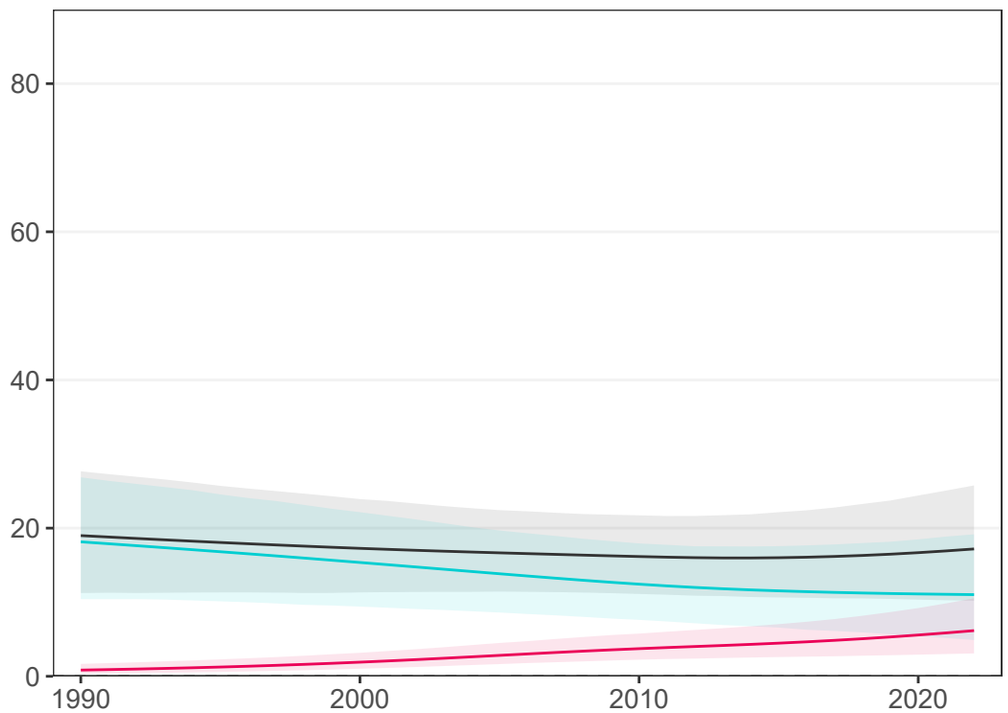
Women

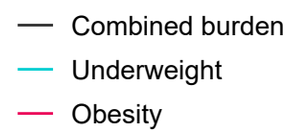
5 studies (4 national)



Men

1 study (0 national)



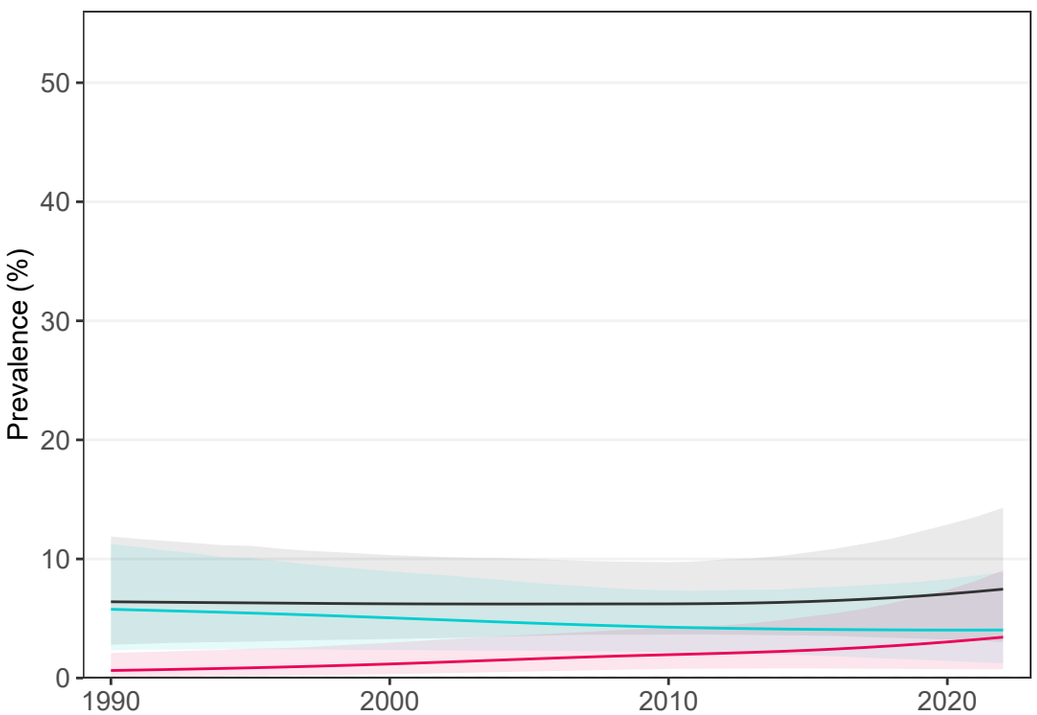


Guinea Bissau

School-aged children and adolescents

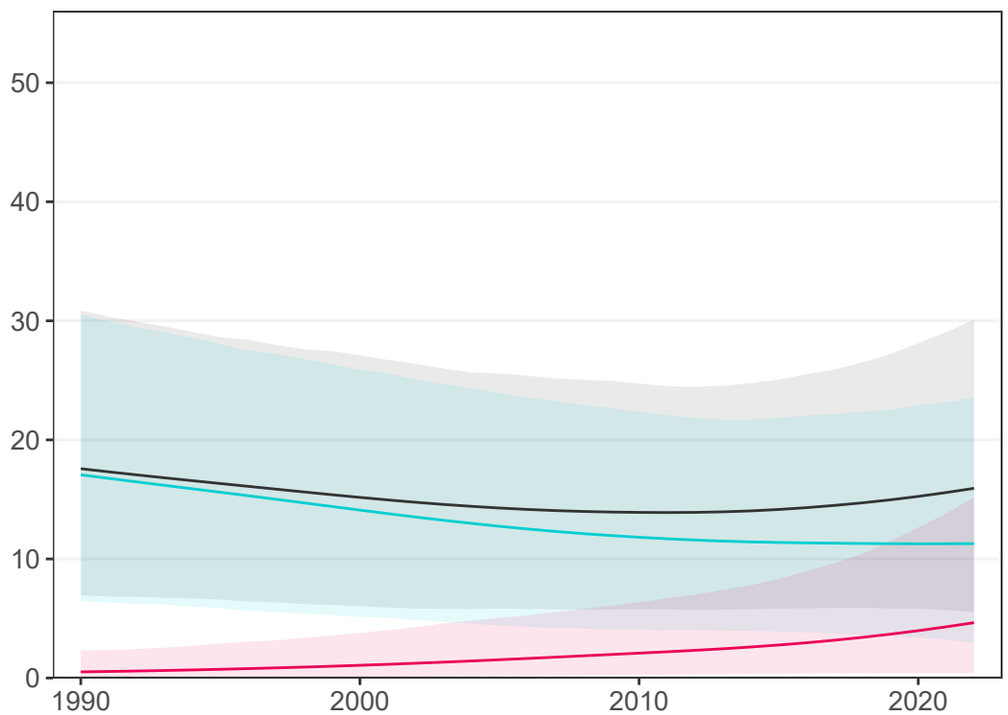
Girls

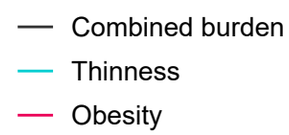
1 study (1 national)



Boys

No studies

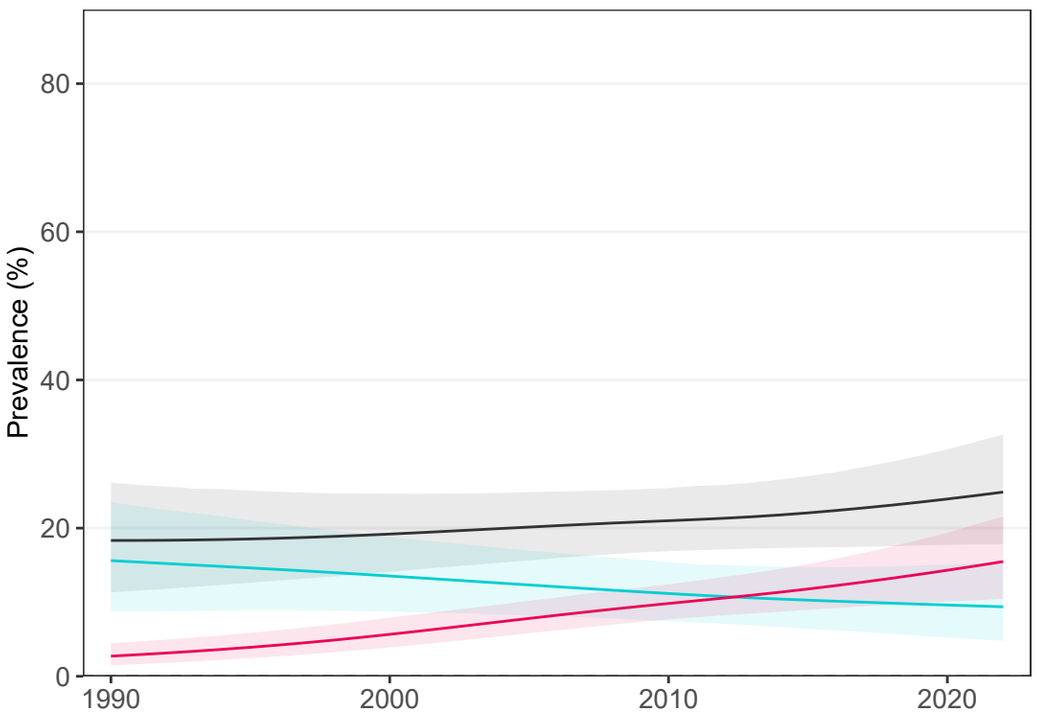




Adults

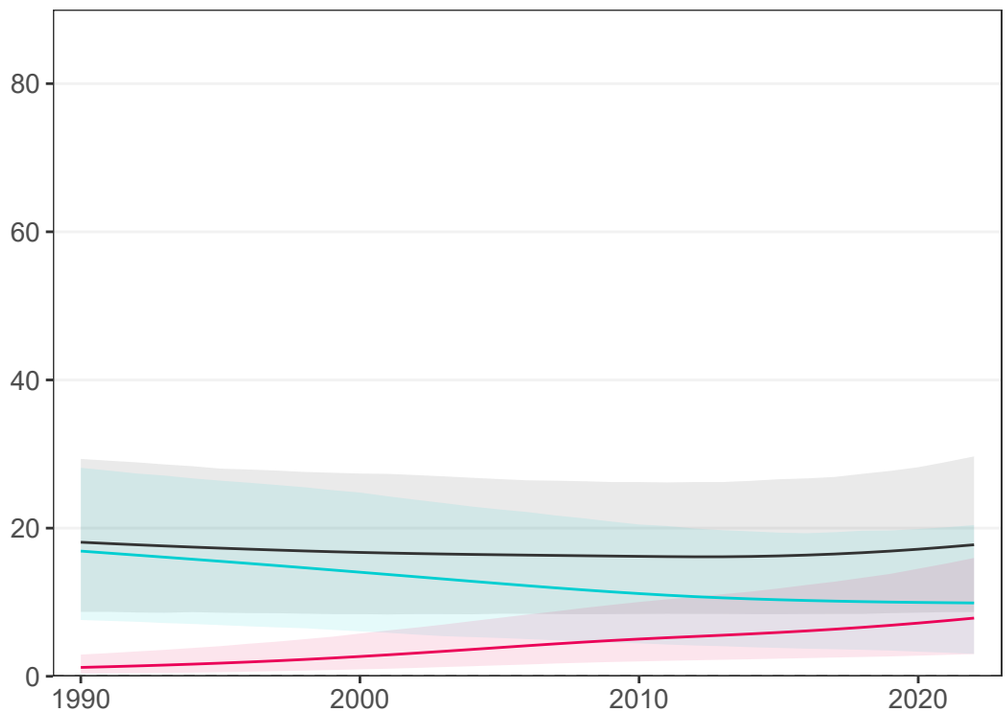
Women

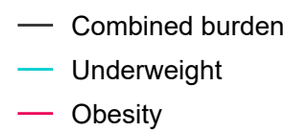
1 study (1 national)



Men

No studies



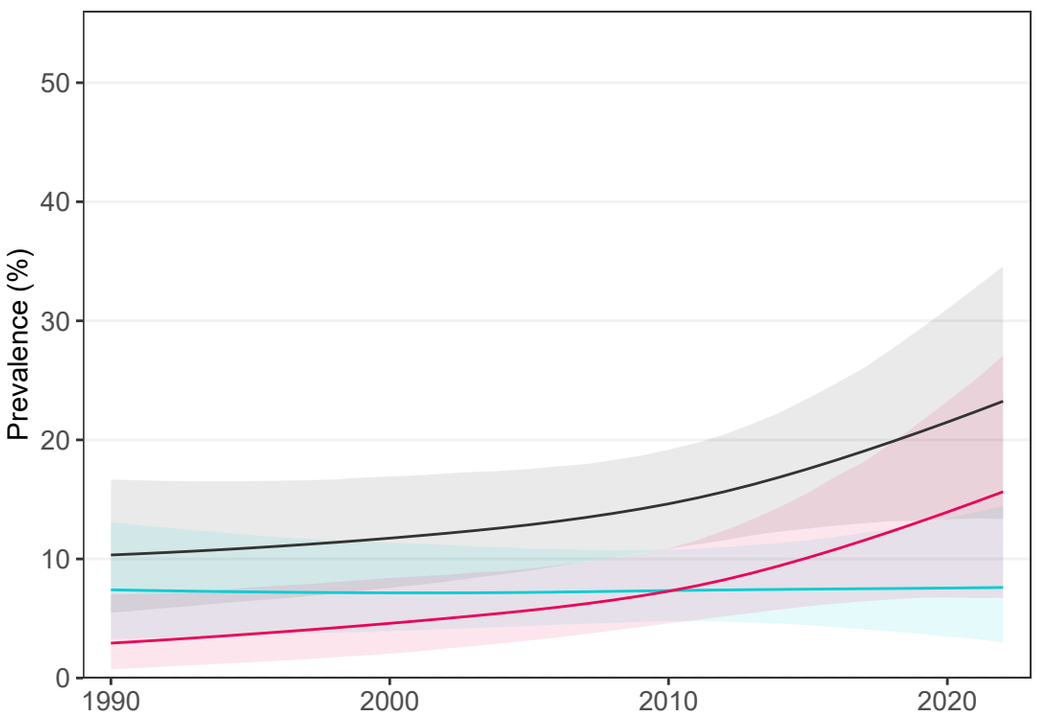


Guyana

School-aged children and adolescents

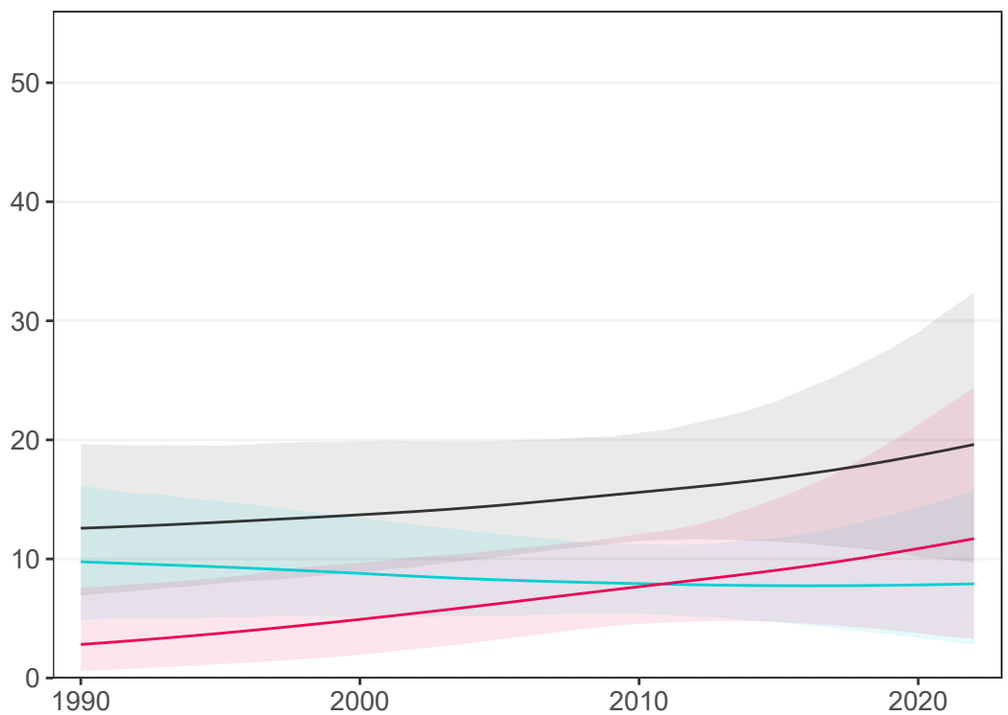
Girls

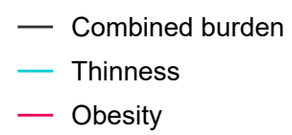
3 studies (3 national)



Boys

3 studies (3 national)

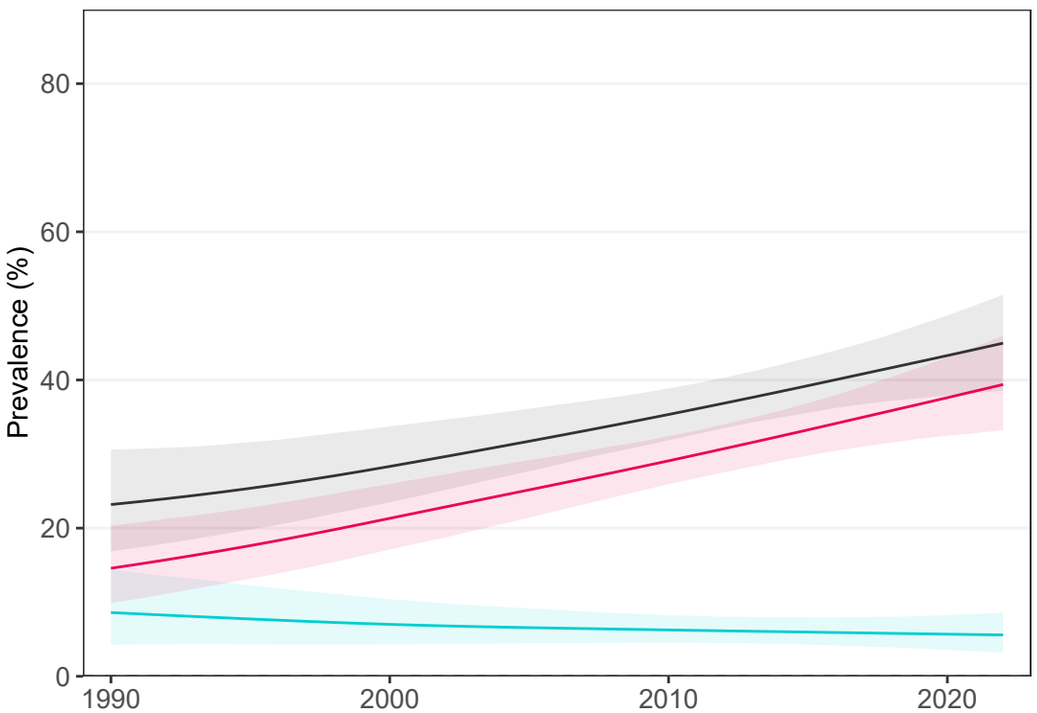




Adults

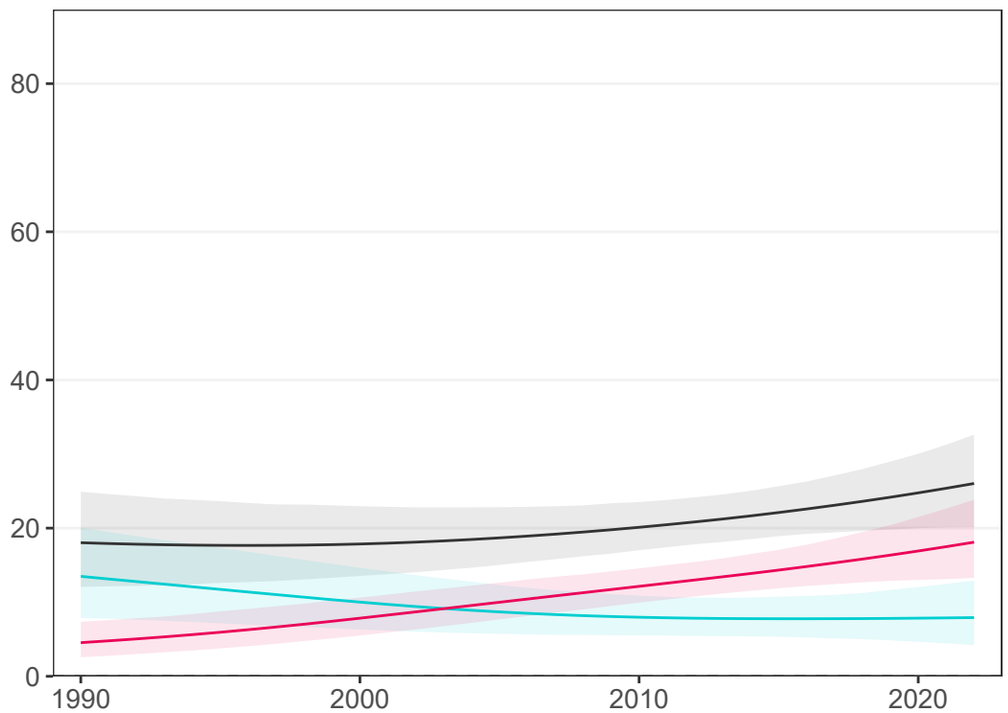
Women

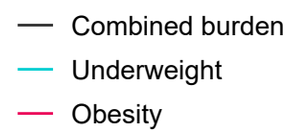
2 studies (2 national)



Men

2 studies (2 national)



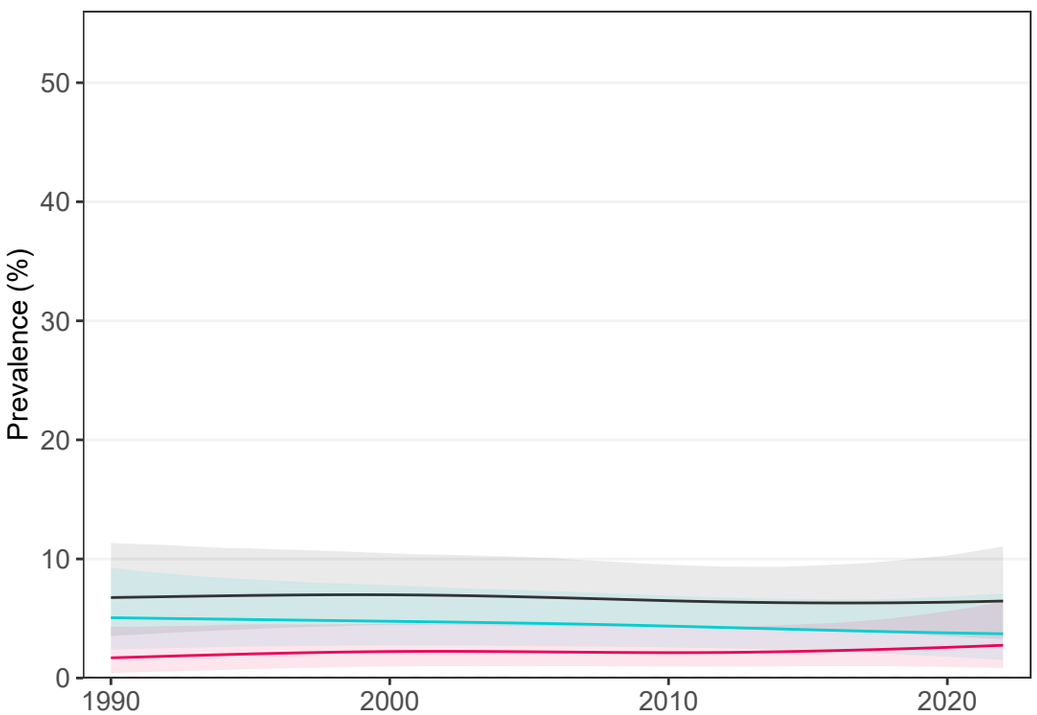


Haiti

School-aged children and adolescents

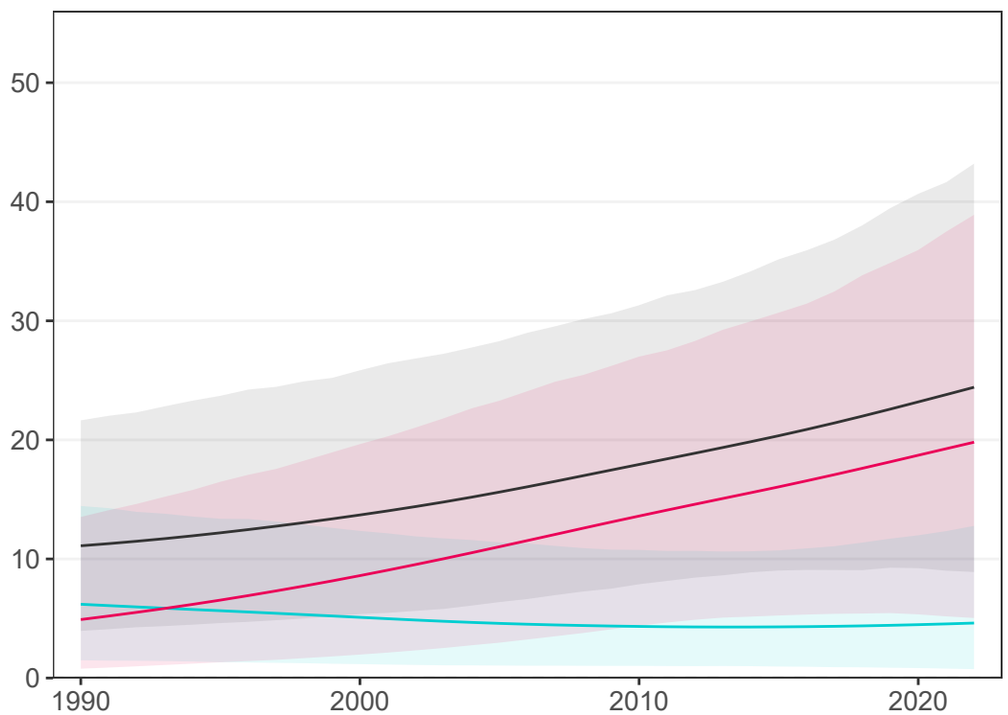
Girls

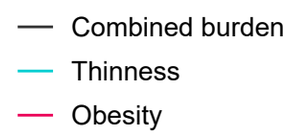
4 studies (4 national)



Boys

No studies

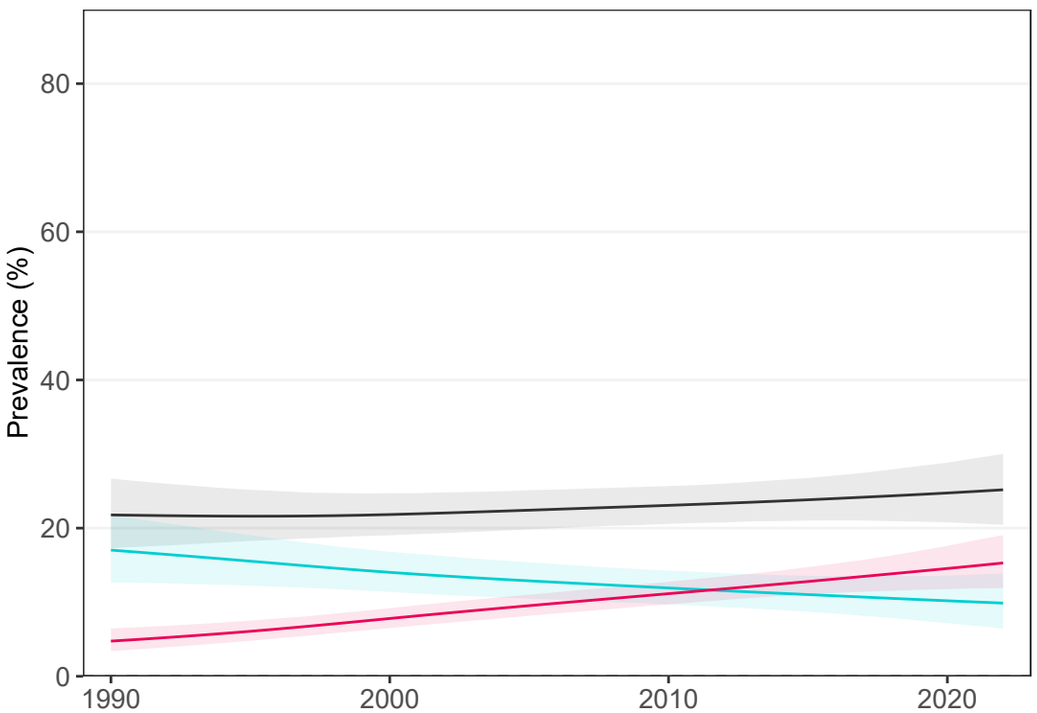




Adults

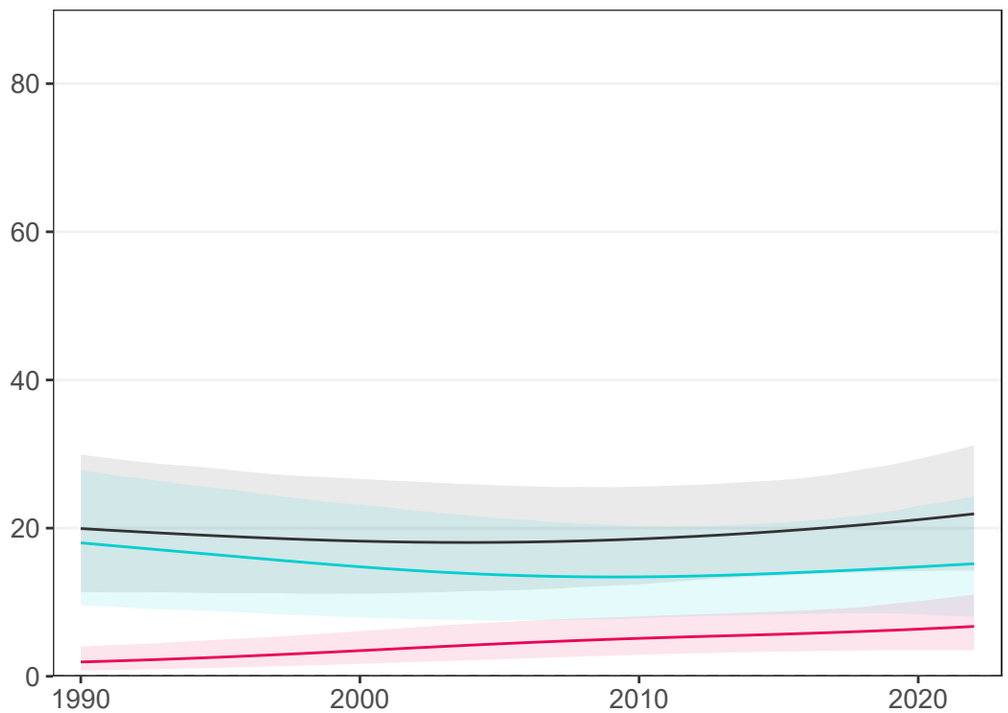
Women

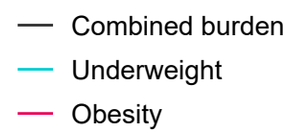
7 studies (5 national)



Men

2 studies (0 national)



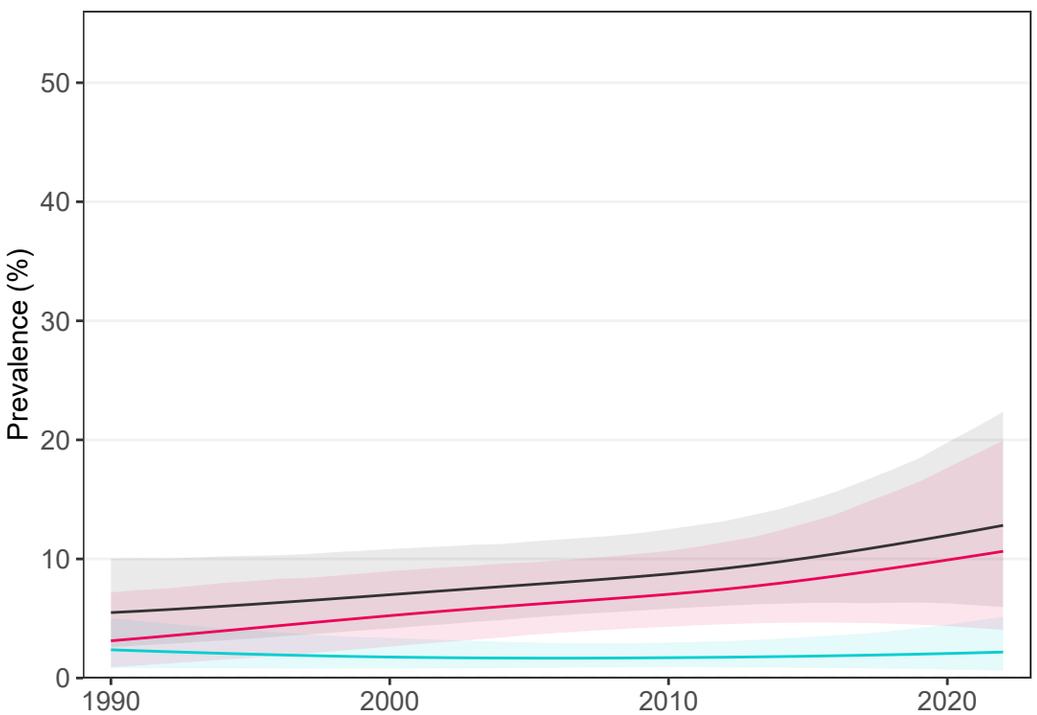


Honduras

School-aged children and adolescents

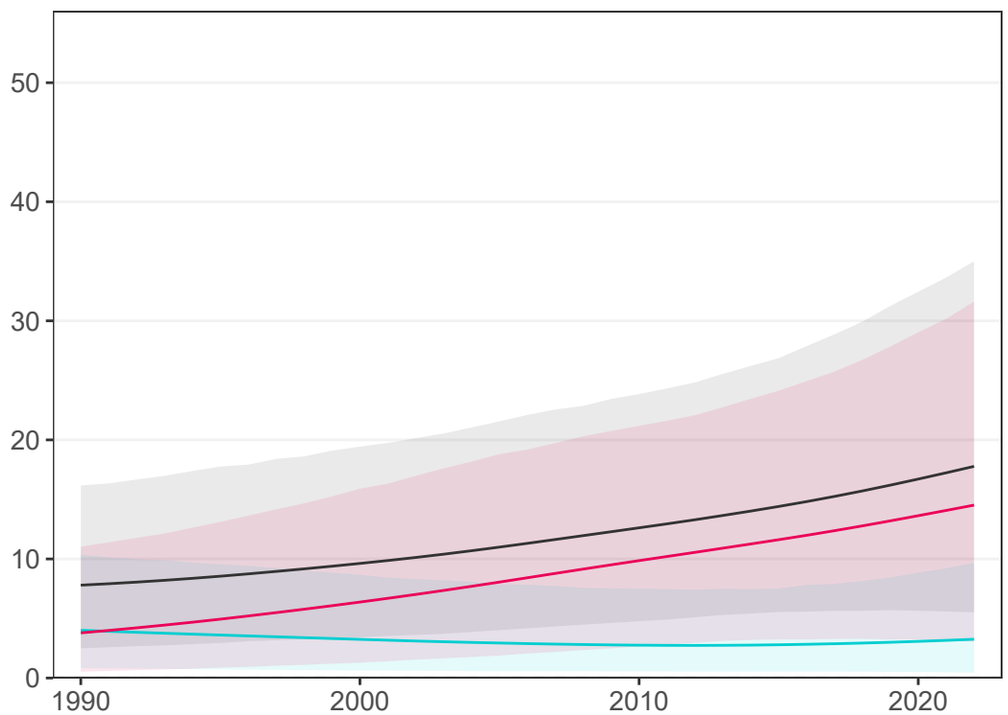
Girls

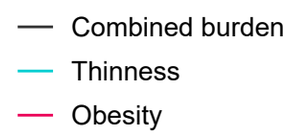
2 studies (2 national)



Boys

No studies

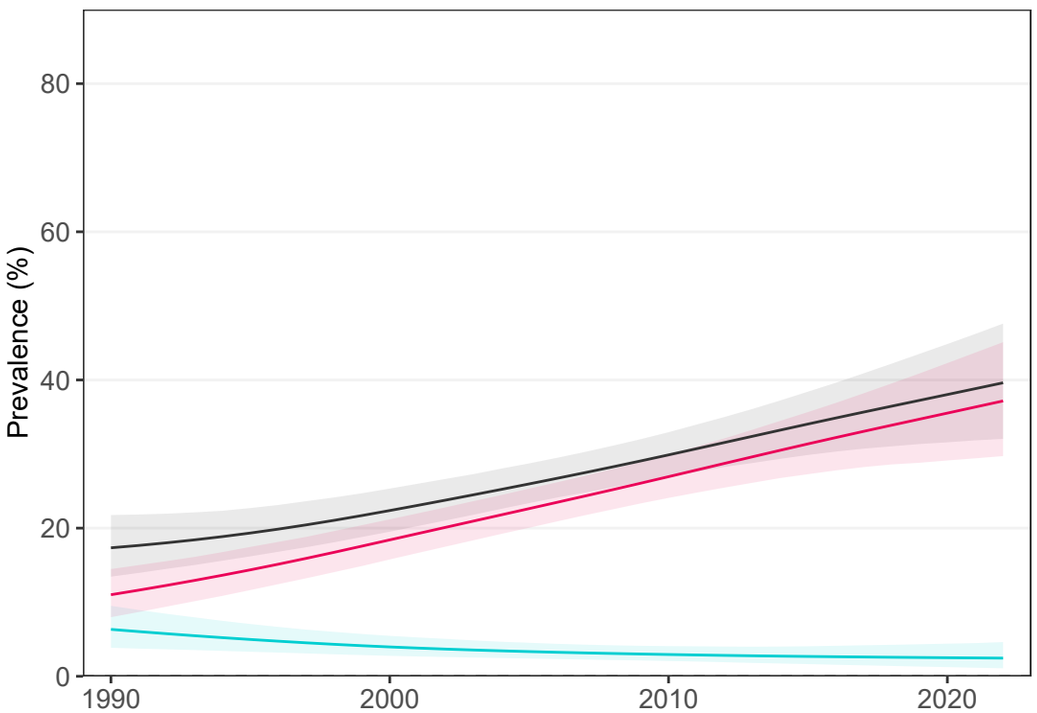




Adults

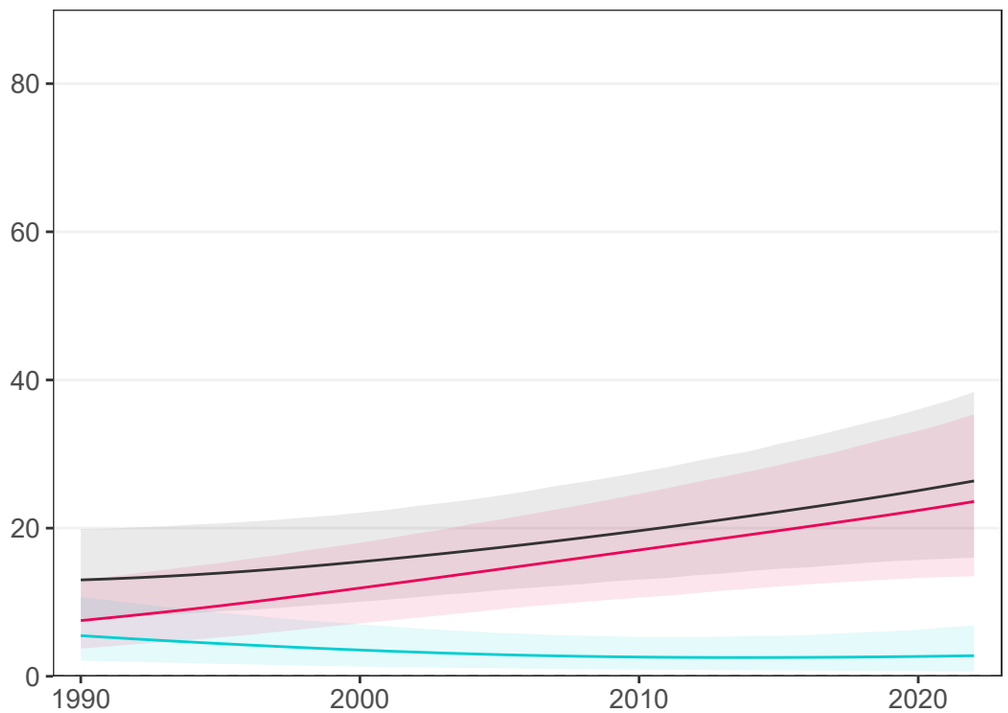
Women

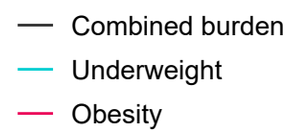
4 studies (3 national)



Men

1 study (0 national)



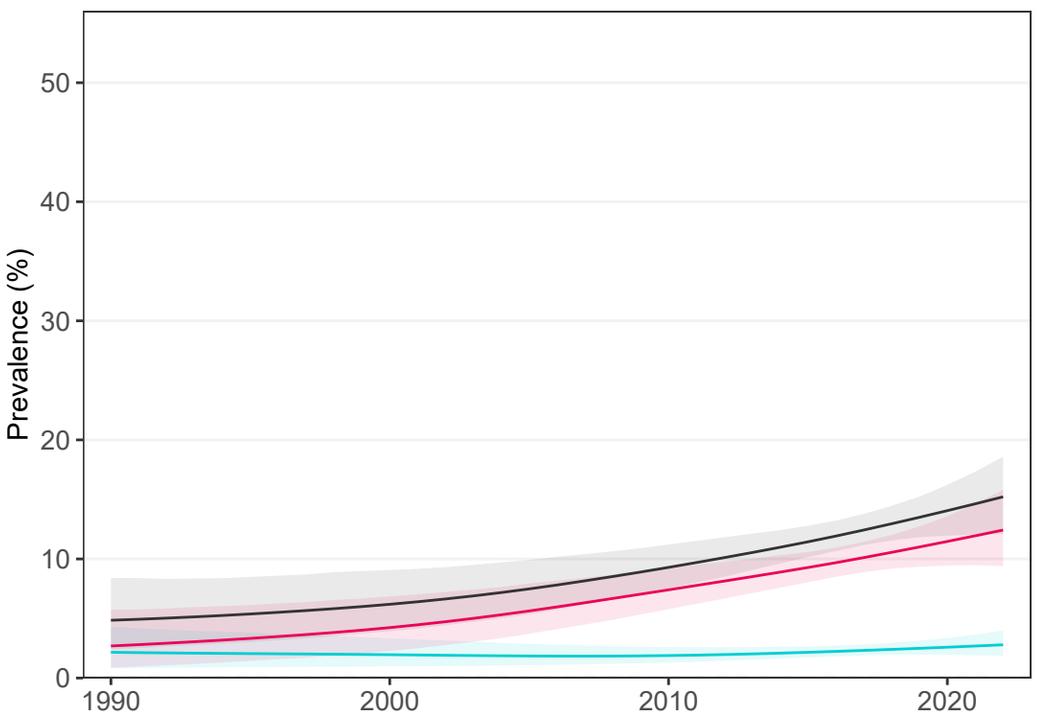


Hungary

School-aged children and adolescents

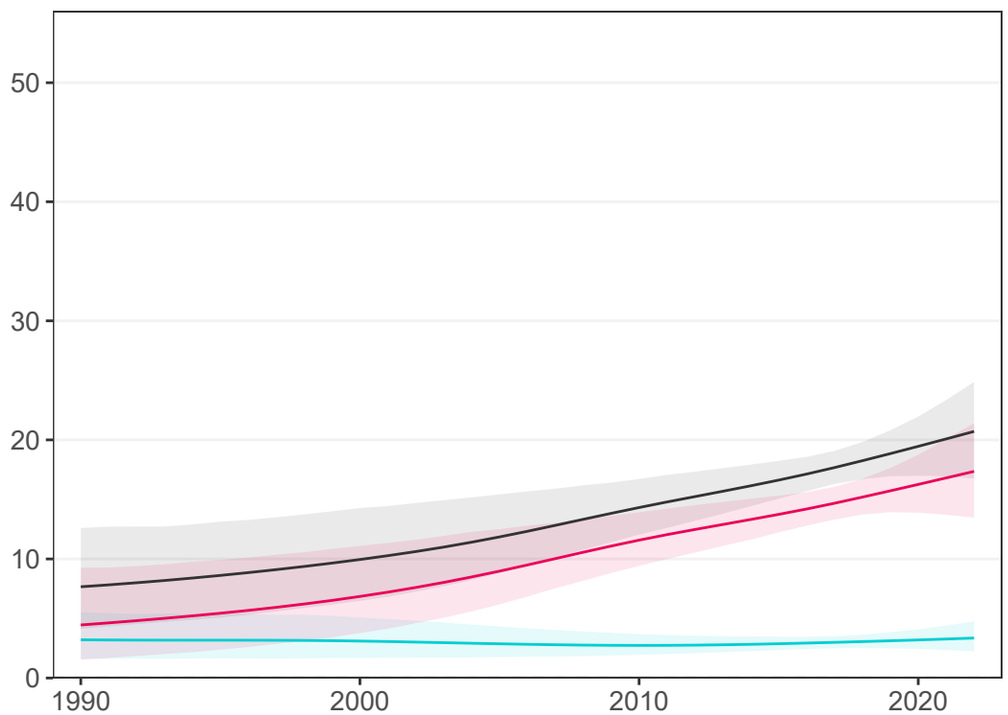
Girls

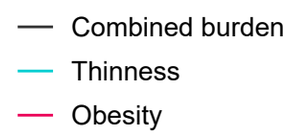
18 studies (15 national)



Boys

18 studies (15 national)

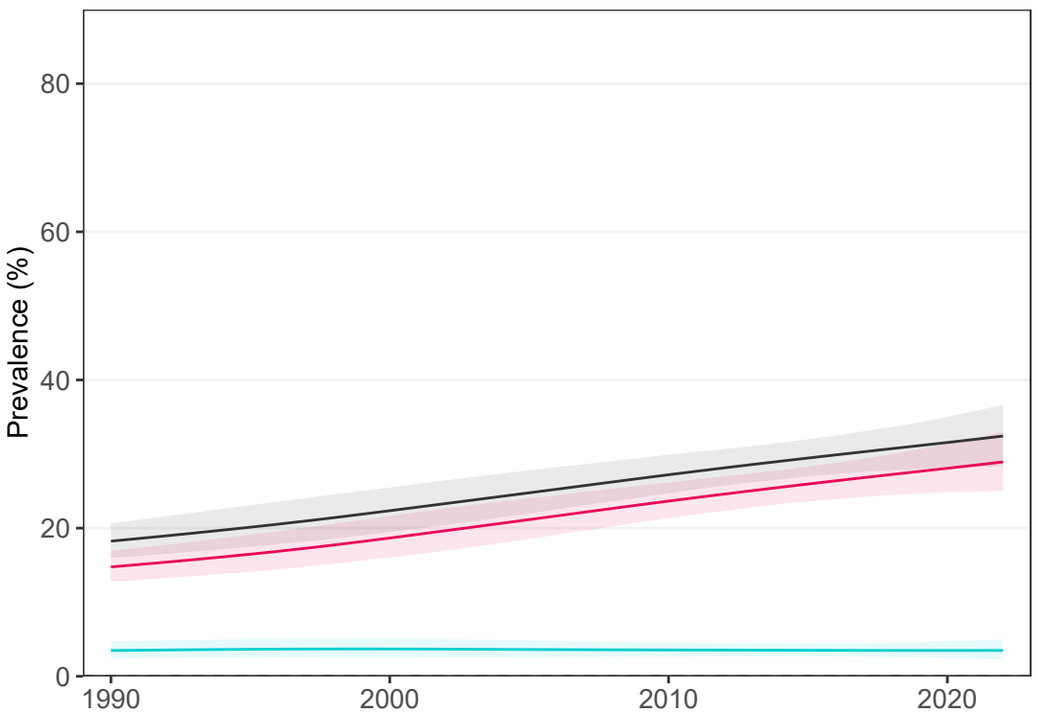




Adults

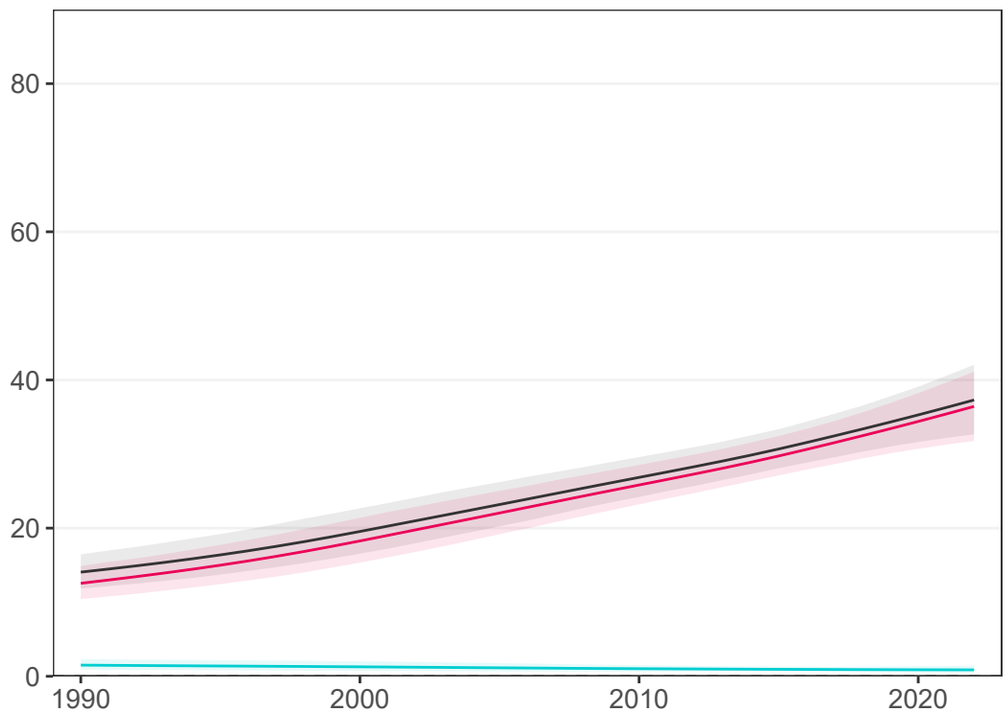
Women

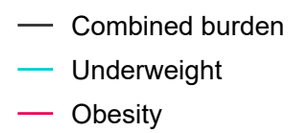
13 studies (8 national)



Men

15 studies (8 national)



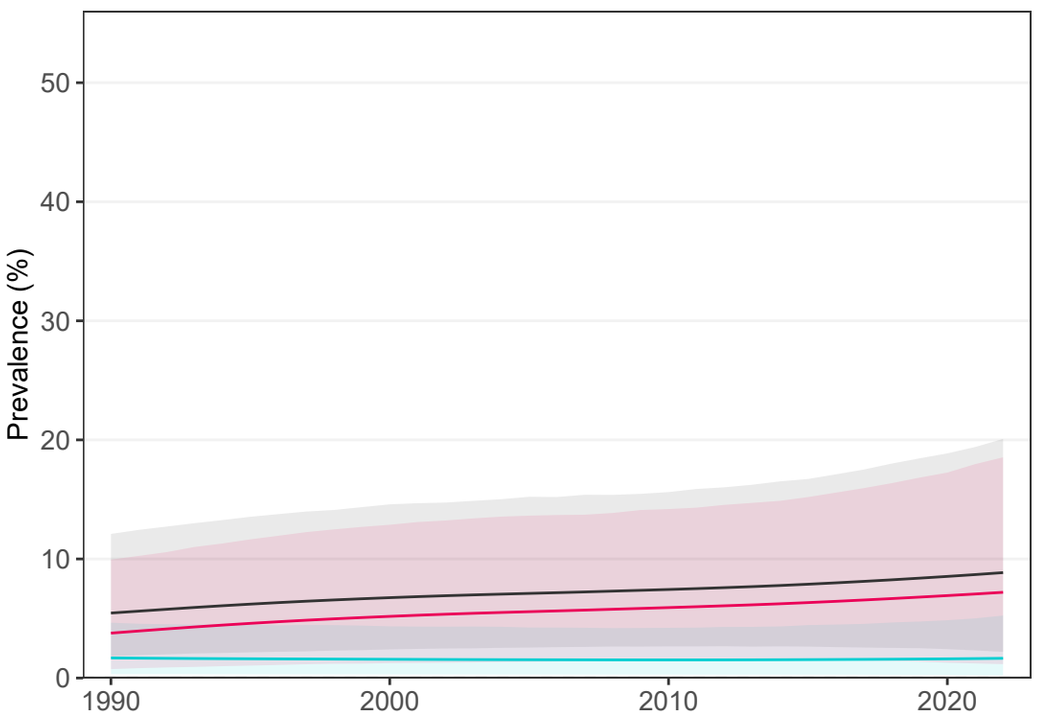


Iceland

School-aged children and adolescents

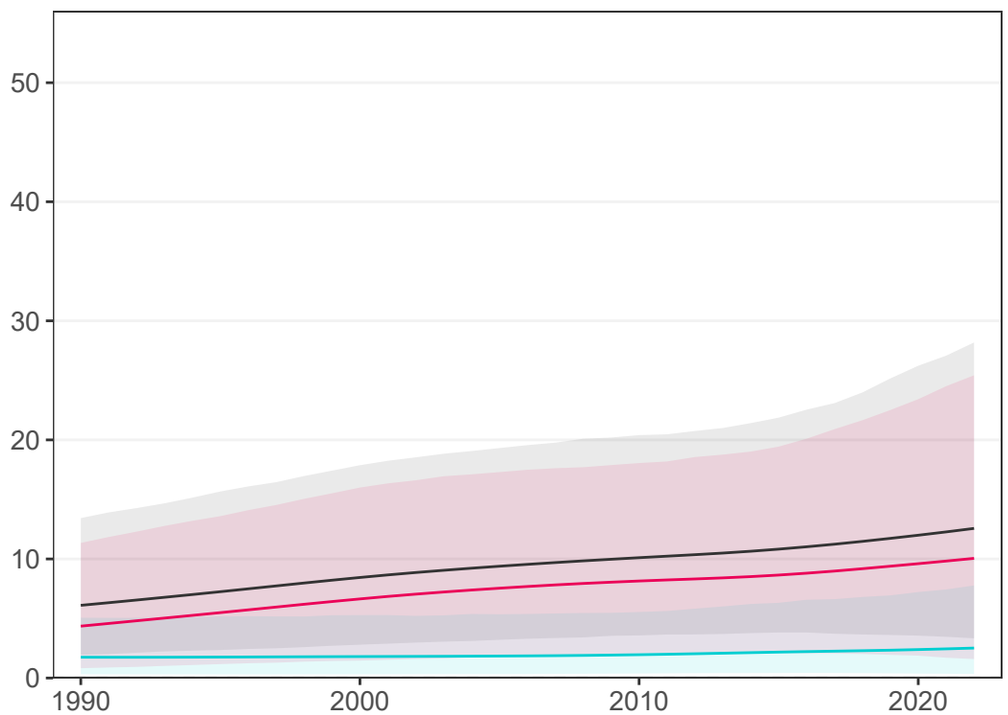
Girls

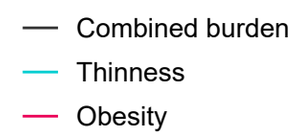
No studies



Boys

No studies

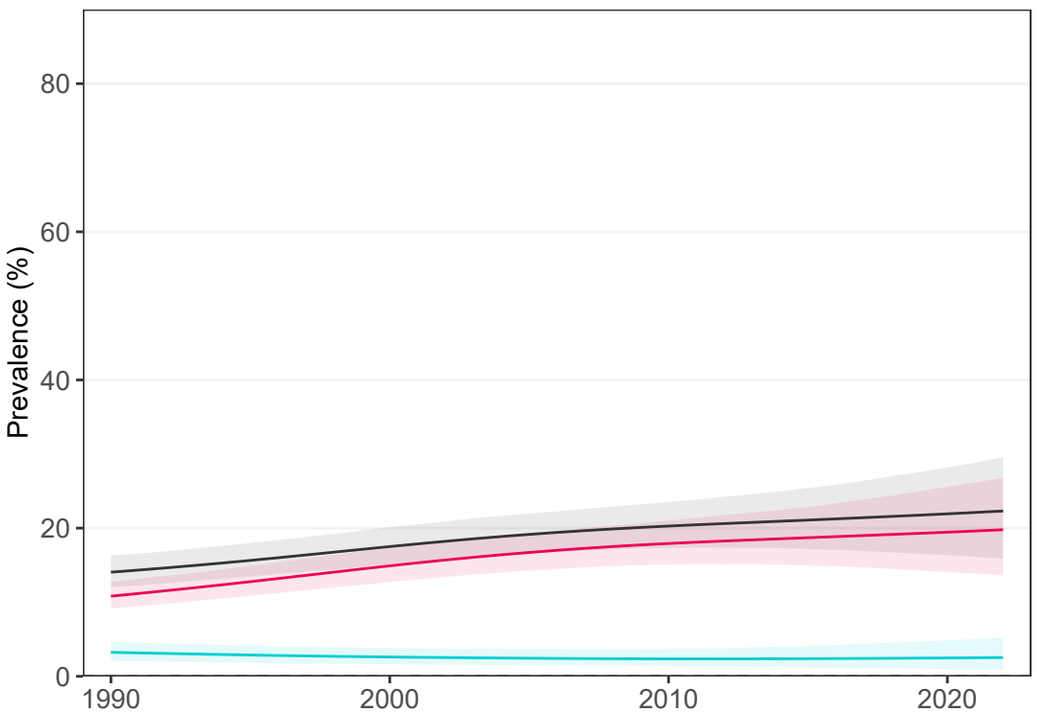




Adults

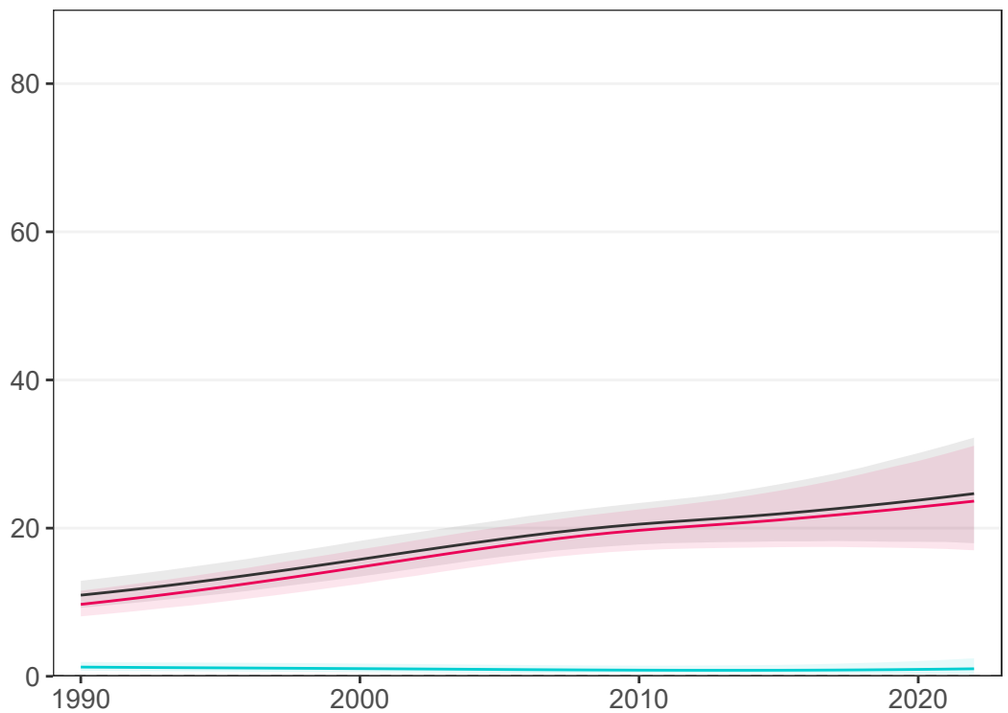
Women

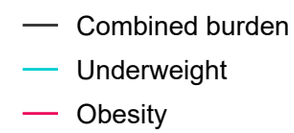
17 studies (0 national)



Men

17 studies (0 national)



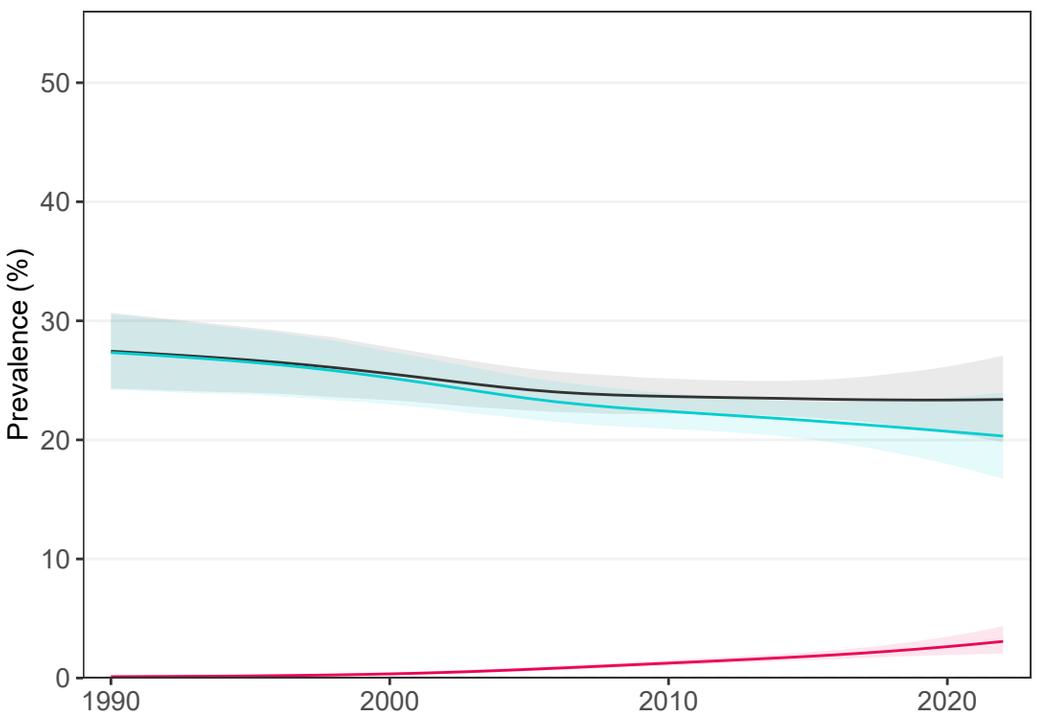


India

School-aged children and adolescents

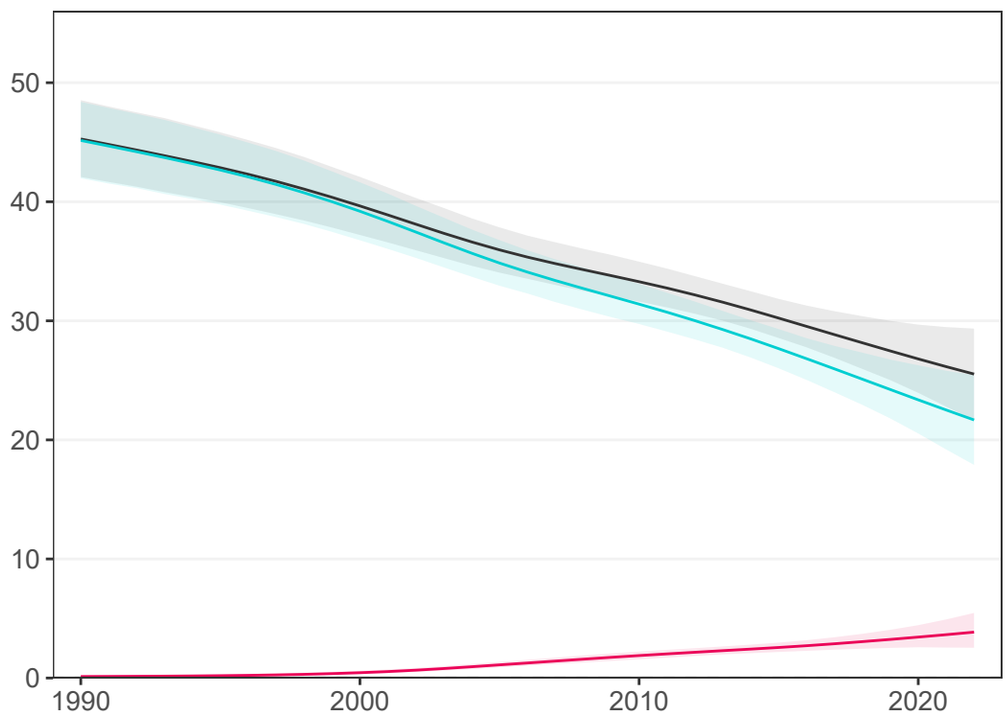
Girls

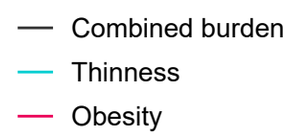
51 studies (17 national)



Boys

52 studies (17 national)

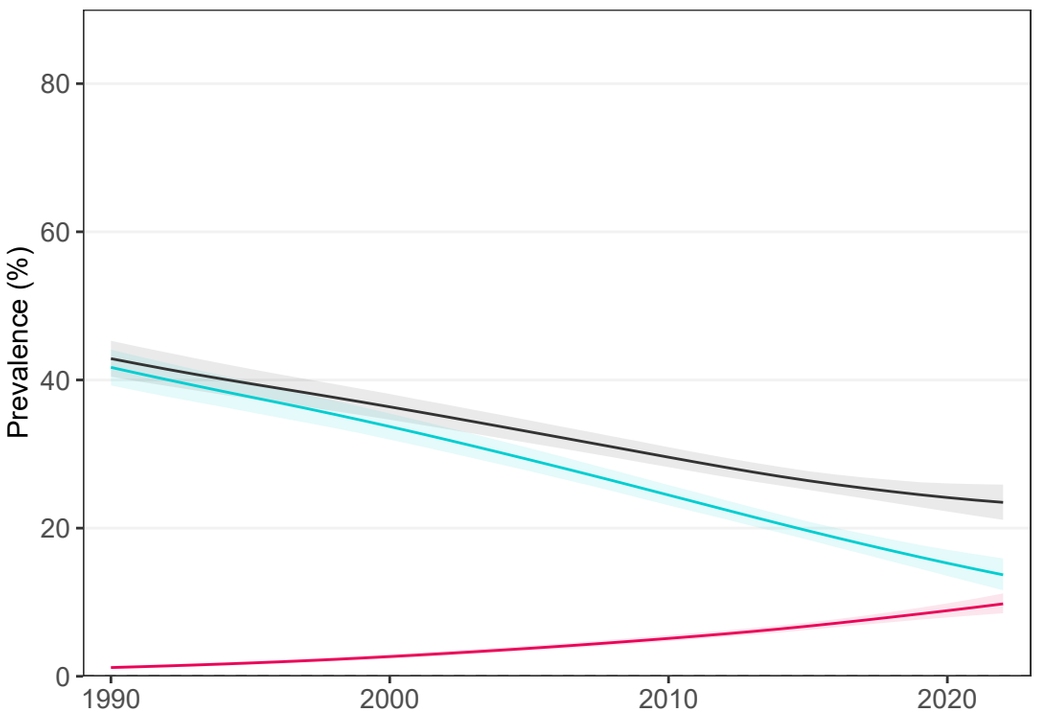




Adults

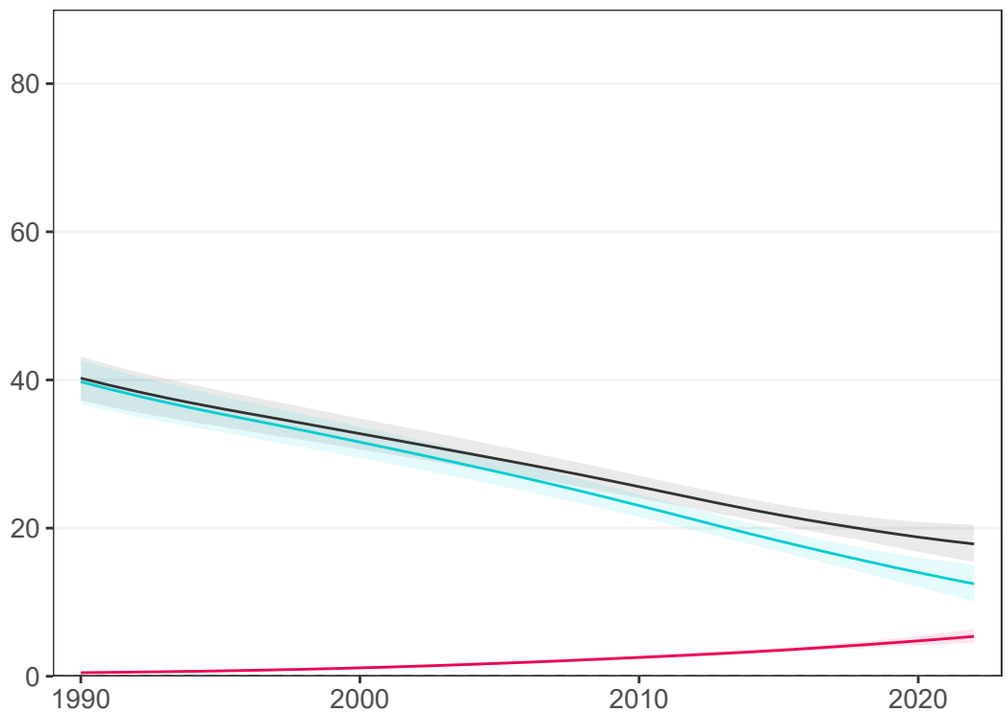
Women

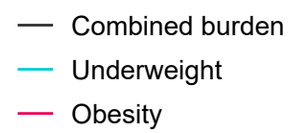
92 studies (18 national)



Men

92 studies (17 national)



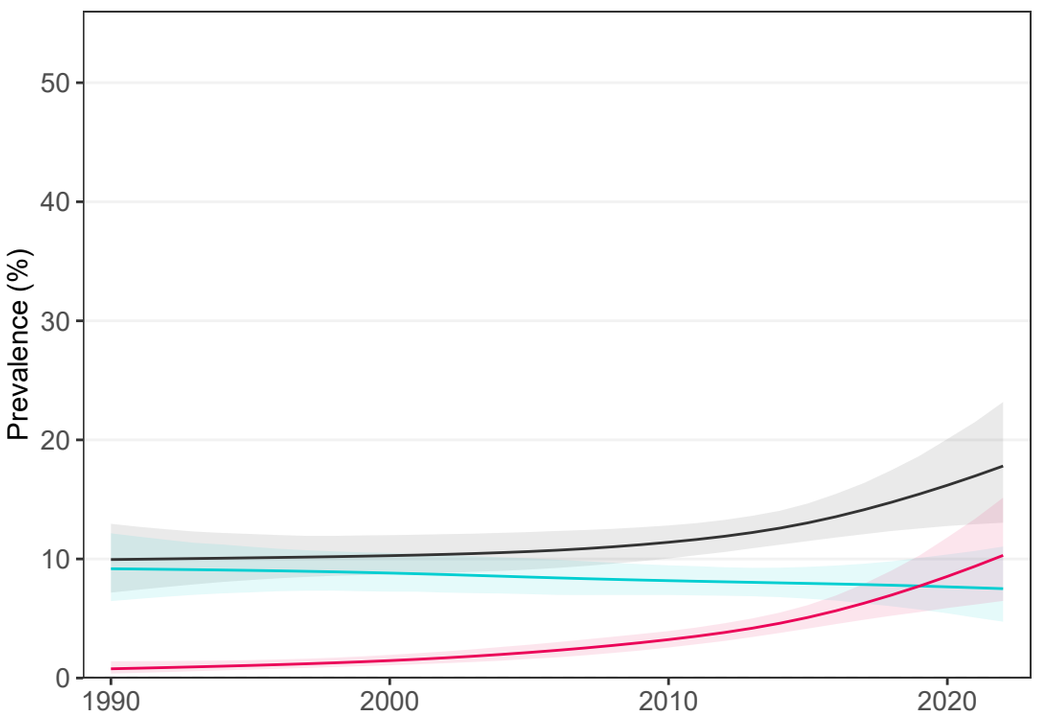


Indonesia

School-aged children and adolescents

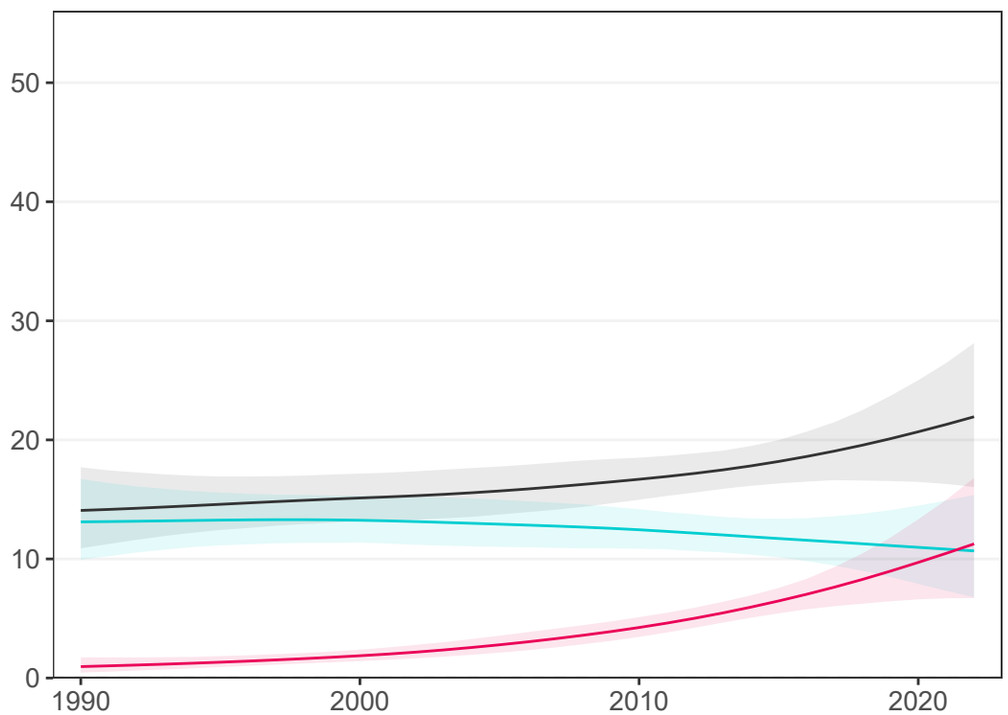
Girls

11 studies (9 national)



Boys

11 studies (9 national)

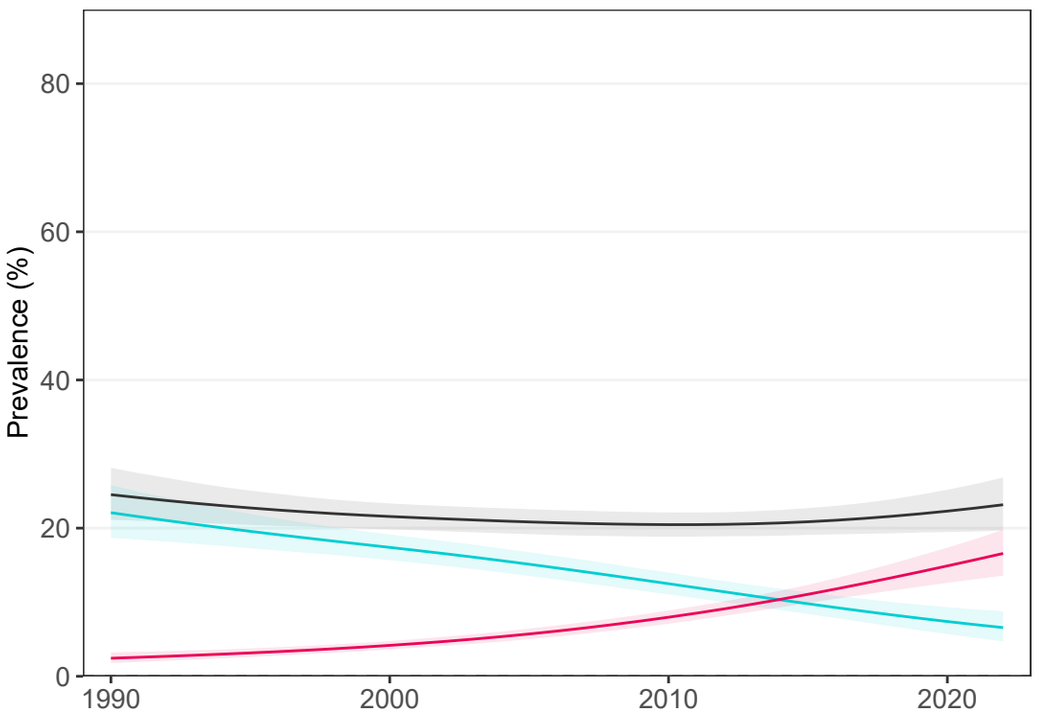


Combined burden
Thinness
Obesity

Adults

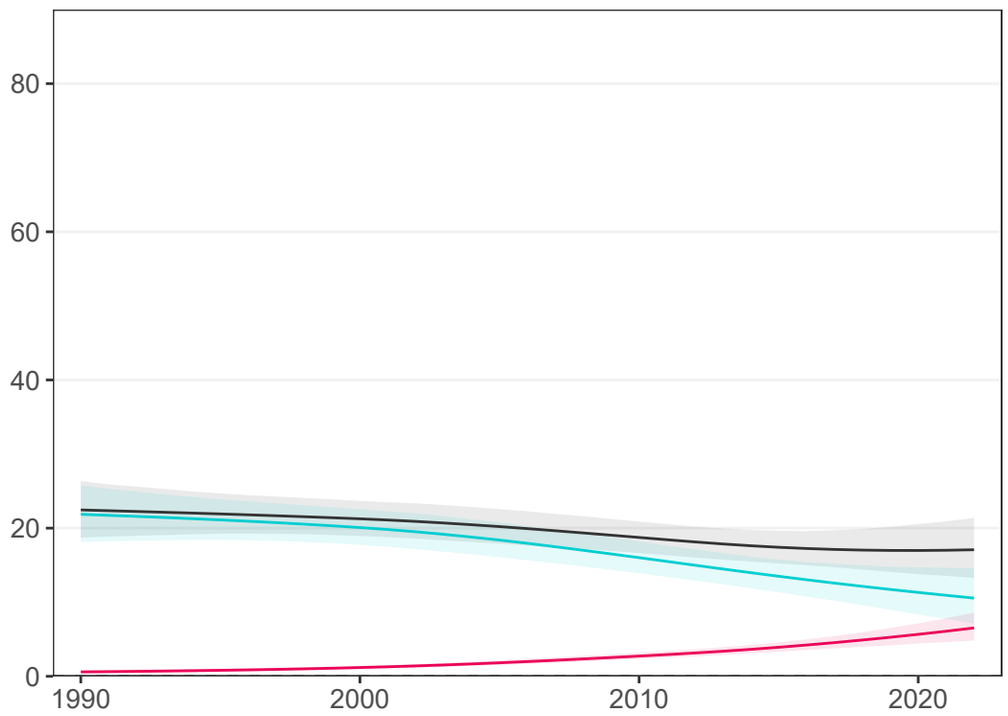
Women

13 studies (8 national)



Men

13 studies (8 national)



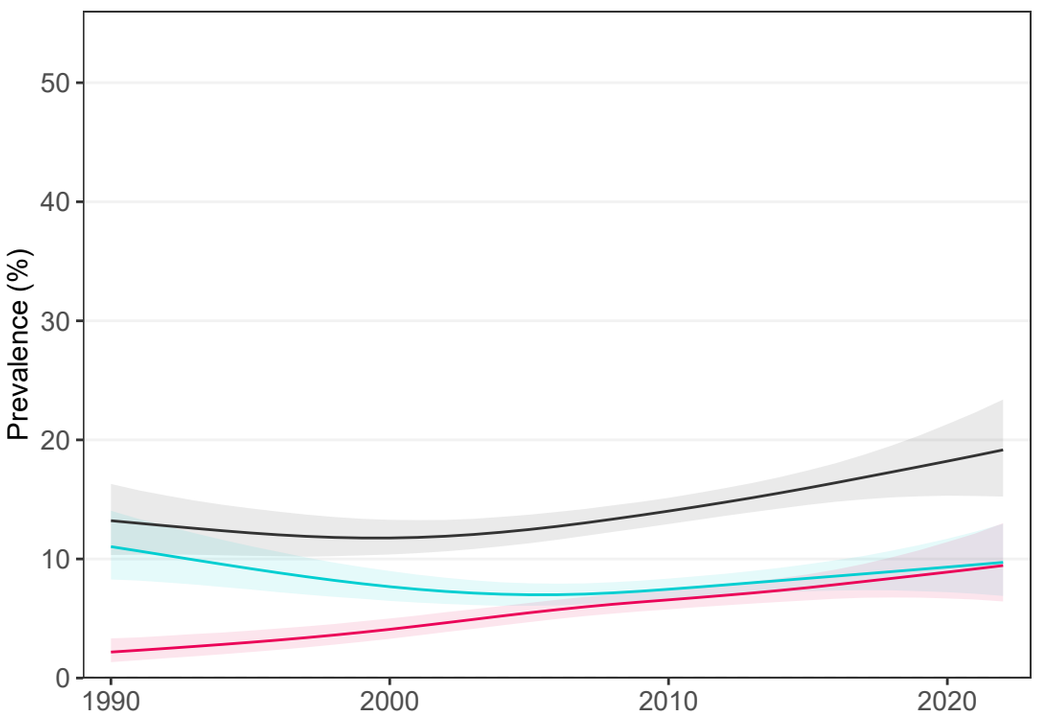
Combined burden
Underweight
Obesity

Iran

School-aged children and adolescents

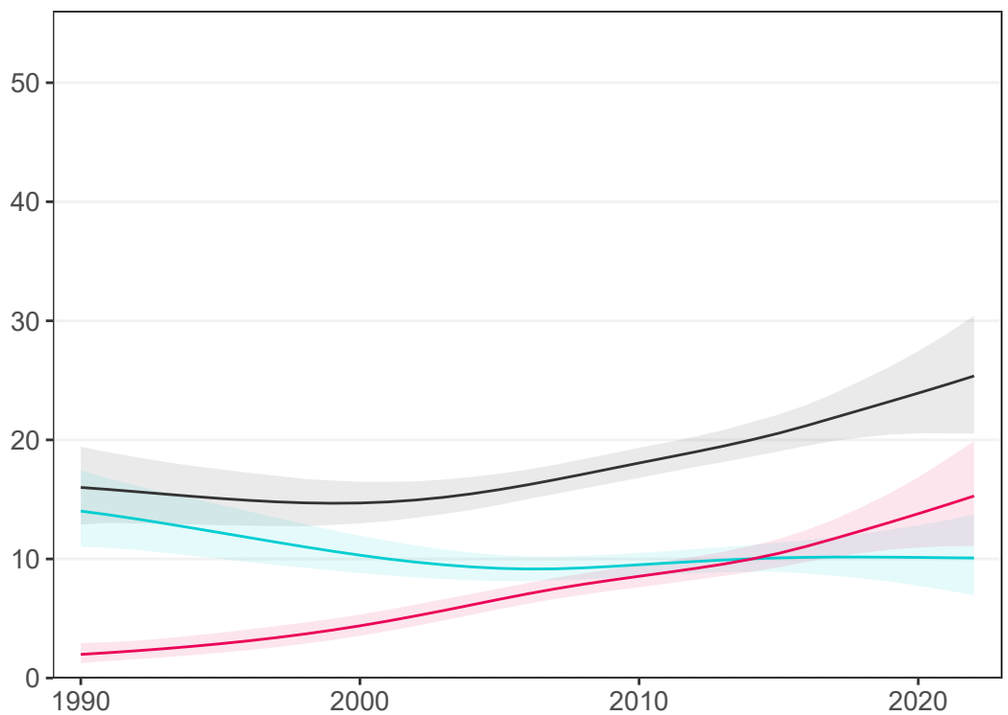
Girls

52 studies (18 national)



Boys

50 studies (18 national)

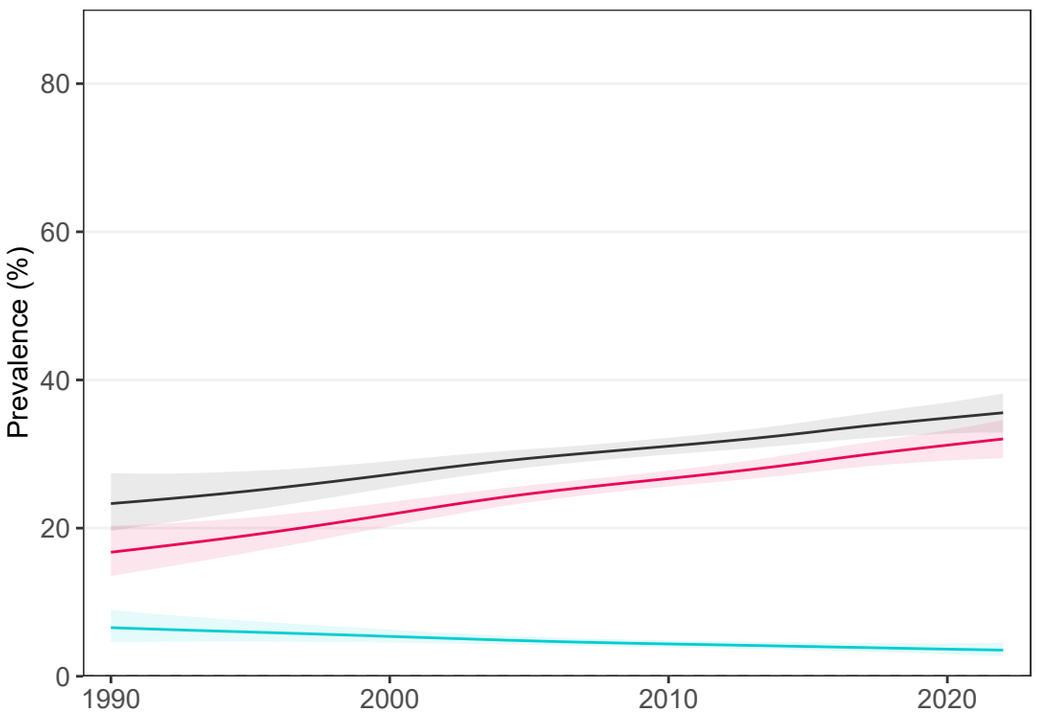


Combined burden
Thinness
Obesity

Adults

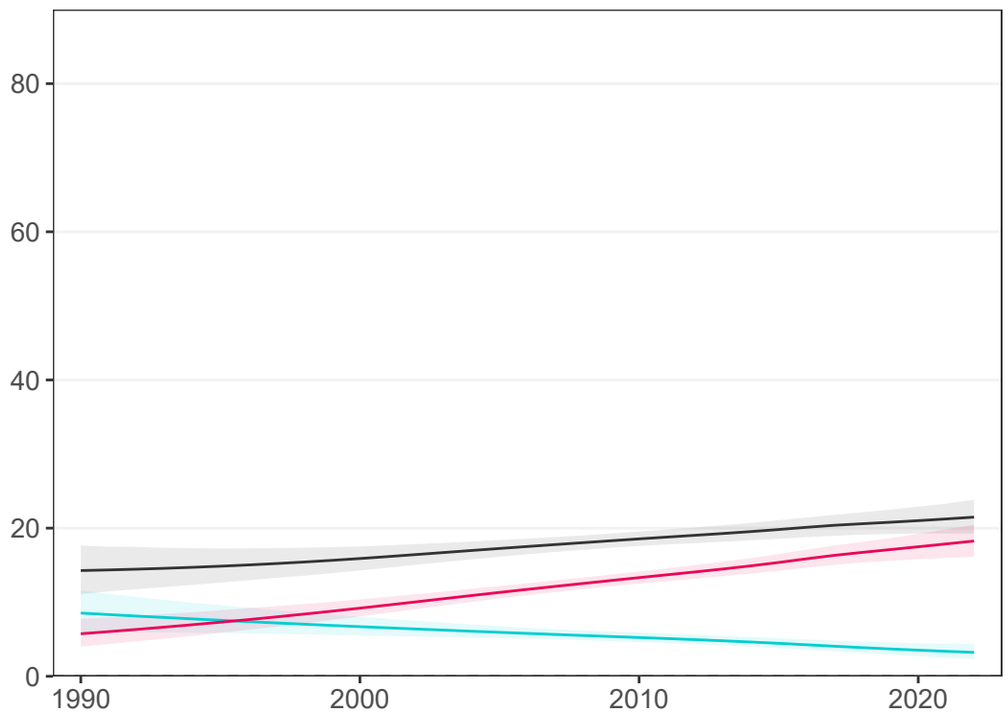
Women

91 studies (18 national)



Men

93 studies (18 national)



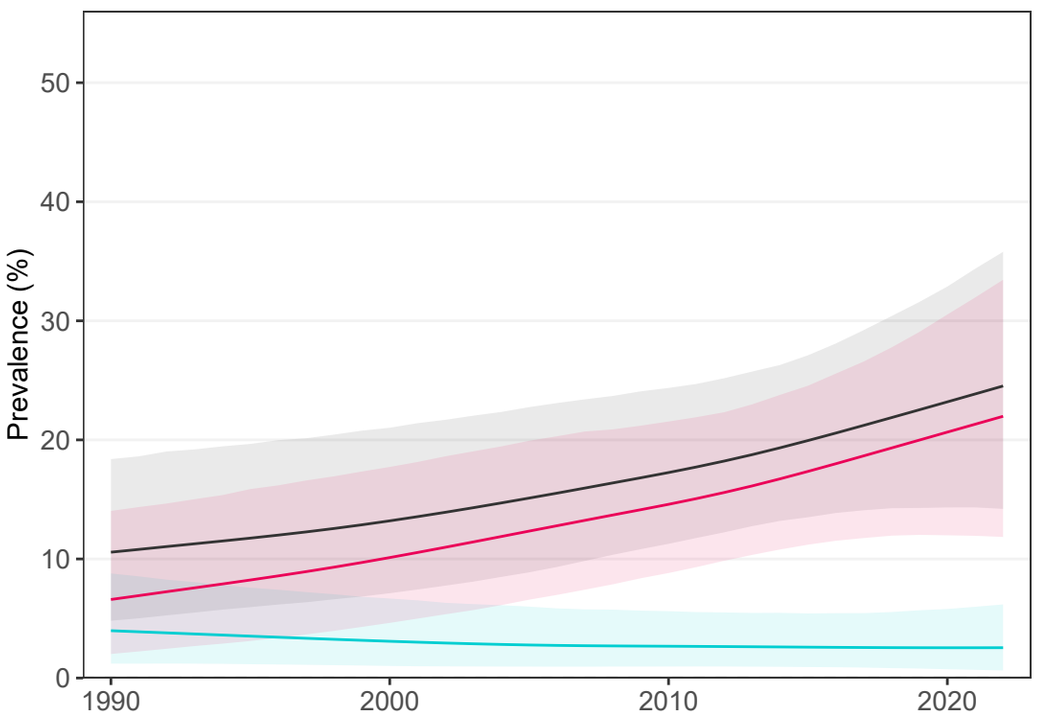
Combined burden
Underweight
Obesity

Iraq

School-aged children and adolescents

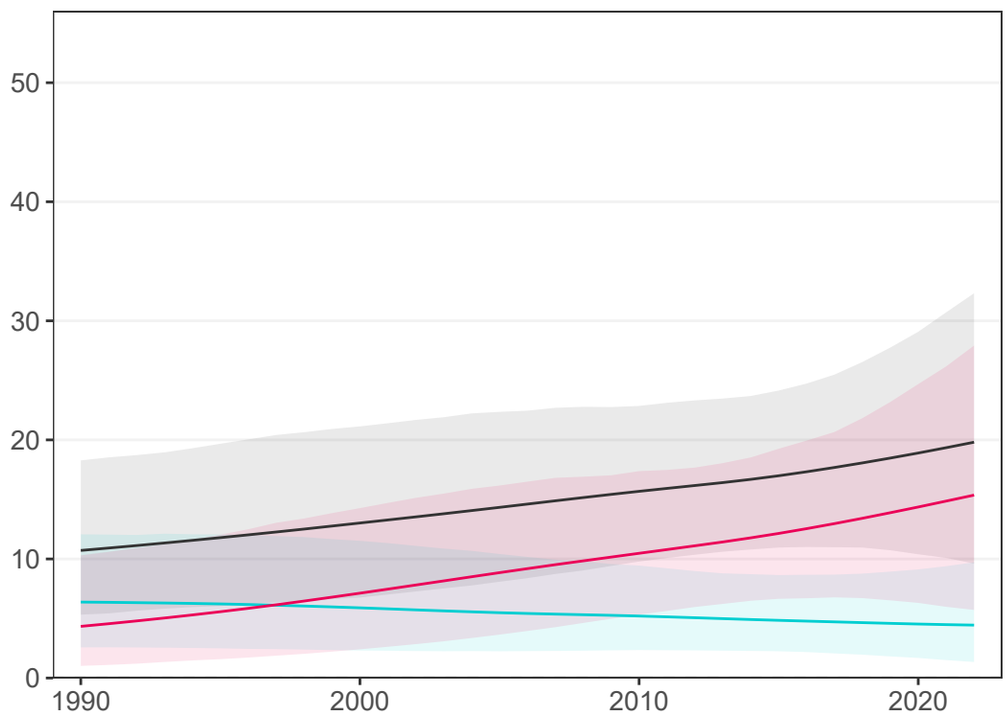
Girls

2 studies (1 national)



Boys

2 studies (1 national)

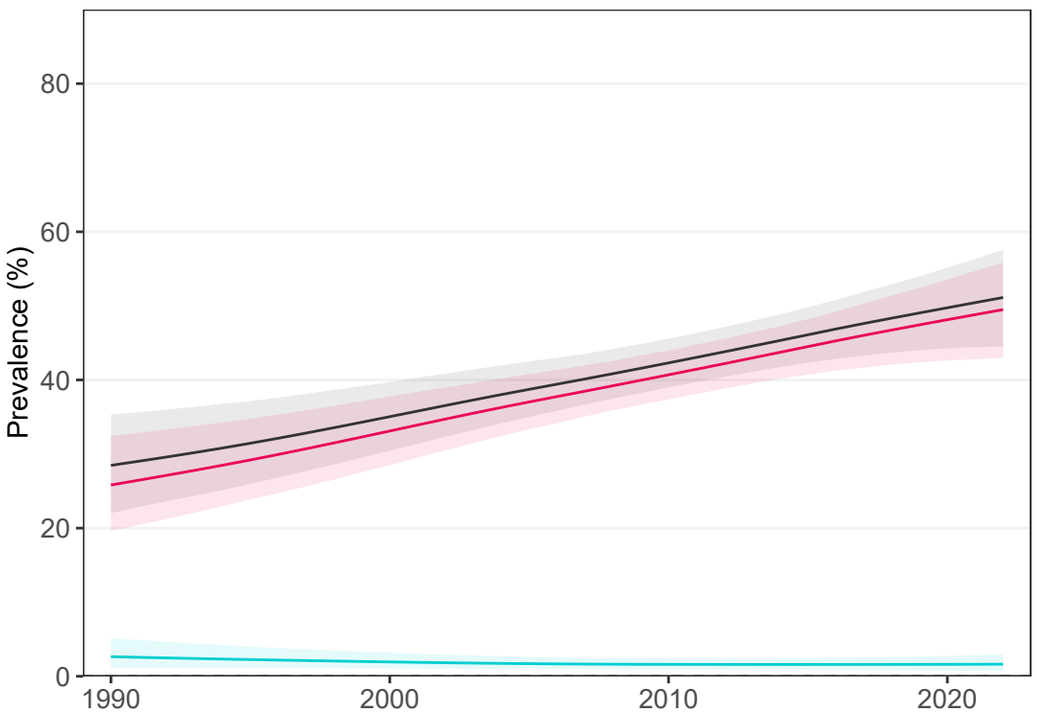


Combined burden
Thinness
Obesity

Adults

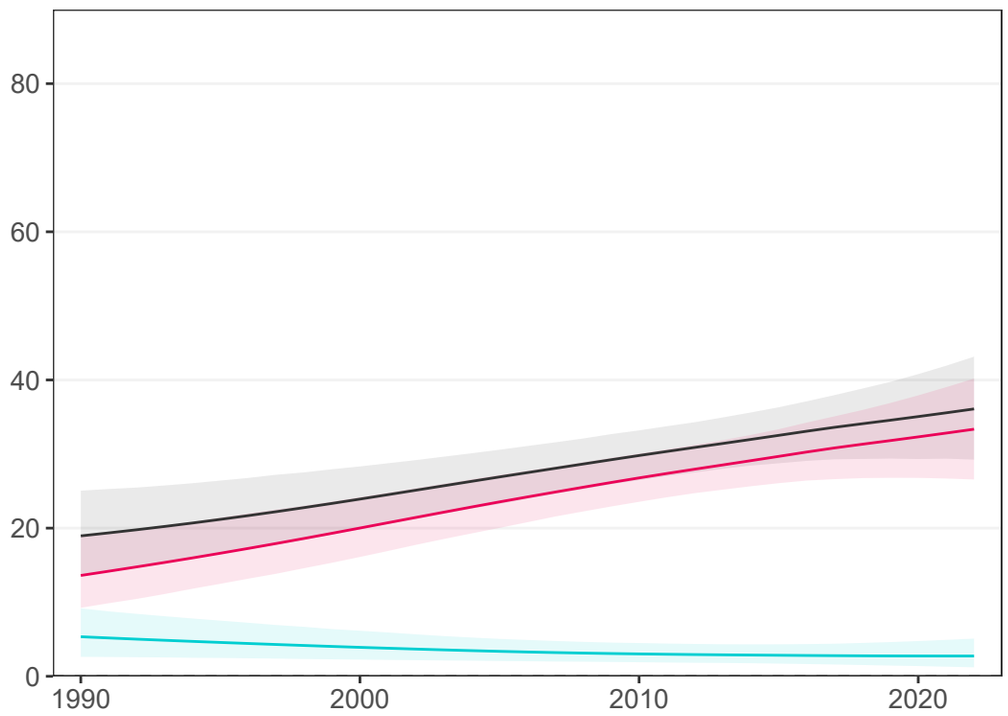
Women

2 studies (2 national)



Men

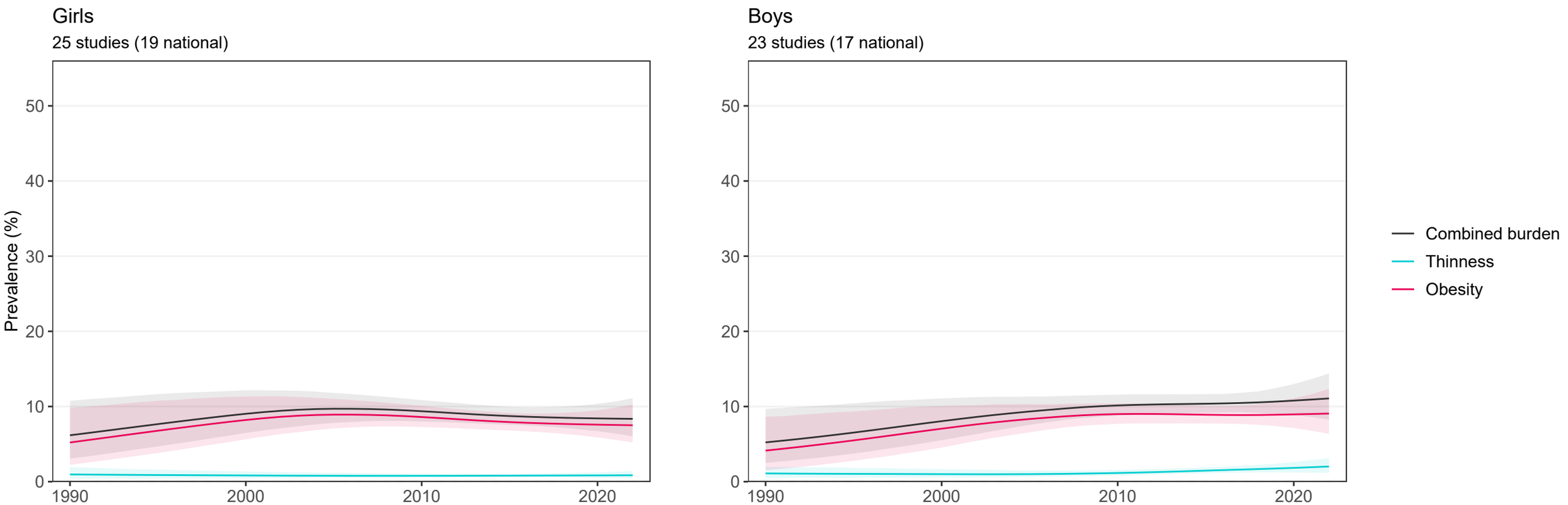
2 studies (2 national)



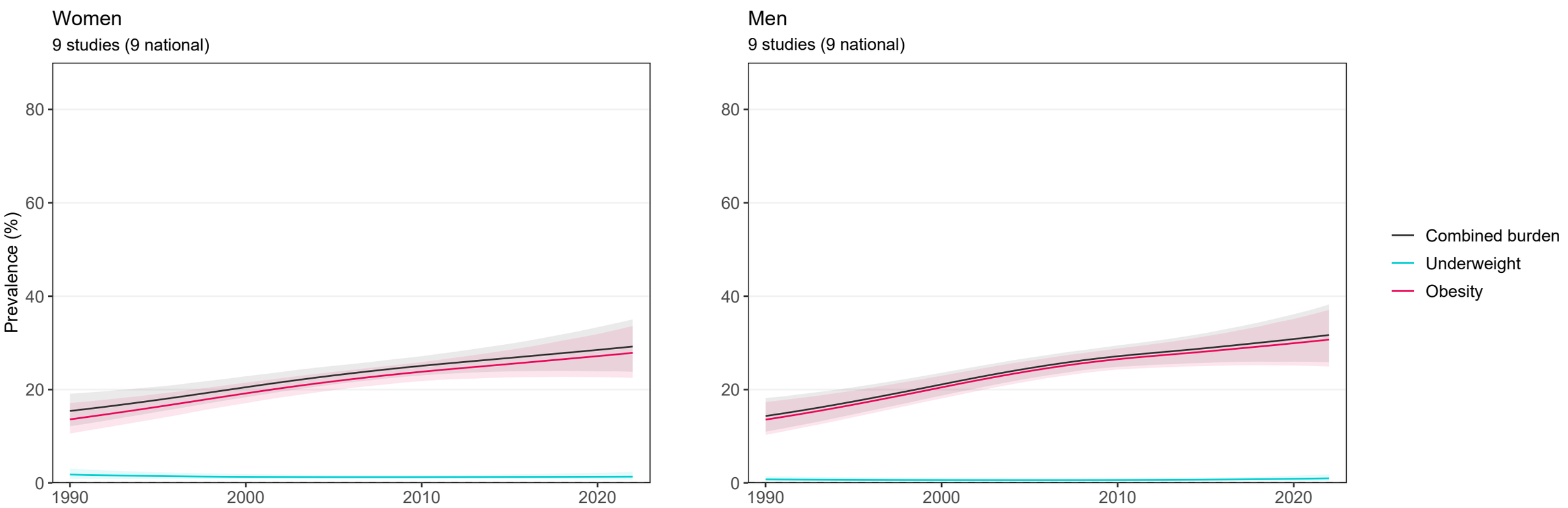
Combined burden
Underweight
Obesity

Ireland

School-aged children and adolescents



Adults

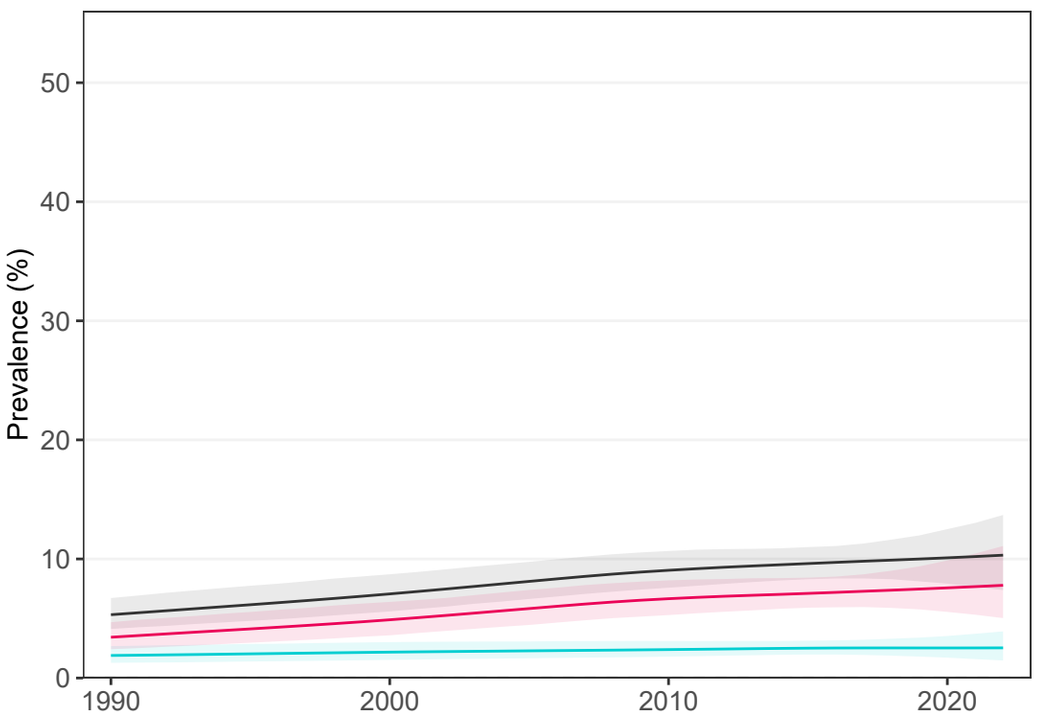


Israel

School-aged children and adolescents

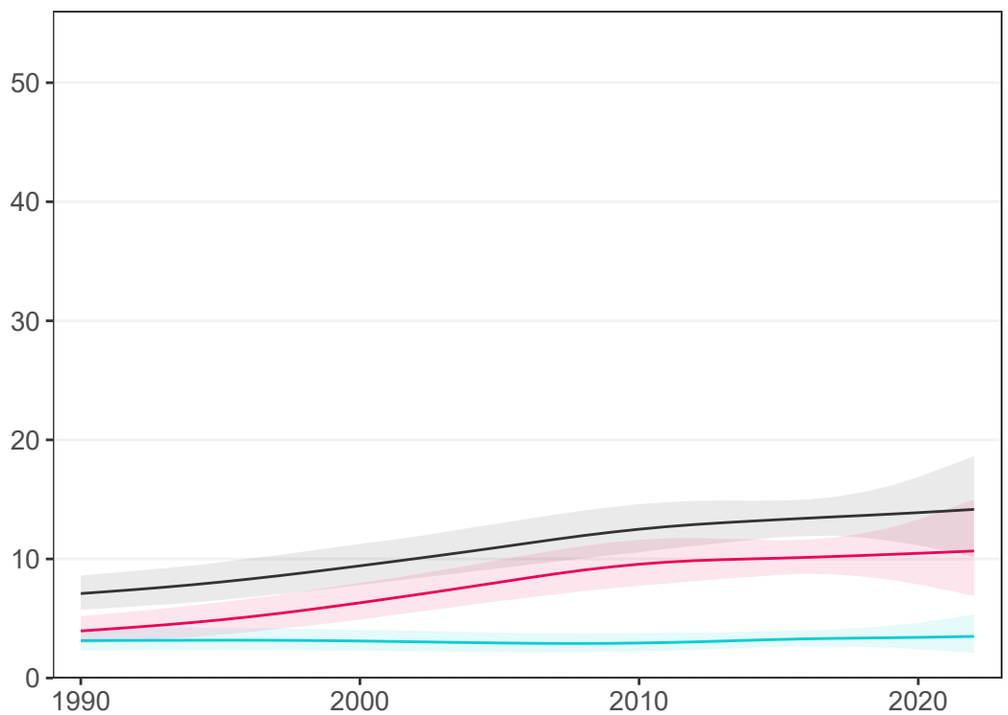
Girls

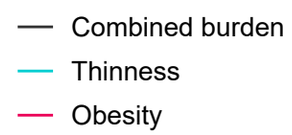
15 studies (15 national)



Boys

15 studies (15 national)

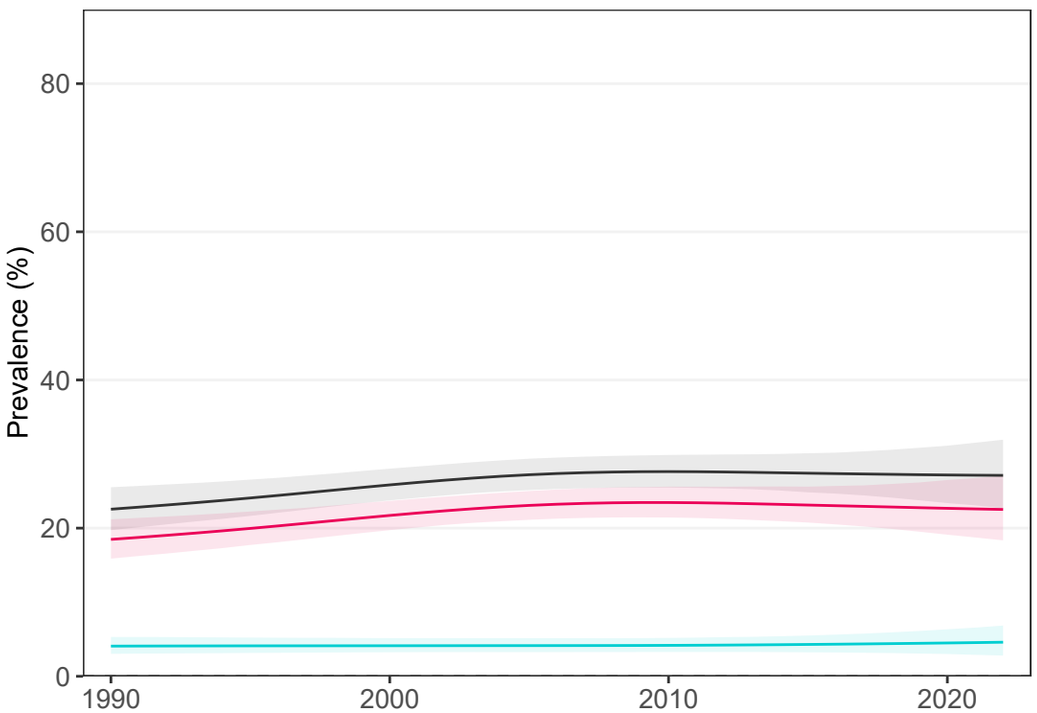




Adults

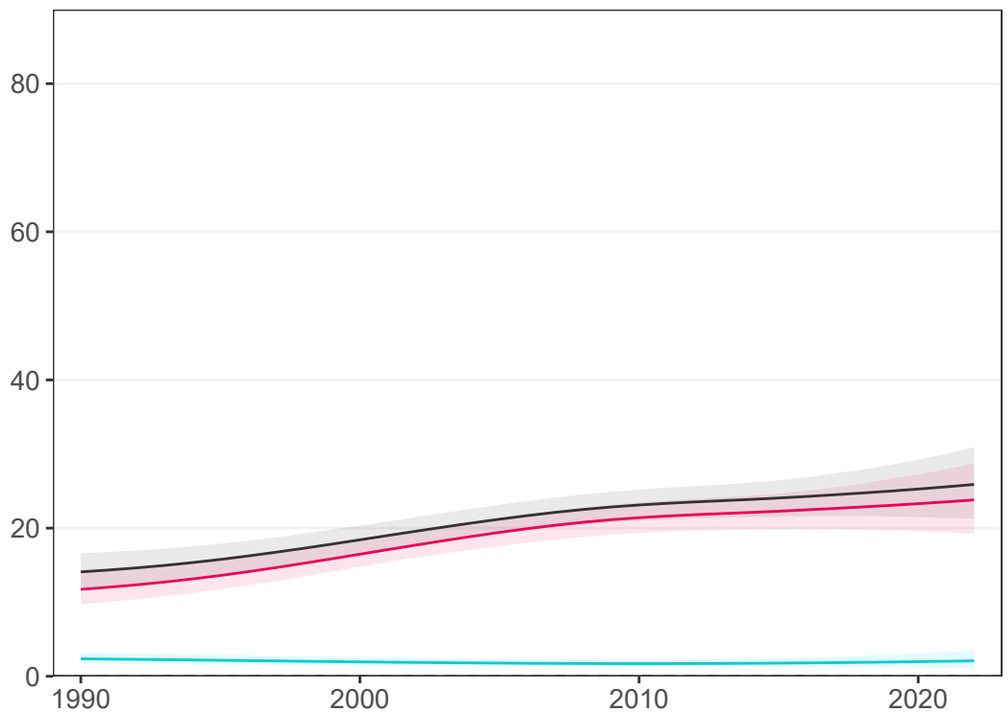
Women

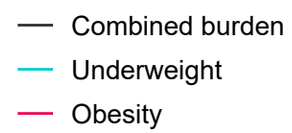
23 studies (16 national)



Men

23 studies (16 national)



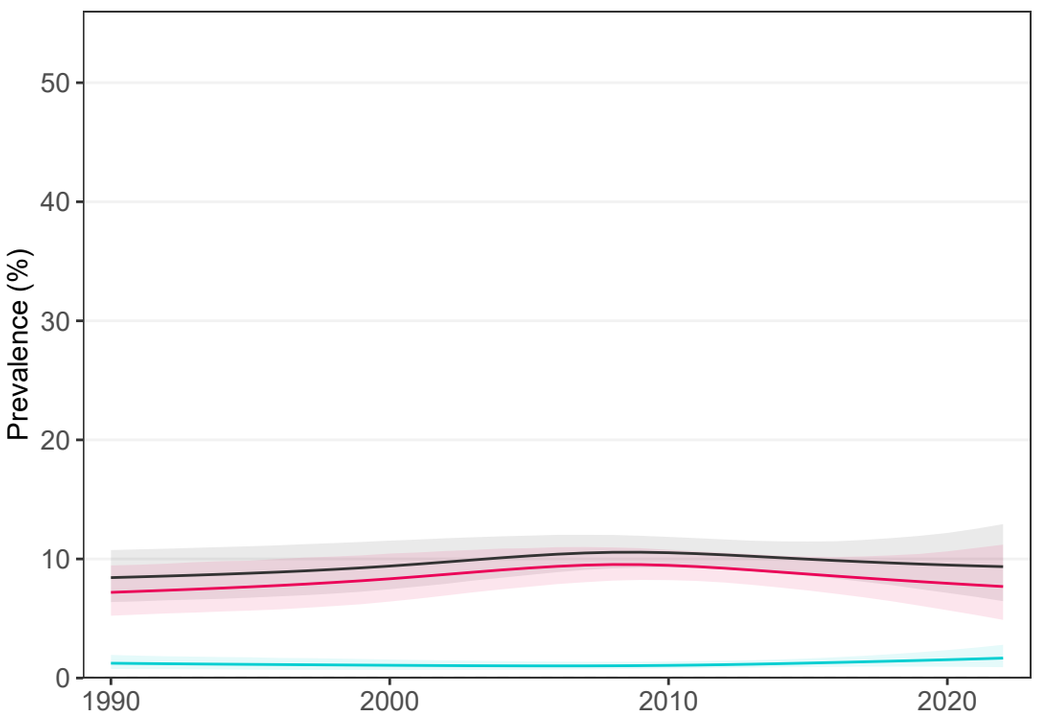


Italy

School-aged children and adolescents

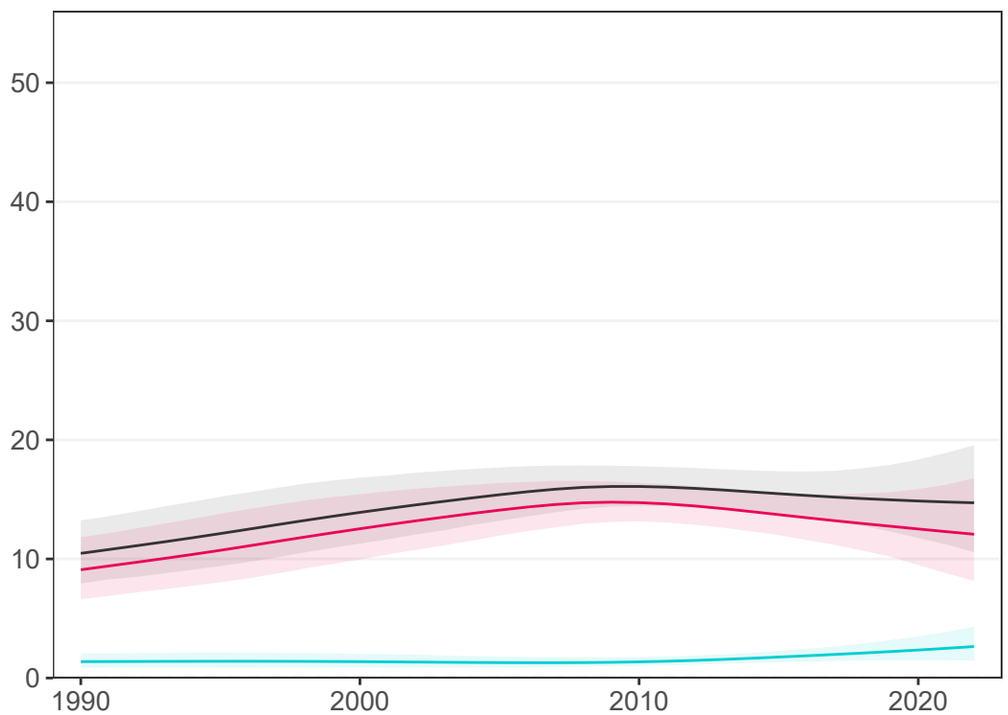
Girls

31 studies (7 national)



Boys

30 studies (7 national)

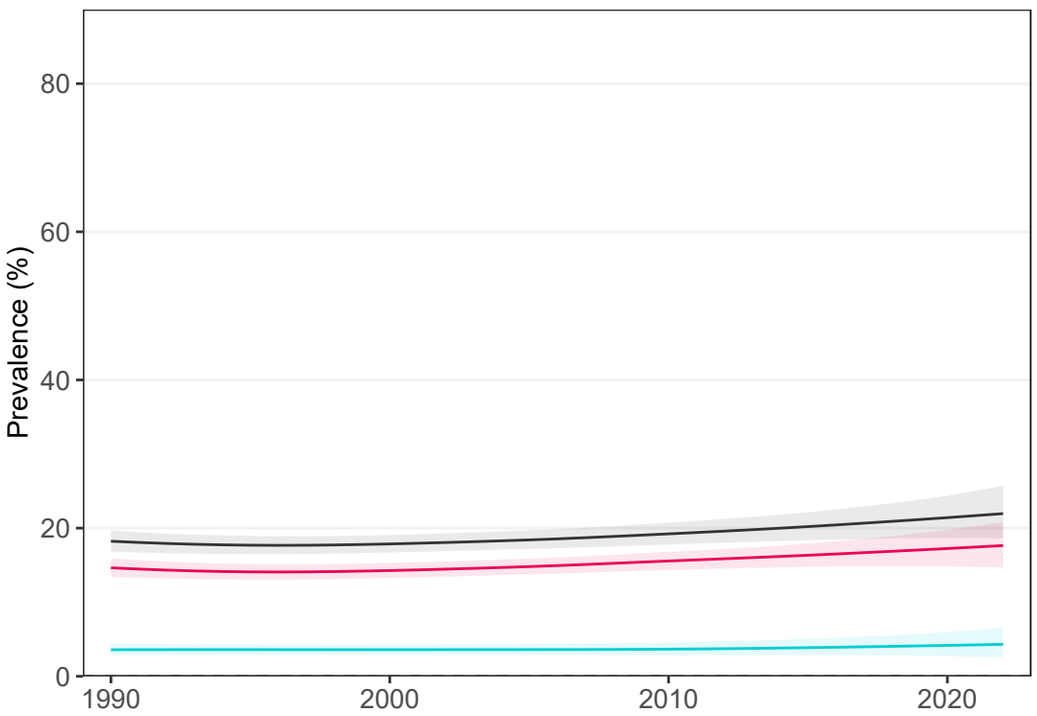


Combined burden
Thinness
Obesity

Adults

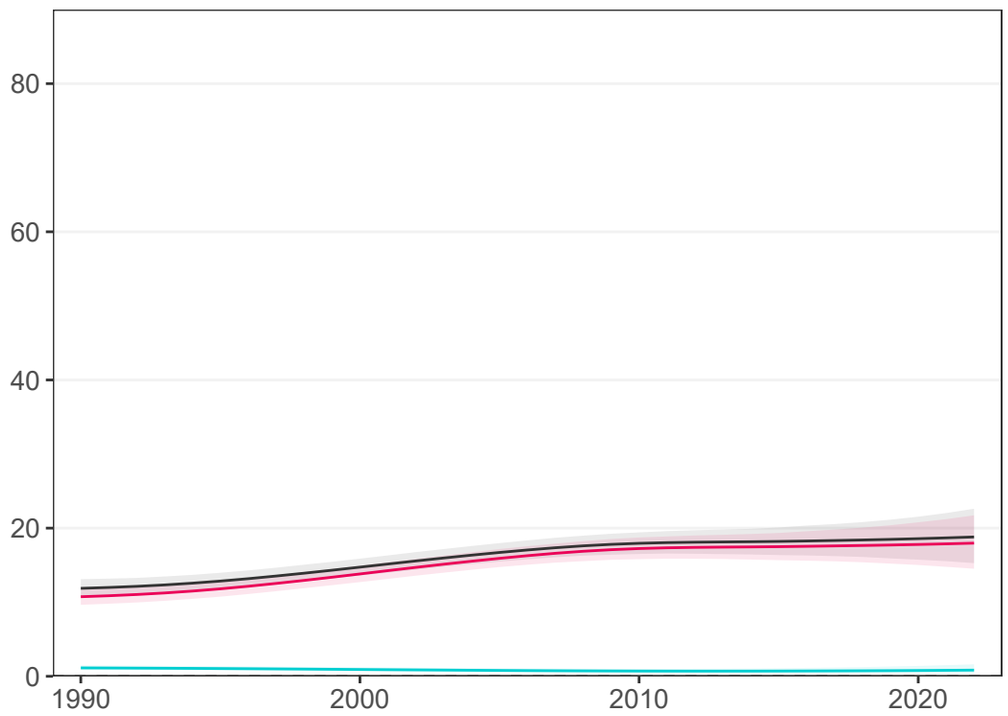
Women

56 studies (8 national)



Men

61 studies (8 national)



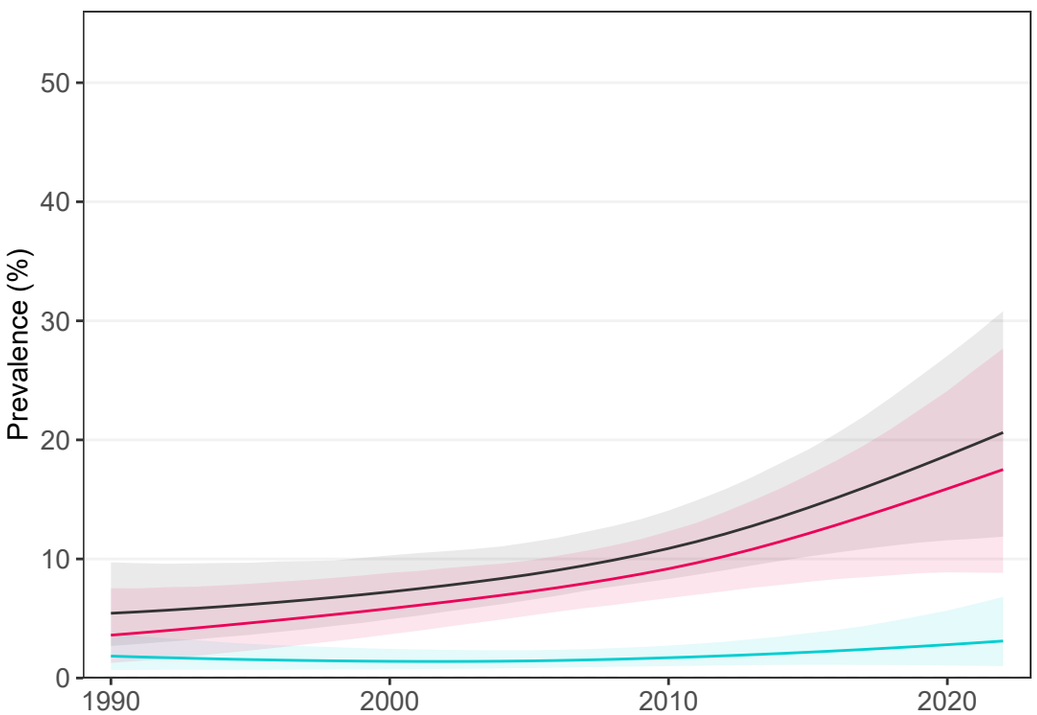
Combined burden
Underweight
Obesity

Jamaica

School-aged children and adolescents

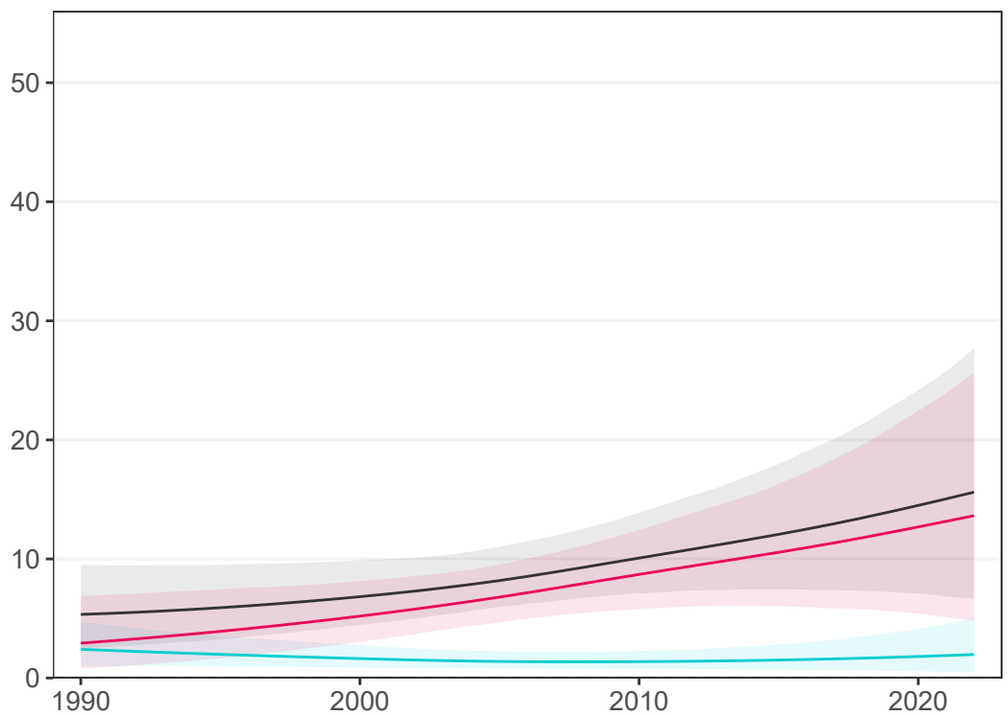
Girls

6 studies (6 national)



Boys

5 studies (5 national)

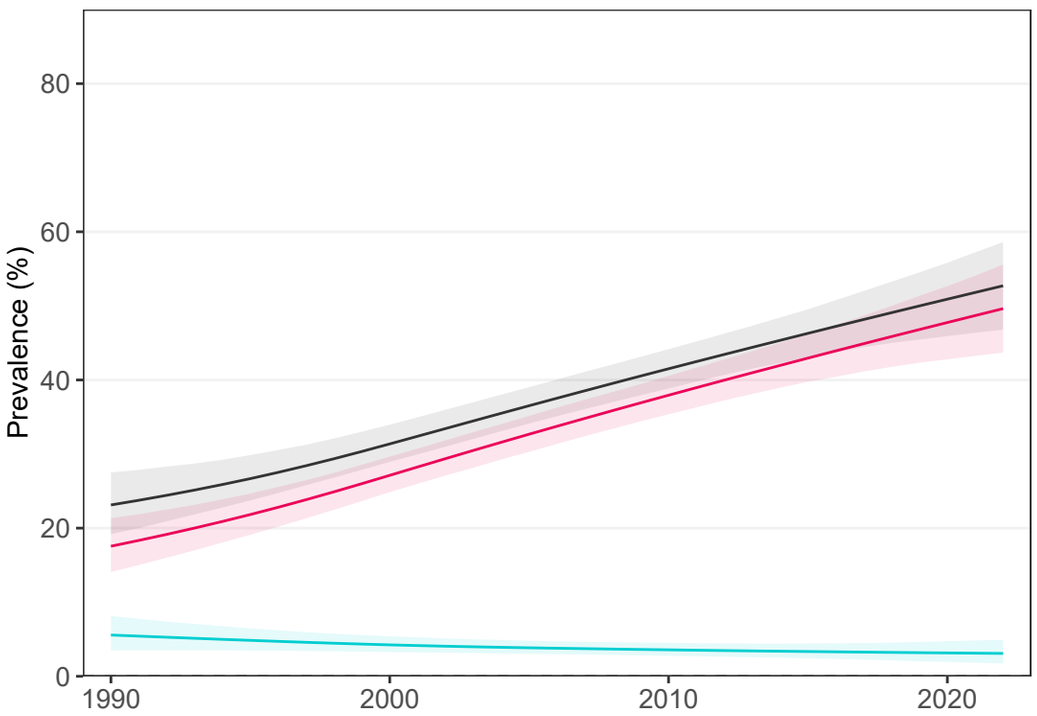


Combined burden
Thinness
Obesity

Adults

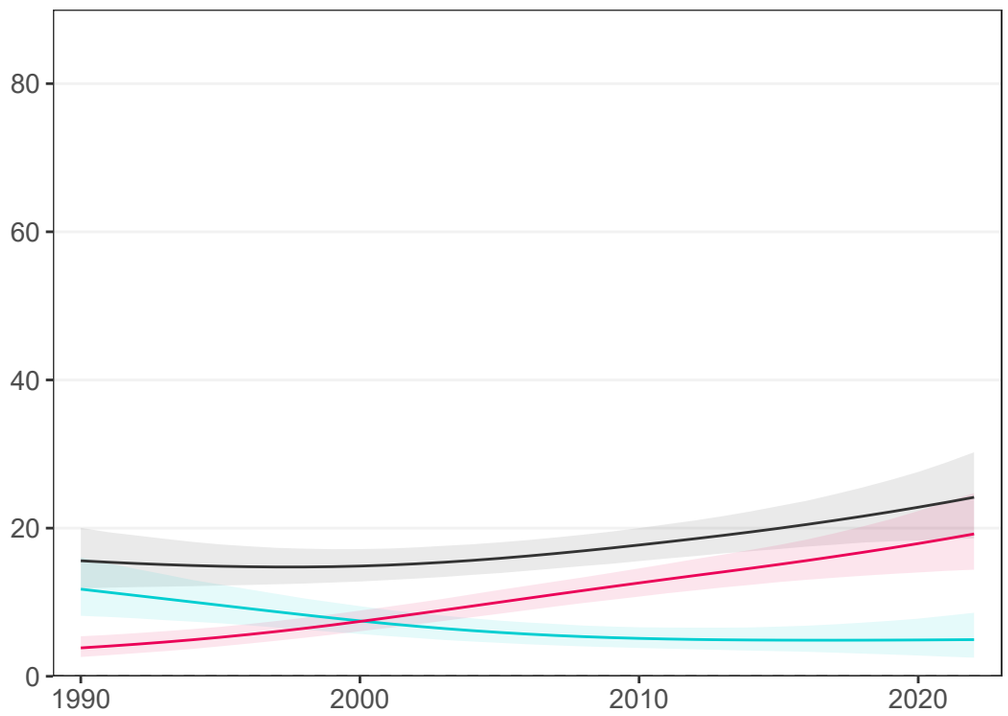
Women

8 studies (6 national)



Men

8 studies (6 national)



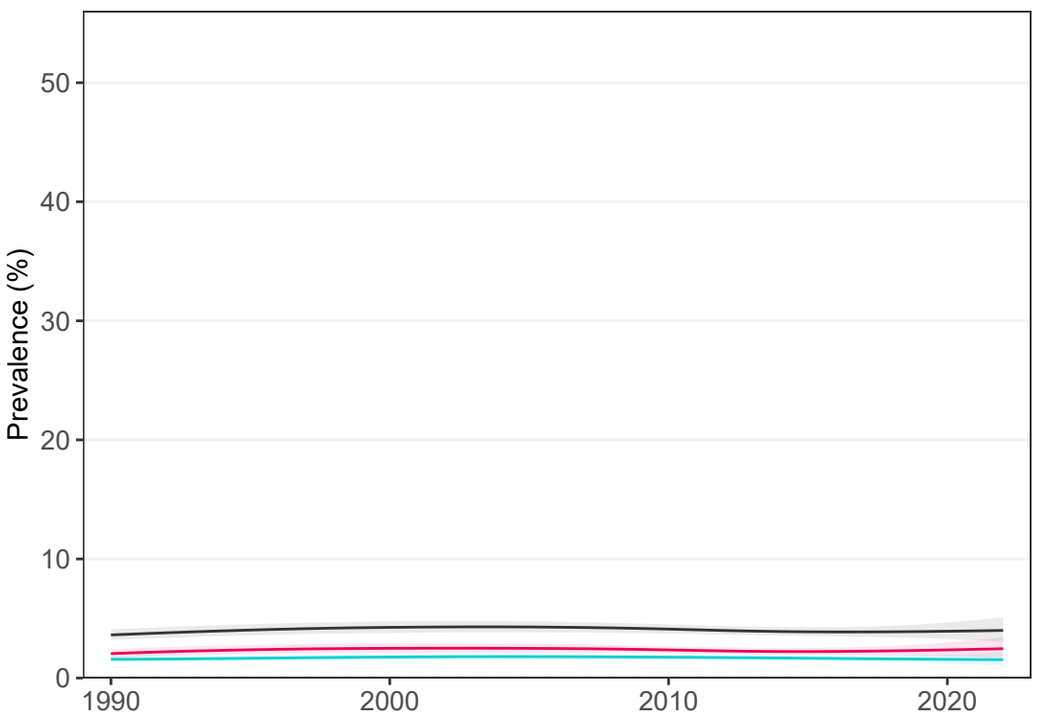
Combined burden
Underweight
Obesity

Japan

School-aged children and adolescents

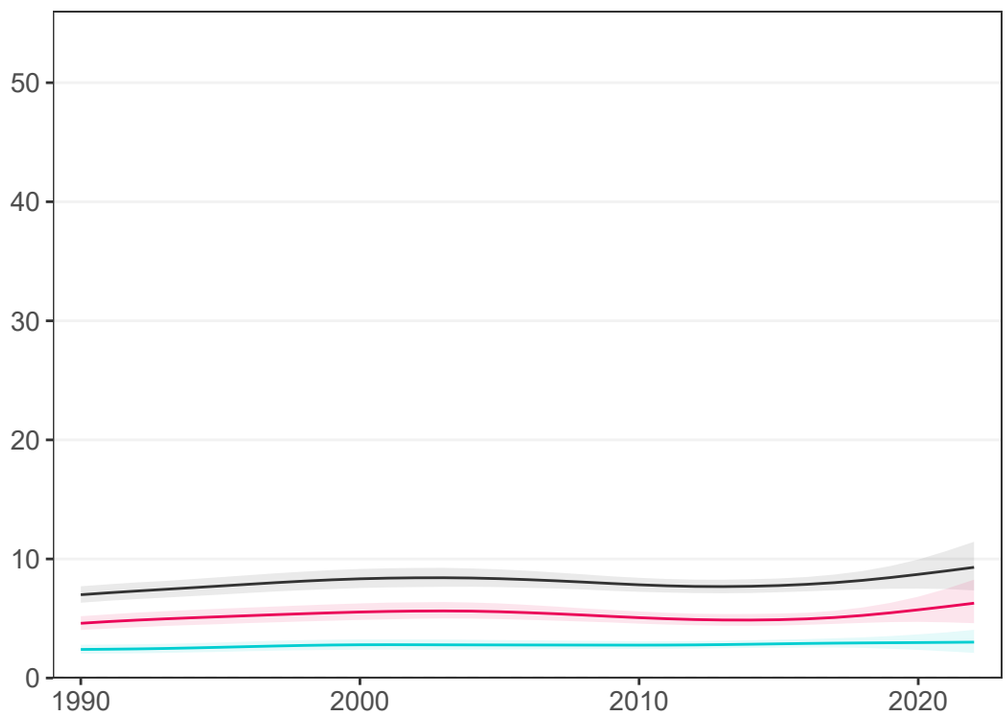
Girls

82 studies (56 national)



Boys

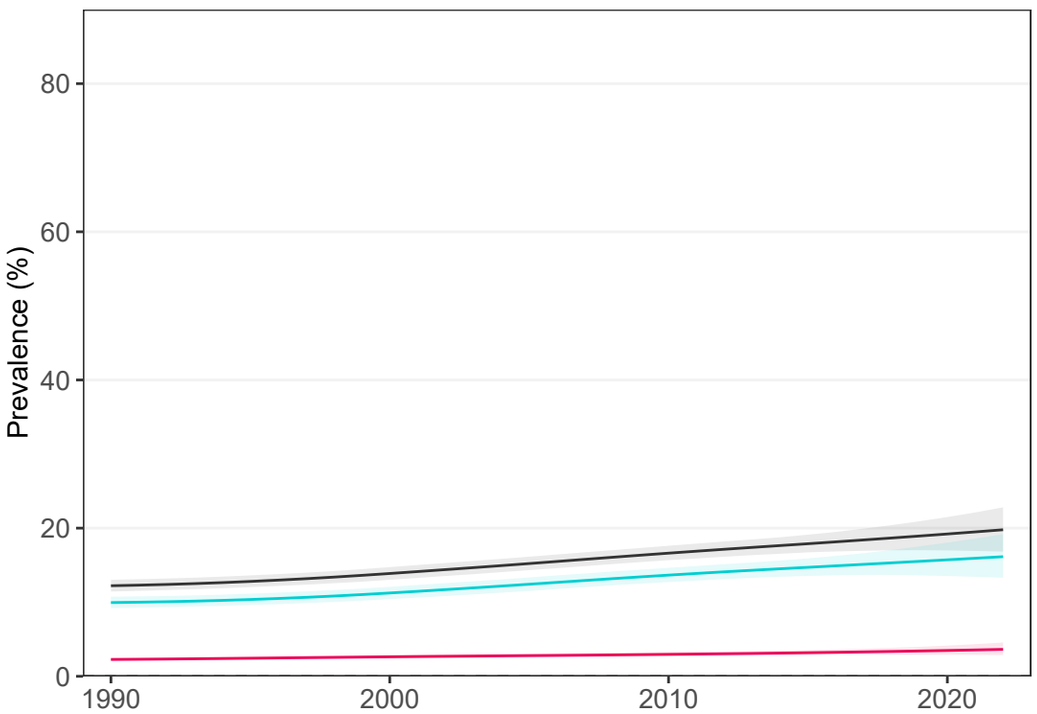
82 studies (56 national)



Adults

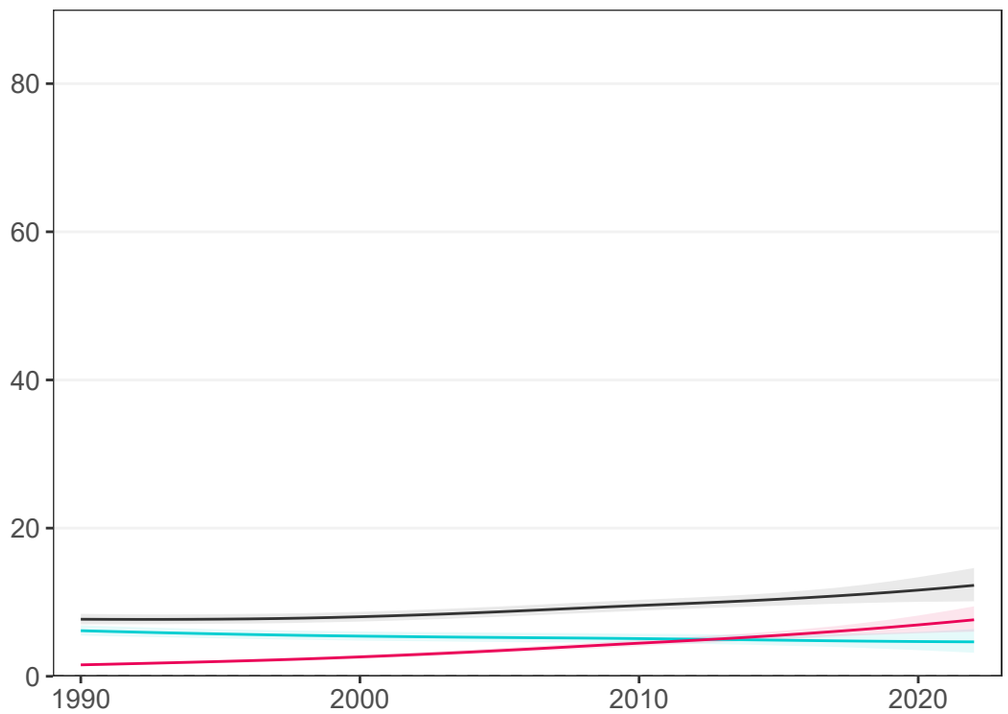
Women

93 studies (43 national)



Men

92 studies (43 national)

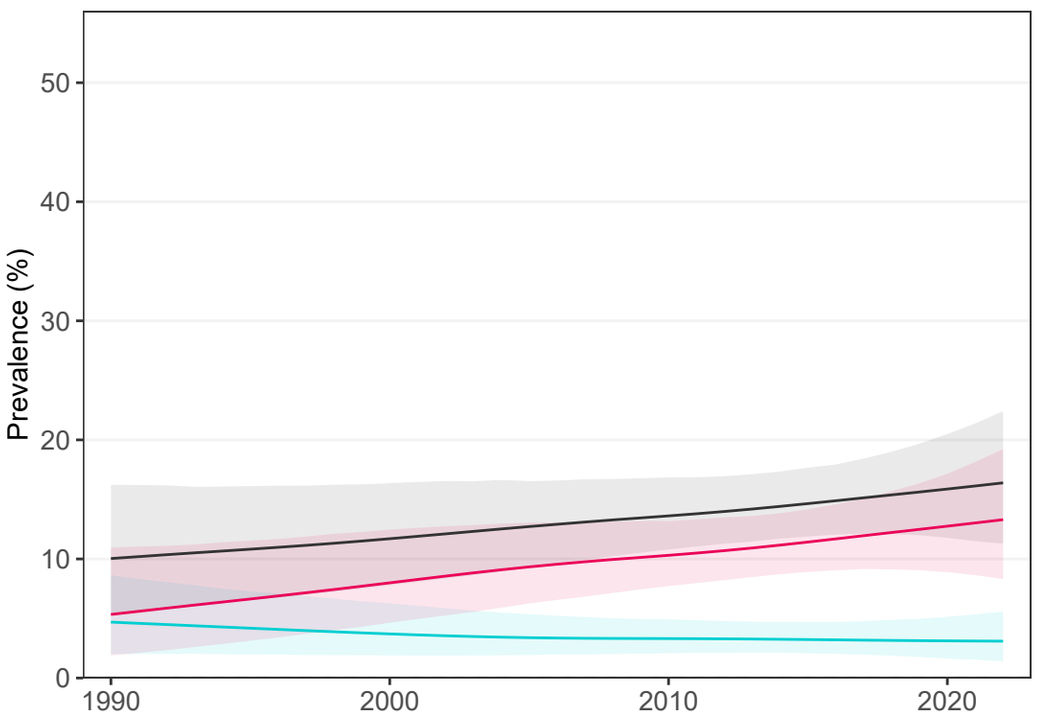


Jordan

School-aged children and adolescents

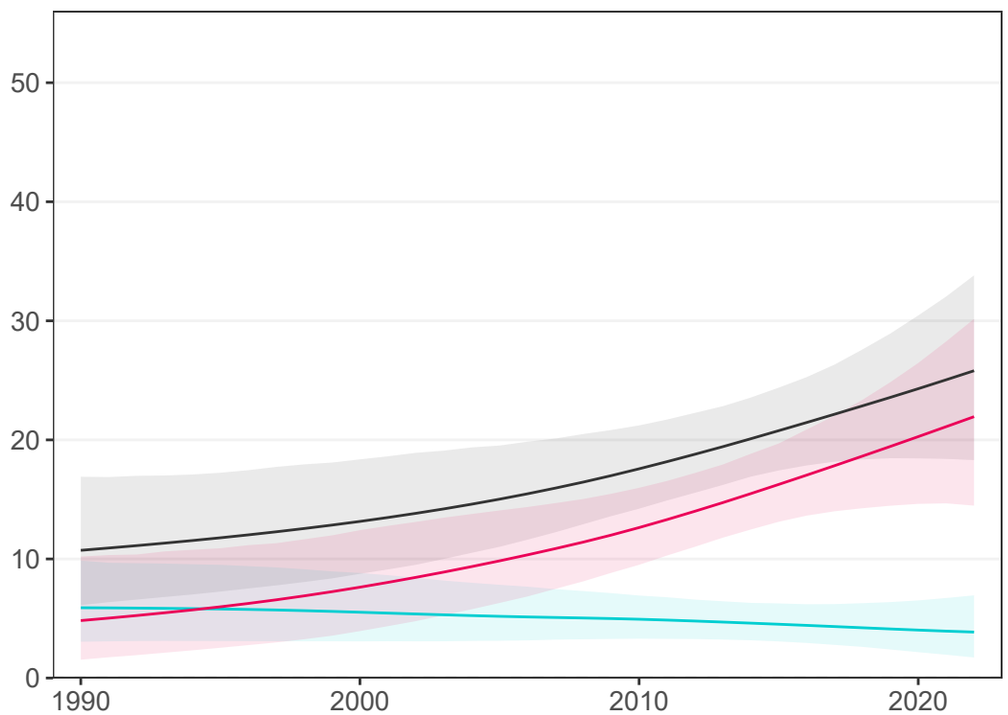
Girls

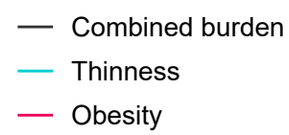
8 studies (5 national)



Boys

8 studies (5 national)

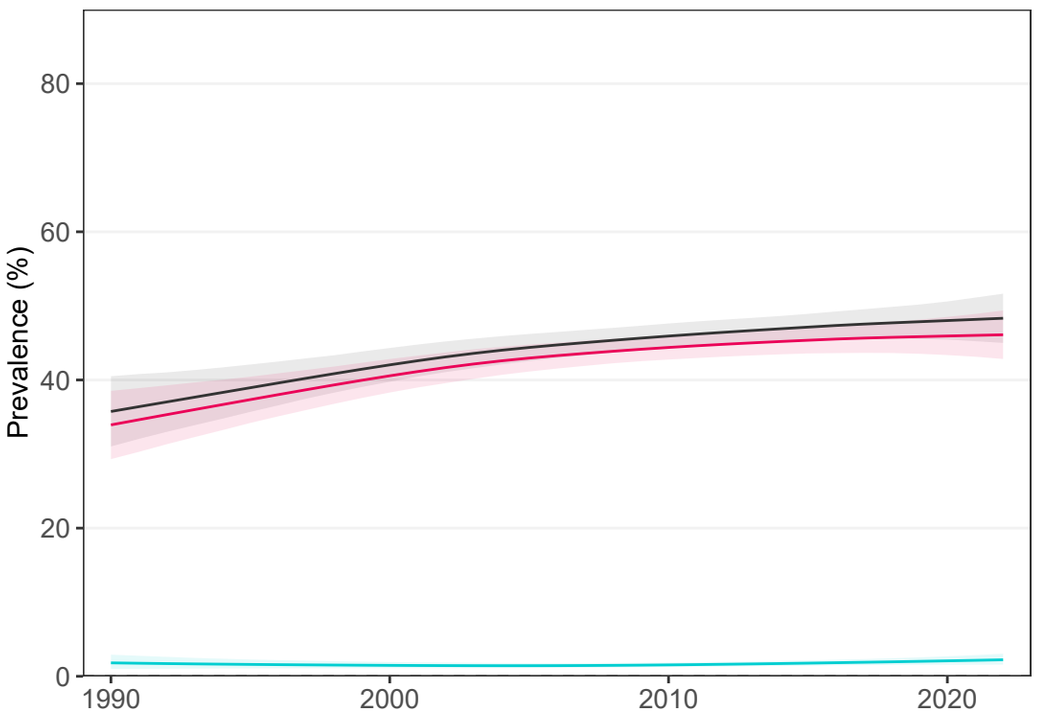




Adults

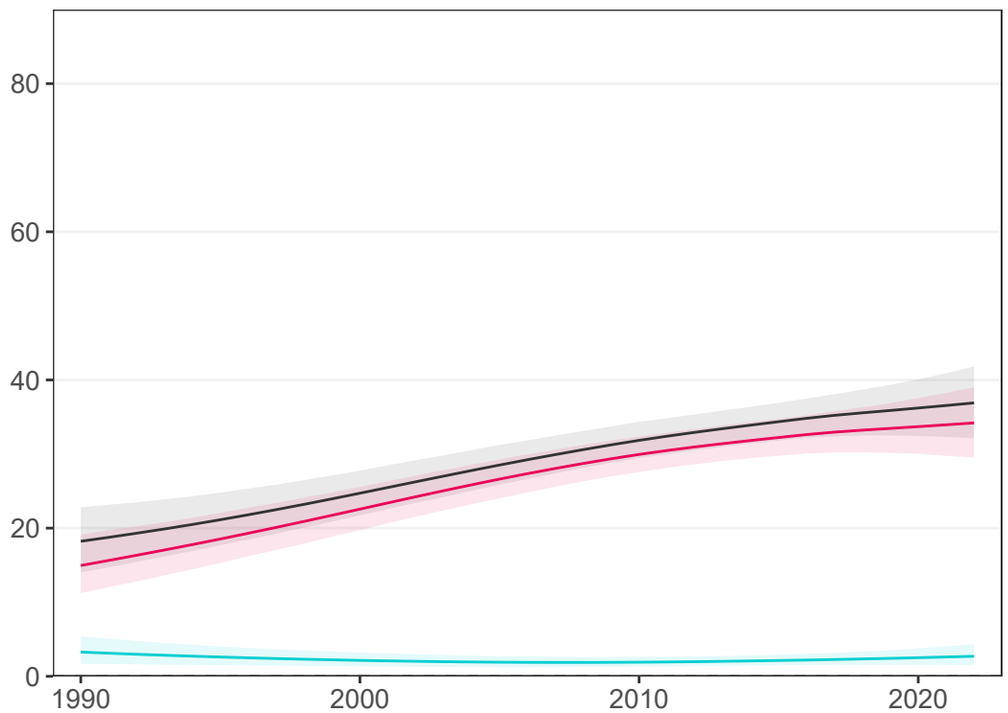
Women

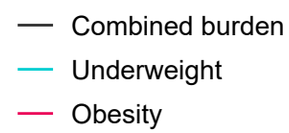
14 studies (12 national)



Men

7 studies (5 national)



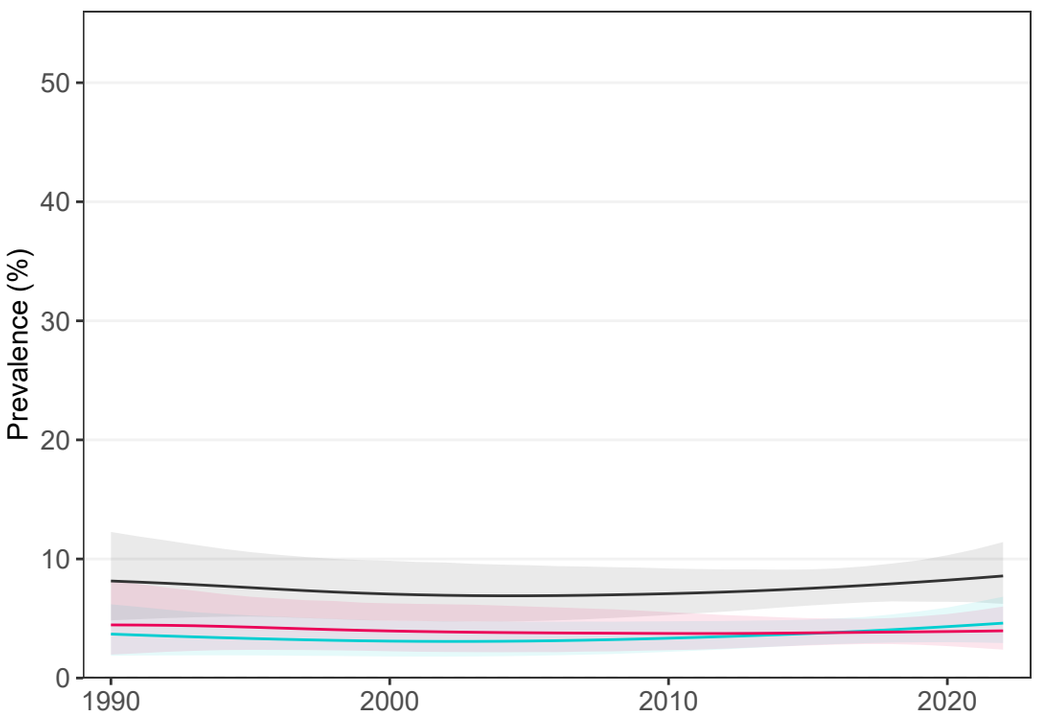


Kazakhstan

School-aged children and adolescents

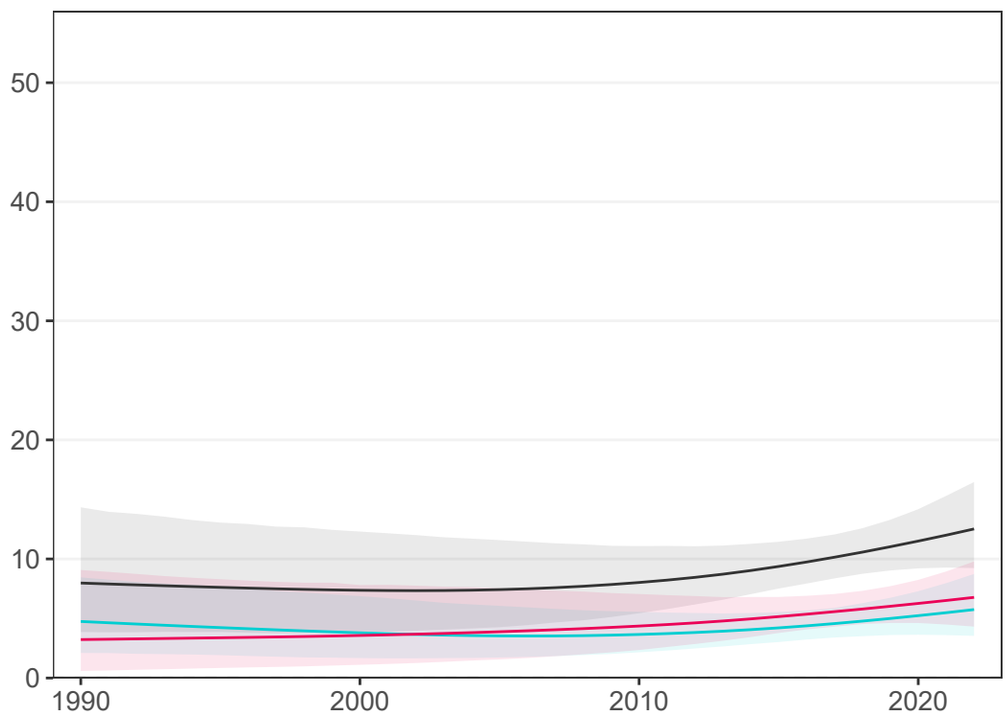
Girls

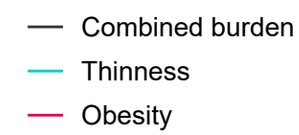
11 studies (5 national)



Boys

8 studies (3 national)

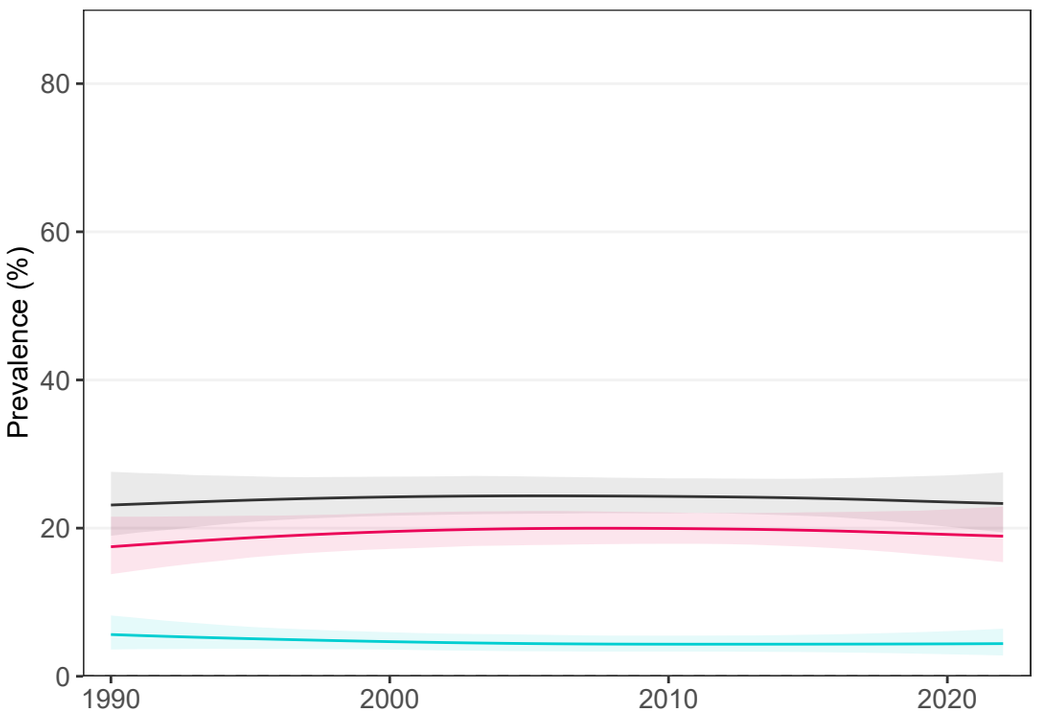




Adults

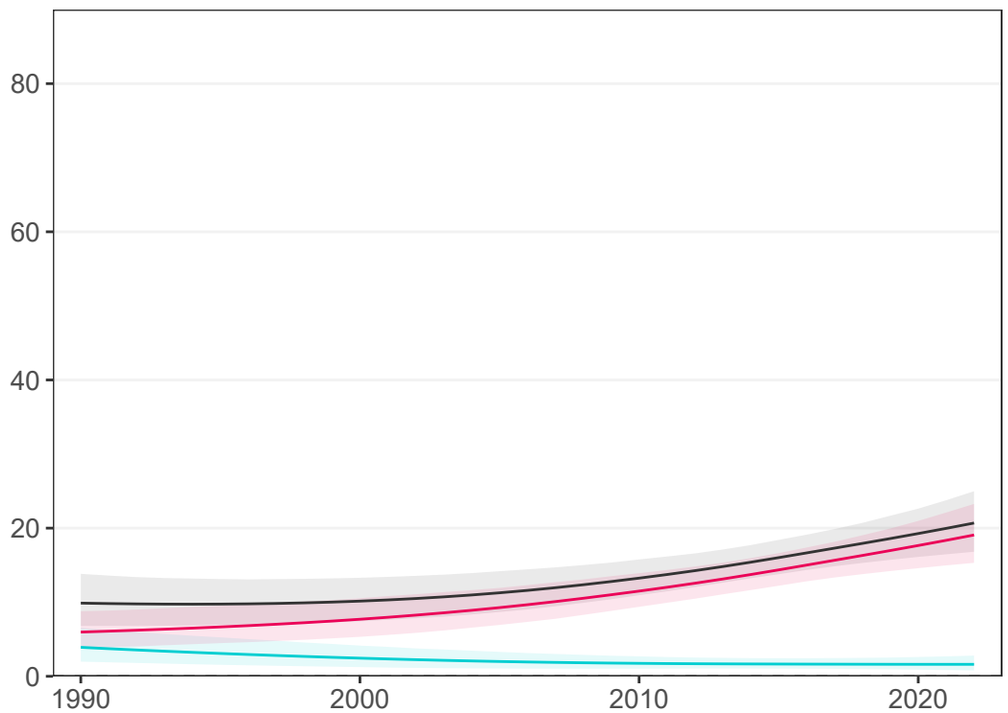
Women

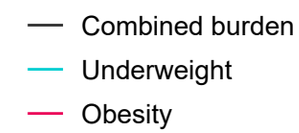
9 studies (3 national)



Men

8 studies (1 national)



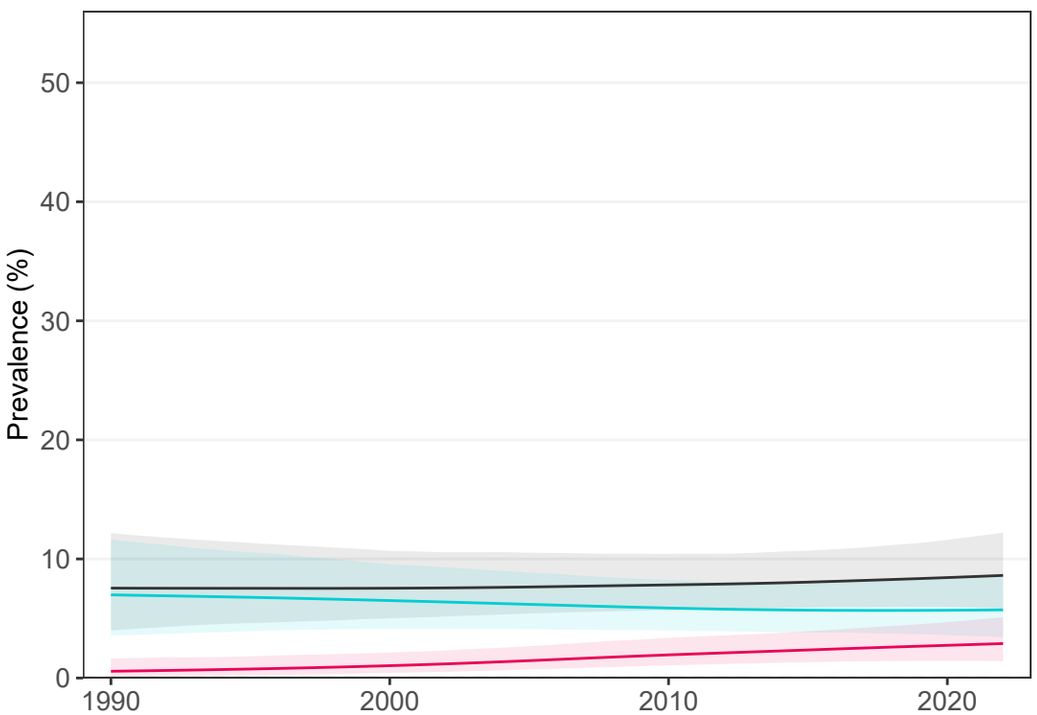


Kenya

School-aged children and adolescents

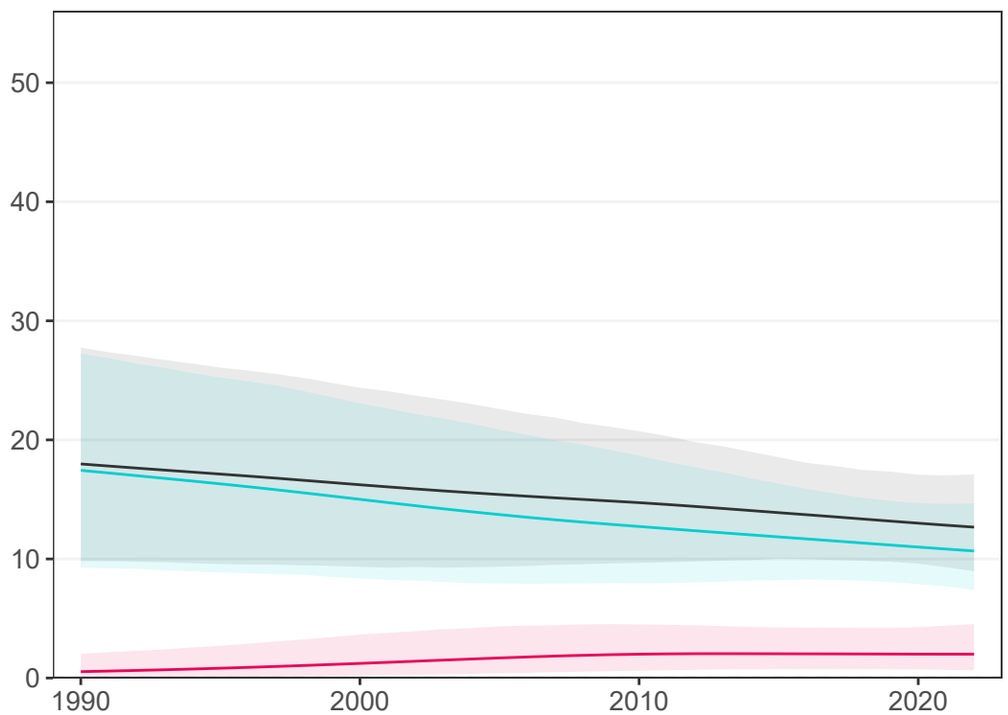
Girls

7 studies (5 national)



Boys

4 studies (2 national)

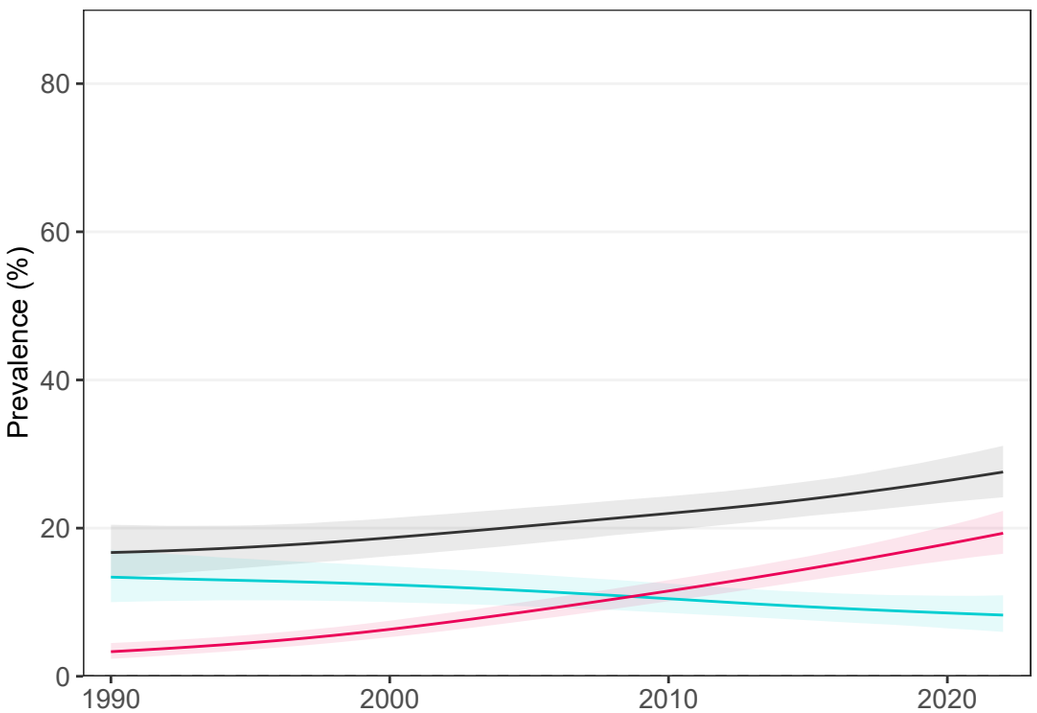


Combined burden
Thinness
Obesity

Adults

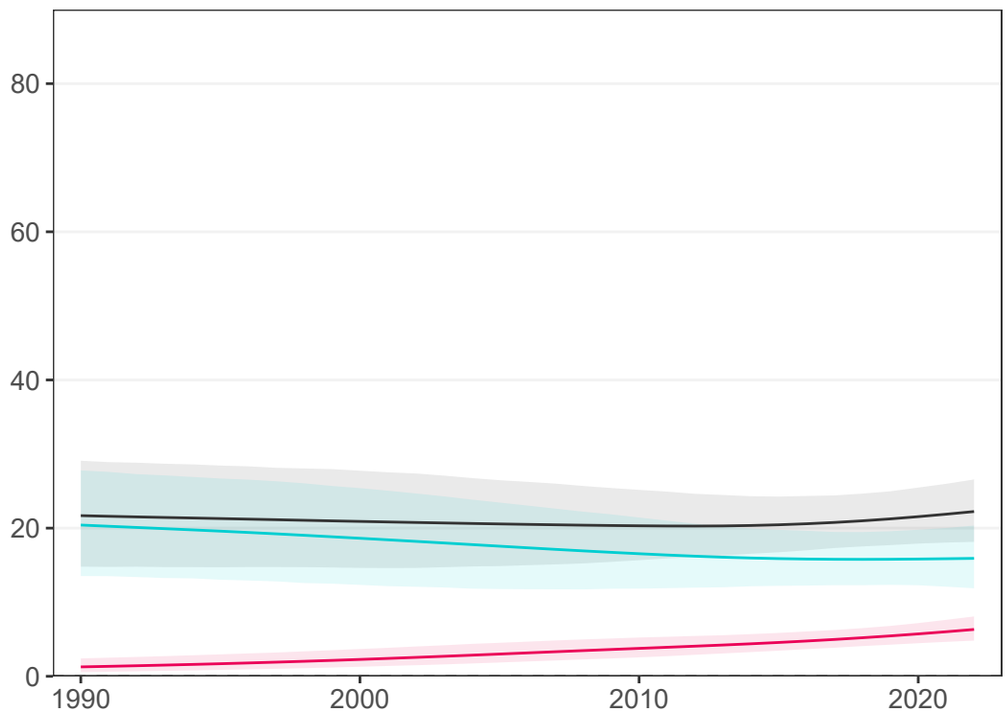
Women

9 studies (7 national)



Men

4 studies (2 national)



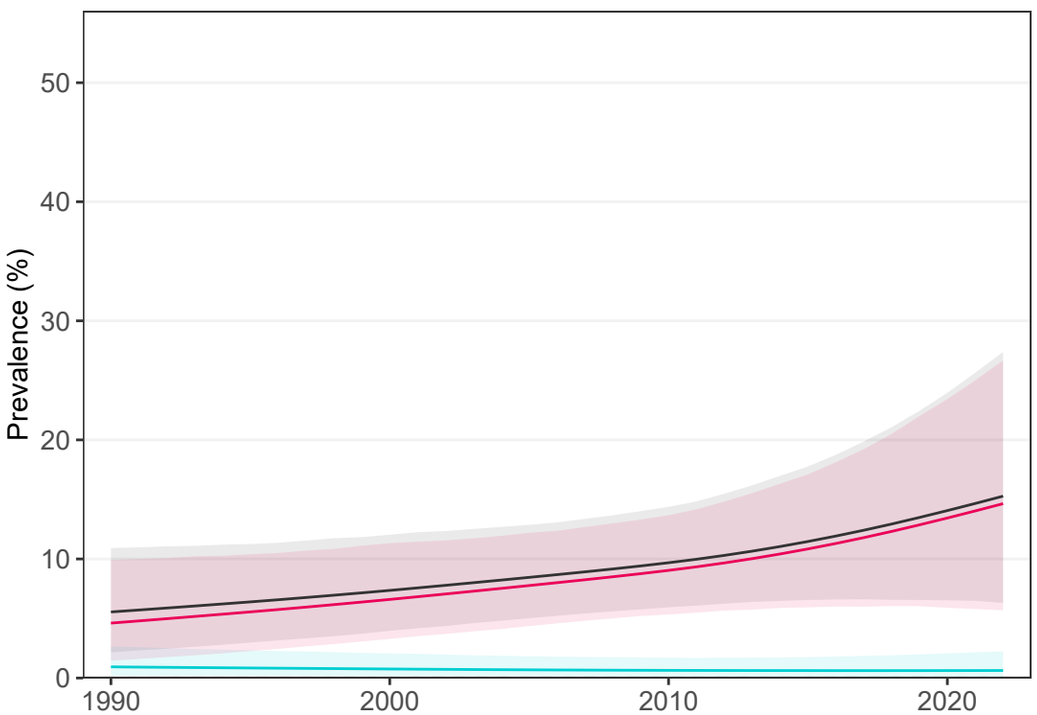
Combined burden
Underweight
Obesity

Kiribati

School-aged children and adolescents

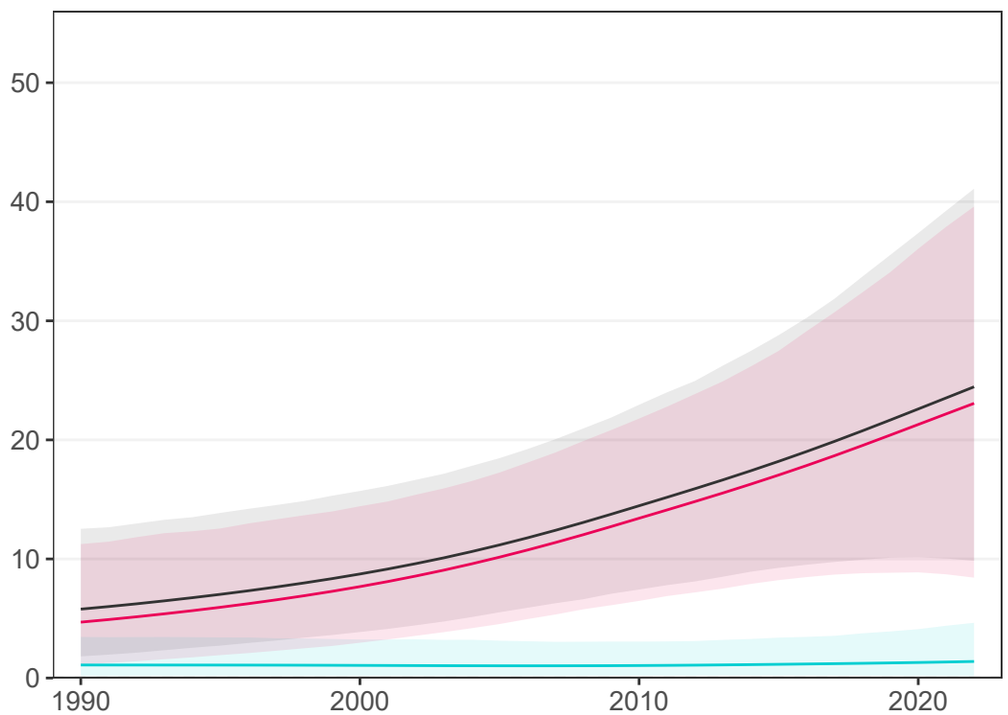
Girls

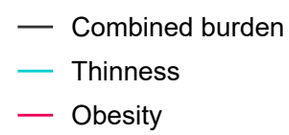
3 studies (3 national)



Boys

2 studies (2 national)

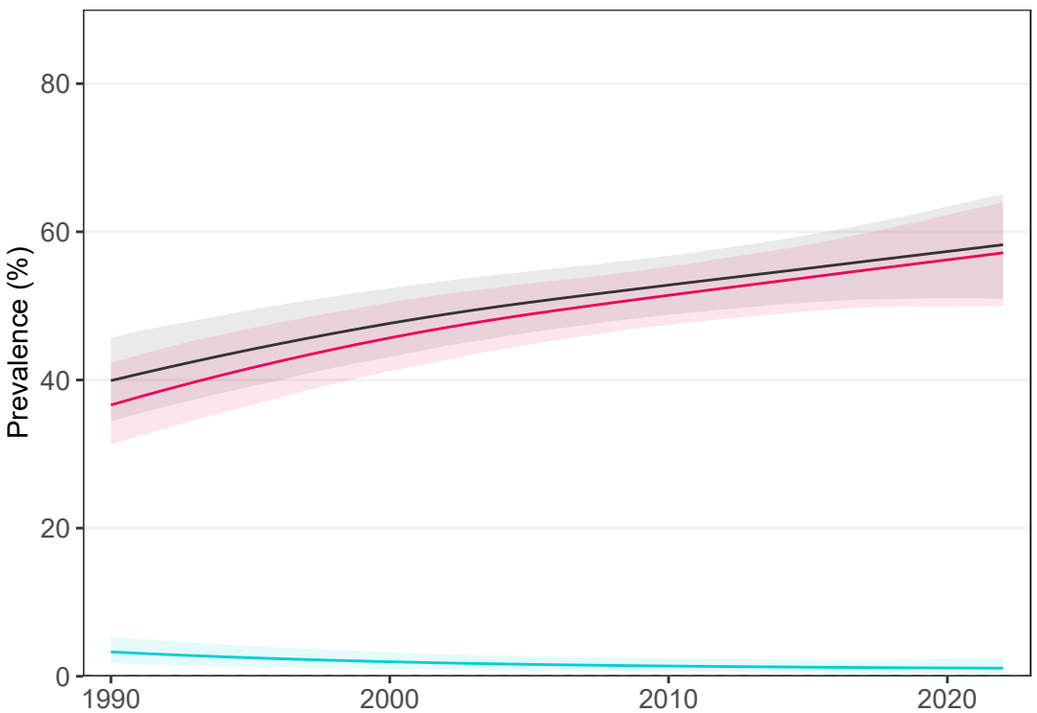




Adults

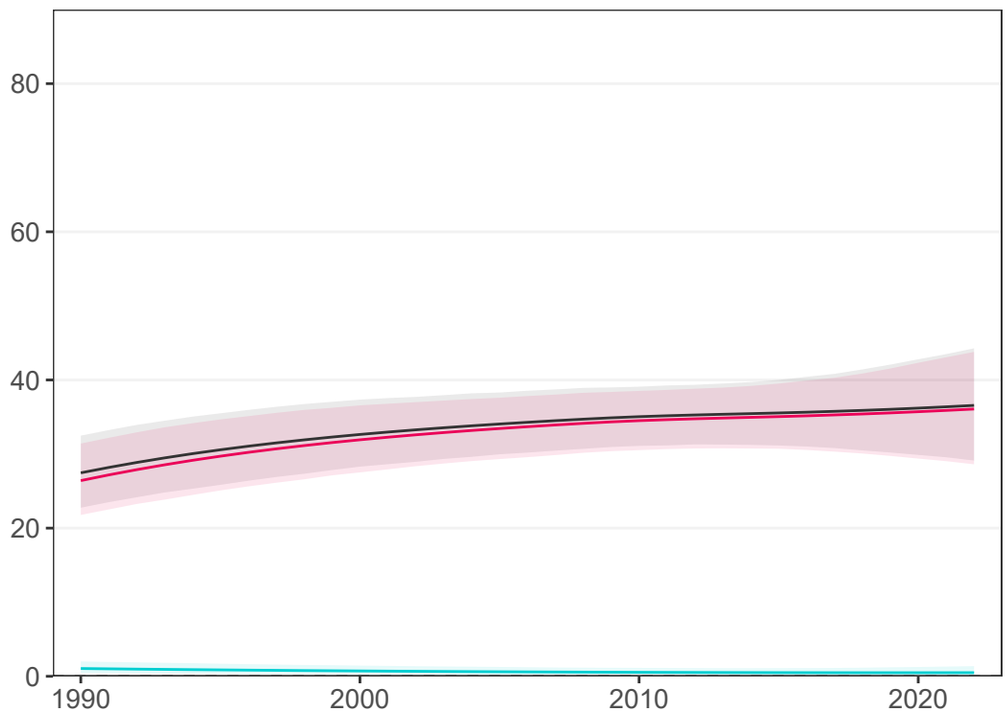
Women

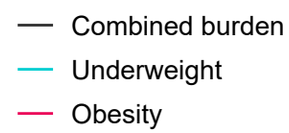
4 studies (2 national)



Men

4 studies (2 national)



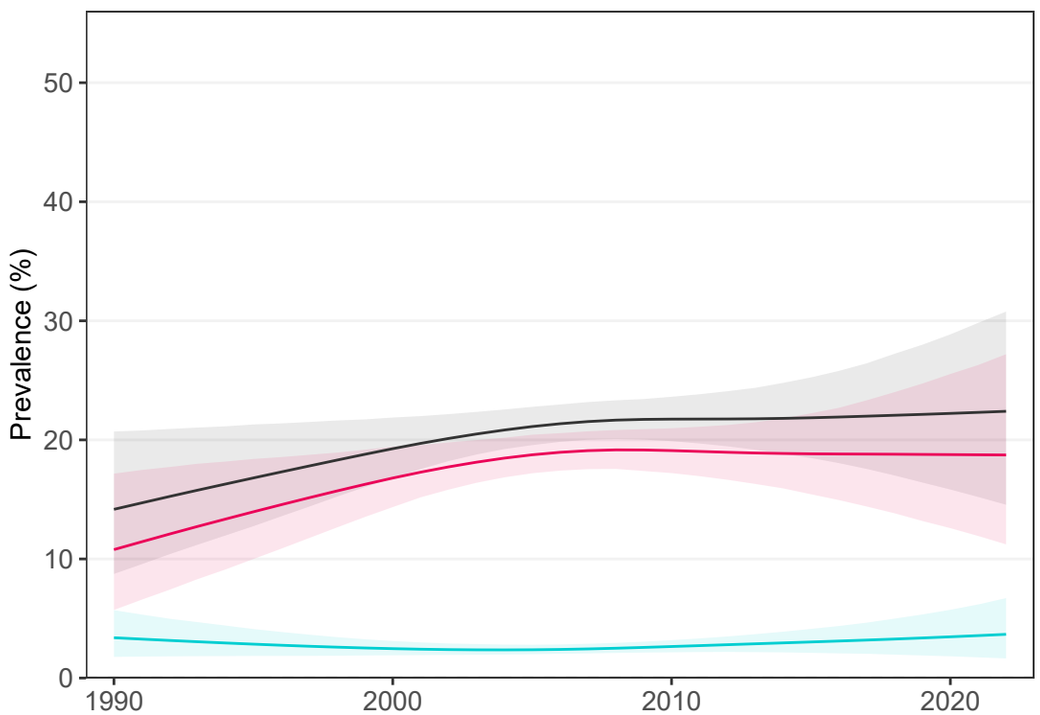


Kuwait

School-aged children and adolescents

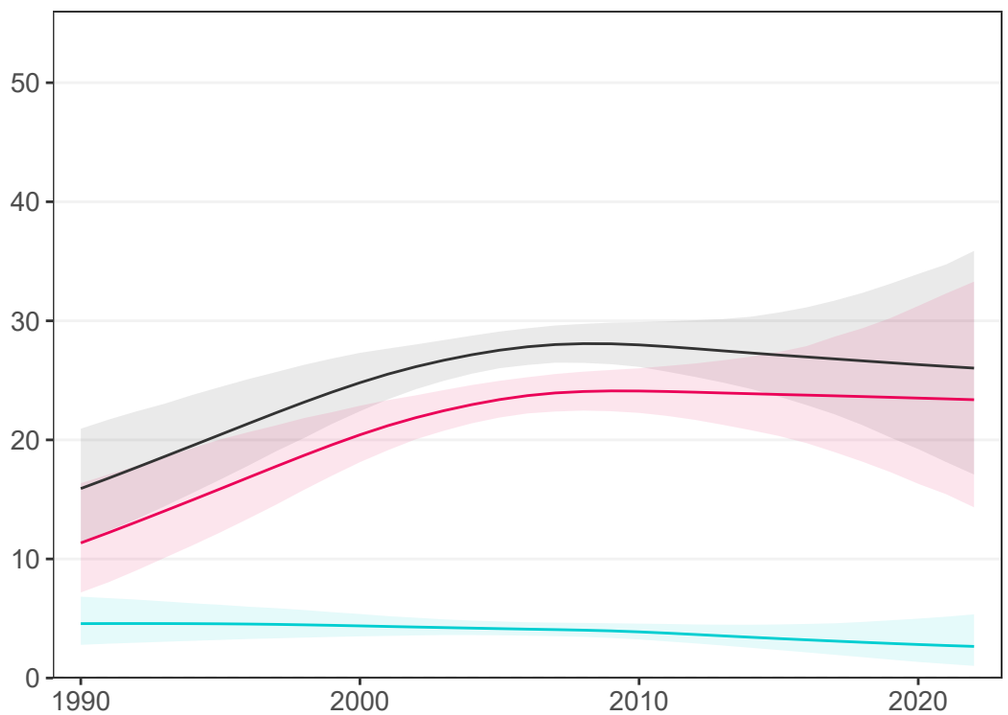
Girls

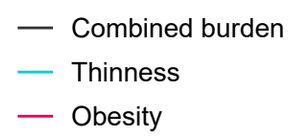
15 studies (15 national)



Boys

17 studies (15 national)

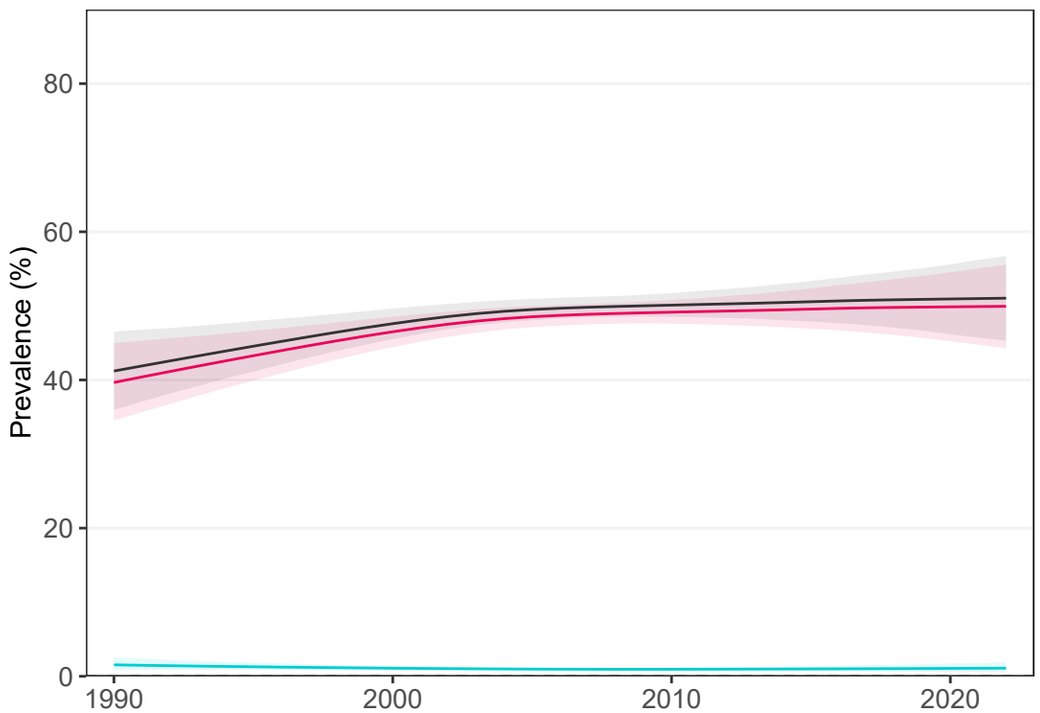




Adults

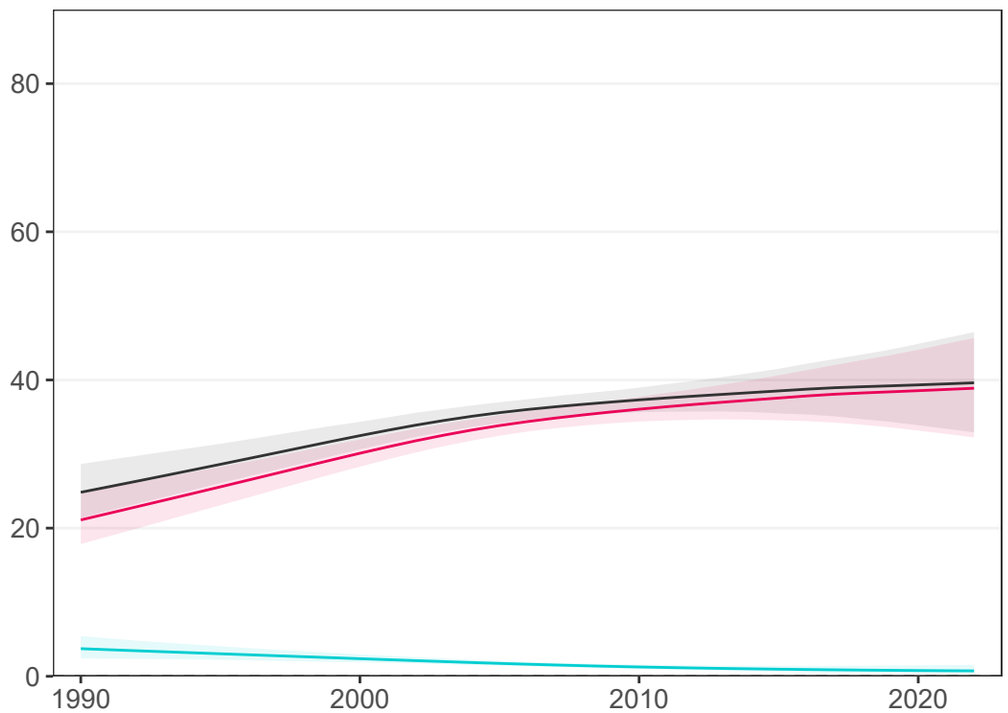
Women

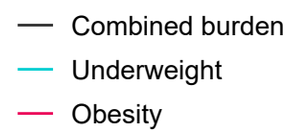
25 studies (24 national)



Men

27 studies (24 national)



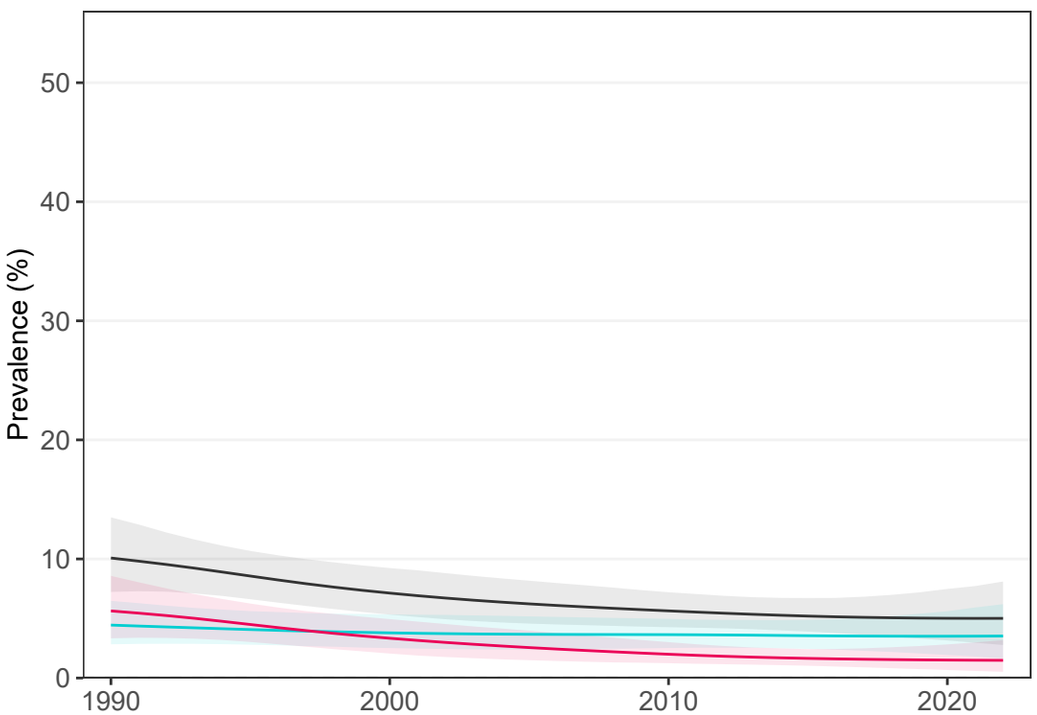


Kyrgyzstan

School-aged children and adolescents

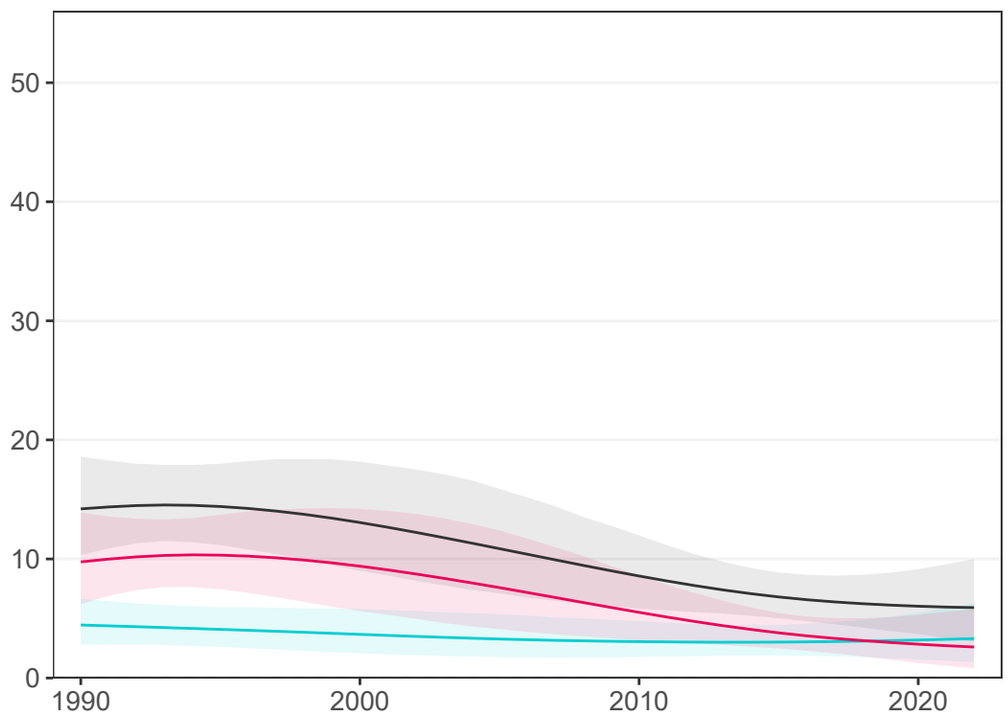
Girls

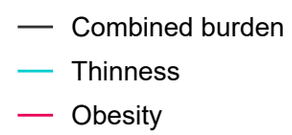
4 studies (4 national)



Boys

2 studies (2 national)

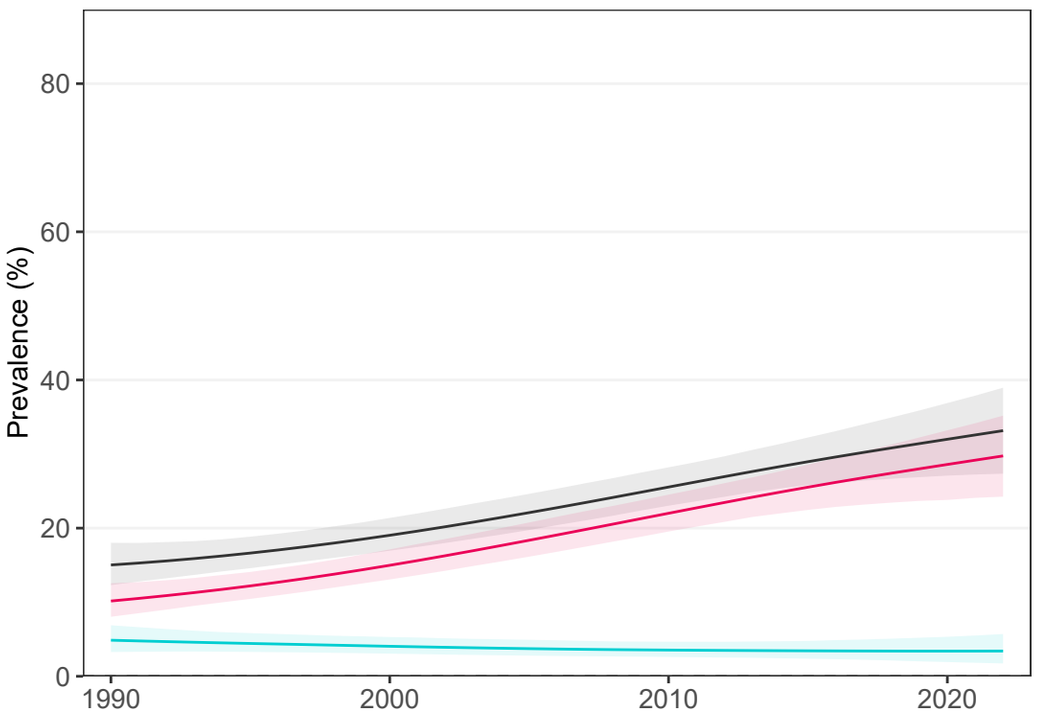




Adults

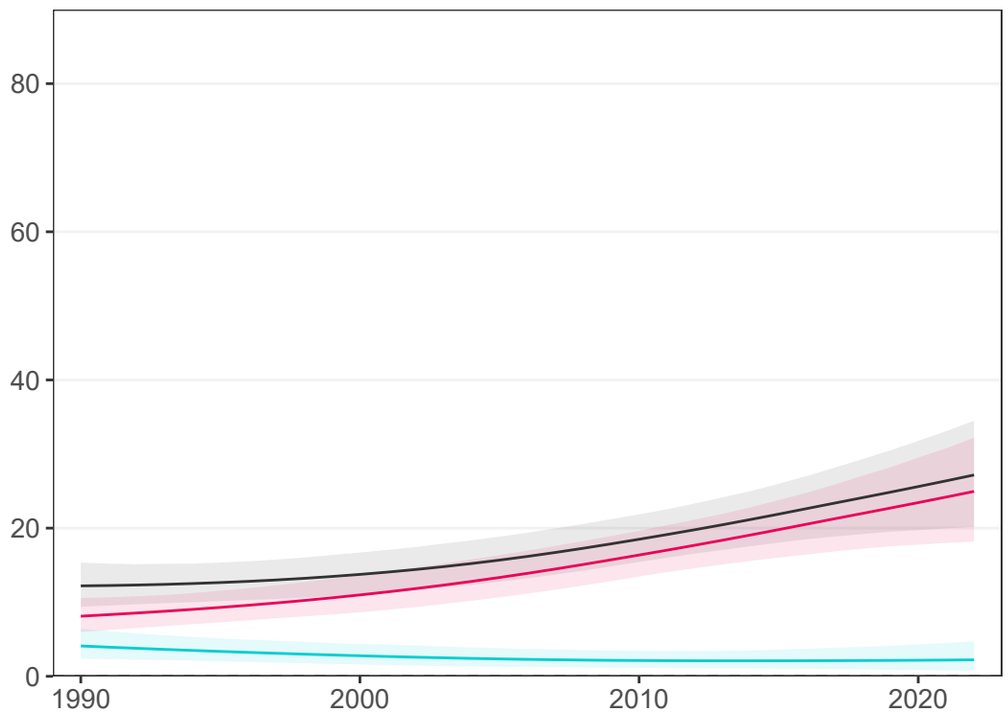
Women

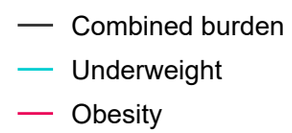
4 studies (4 national)



Men

2 studies (2 national)



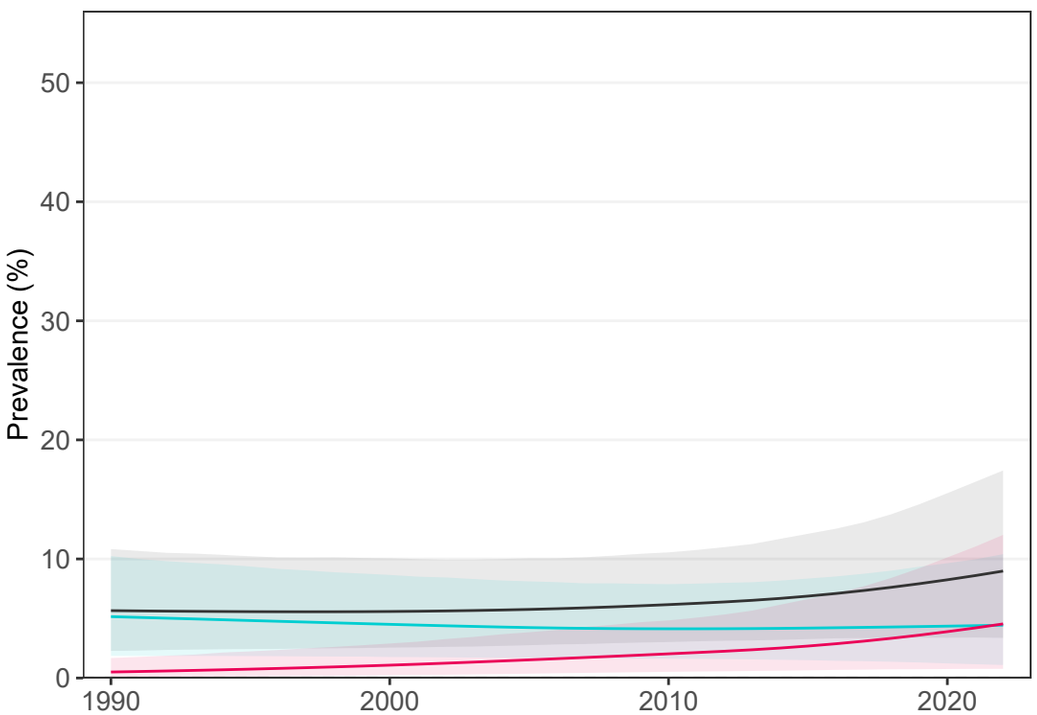


Lao PDR

School-aged children and adolescents

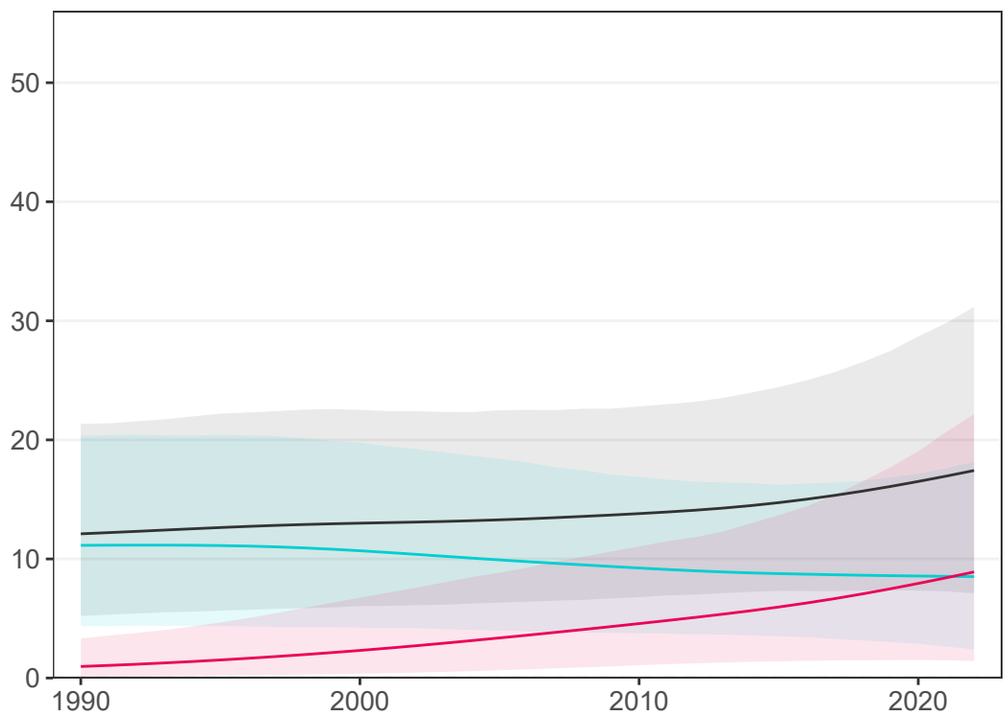
Girls

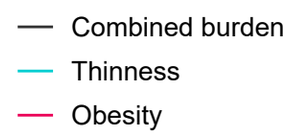
2 studies (2 national)



Boys

1 study (1 national)

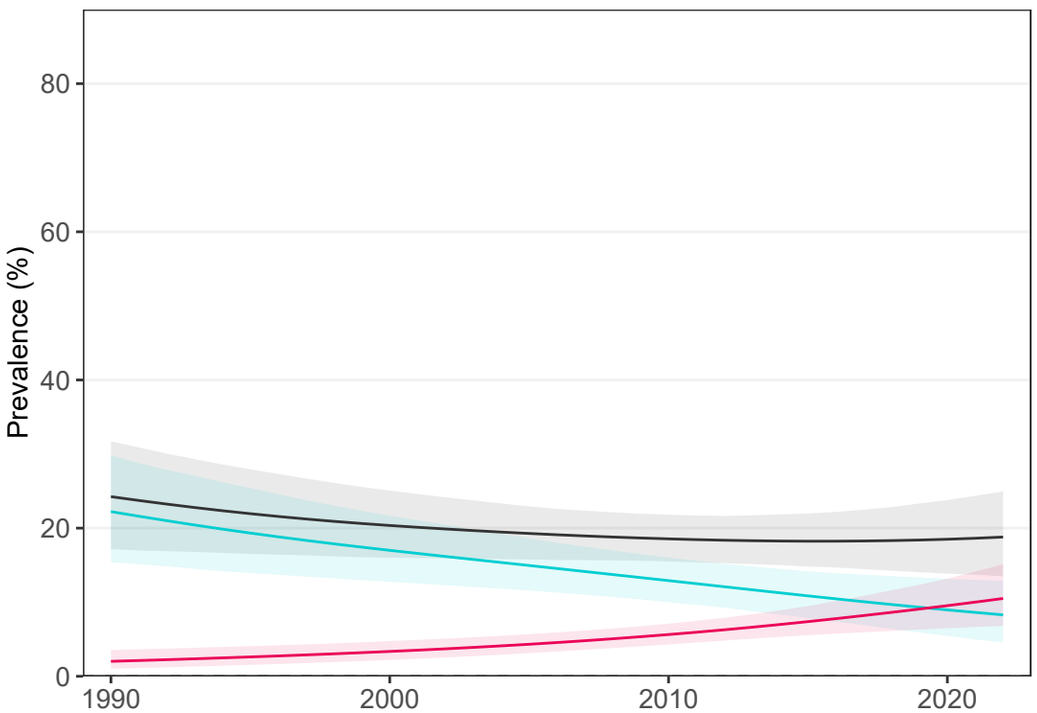




Adults

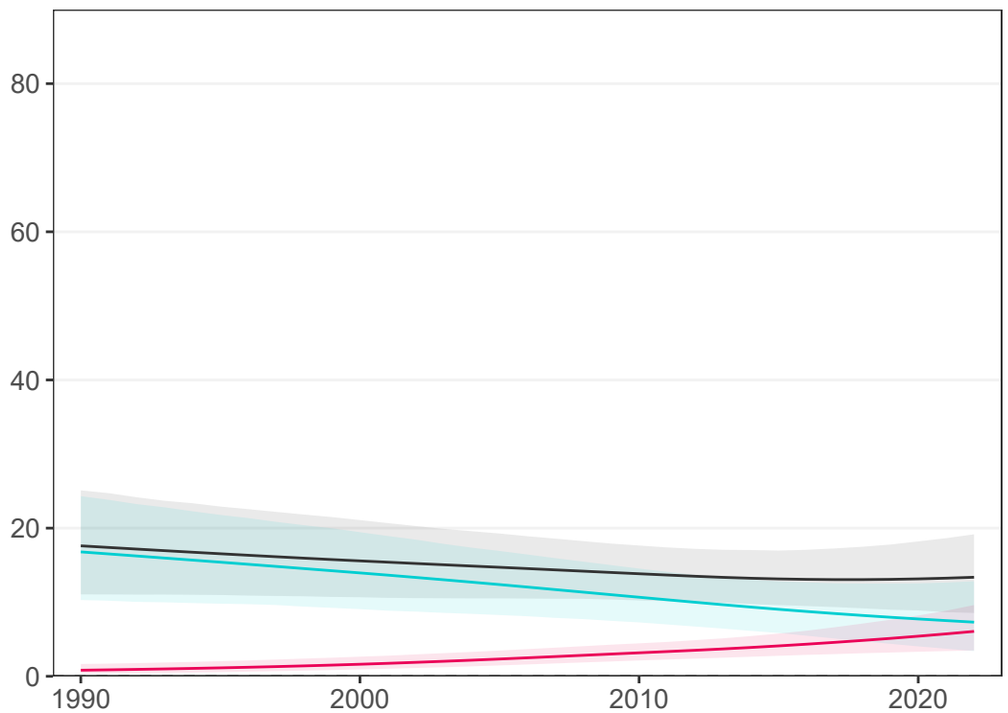
Women

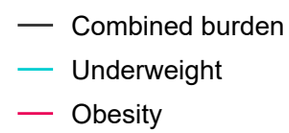
3 studies (2 national)



Men

2 studies (1 national)



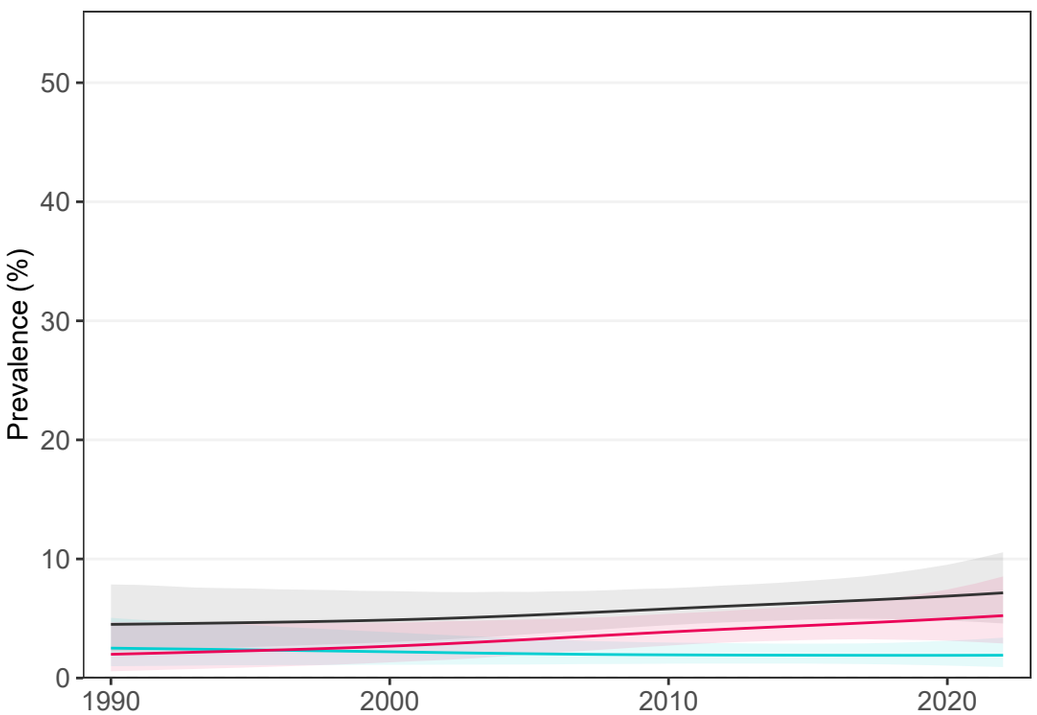


Latvia

School-aged children and adolescents

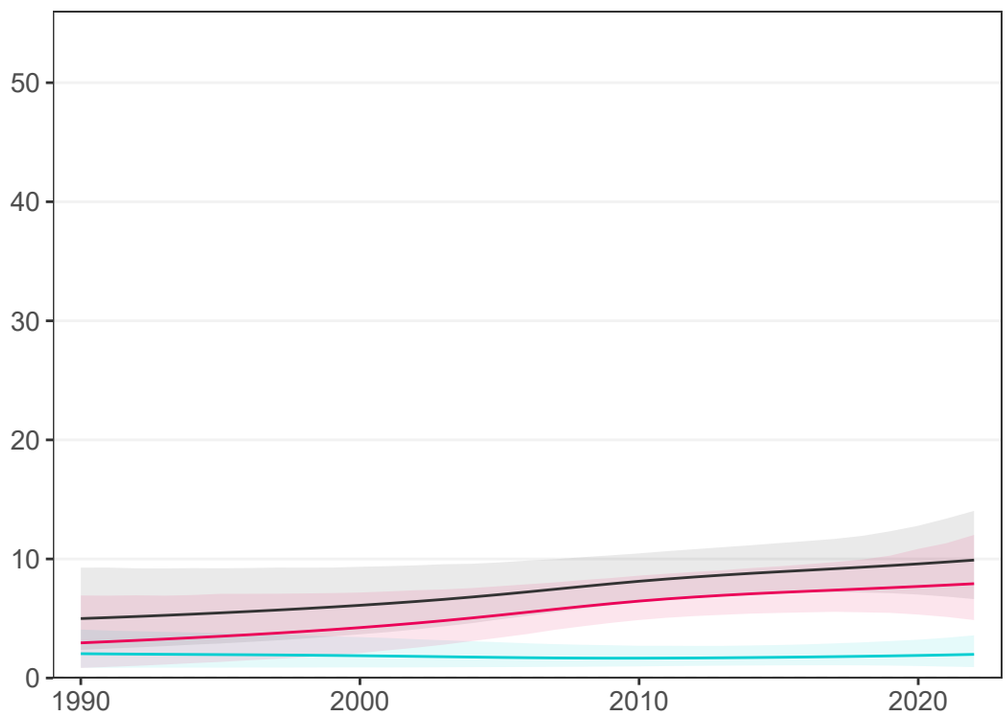
Girls

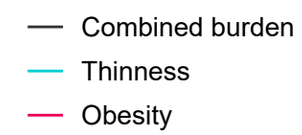
5 studies (5 national)



Boys

5 studies (5 national)

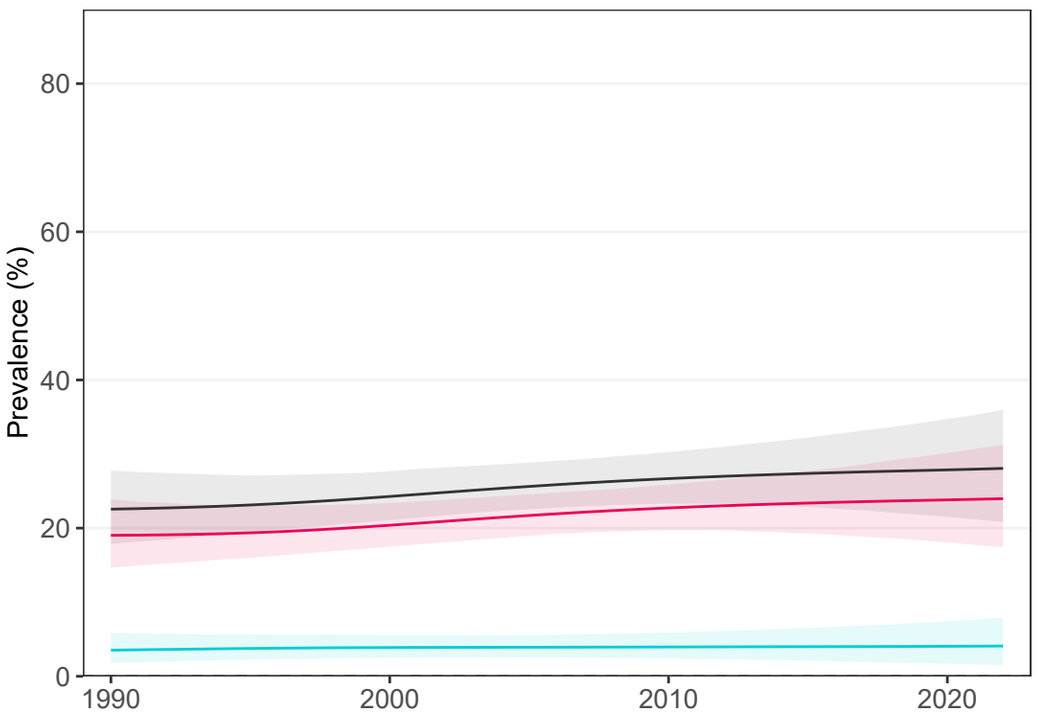




Adults

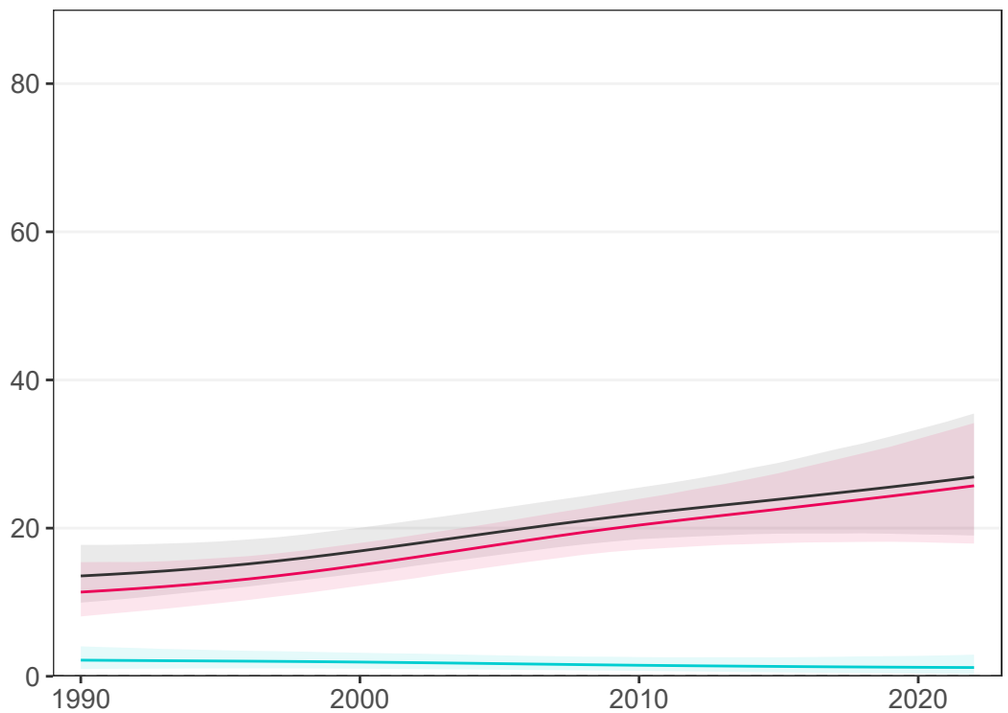
Women

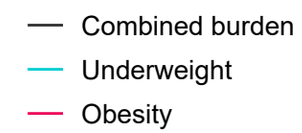
2 studies (2 national)



Men

2 studies (2 national)



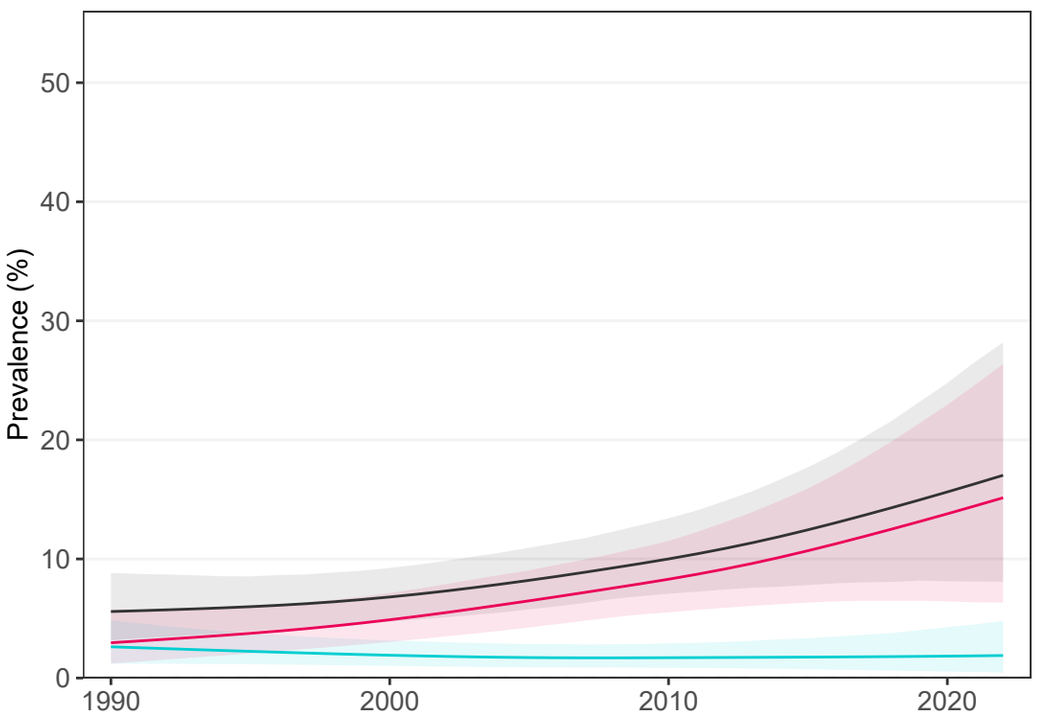


Lebanon

School-aged children and adolescents

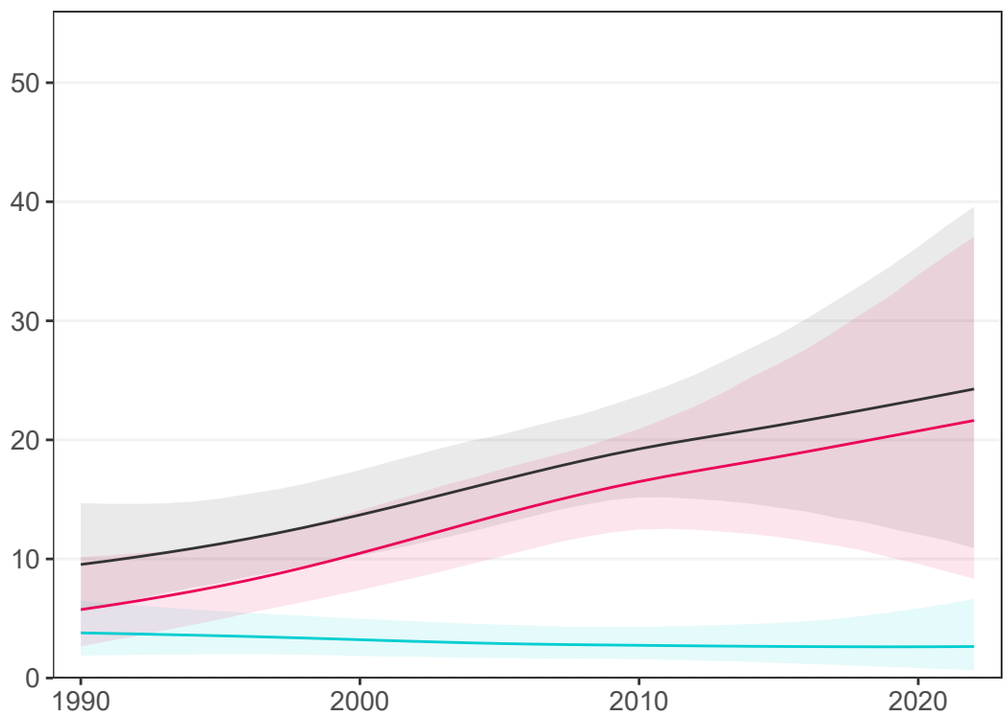
Girls

3 studies (3 national)



Boys

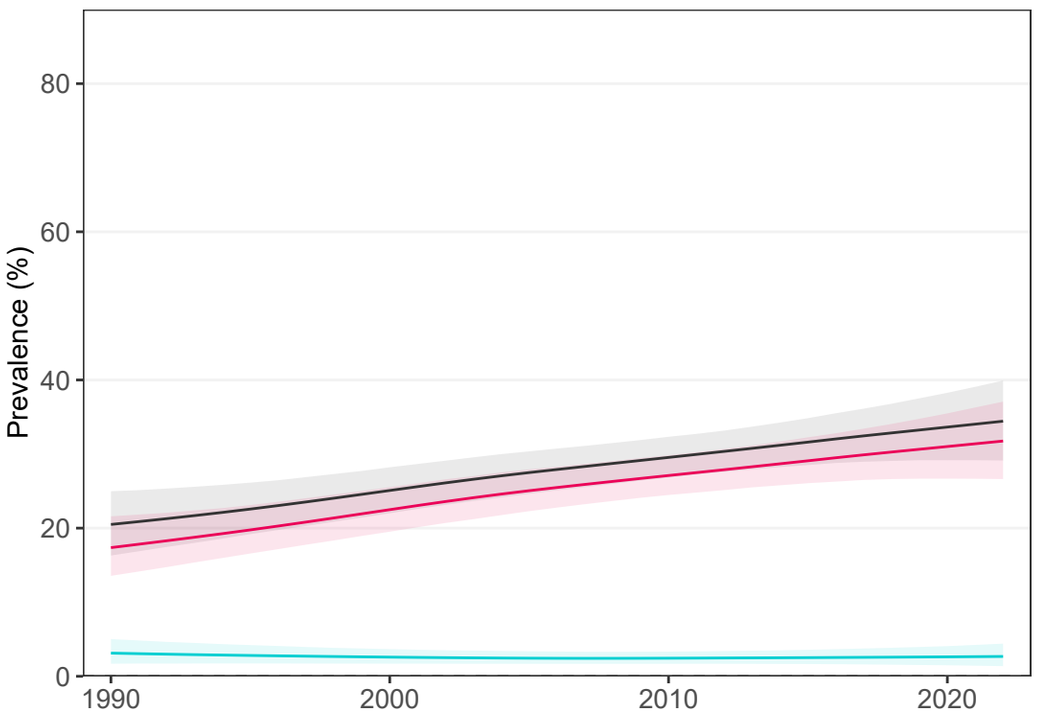
3 studies (3 national)



Adults

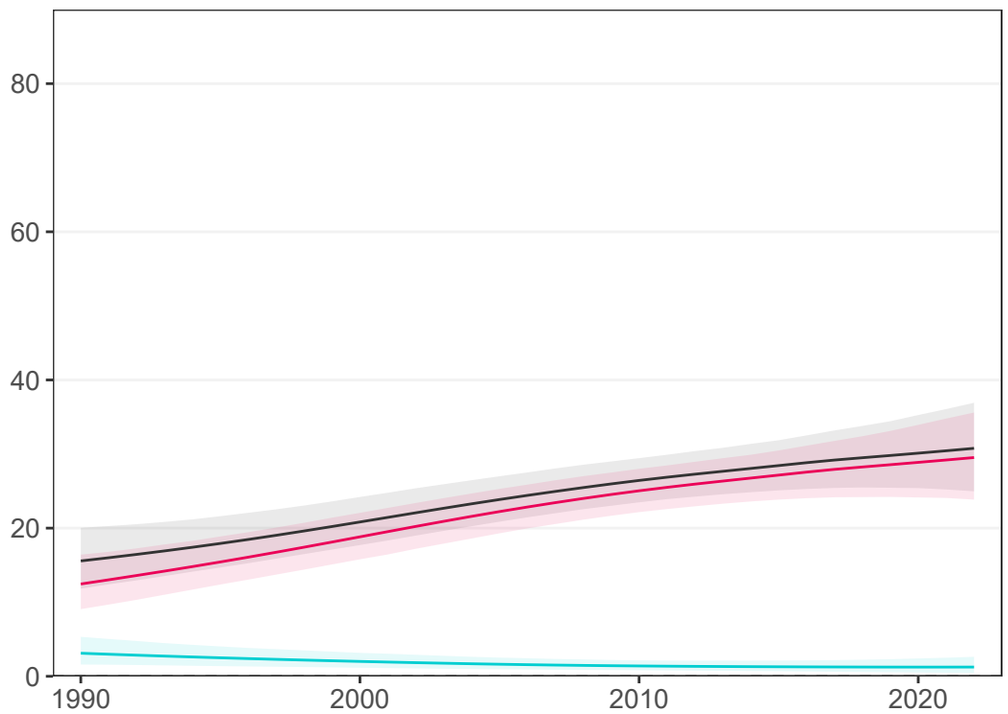
Women

3 studies (3 national)



Men

3 studies (3 national)

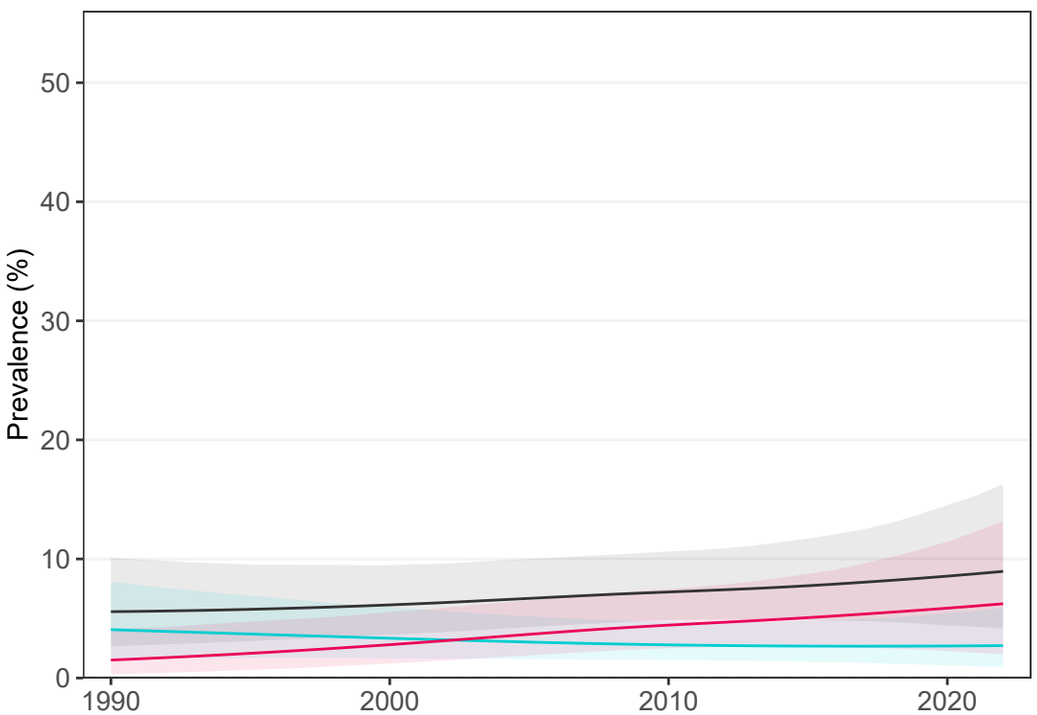


Lesotho

School-aged children and adolescents

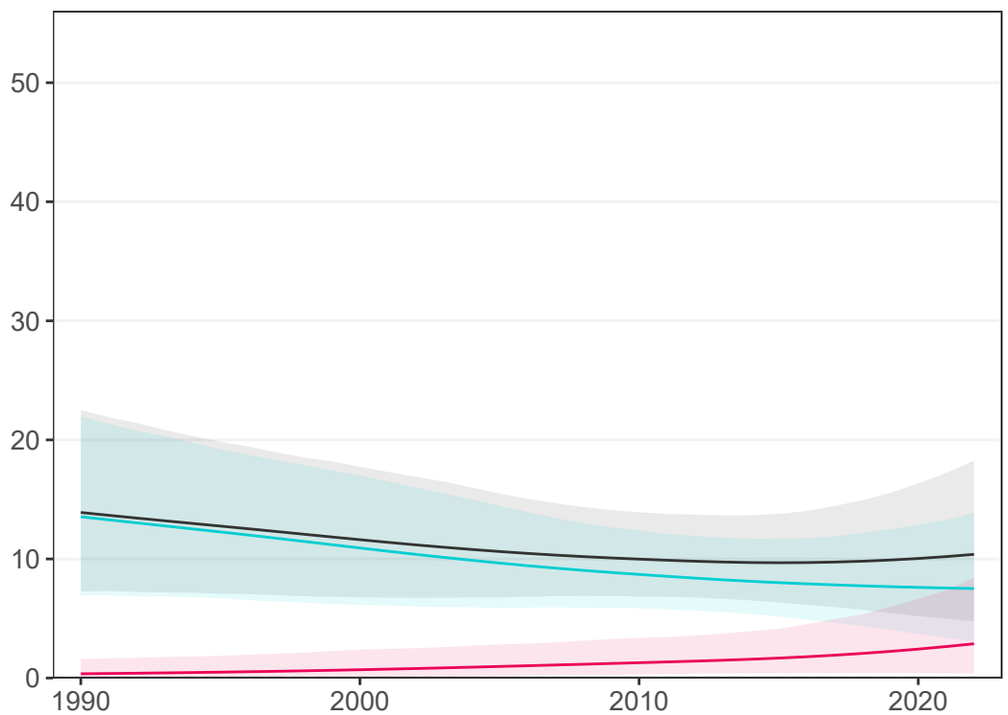
Girls

3 studies (3 national)



Boys

2 studies (2 national)

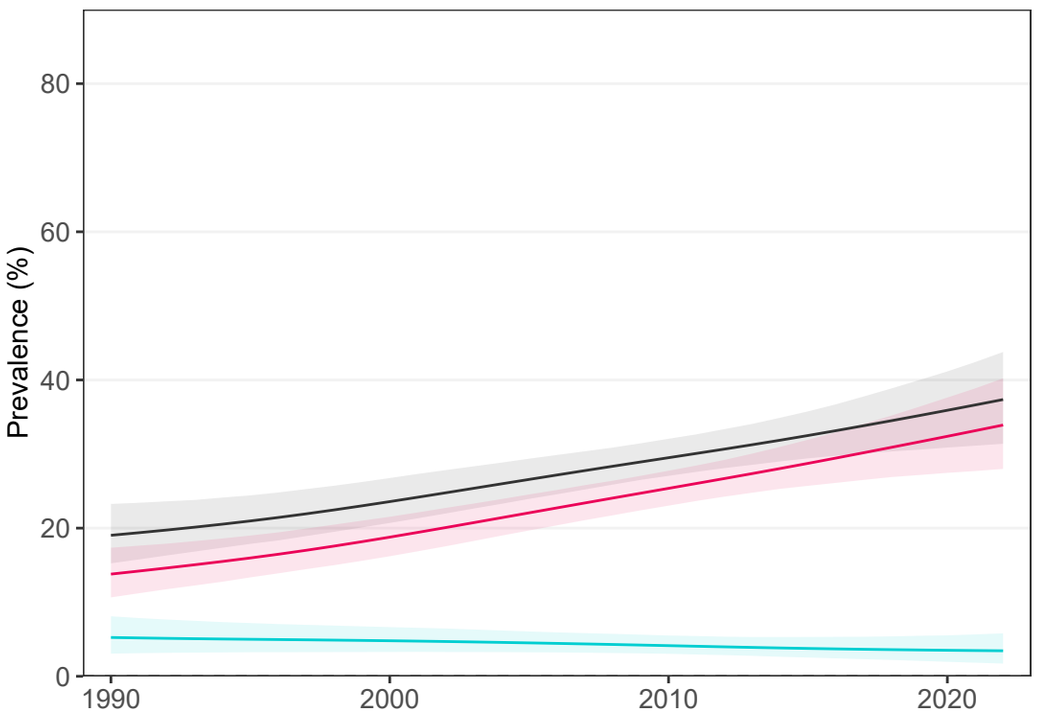


Combined burden
Thinness
Obesity

Adults

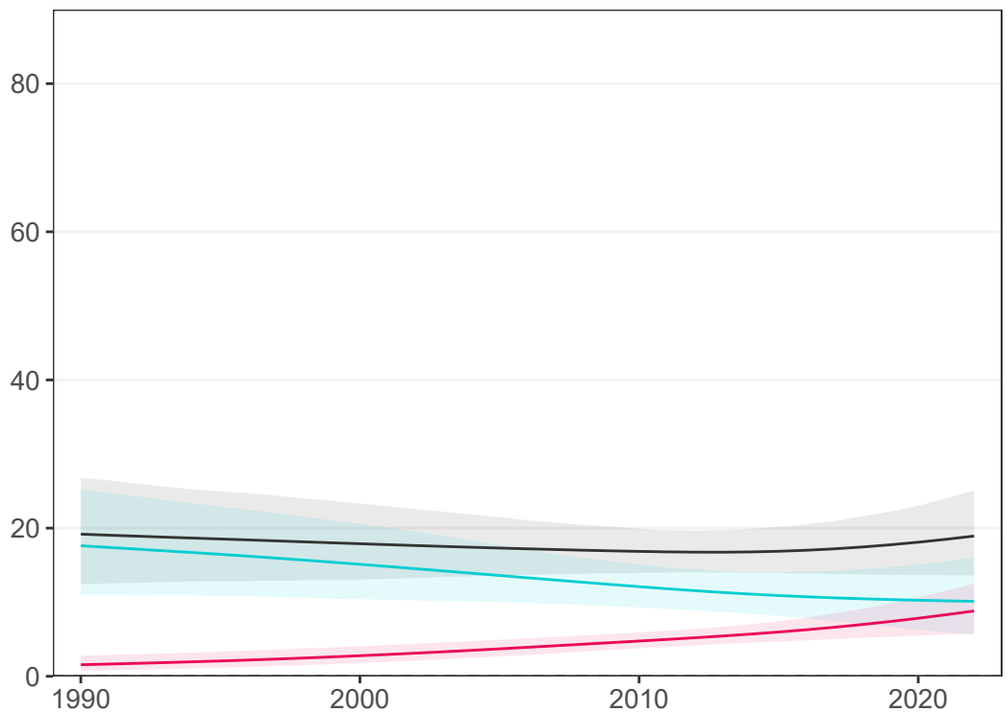
Women

5 studies (5 national)



Men

3 studies (3 national)



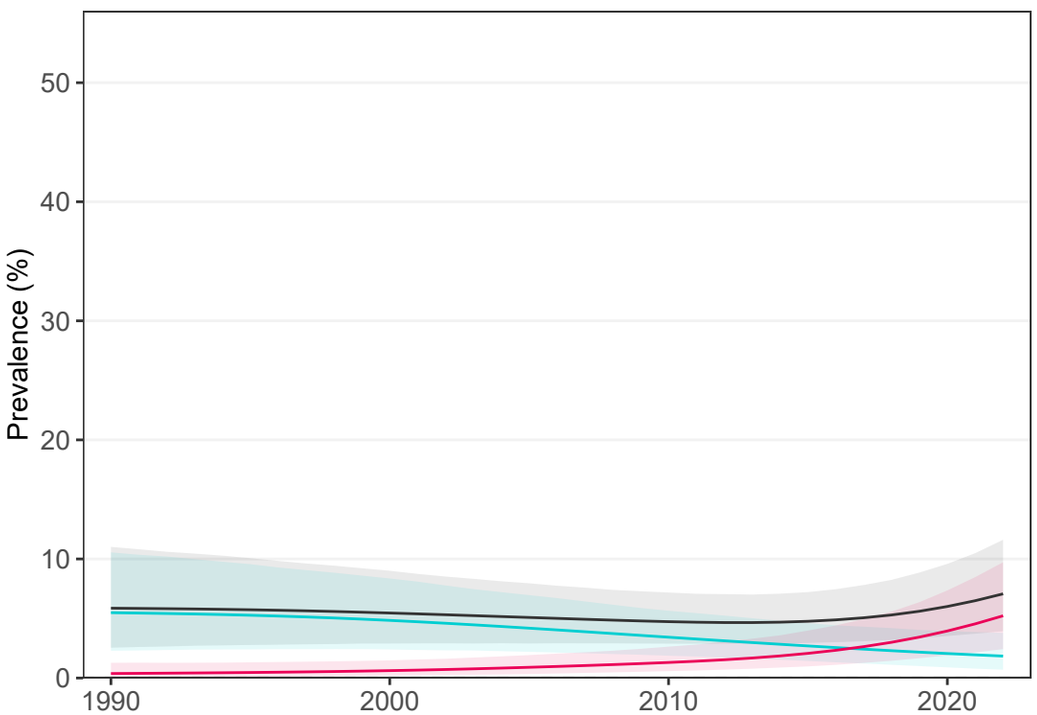
Combined burden
Underweight
Obesity

Liberia

School-aged children and adolescents

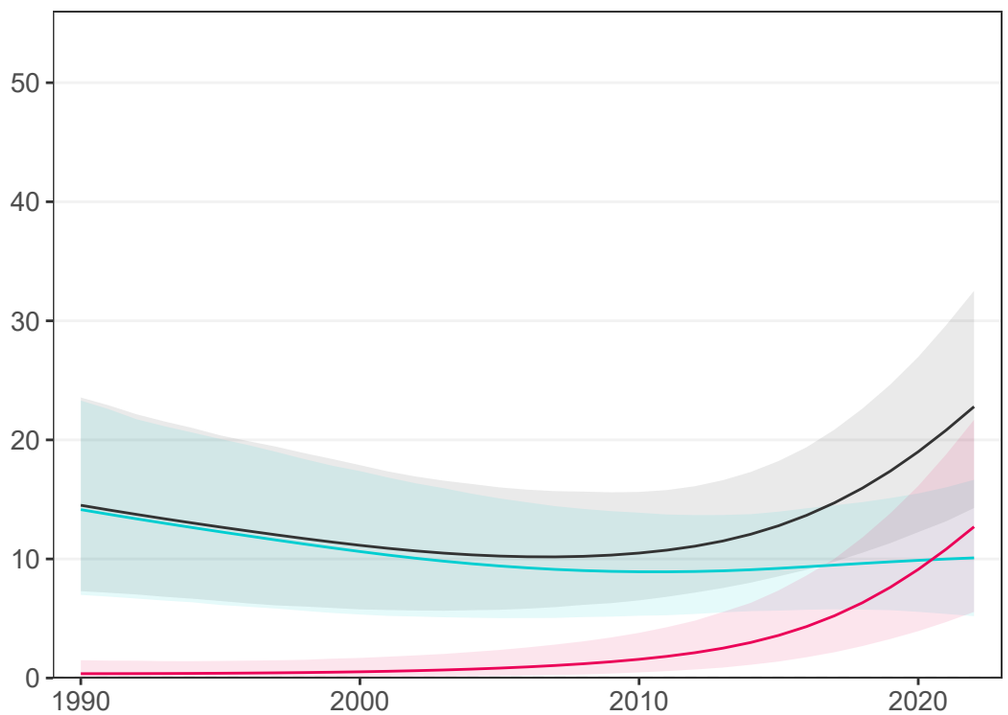
Girls

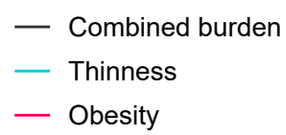
4 studies (4 national)



Boys

2 studies (2 national)

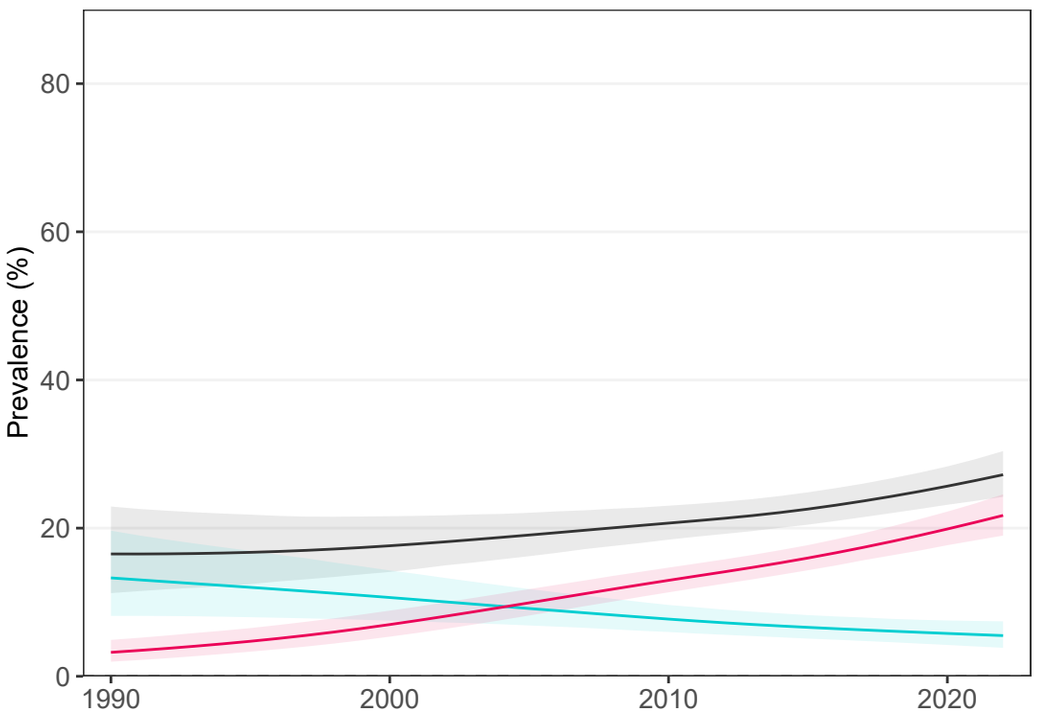




Adults

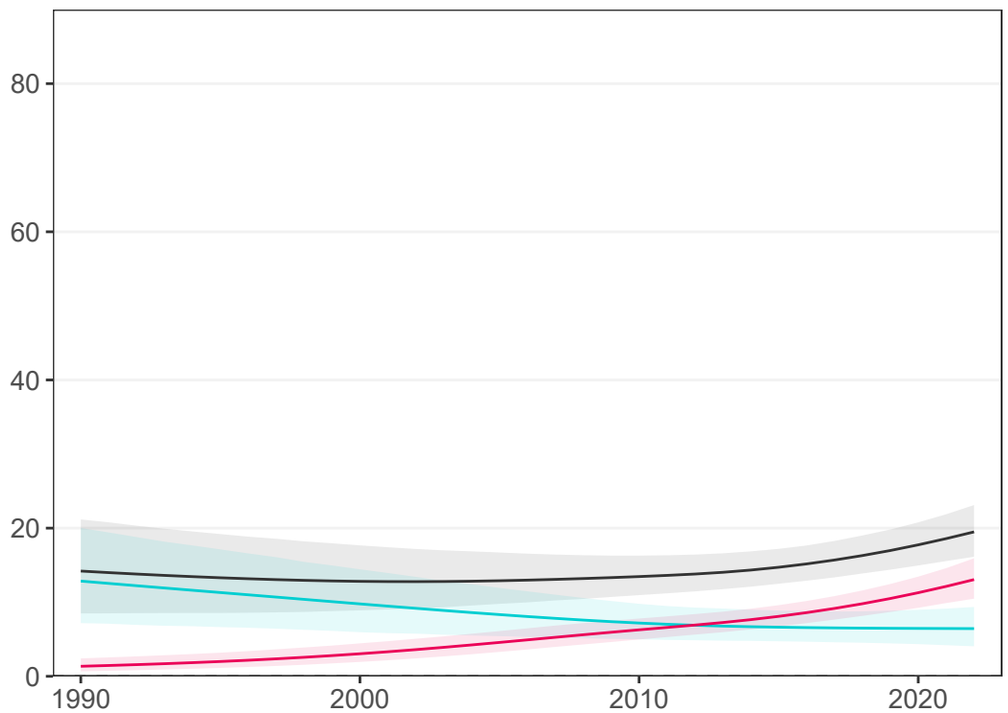
Women

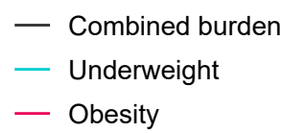
5 studies (5 national)



Men

3 studies (3 national)



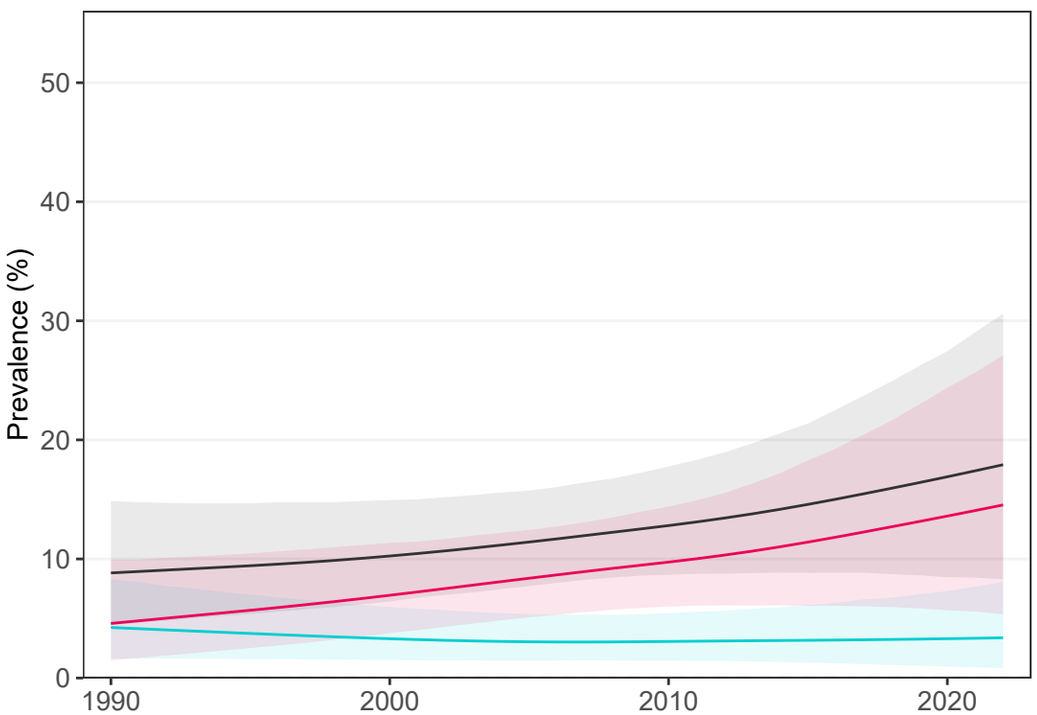


Libya

School-aged children and adolescents

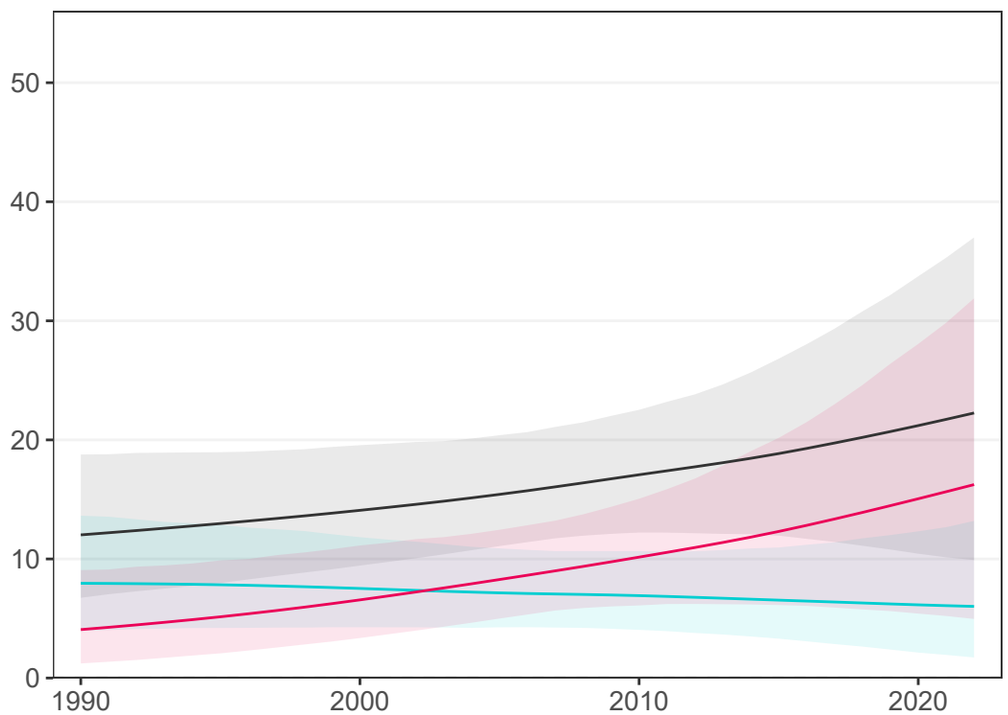
Girls

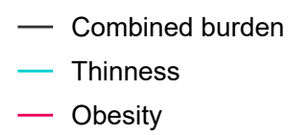
1 study (1 national)



Boys

1 study (1 national)

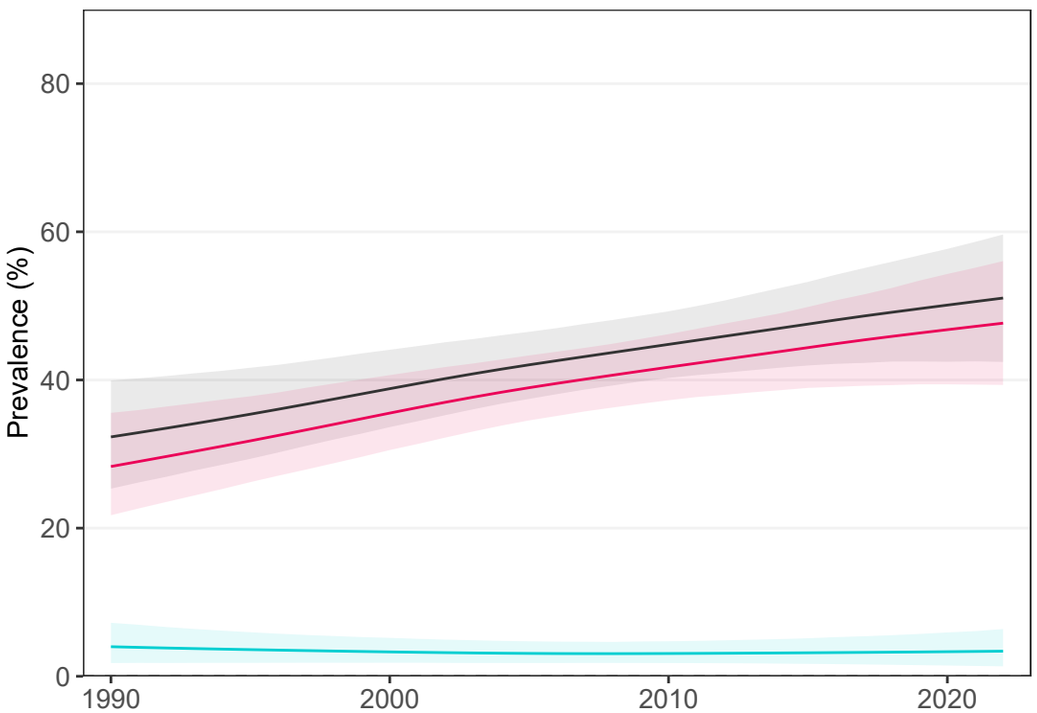




Adults

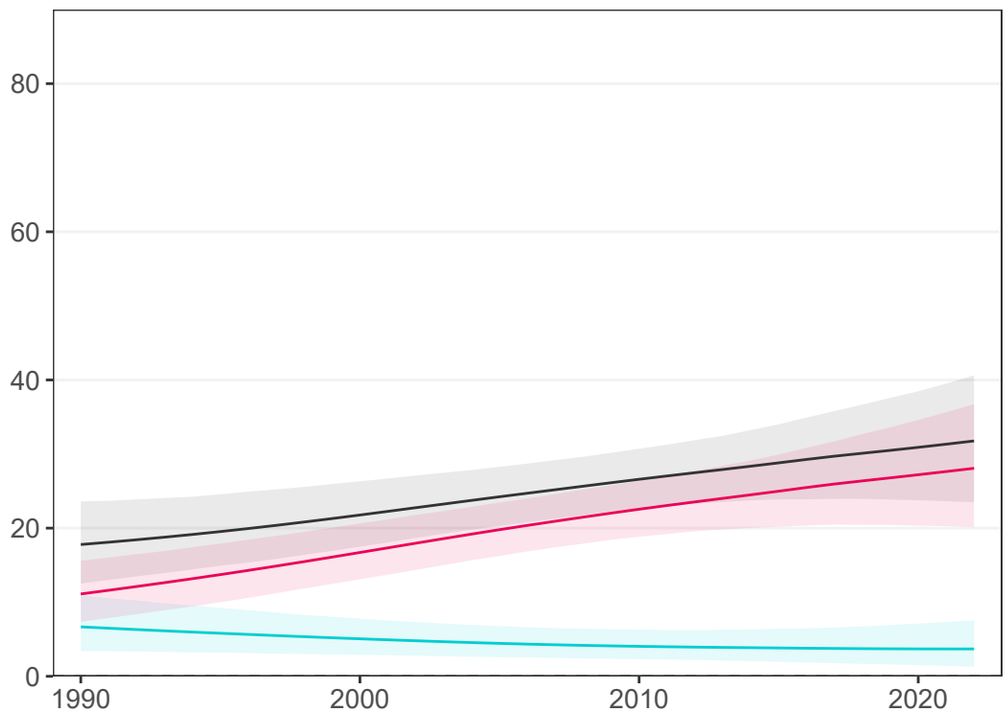
Women

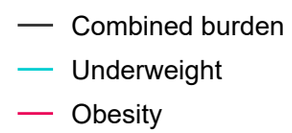
2 studies (1 national)



Men

2 studies (1 national)



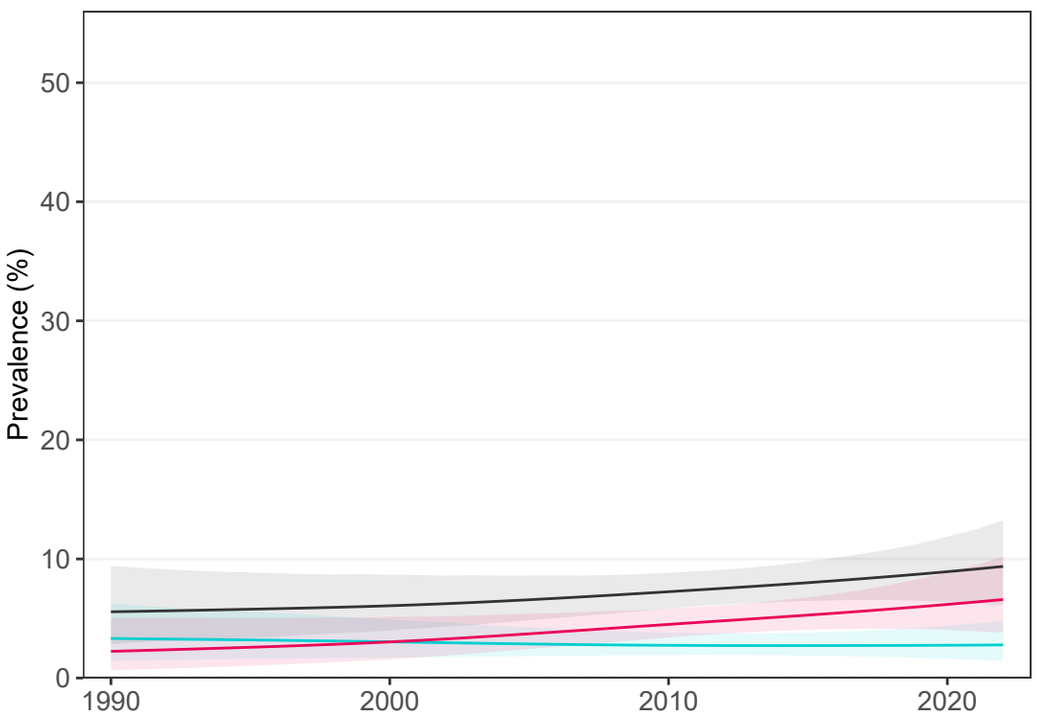


Lithuania

School-aged children and adolescents

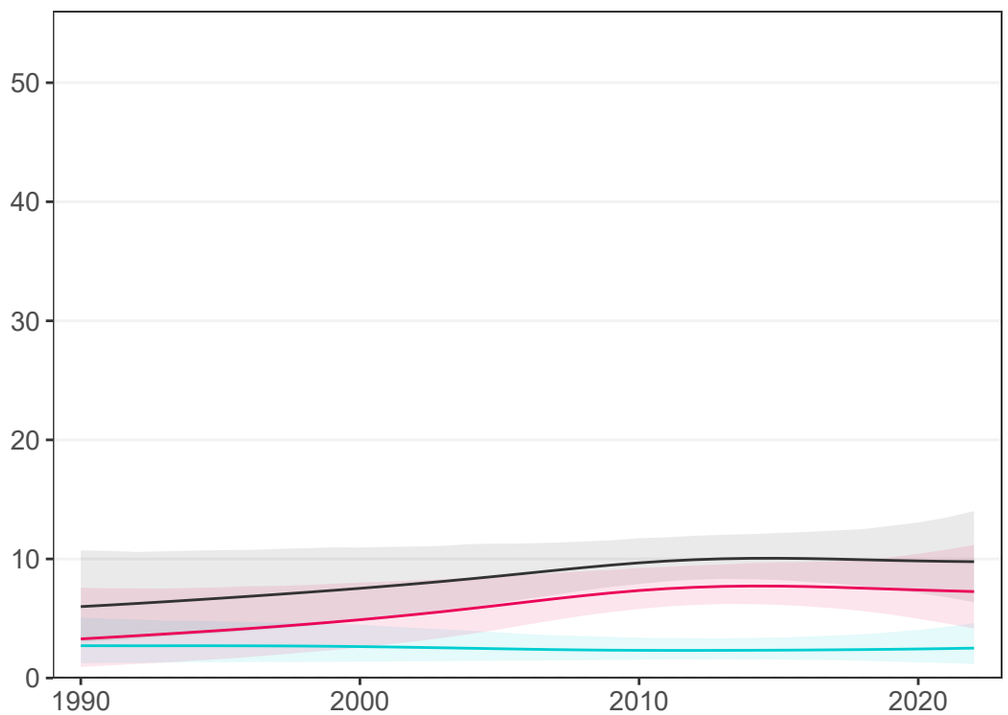
Girls

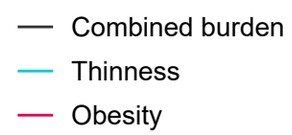
7 studies (5 national)



Boys

7 studies (5 national)

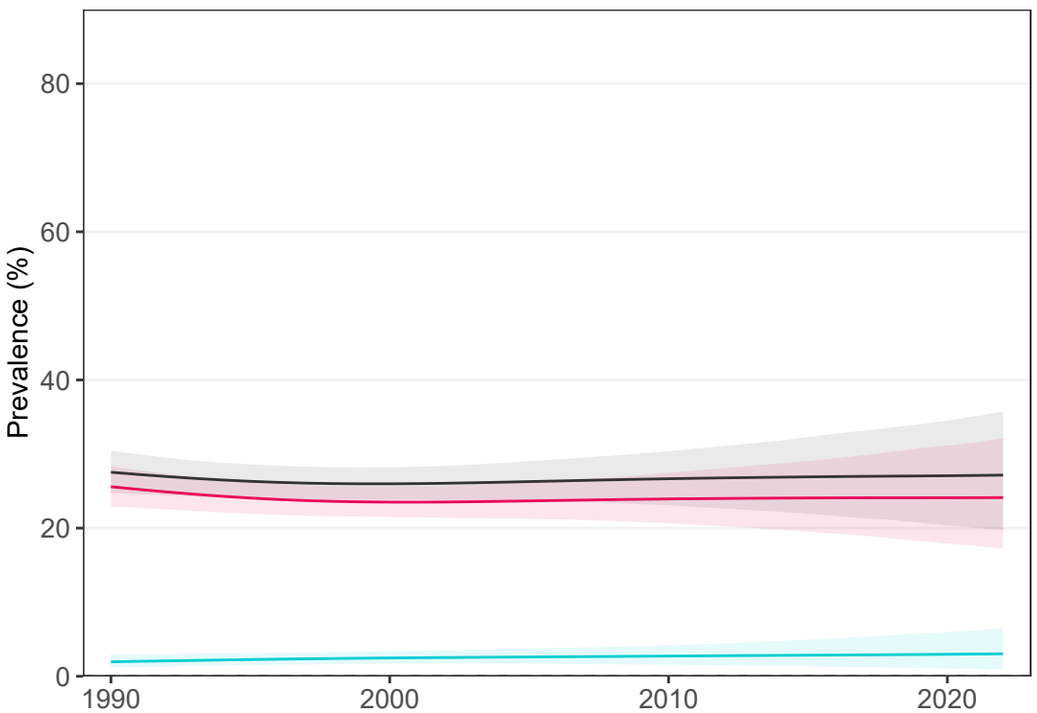




Adults

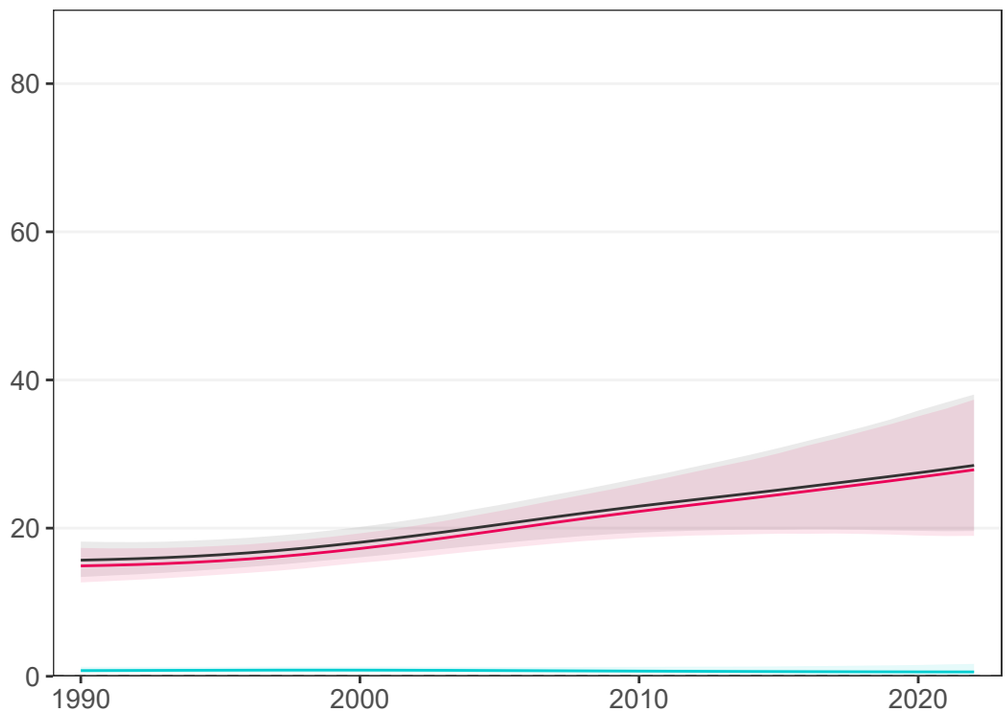
Women

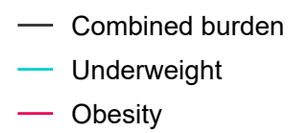
11 studies (2 national)



Men

11 studies (2 national)



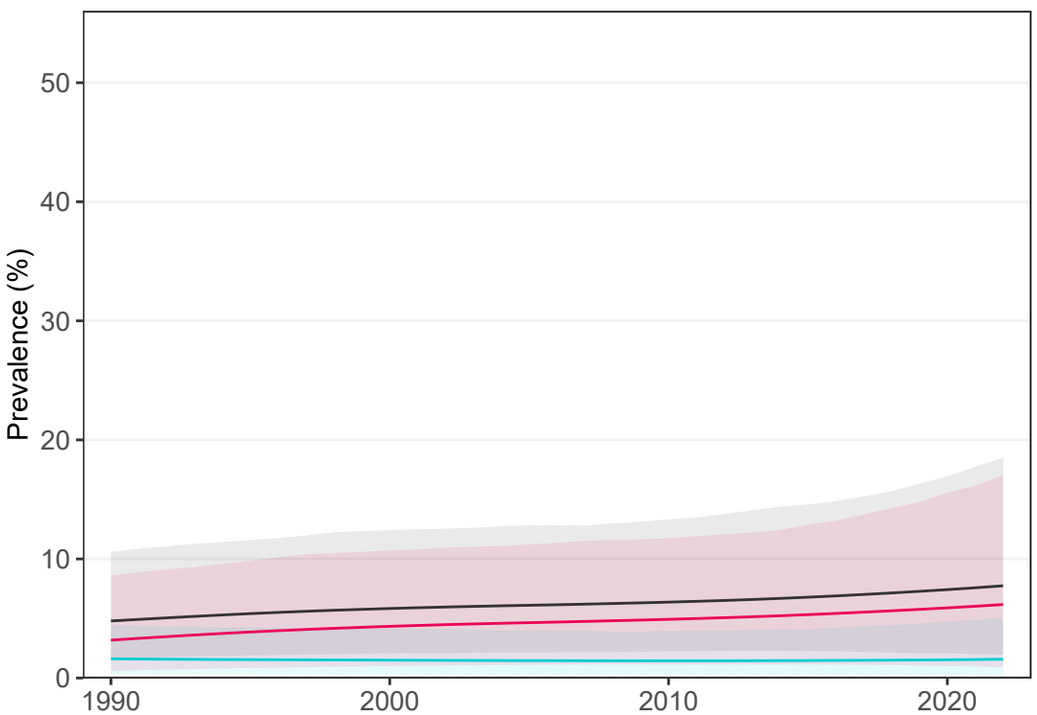


Luxembourg

School-aged children and adolescents

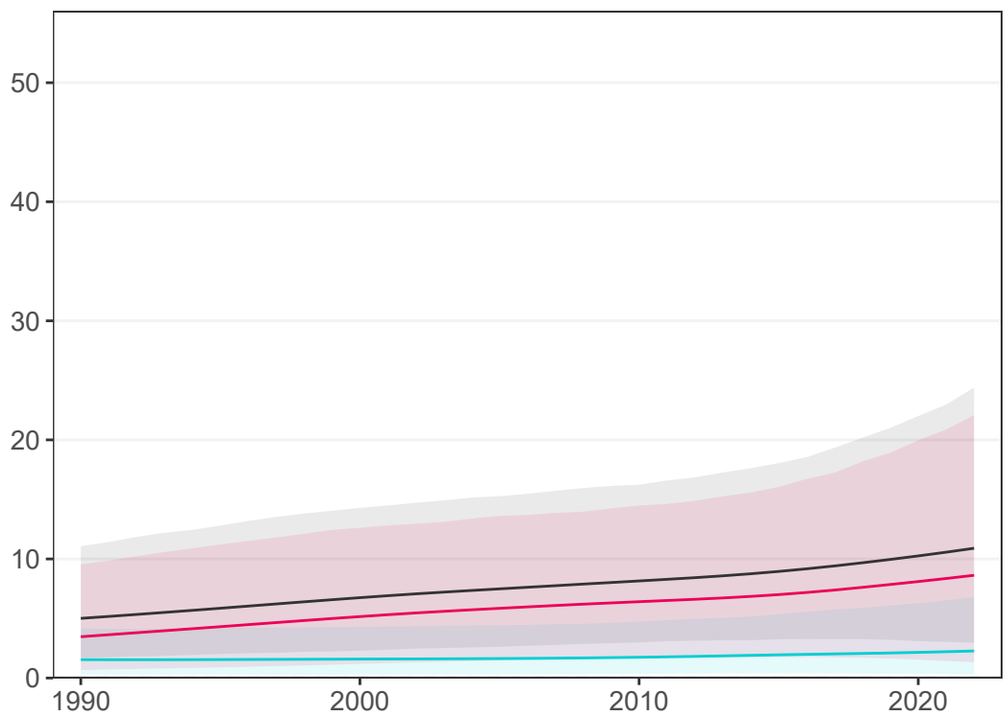
Girls

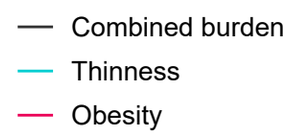
1 study (1 national)



Boys

1 study (1 national)

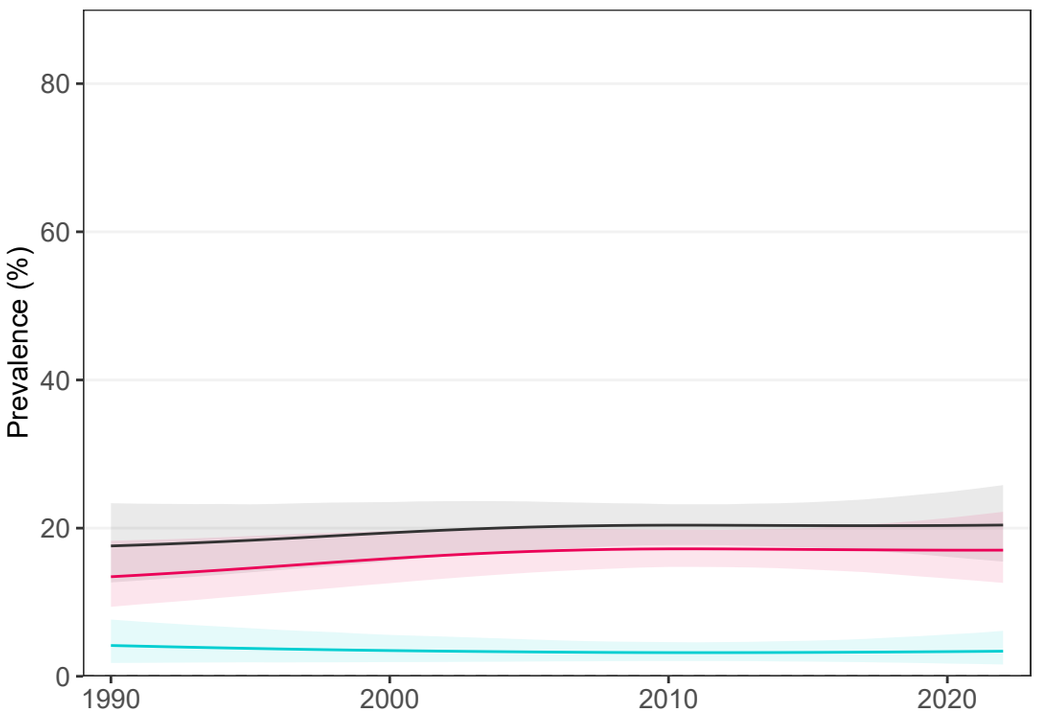




Adults

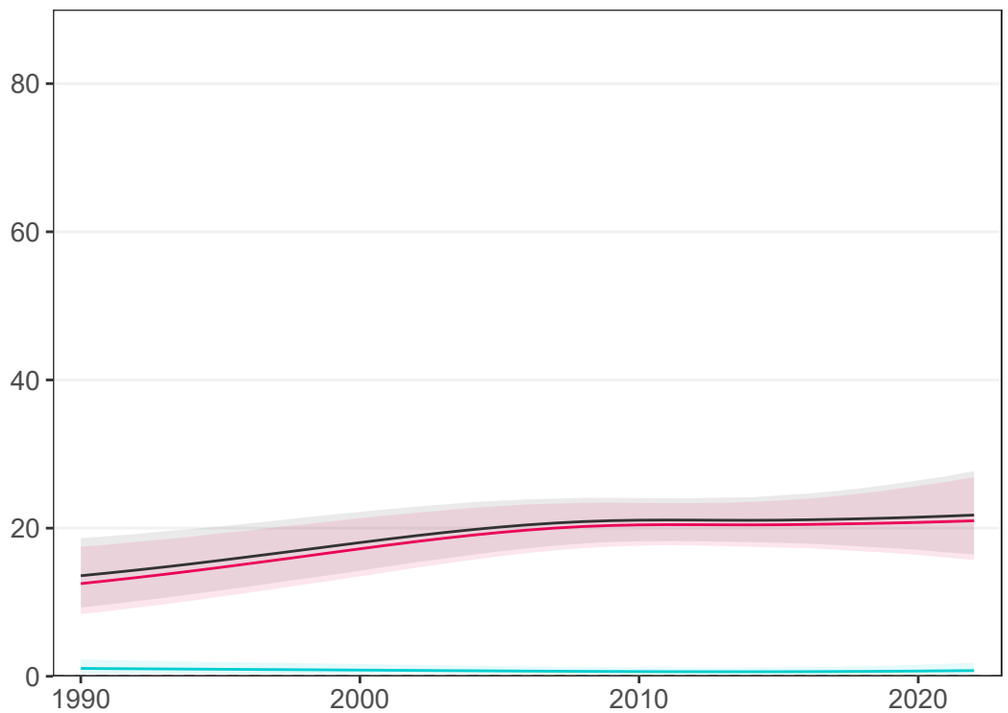
Women

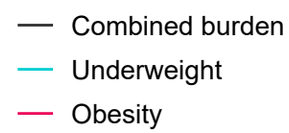
3 studies (2 national)



Men

3 studies (2 national)



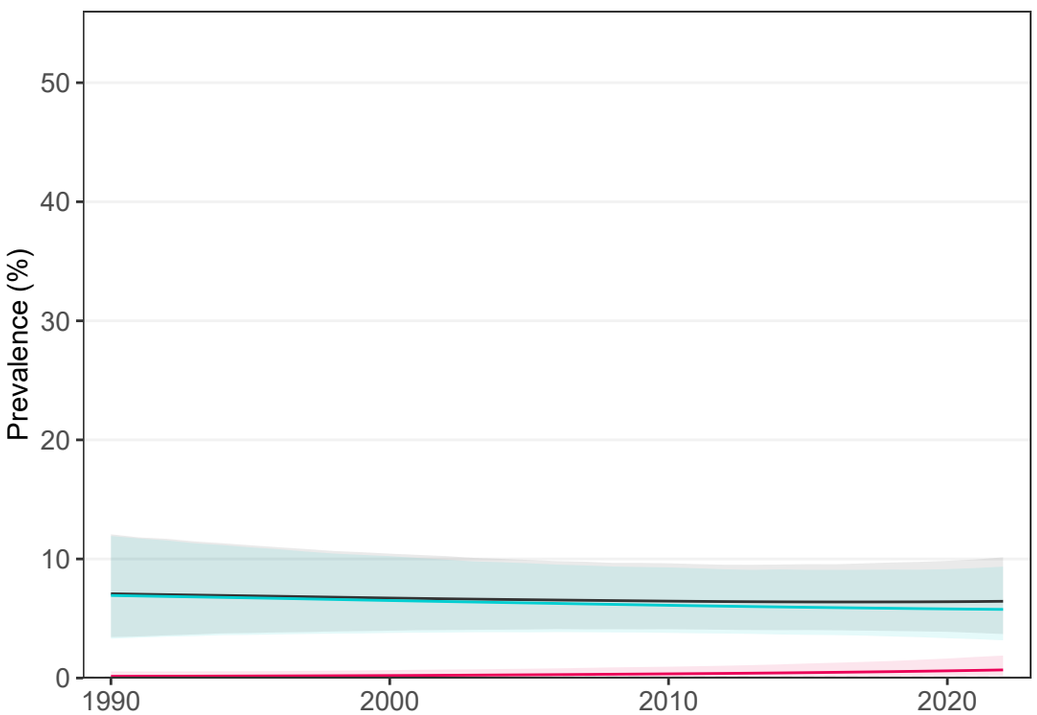


Madagascar

School-aged children and adolescents

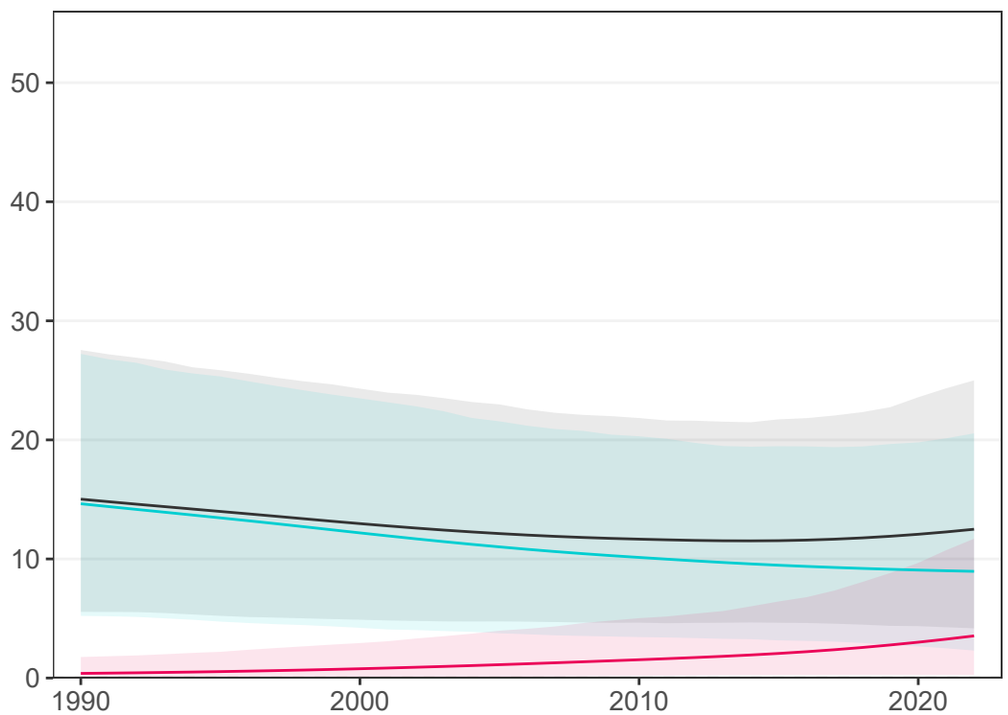
Girls

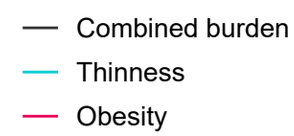
3 studies (3 national)



Boys

No studies

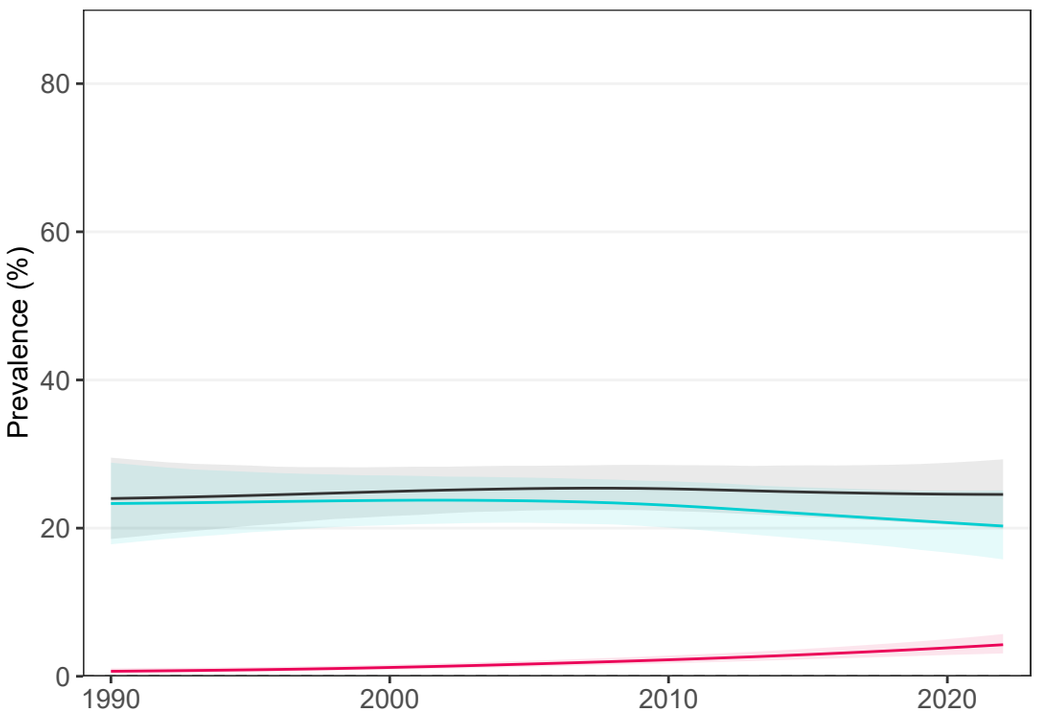




Adults

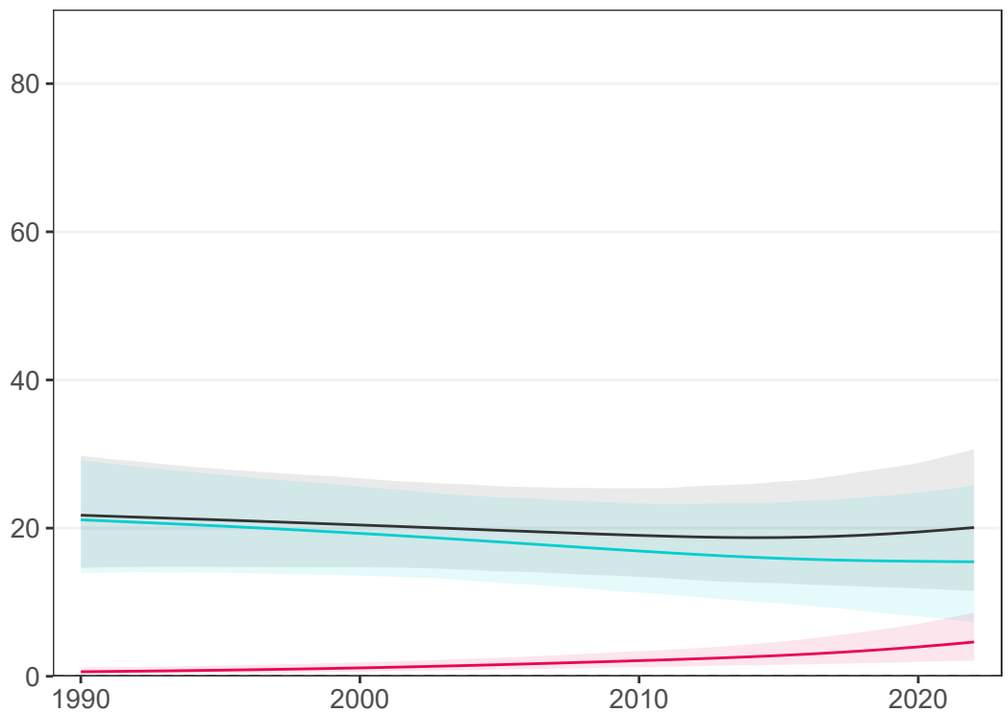
Women

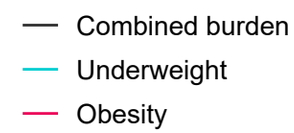
6 studies (4 national)



Men

2 studies (0 national)



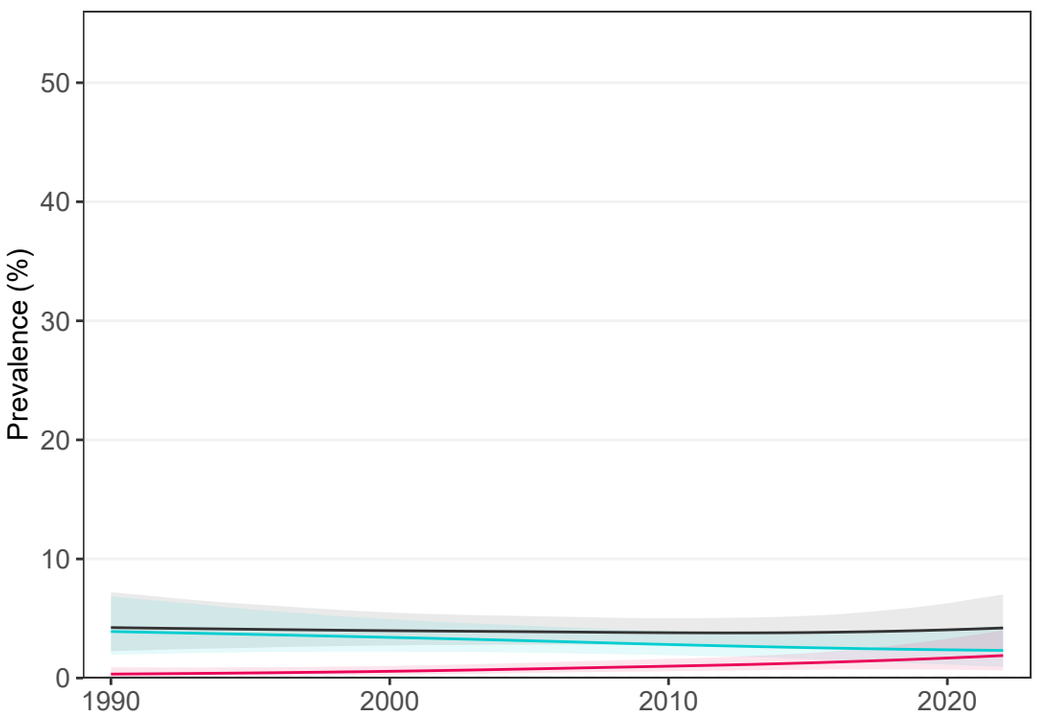


Malawi

School-aged children and adolescents

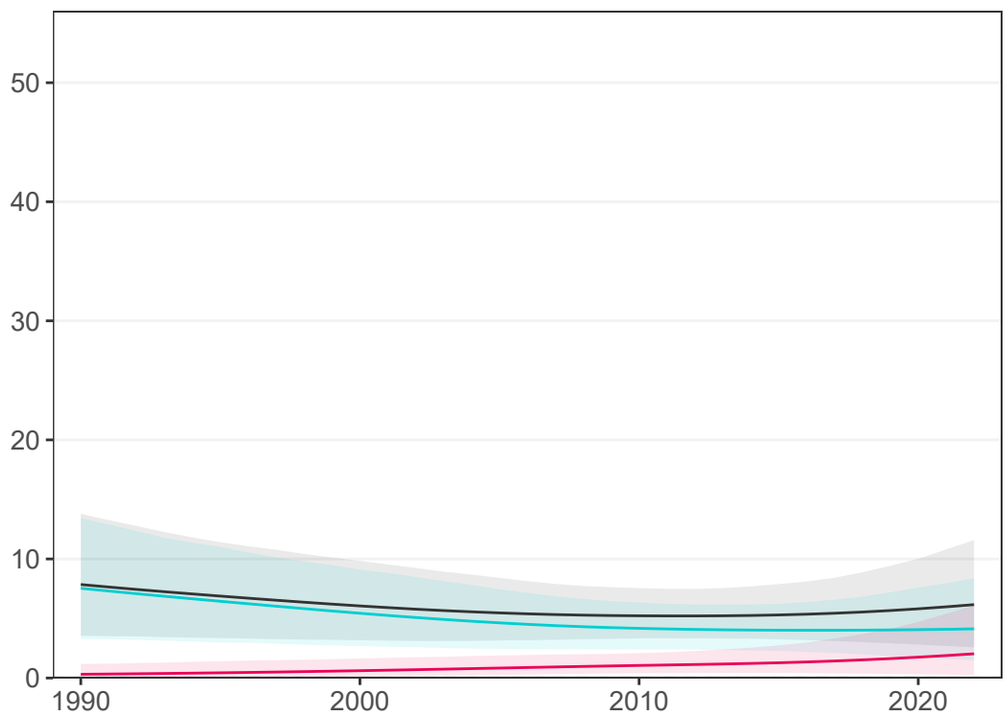
Girls

8 studies (6 national)



Boys

4 studies (2 national)

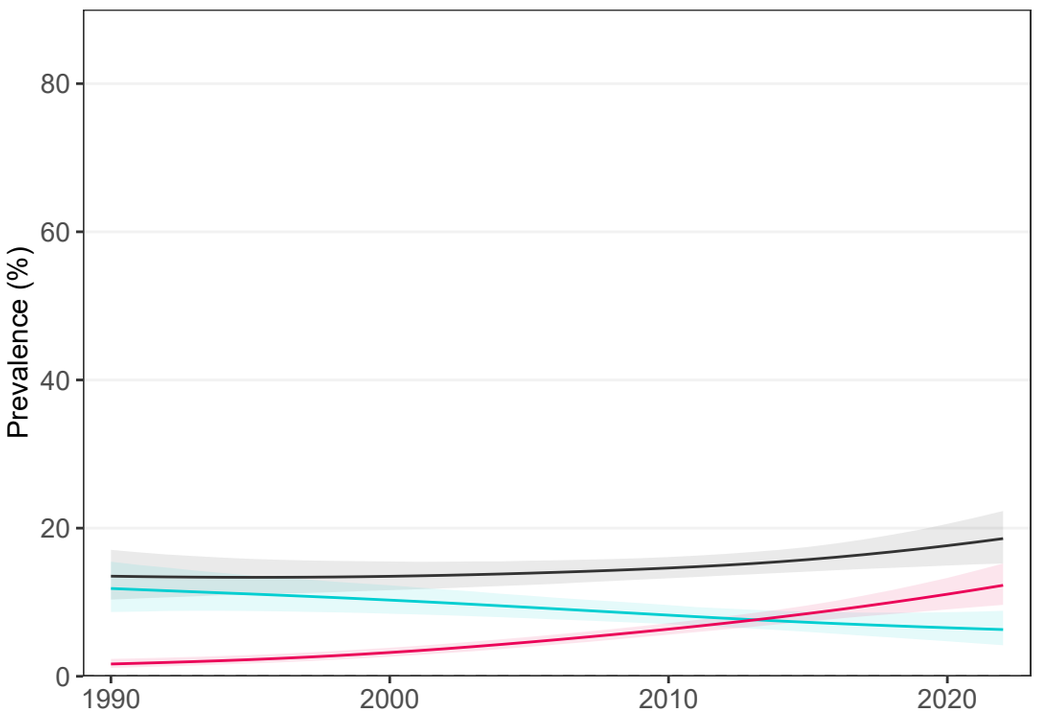


Combined burden
Thinness
Obesity

Adults

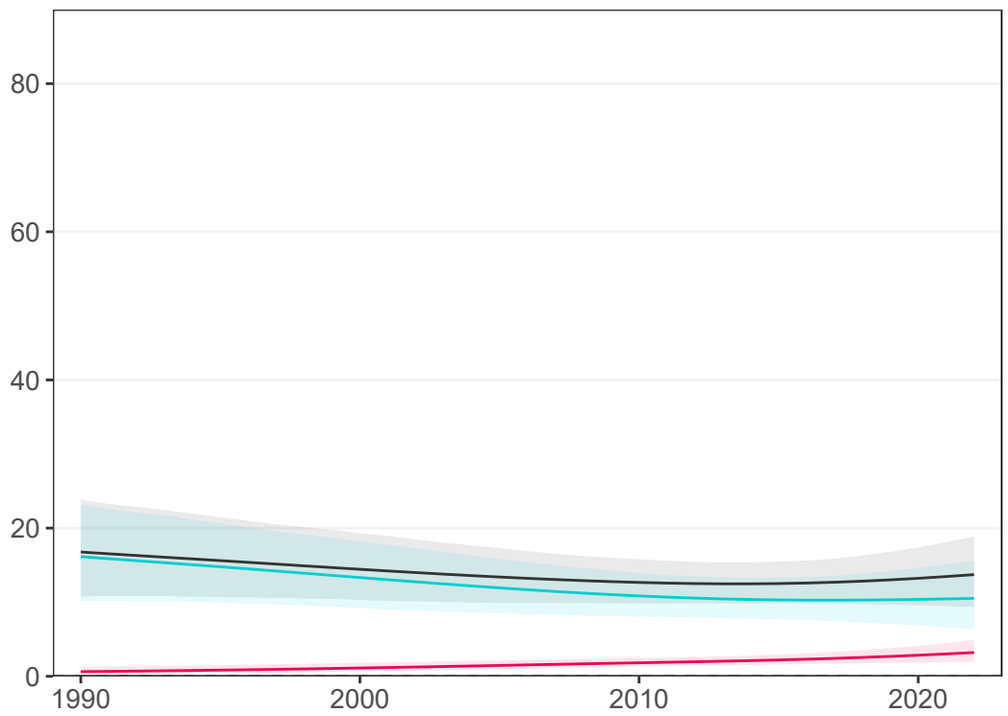
Women

11 studies (8 national)



Men

5 studies (2 national)



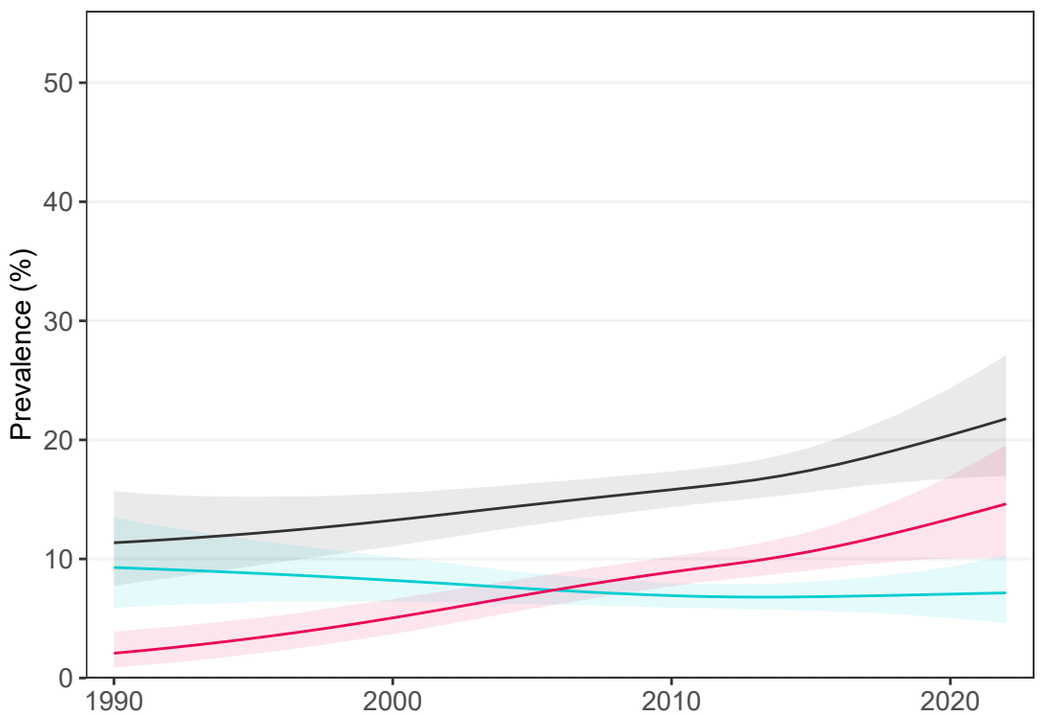
Combined burden
Underweight
Obesity

Malaysia

School-aged children and adolescents

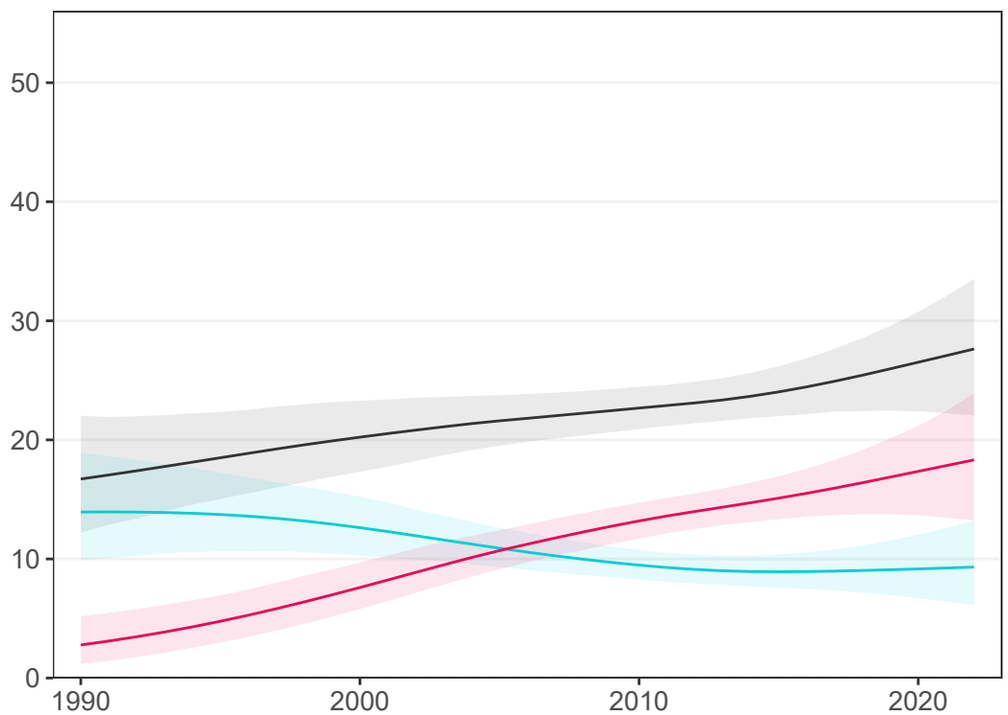
Girls

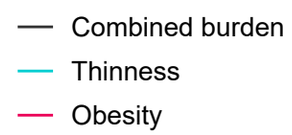
15 studies (13 national)



Boys

15 studies (13 national)

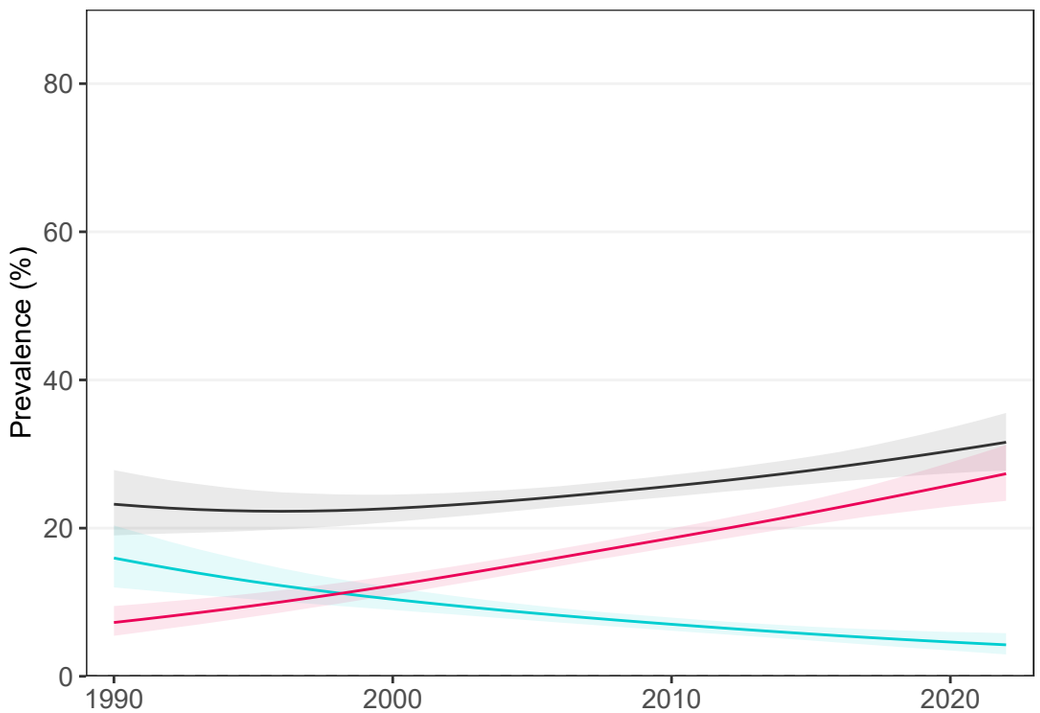




Adults

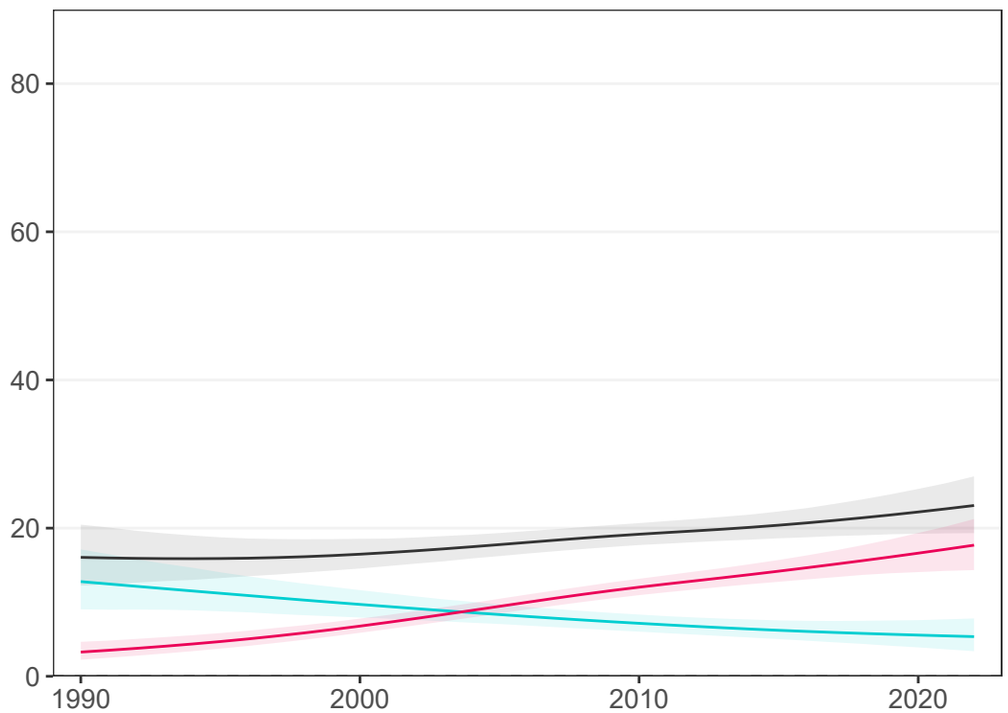
Women

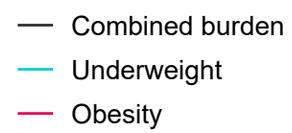
11 studies (11 national)



Men

11 studies (11 national)



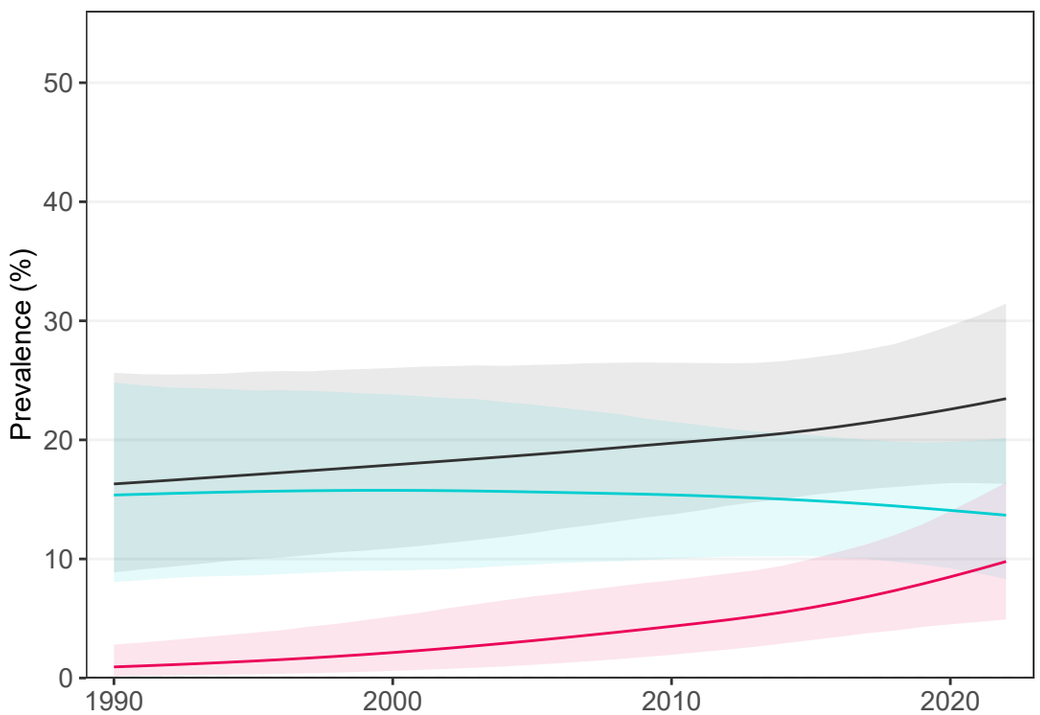


Maldives

School-aged children and adolescents

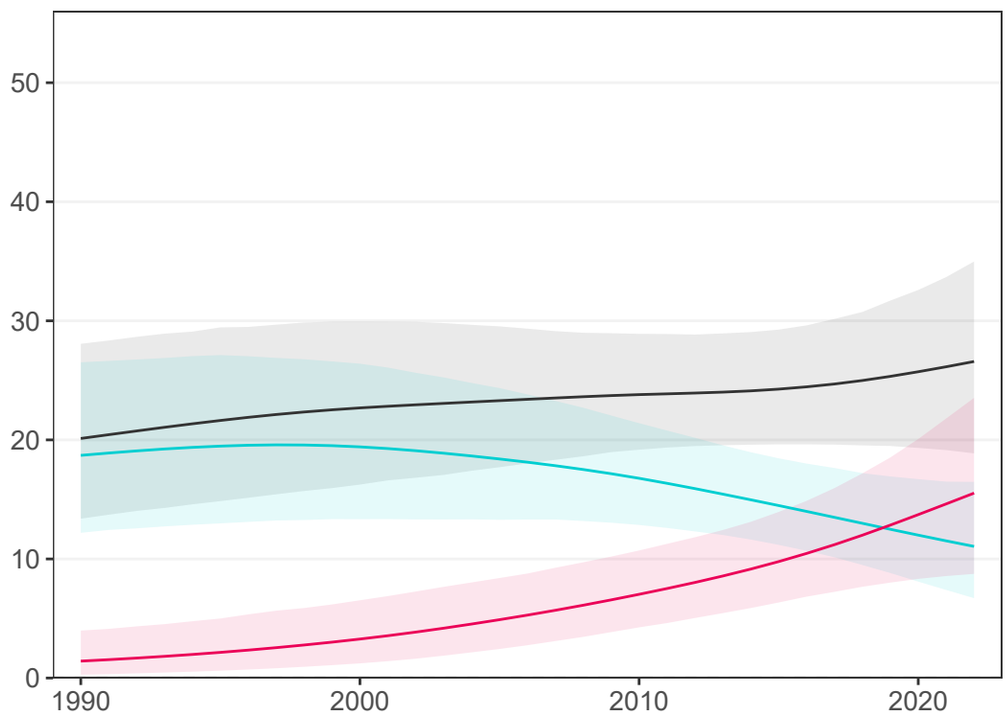
Girls

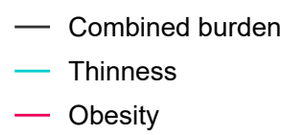
3 studies (2 national)



Boys

5 studies (4 national)

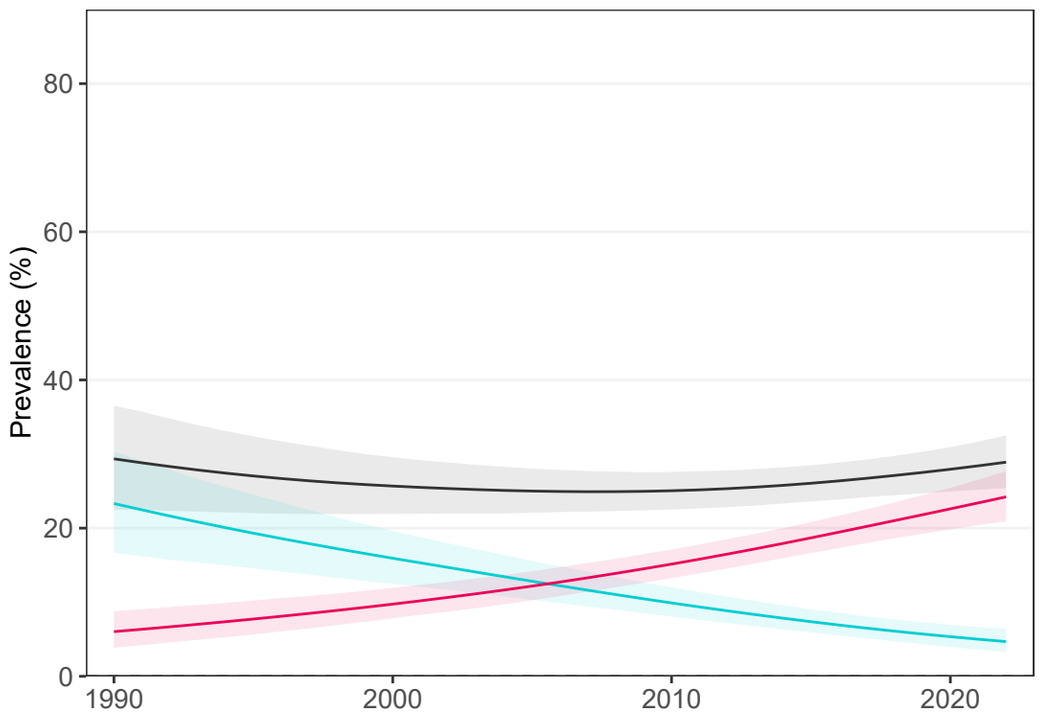




Adults

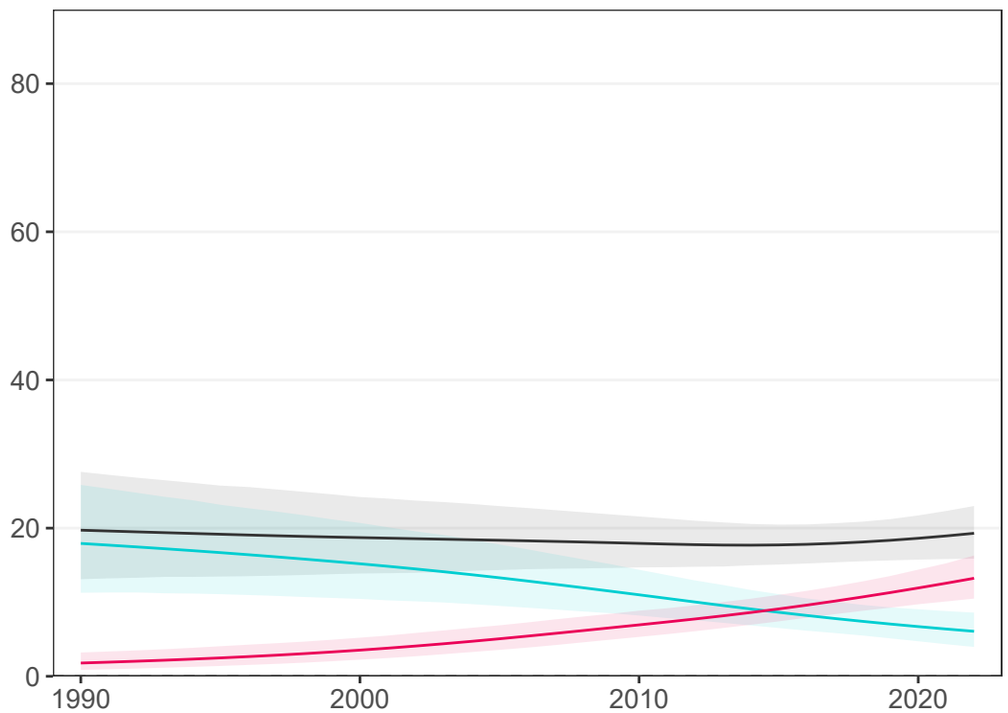
Women

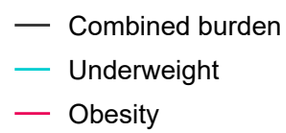
6 studies (4 national)



Men

4 studies (2 national)



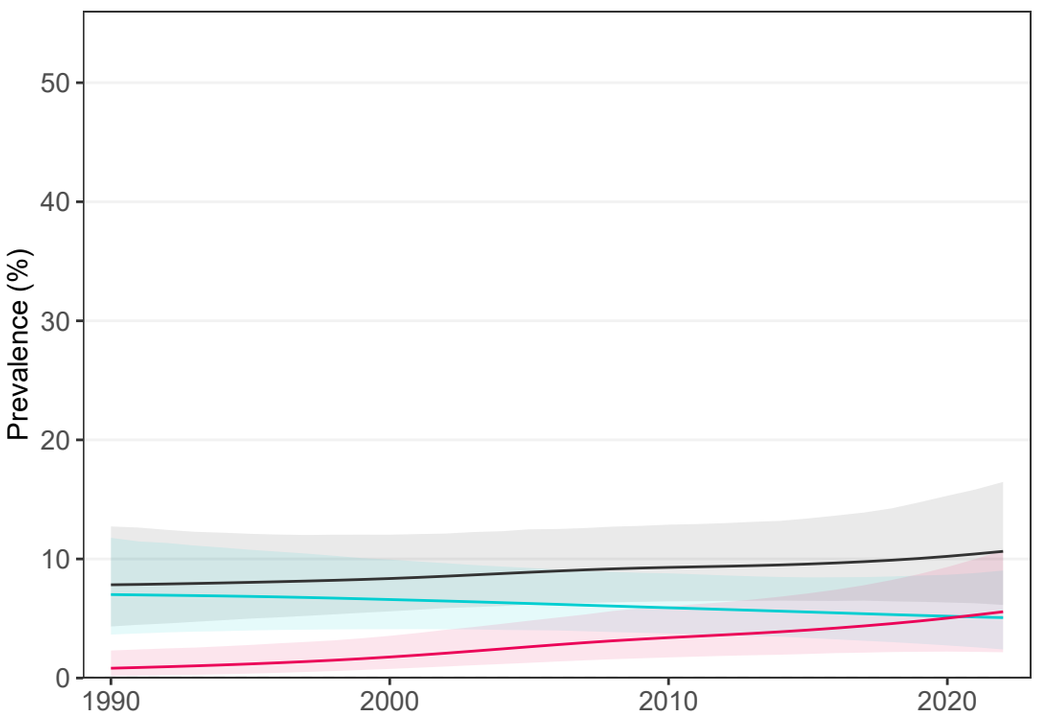


Mali

School-aged children and adolescents

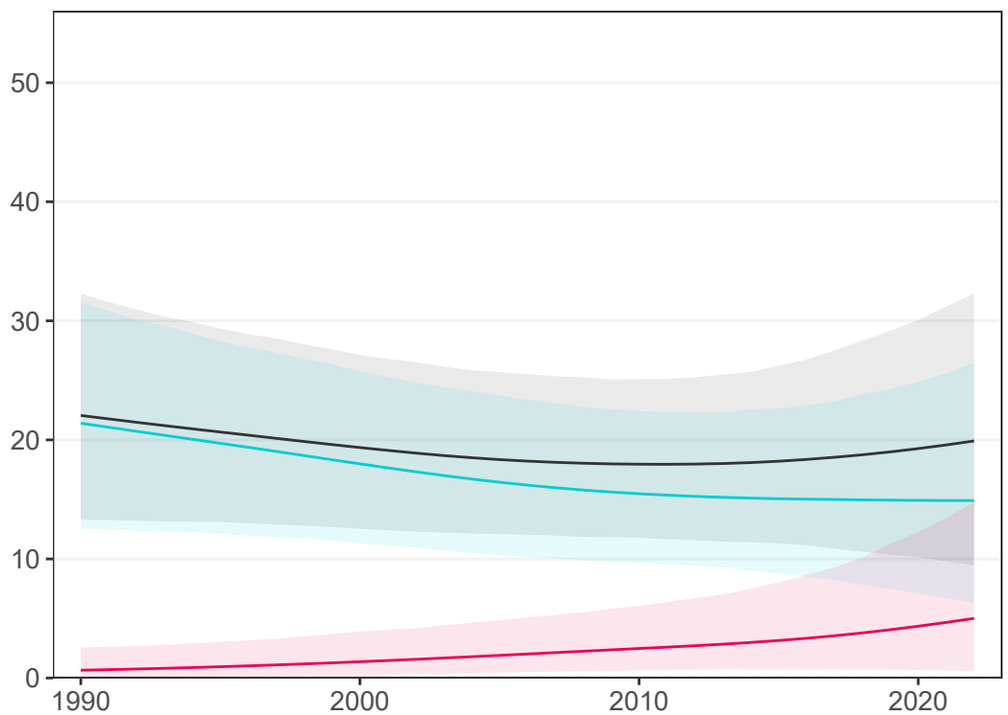
Girls

8 studies (4 national)



Boys

3 studies (0 national)

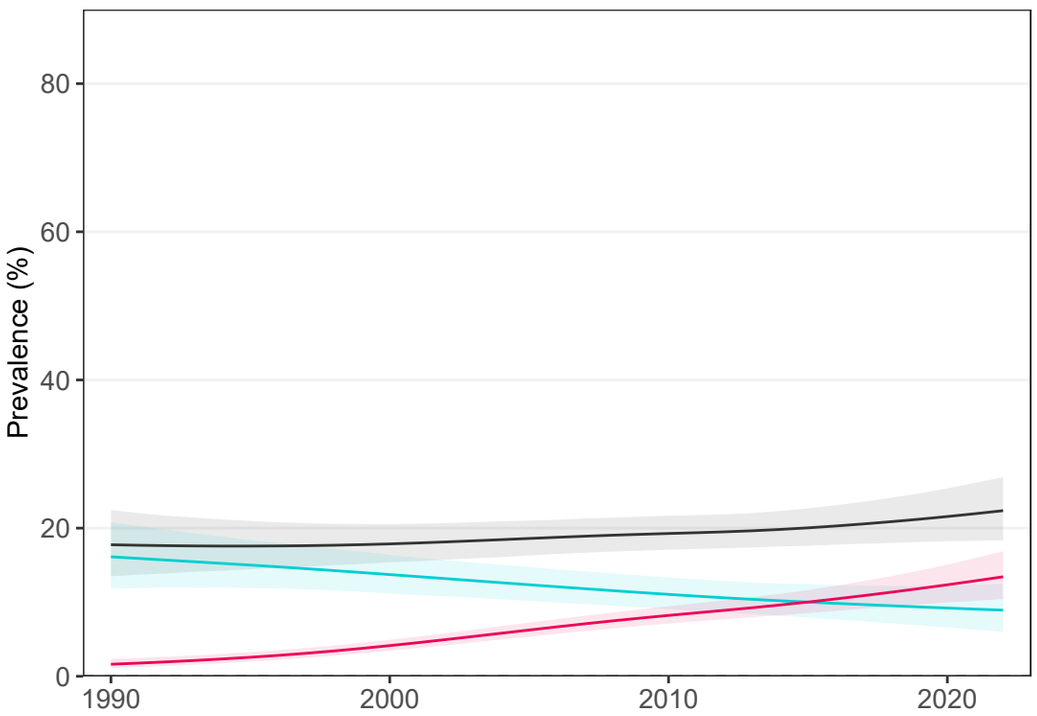


Combined burden
Thinness
Obesity

Adults

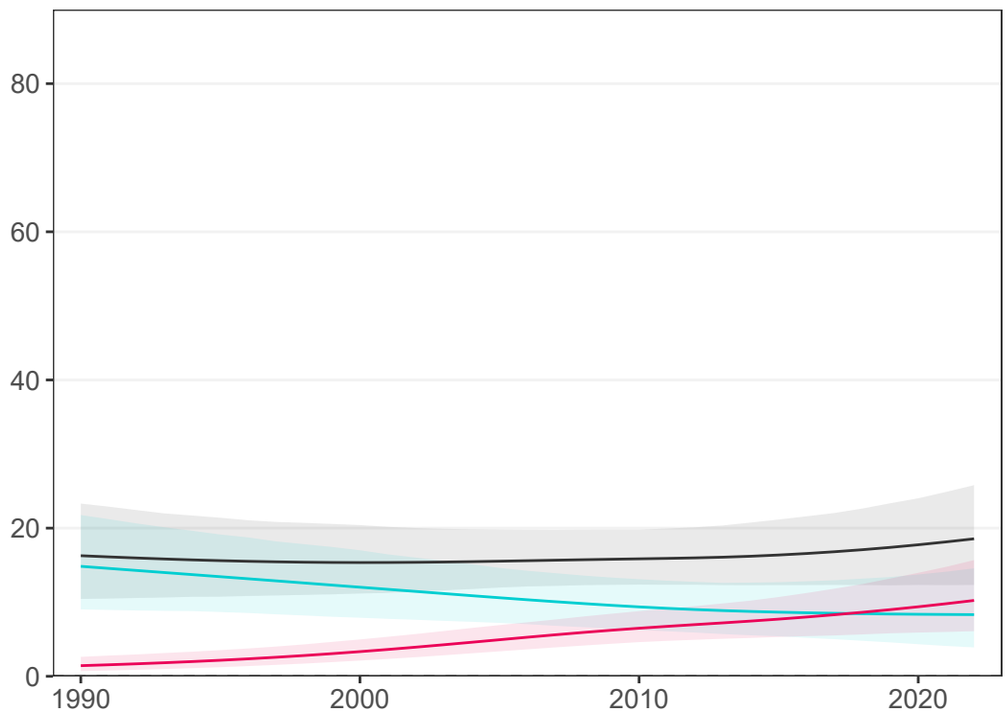
Women

10 studies (5 national)



Men

3 studies (0 national)



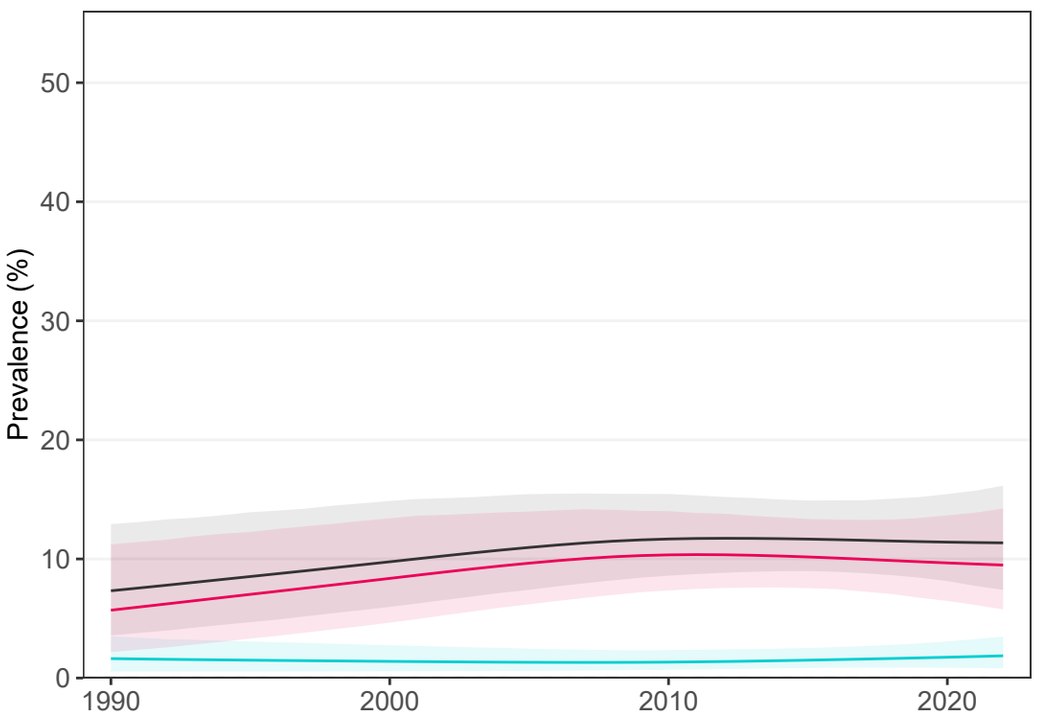
Combined burden
Underweight
Obesity

Malta

School-aged children and adolescents

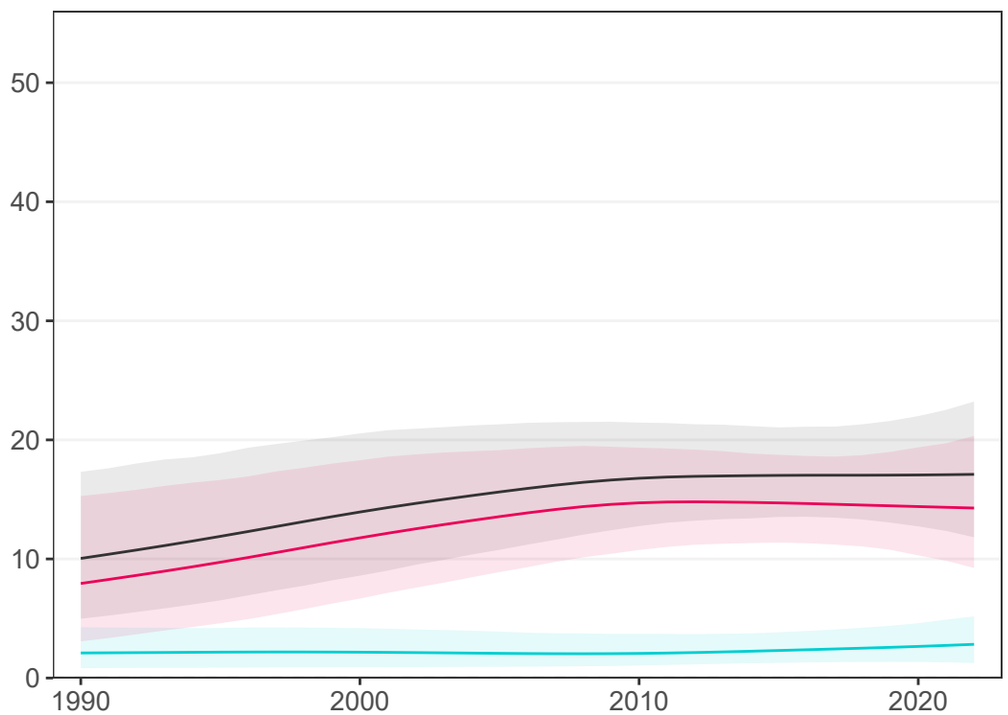
Girls

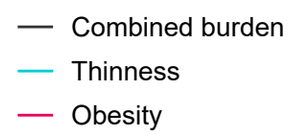
6 studies (6 national)



Boys

6 studies (6 national)

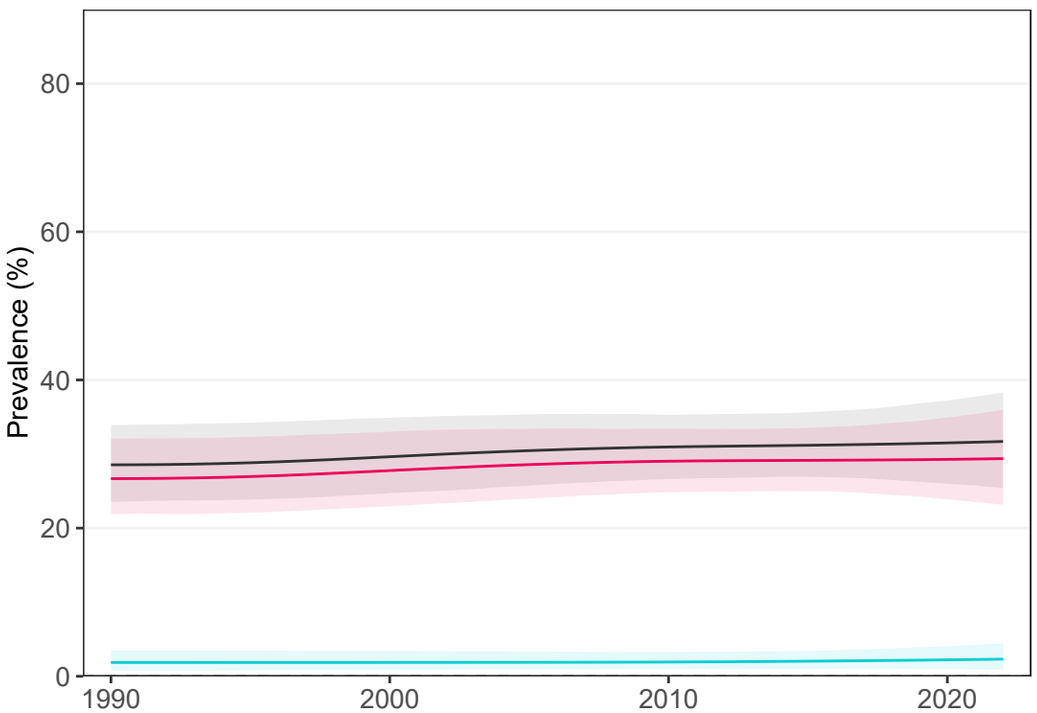




Adults

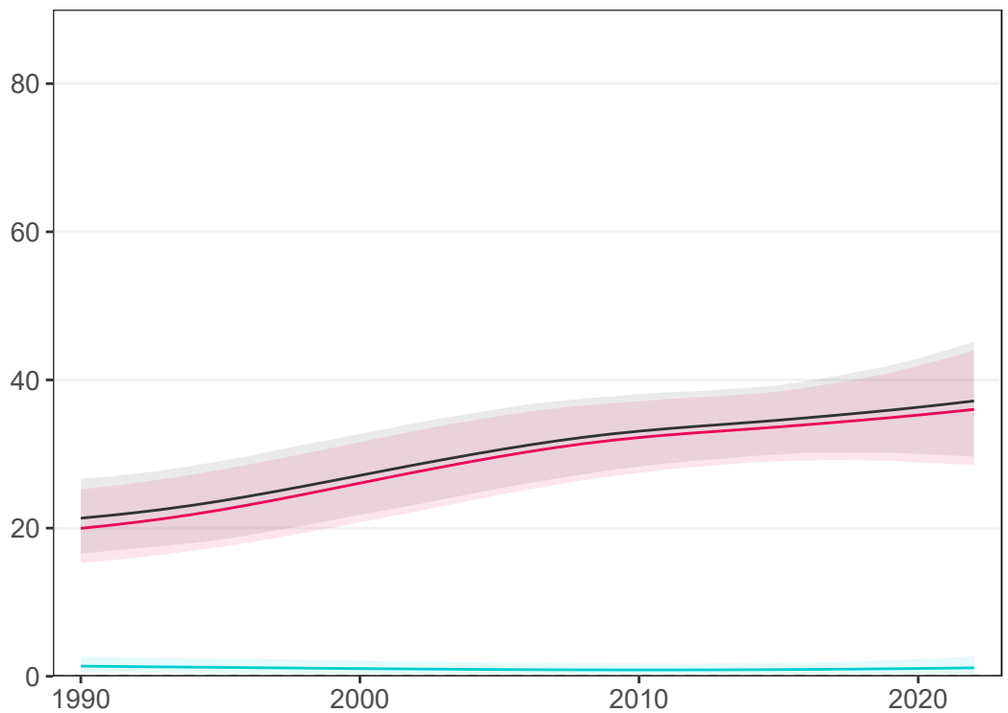
Women

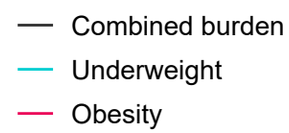
3 studies (1 national)



Men

3 studies (1 national)



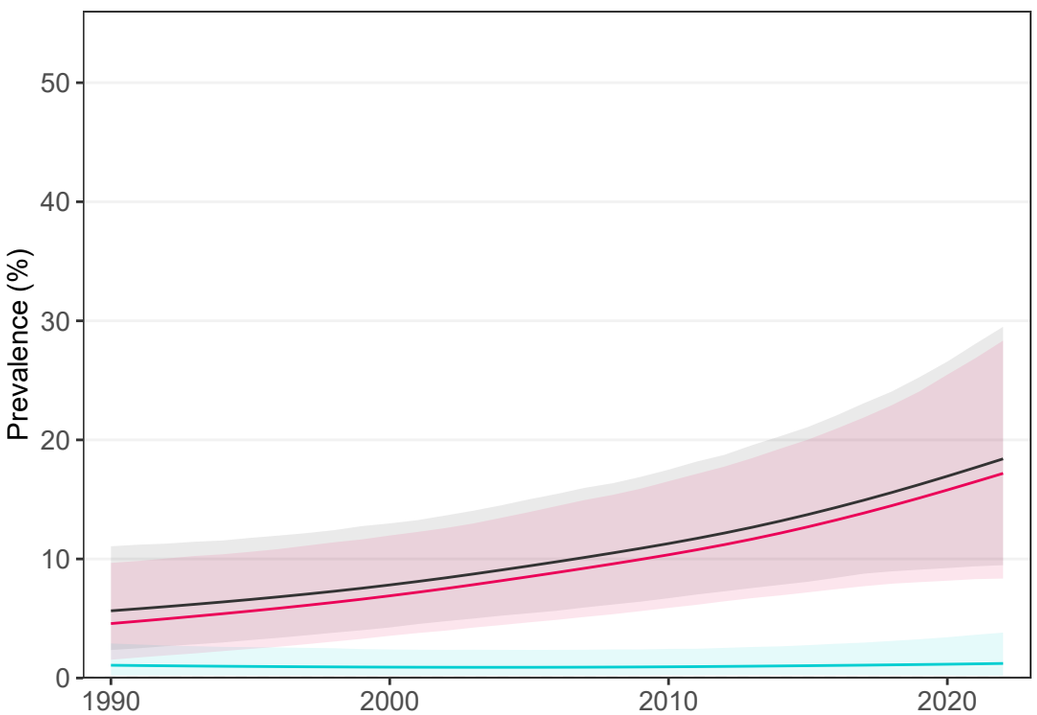


Marshall Islands

School-aged children and adolescents

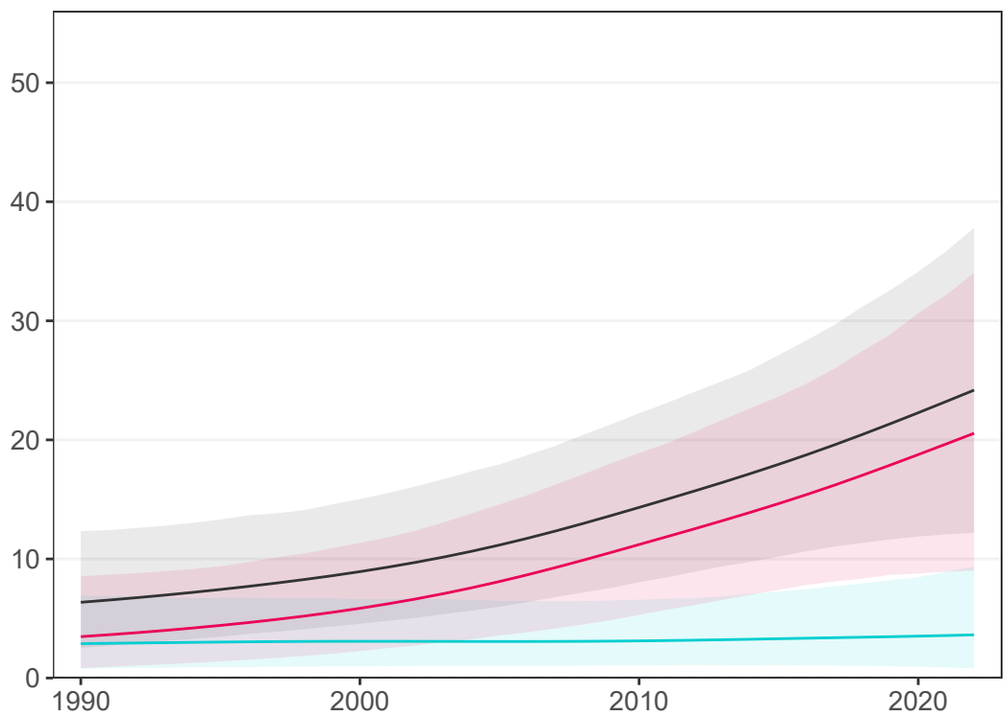
Girls

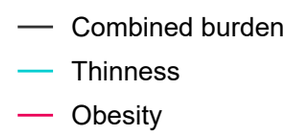
2 studies (2 national)



Boys

2 studies (2 national)

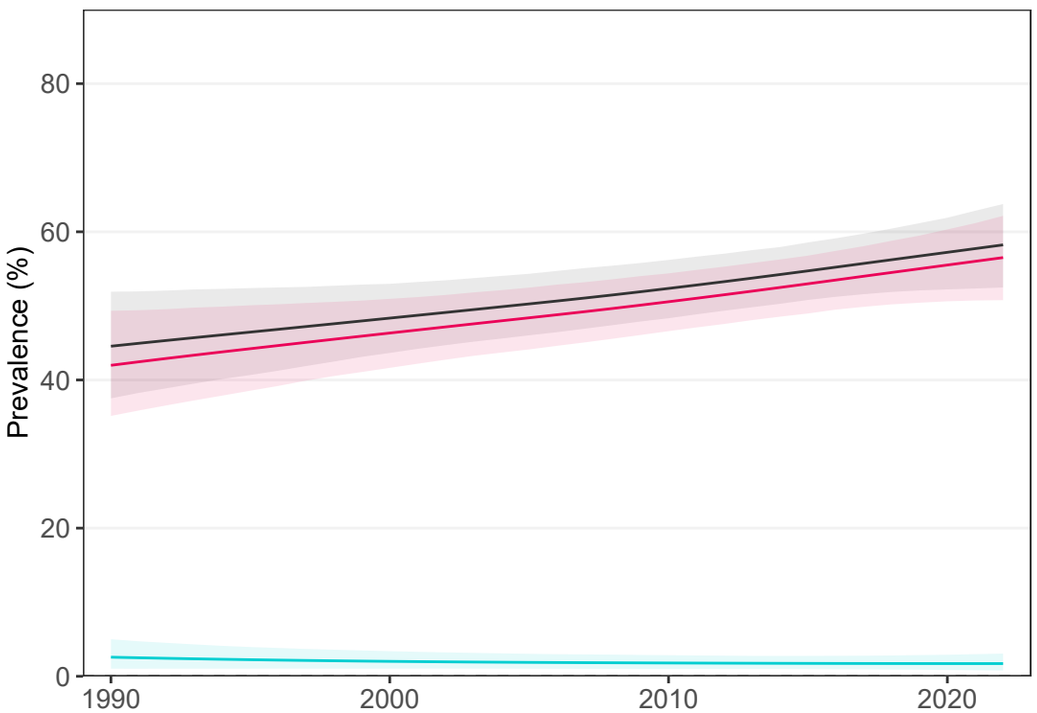




Adults

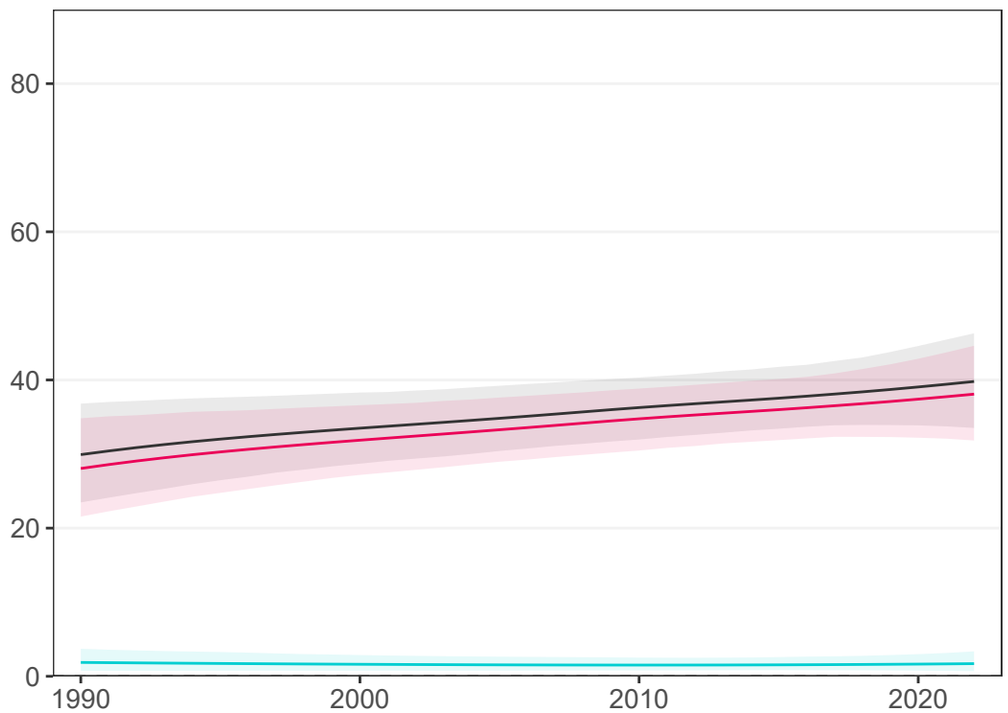
Women

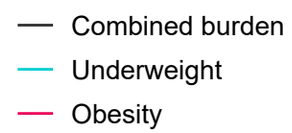
2 studies (2 national)



Men

2 studies (2 national)



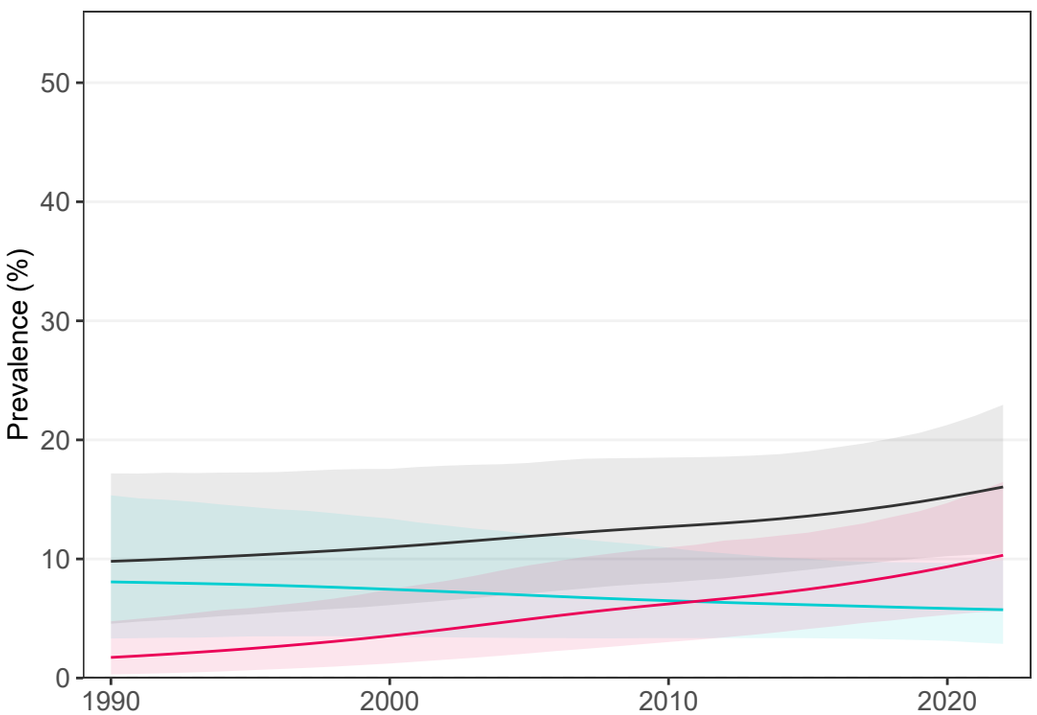


Mauritania

School-aged children and adolescents

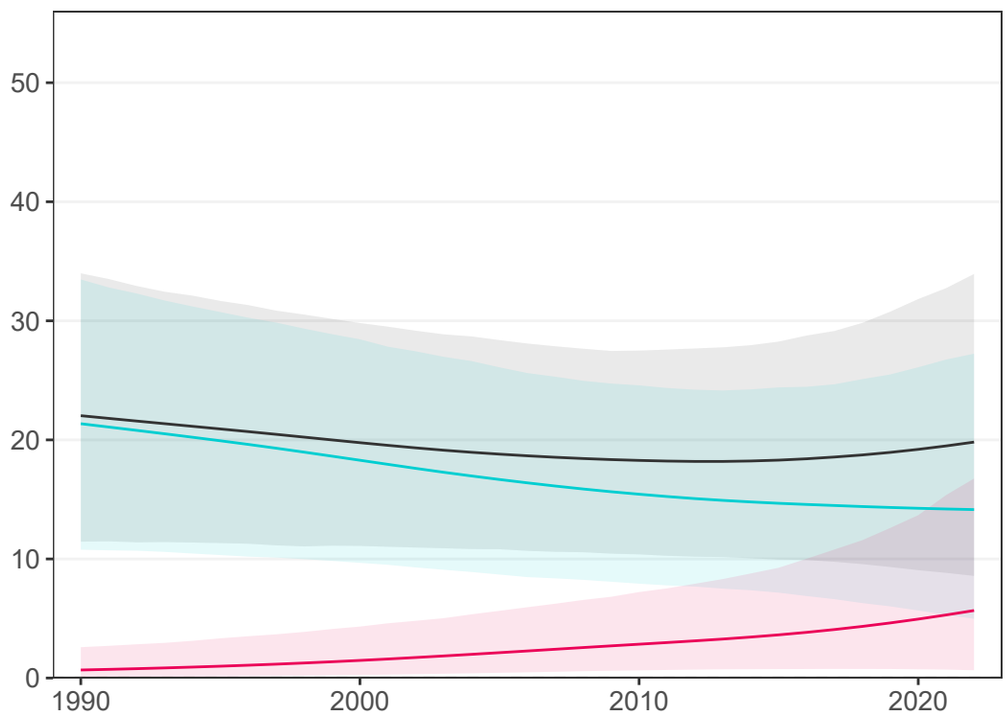
Girls

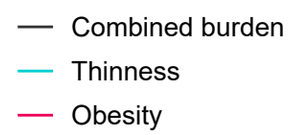
2 studies (1 national)



Boys

1 study (0 national)

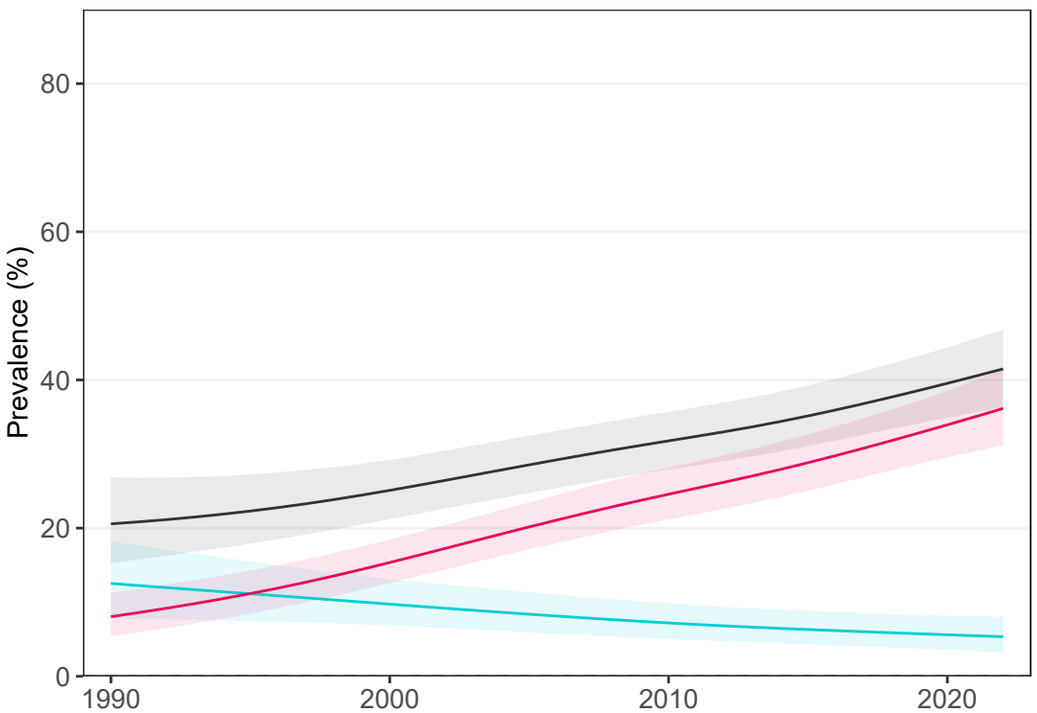




Adults

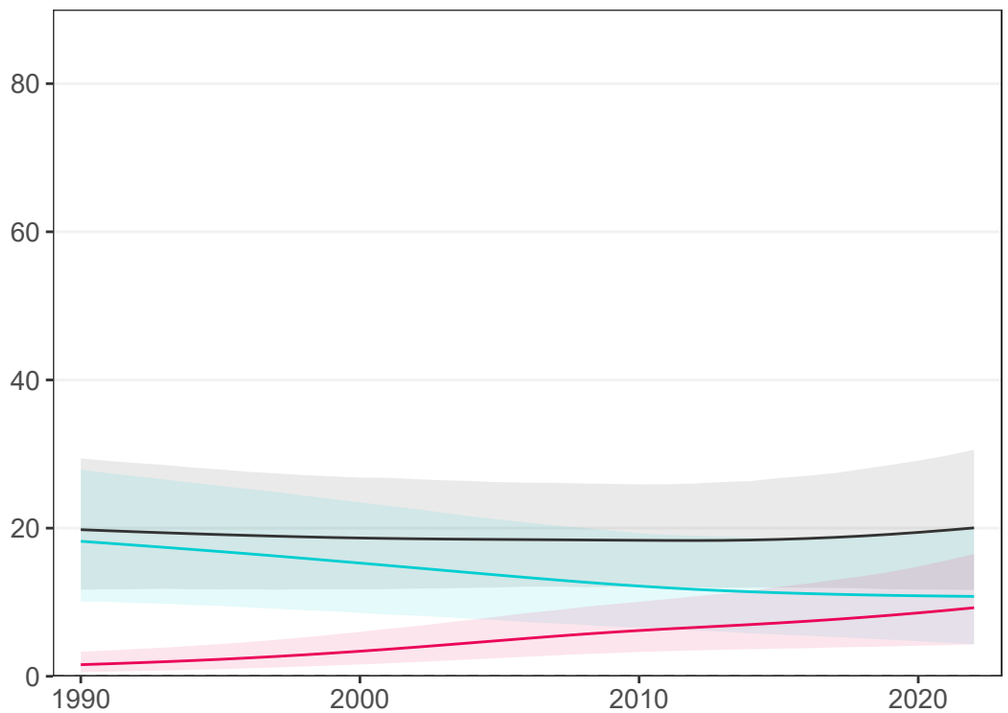
Women

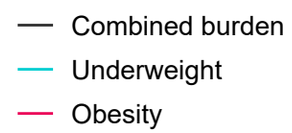
3 studies (2 national)



Men

1 study (0 national)



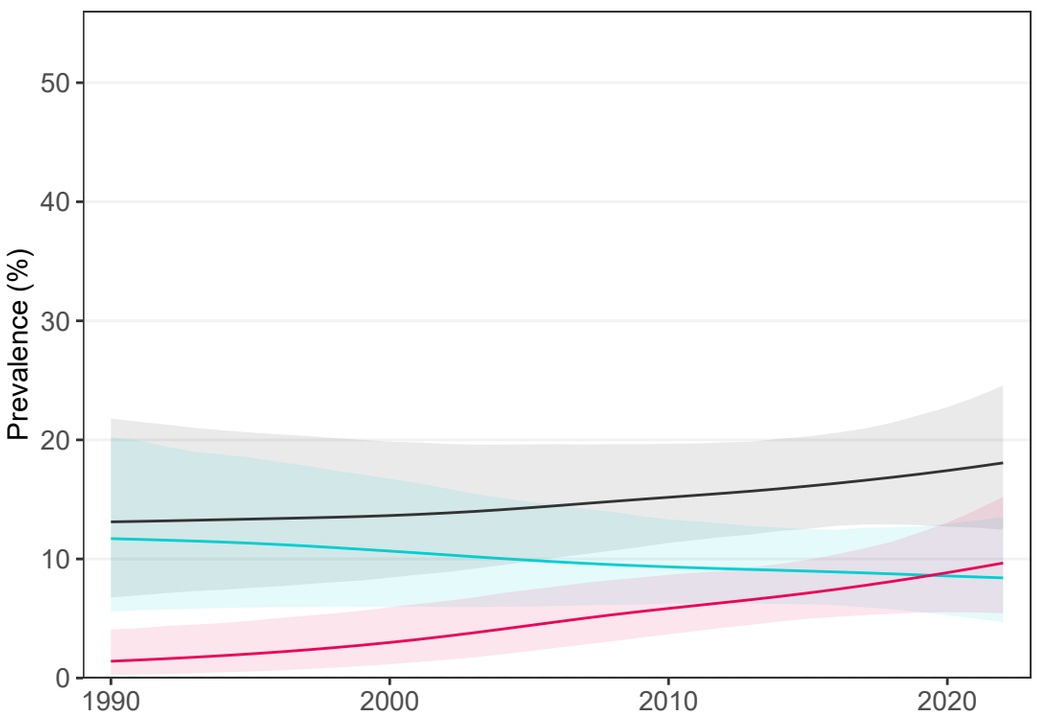


Mauritius

School-aged children and adolescents

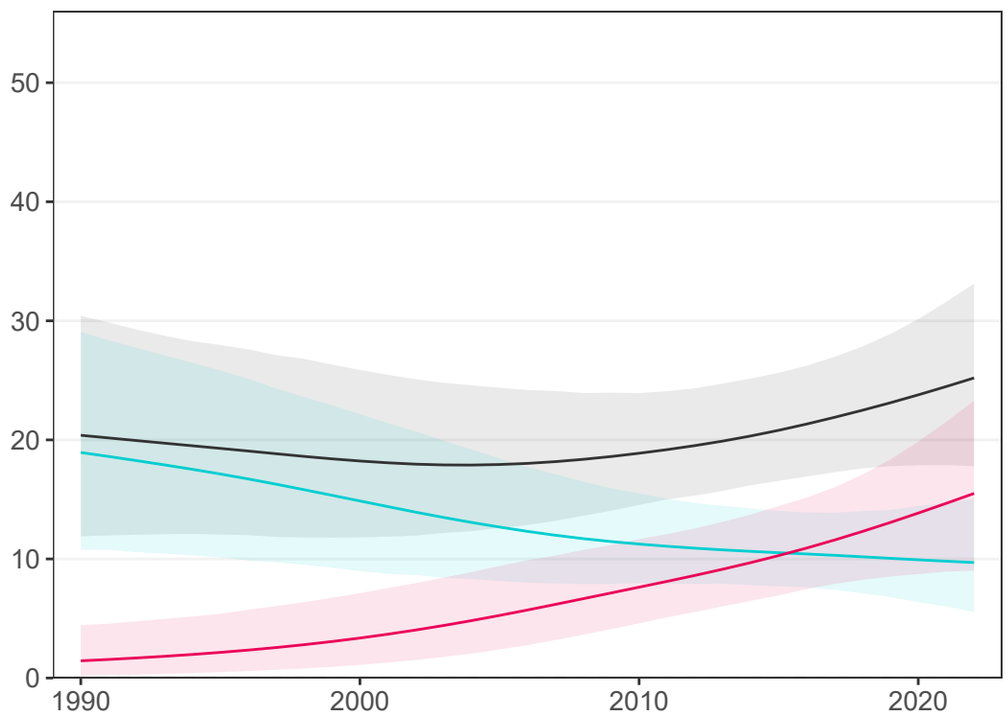
Girls

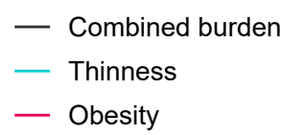
4 studies (2 national)



Boys

4 studies (2 national)

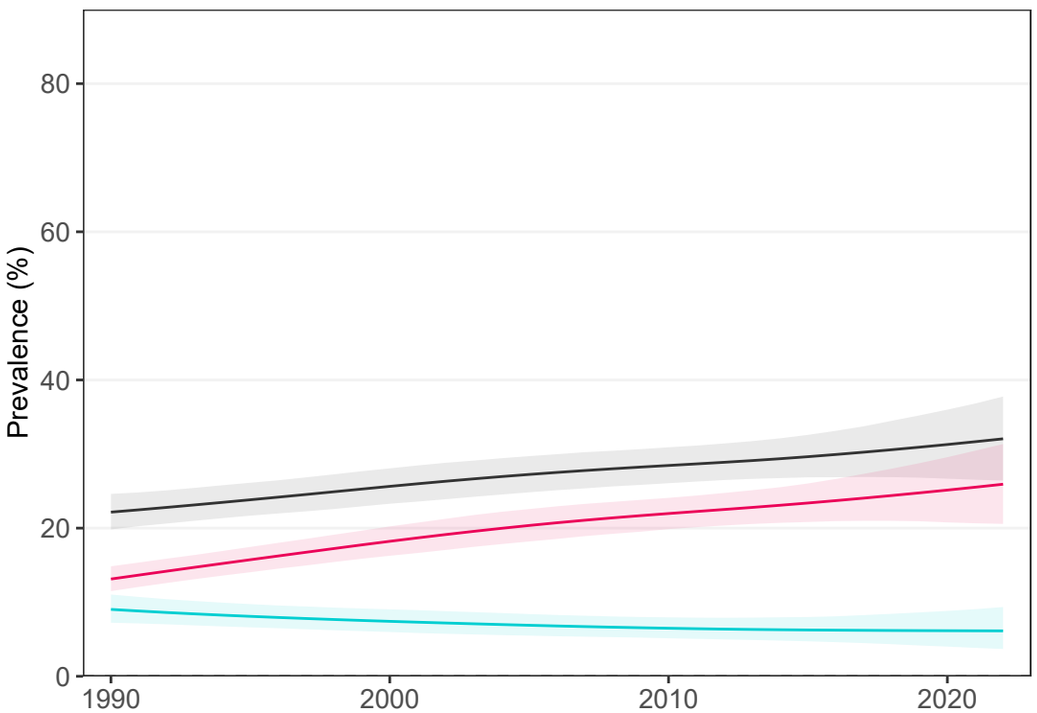




Adults

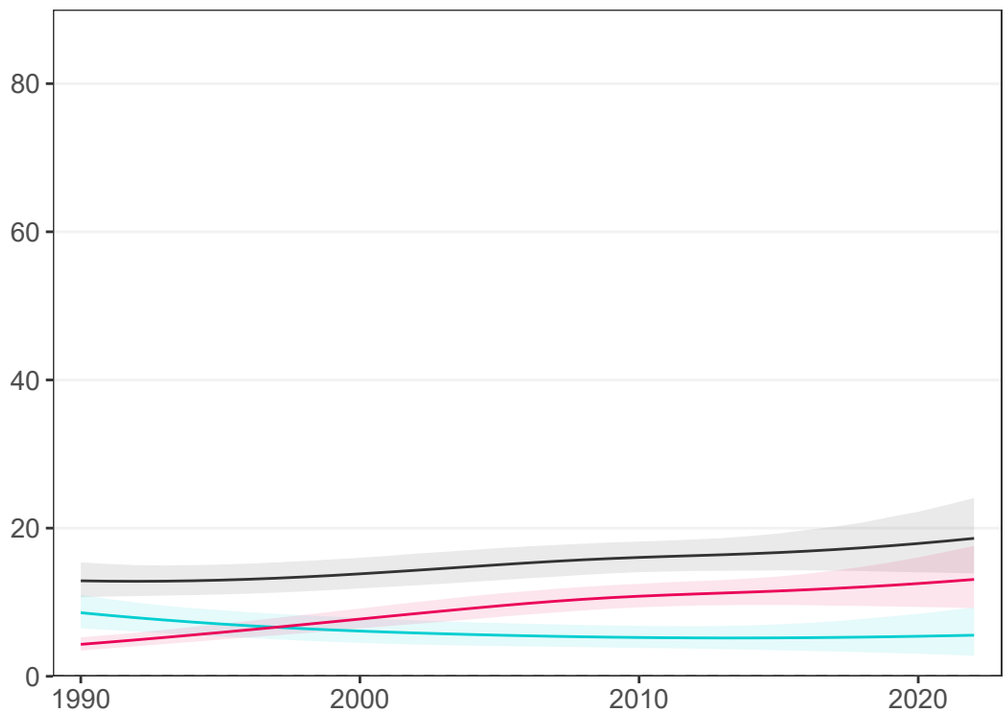
Women

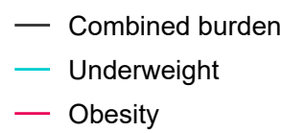
8 studies (6 national)



Men

8 studies (6 national)



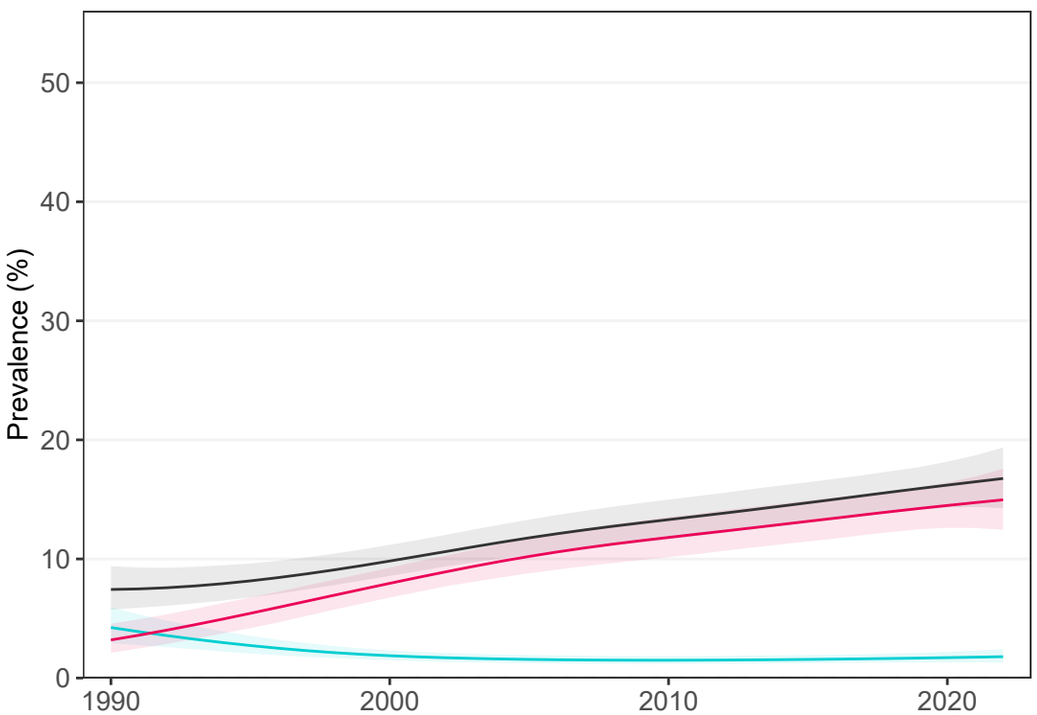


Mexico

School-aged children and adolescents

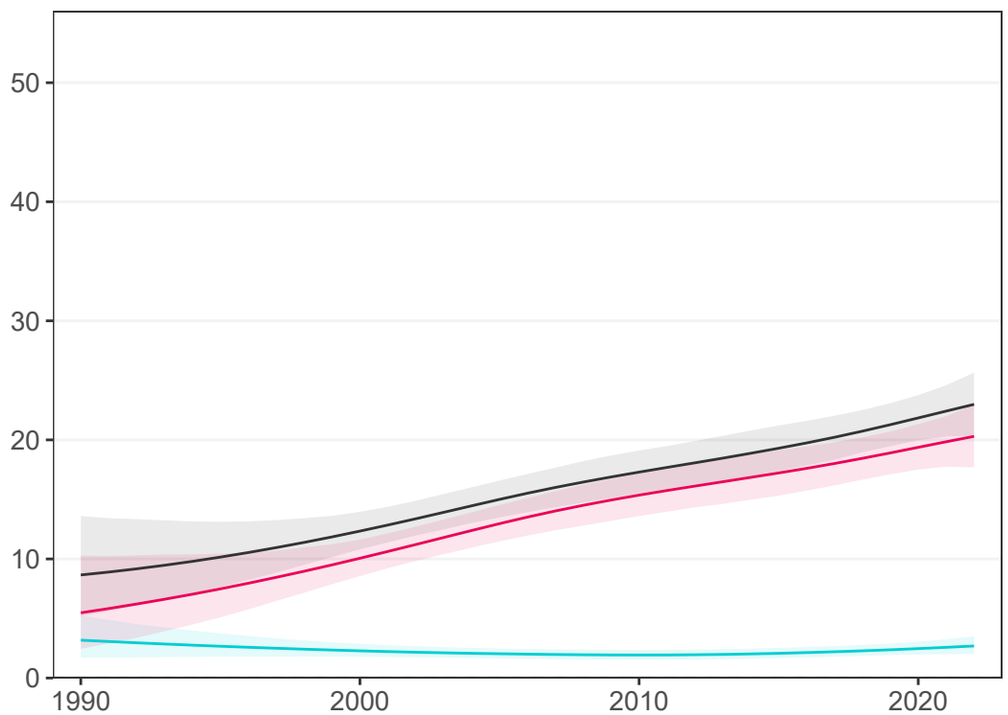
Girls

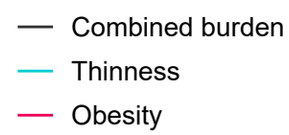
15 studies (15 national)



Boys

13 studies (13 national)

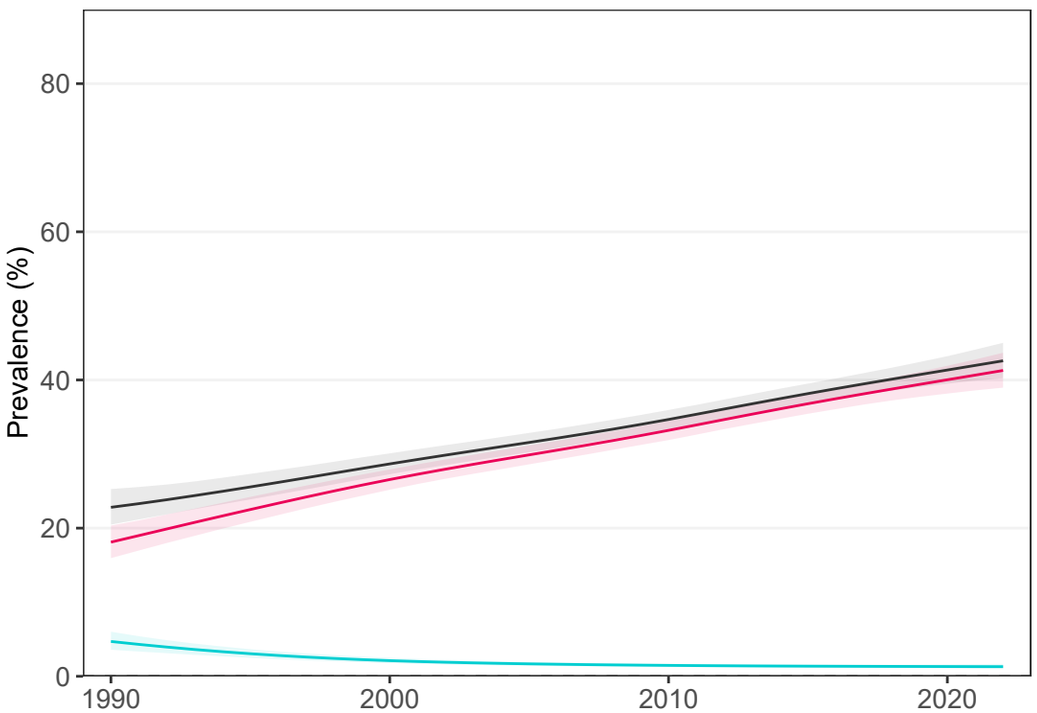




Adults

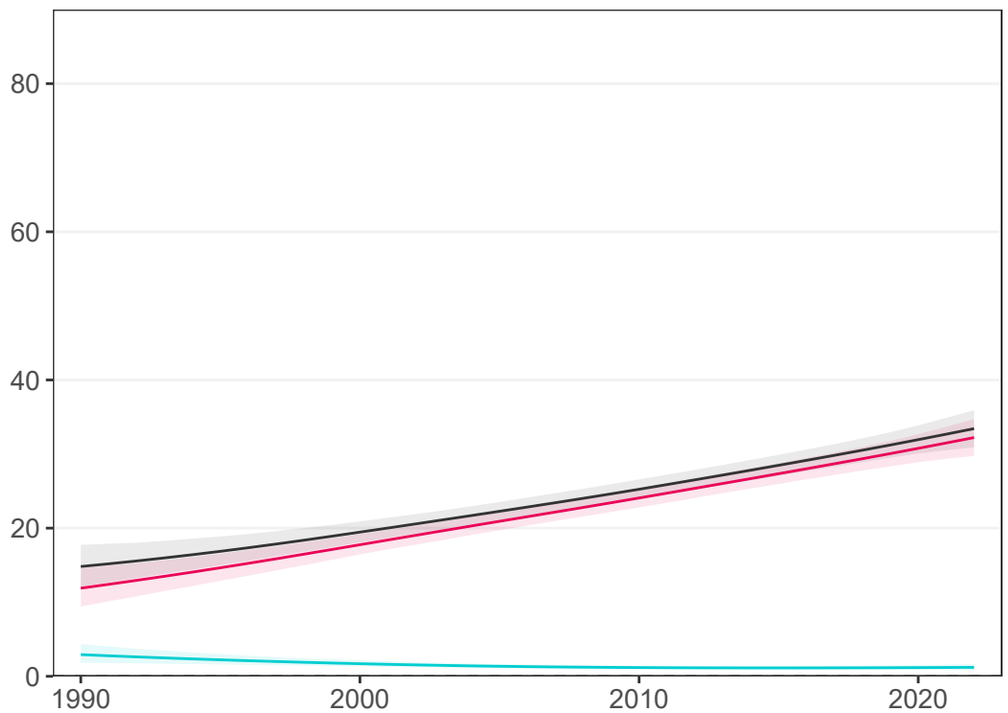
Women

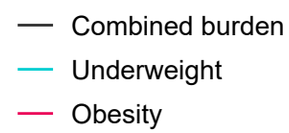
26 studies (22 national)



Men

24 studies (20 national)



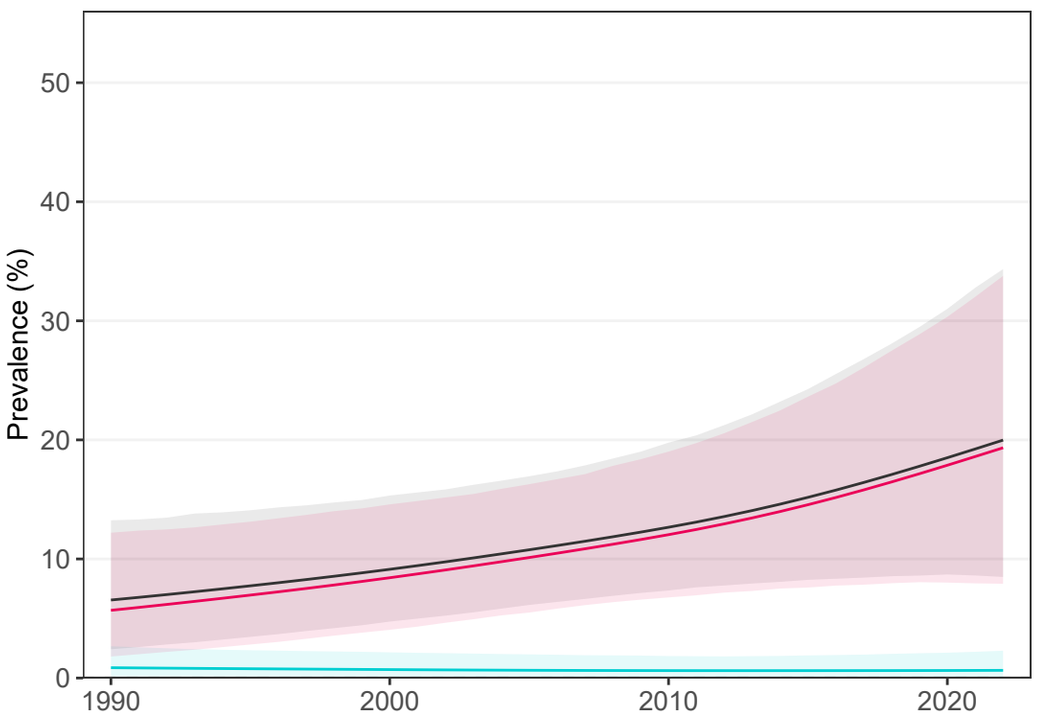


Micronesia

School-aged children and adolescents

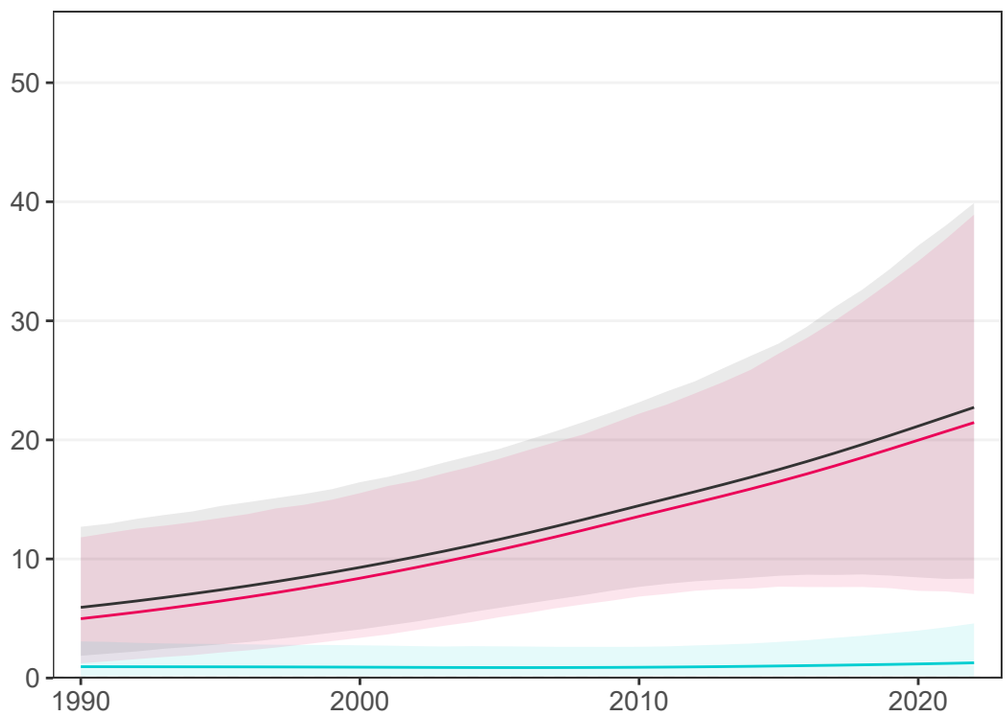
Girls

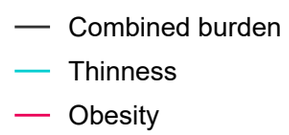
3 studies (0 national)



Boys

3 studies (0 national)

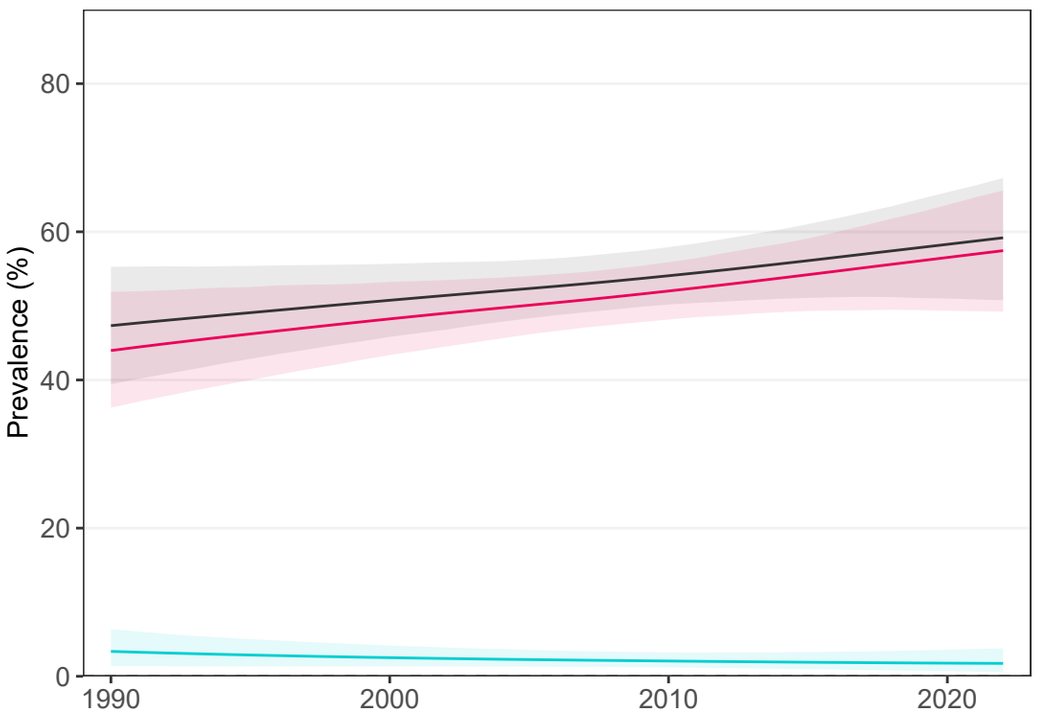




Adults

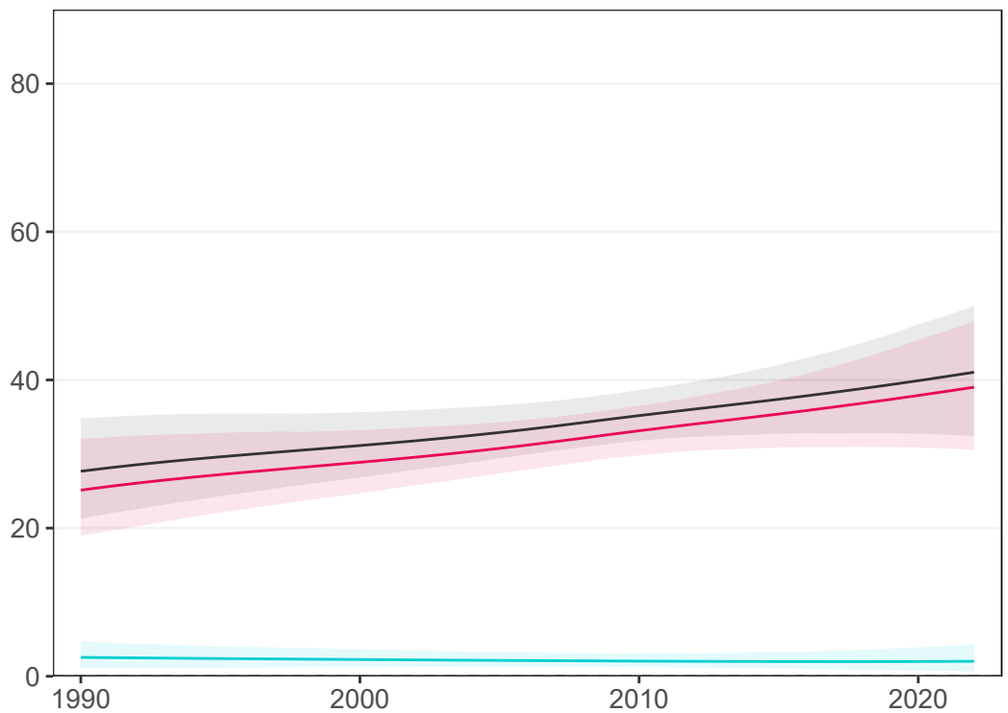
Women

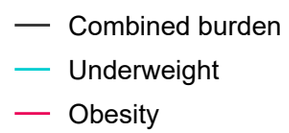
6 studies (0 national)



Men

6 studies (0 national)



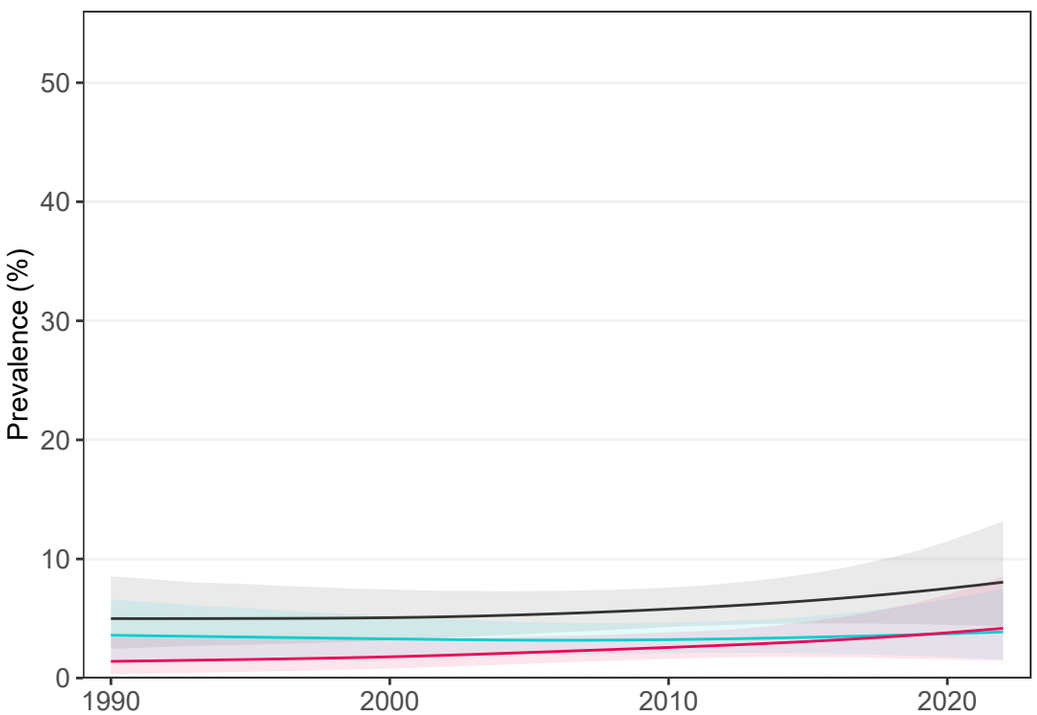


Moldova

School-aged children and adolescents

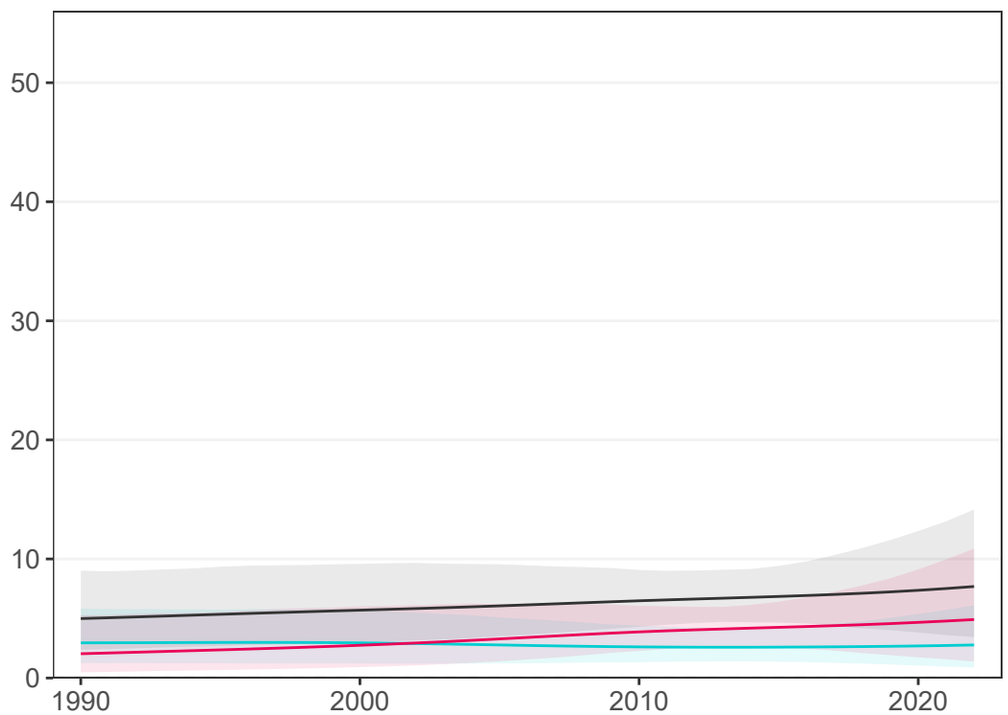
Girls

4 studies (4 national)



Boys

3 studies (3 national)

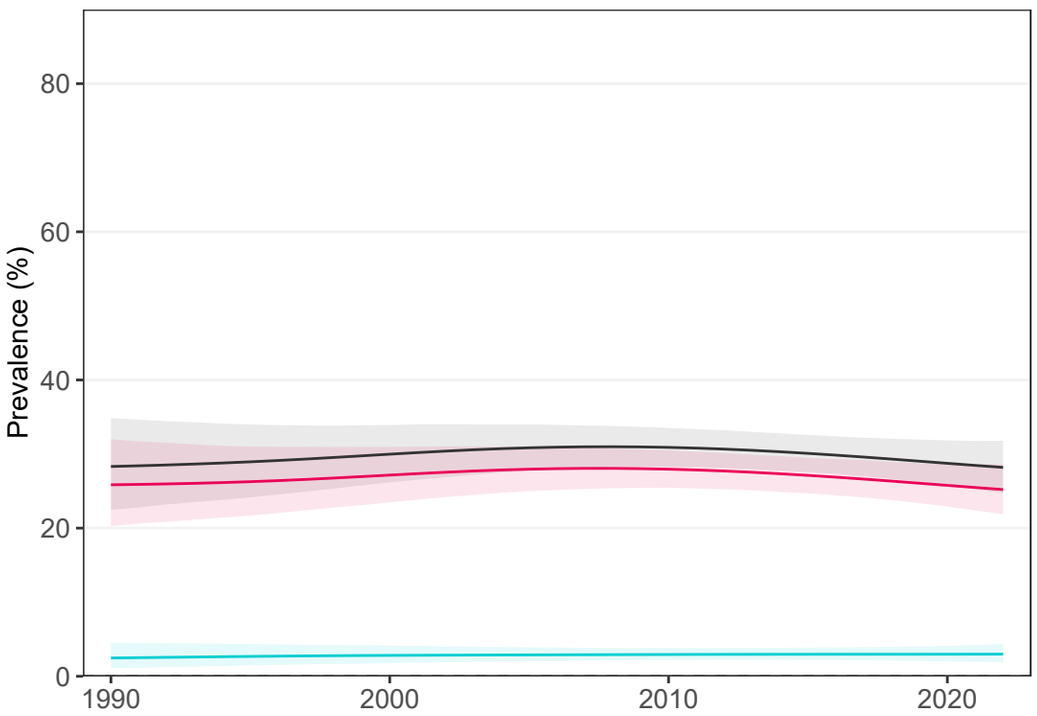


Combined burden
Thinness
Obesity

Adults

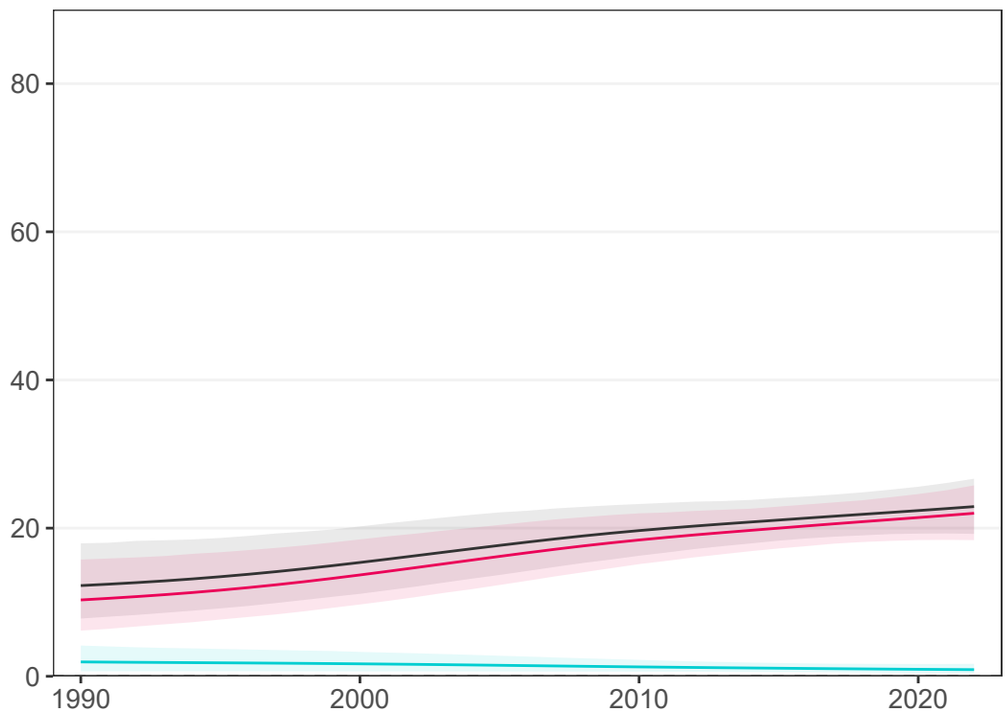
Women

3 studies (3 national)



Men

2 studies (2 national)



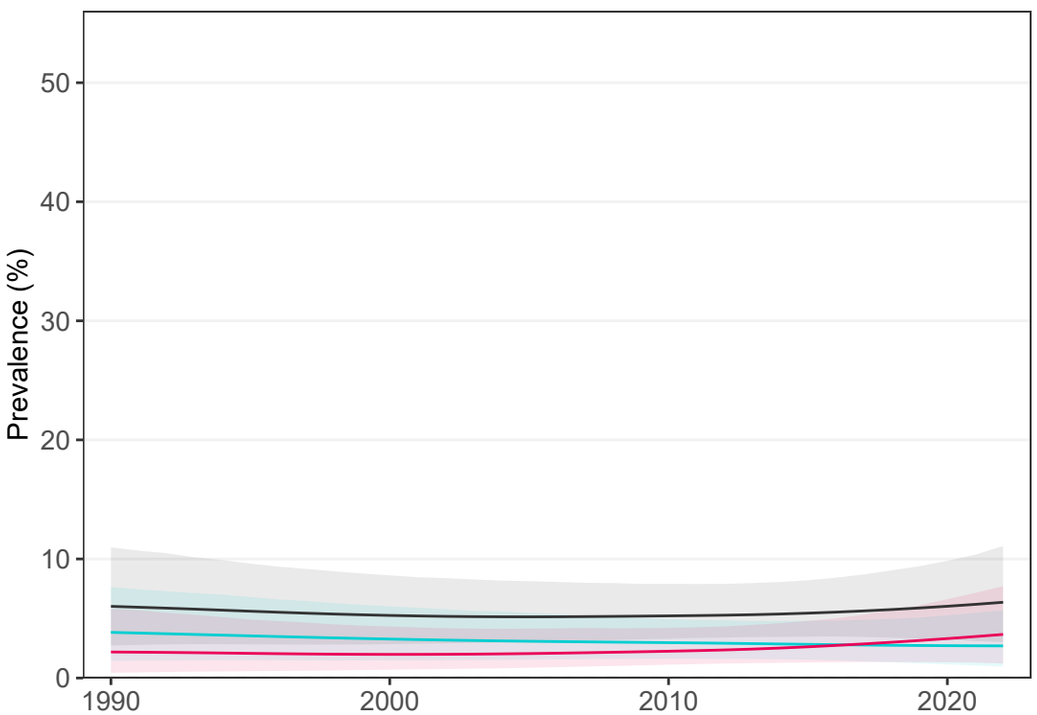
Combined burden
Underweight
Obesity

Mongolia

School-aged children and adolescents

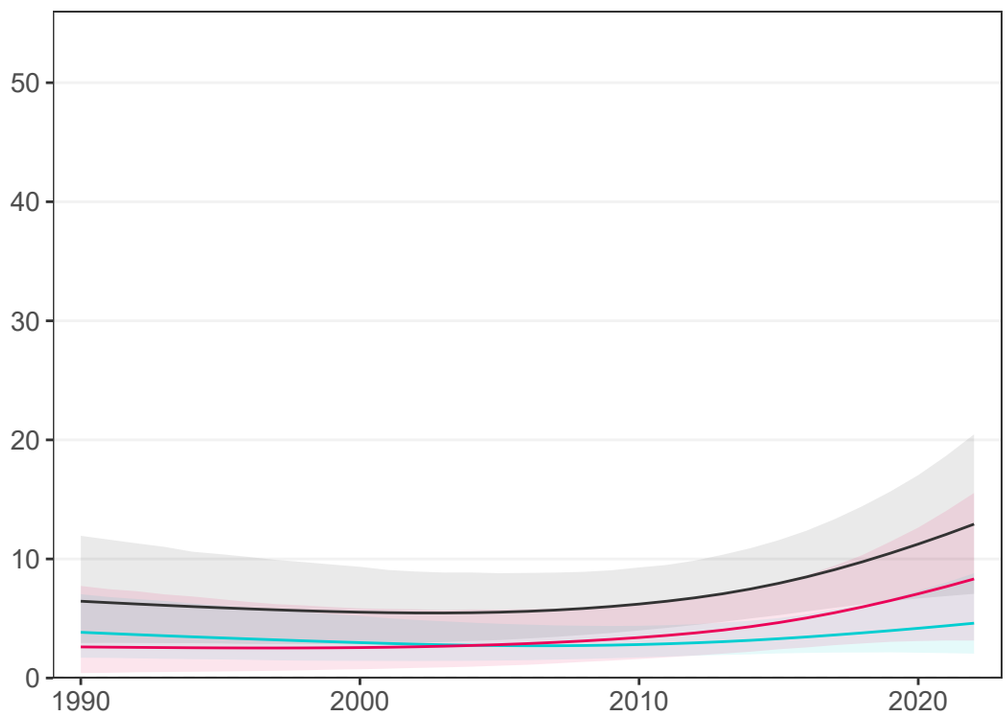
Girls

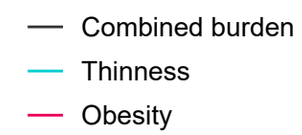
5 studies (5 national)



Boys

5 studies (5 national)

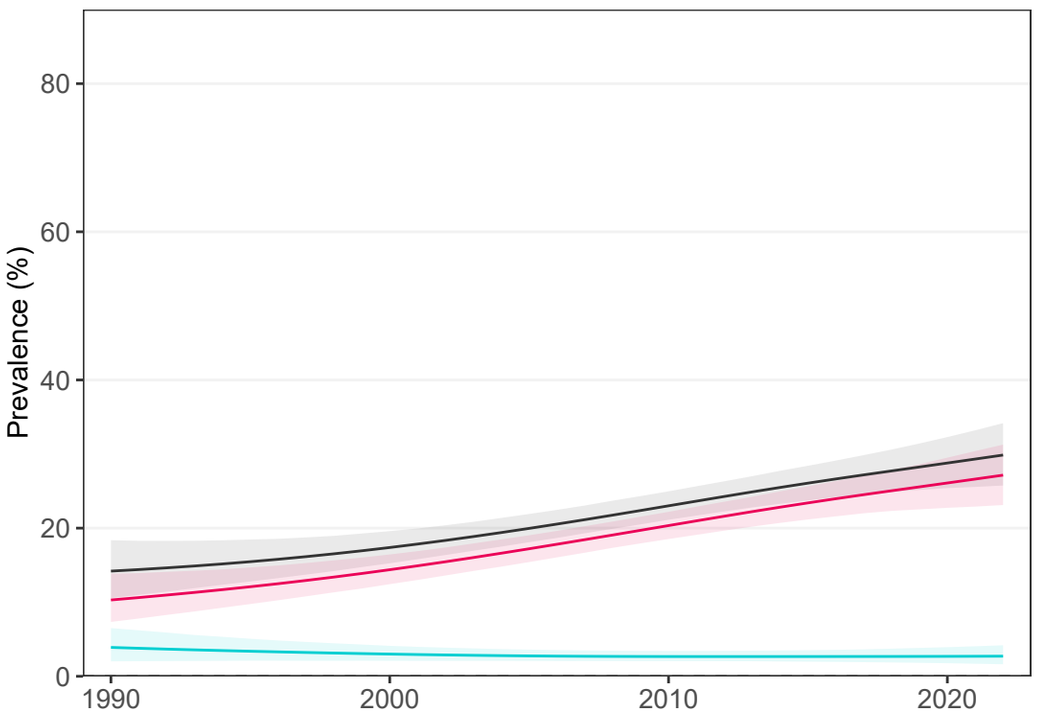




Adults

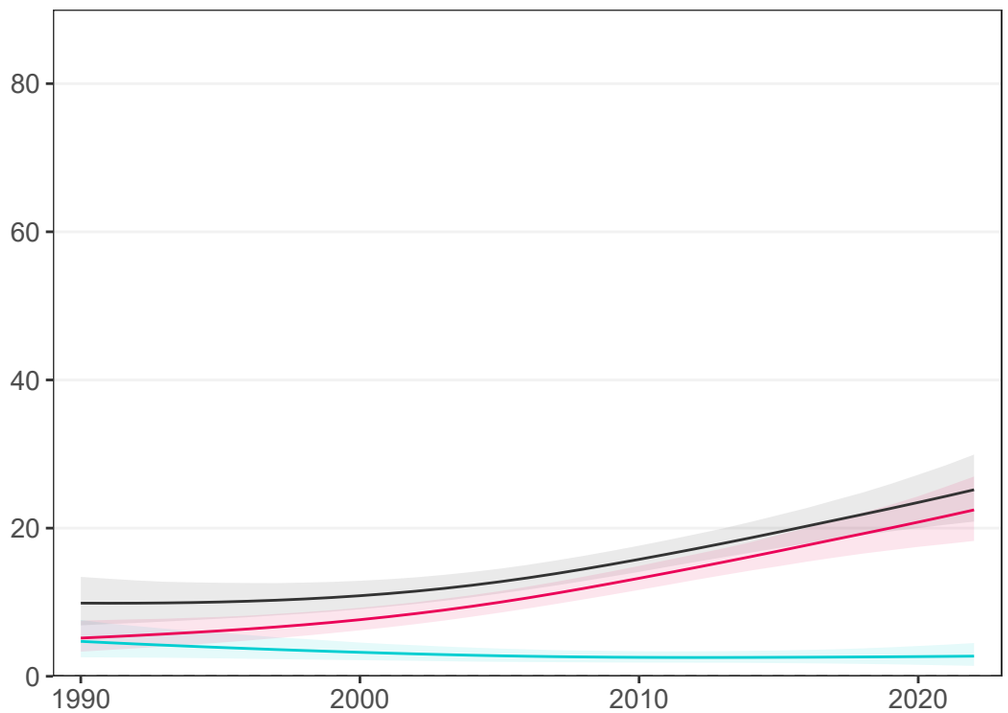
Women

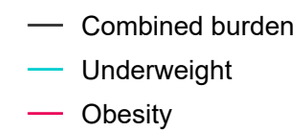
6 studies (6 national)



Men

6 studies (6 national)



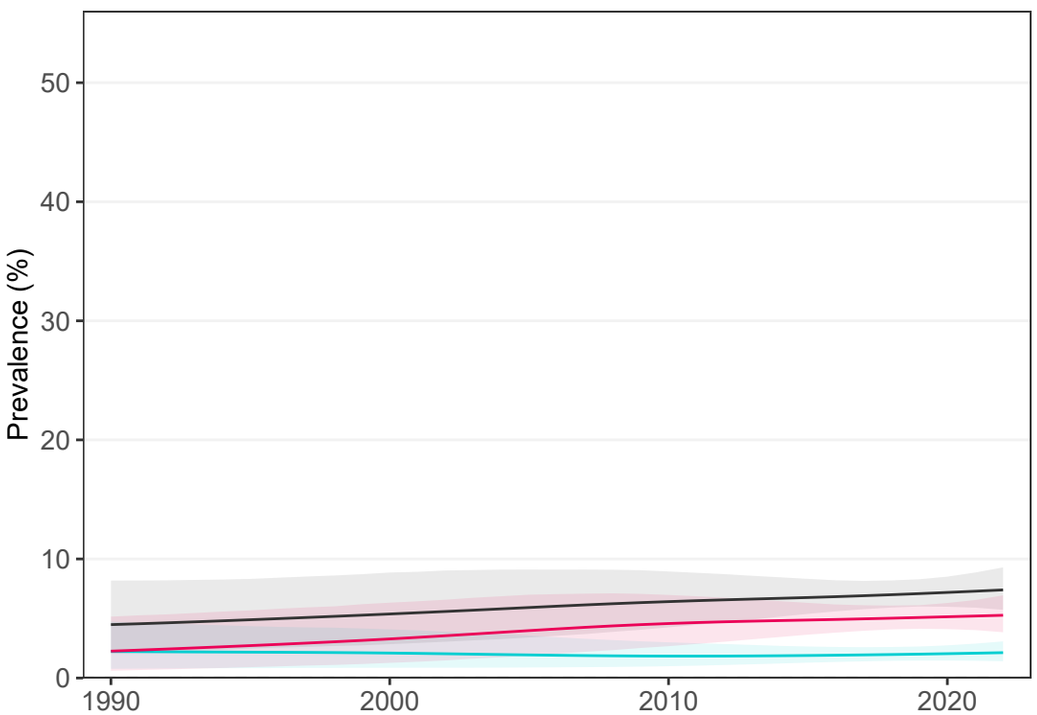


Montenegro

School-aged children and adolescents

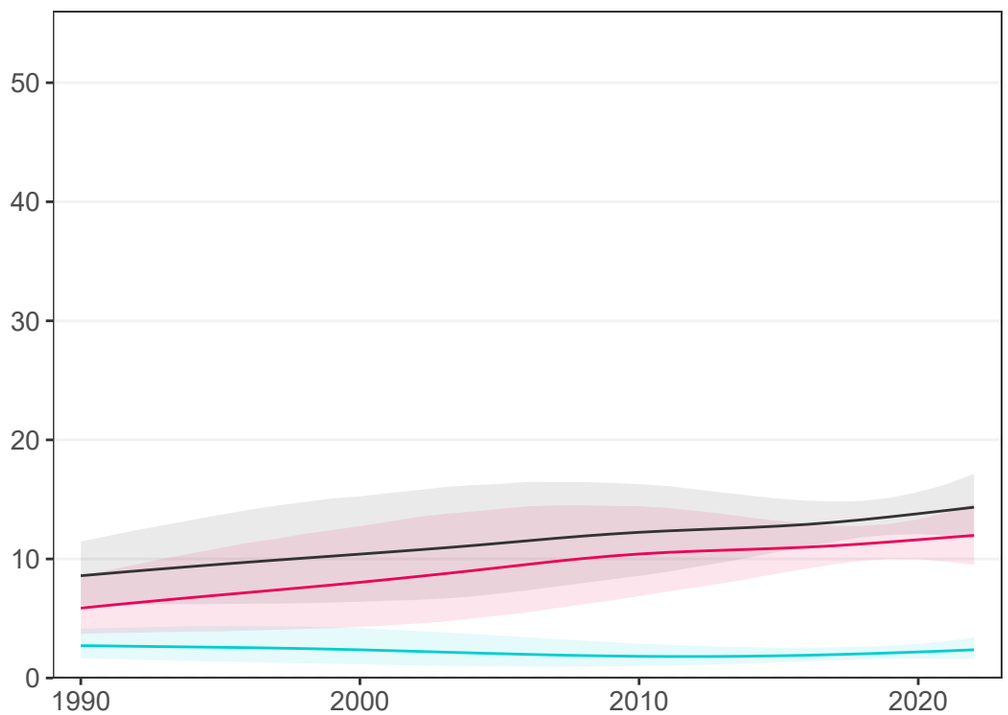
Girls

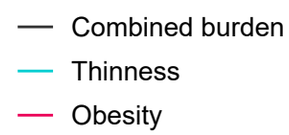
13 studies (8 national)



Boys

24 studies (19 national)

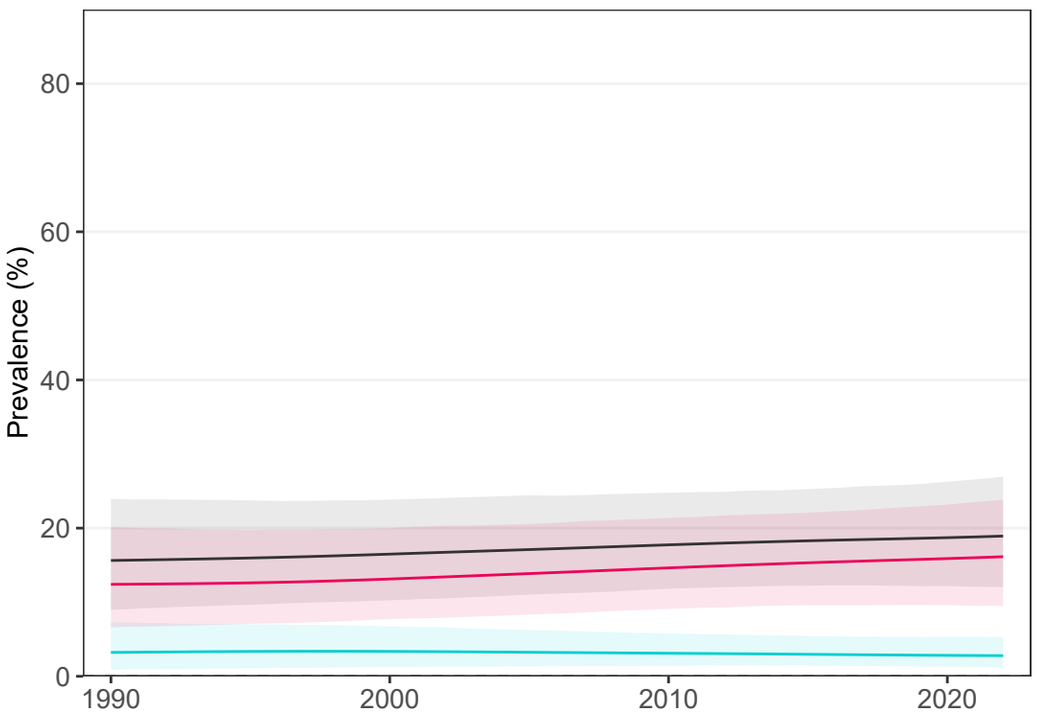




Adults

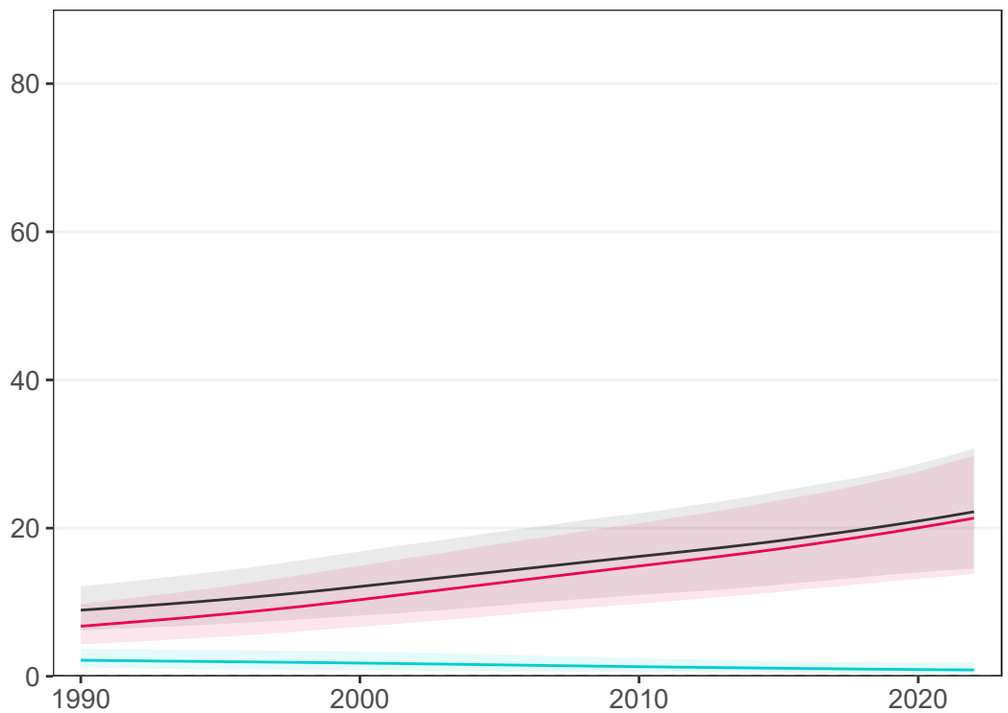
Women

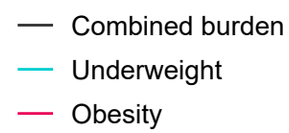
2 studies (2 national)



Men

13 studies (13 national)



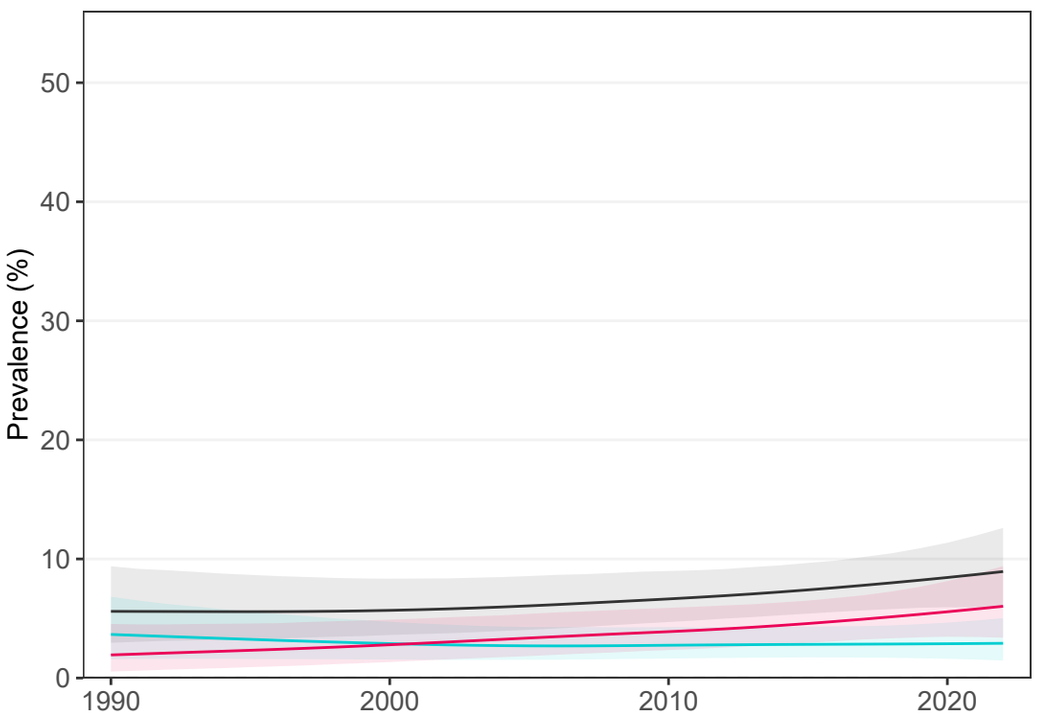


Morocco

School-aged children and adolescents

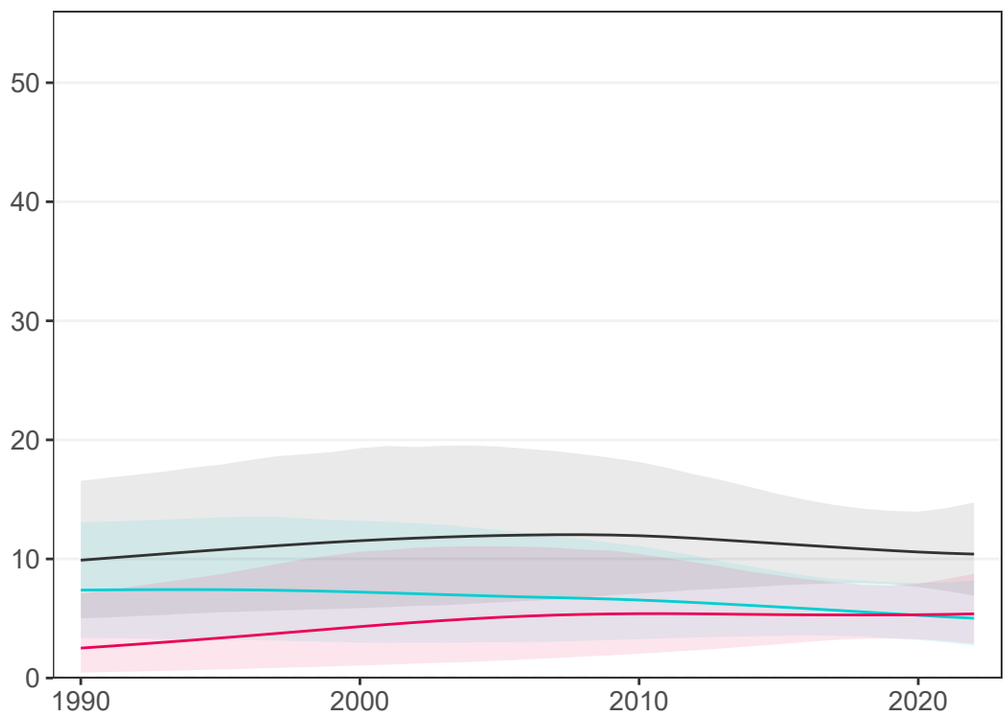
Girls

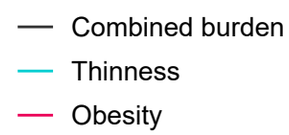
3 studies (3 national)



Boys

2 studies (2 national)

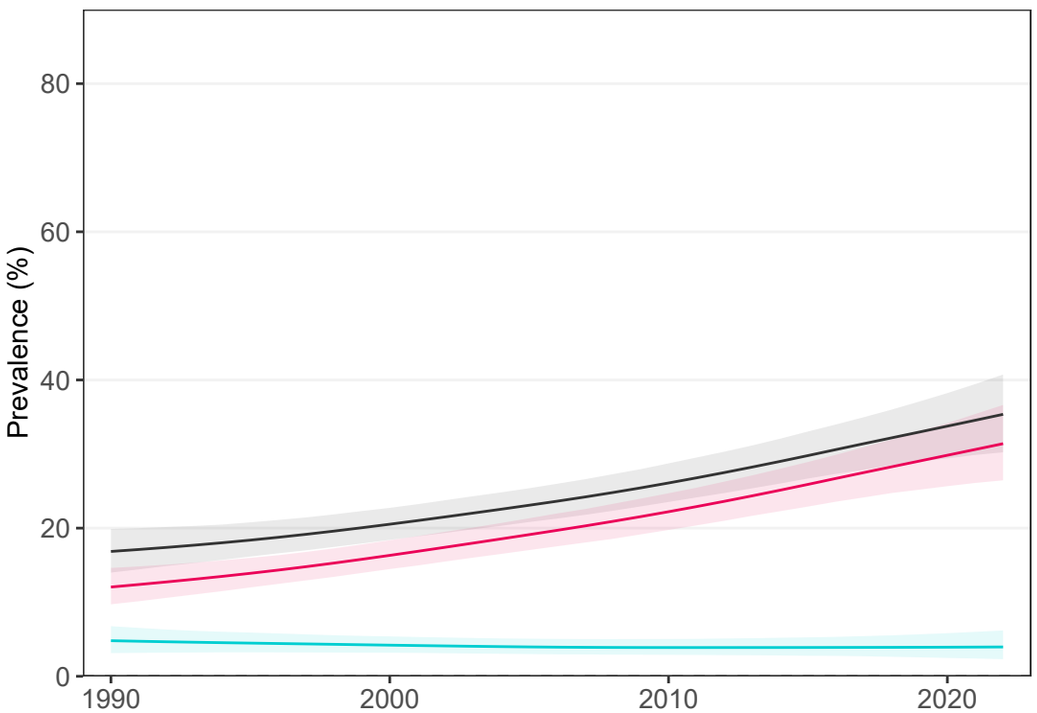




Adults

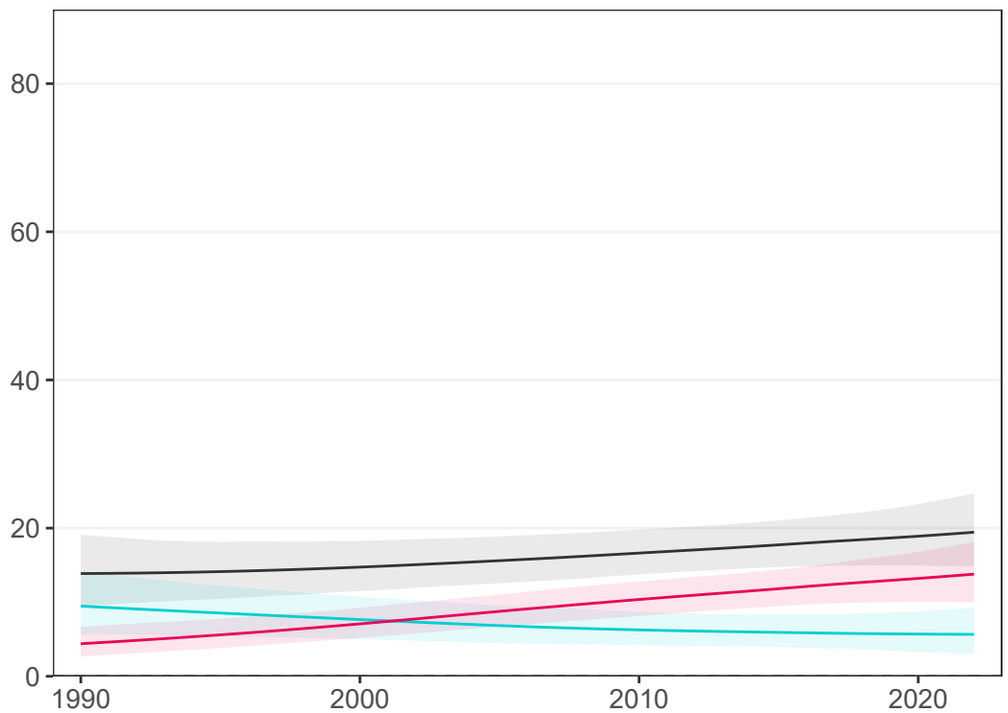
Women

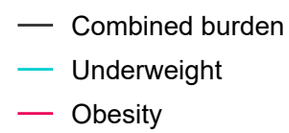
4 studies (4 national)



Men

2 studies (2 national)



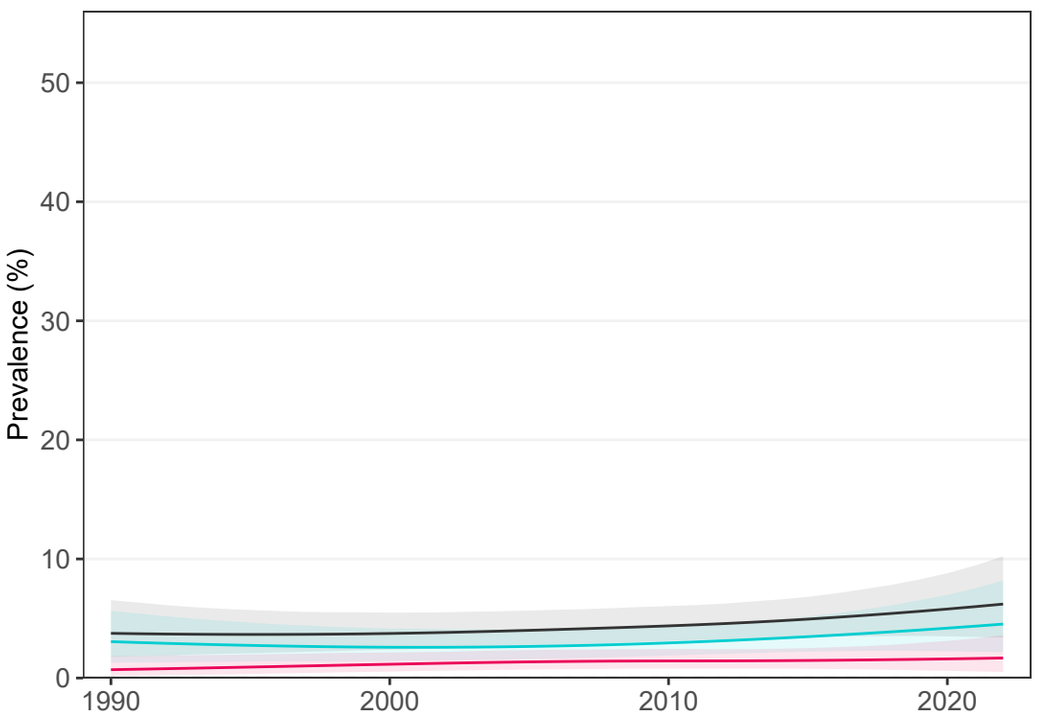


Mozambique

School-aged children and adolescents

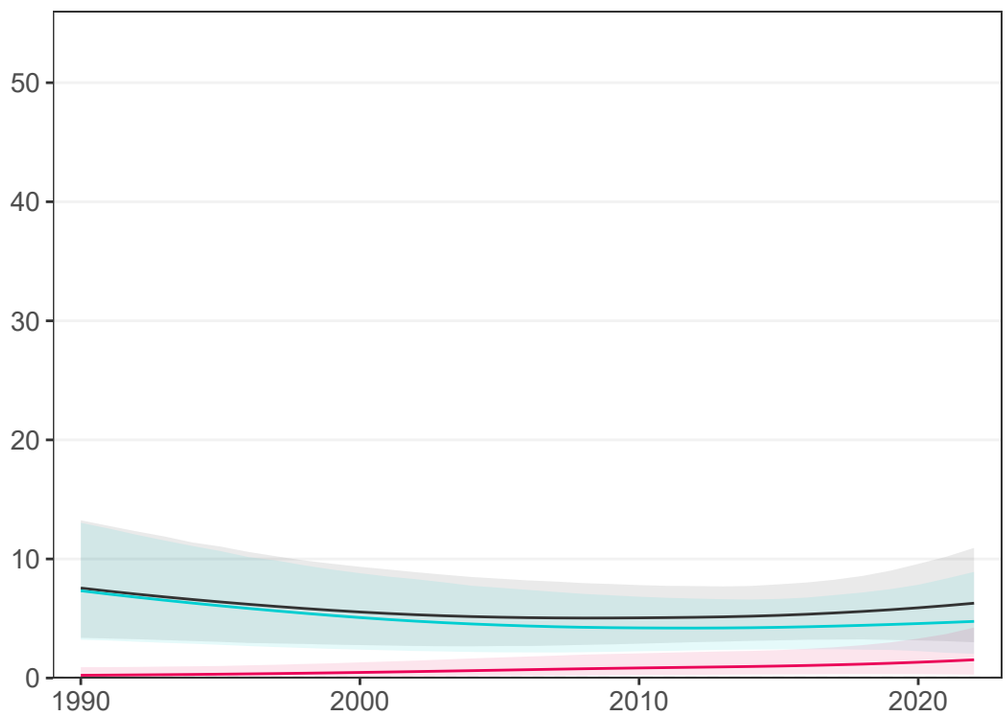
Girls

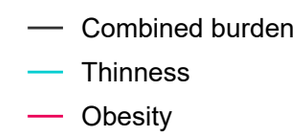
6 studies (3 national)



Boys

4 studies (1 national)

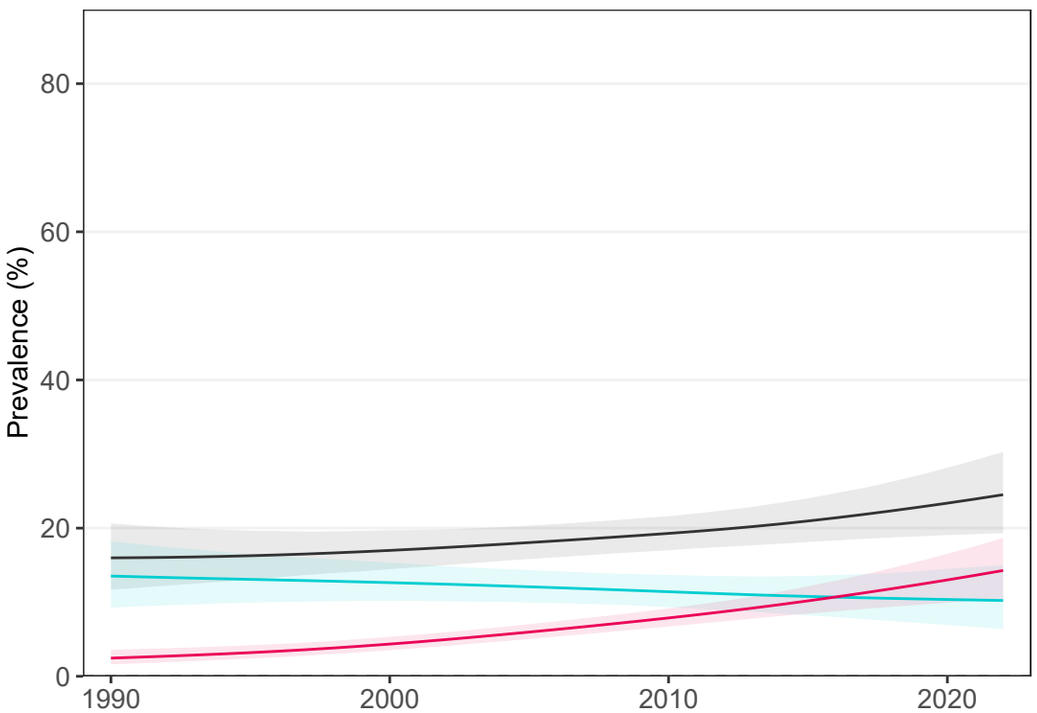




Adults

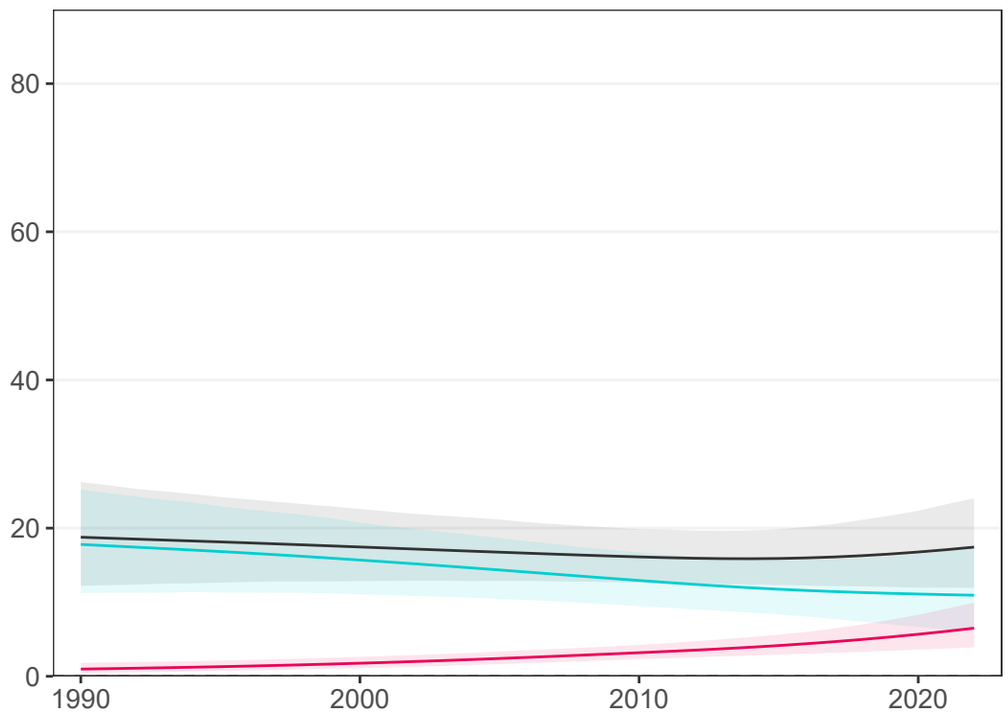
Women

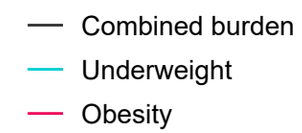
5 studies (5 national)



Men

2 studies (2 national)



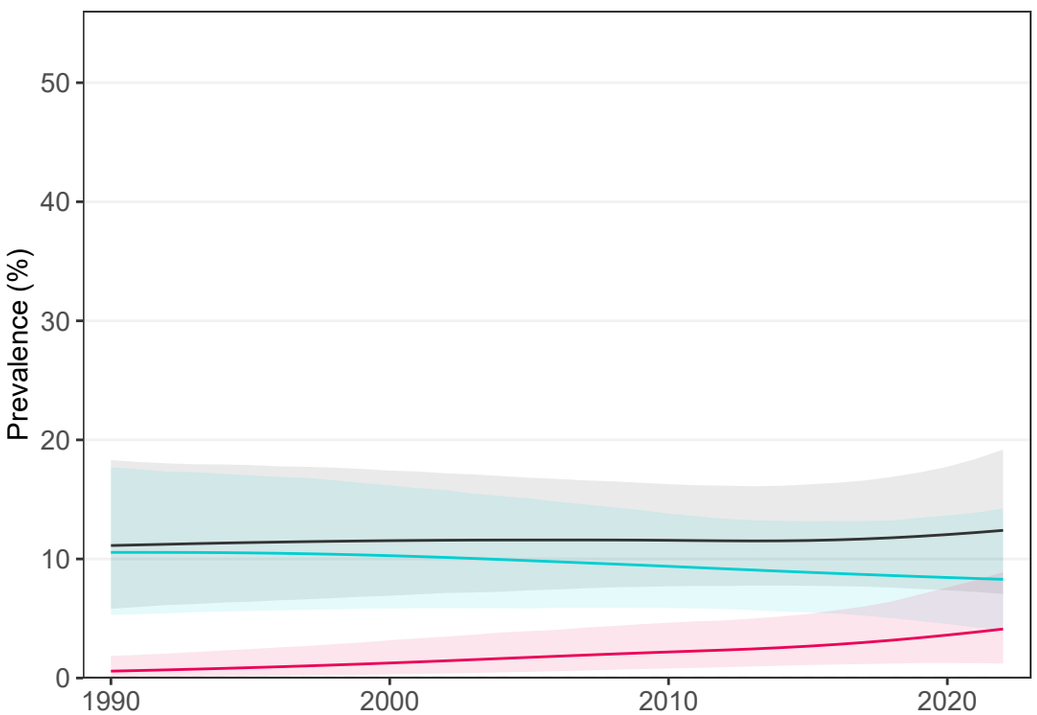


Myanmar

School-aged children and adolescents

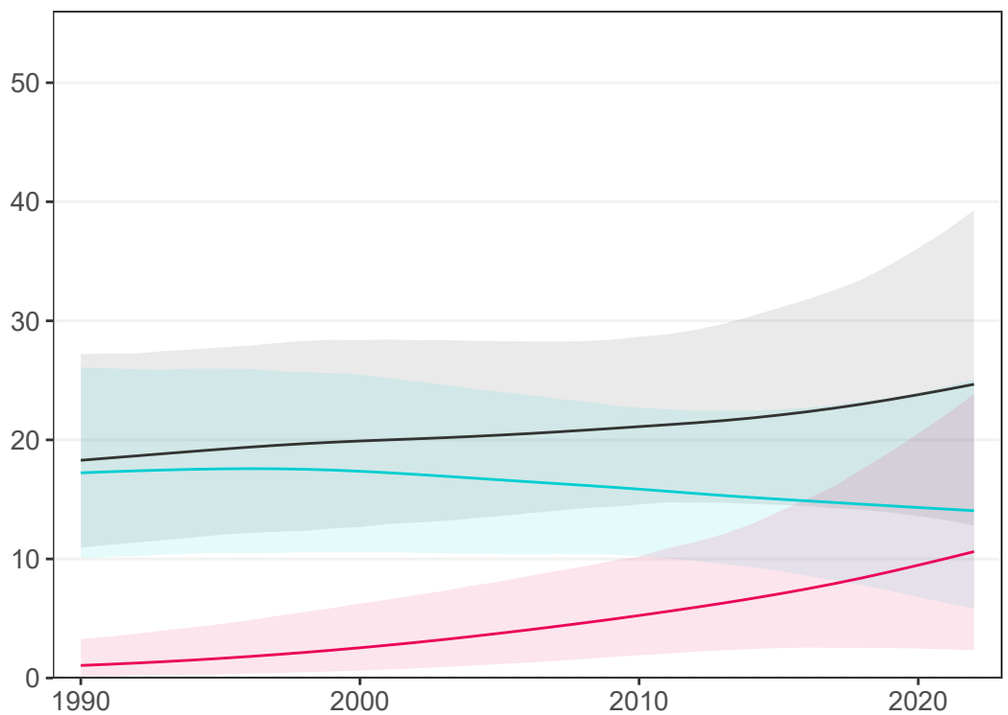
Girls

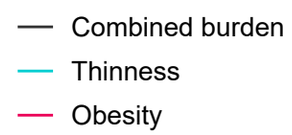
3 studies (2 national)



Boys

2 studies (1 national)

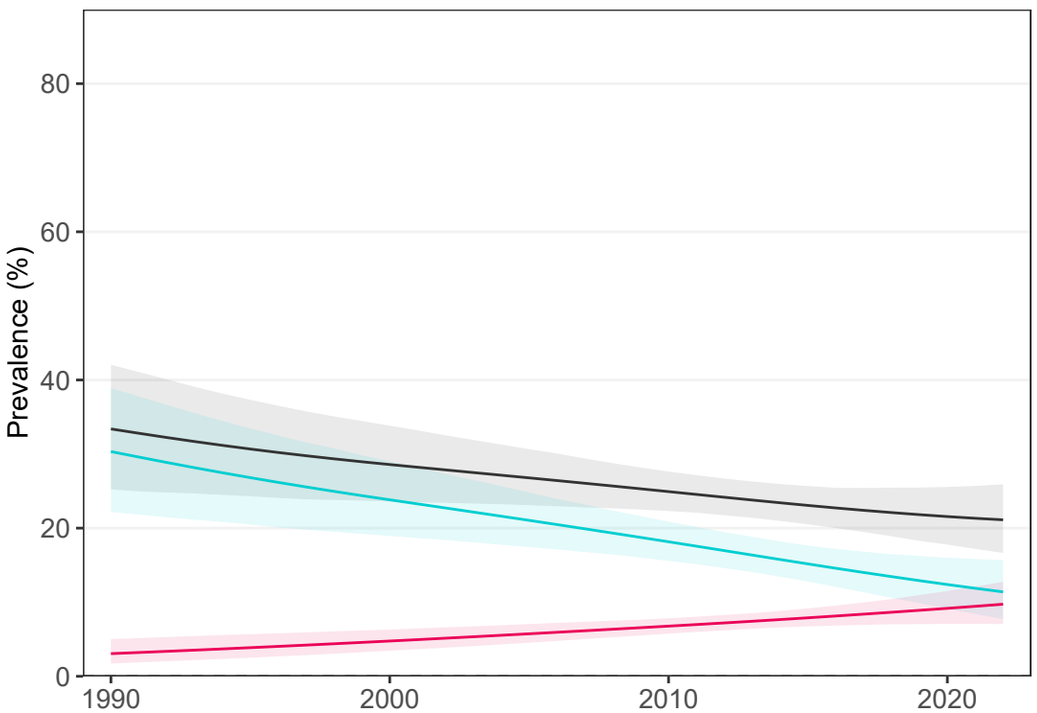




Adults

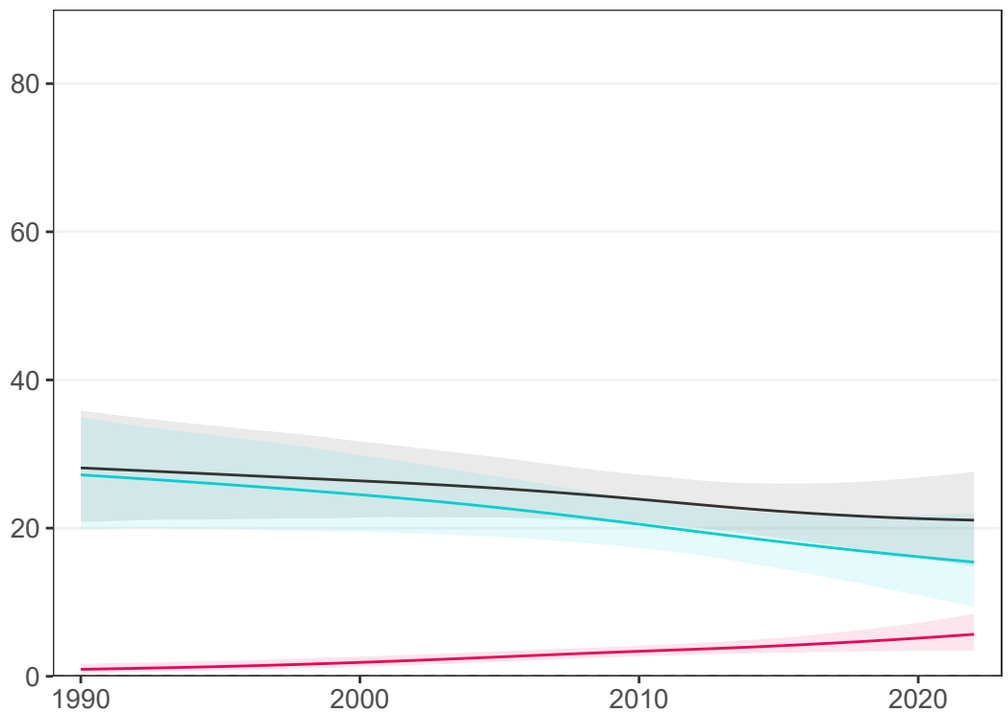
Women

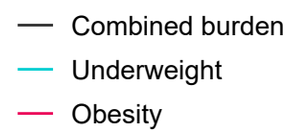
6 studies (3 national)



Men

5 studies (2 national)



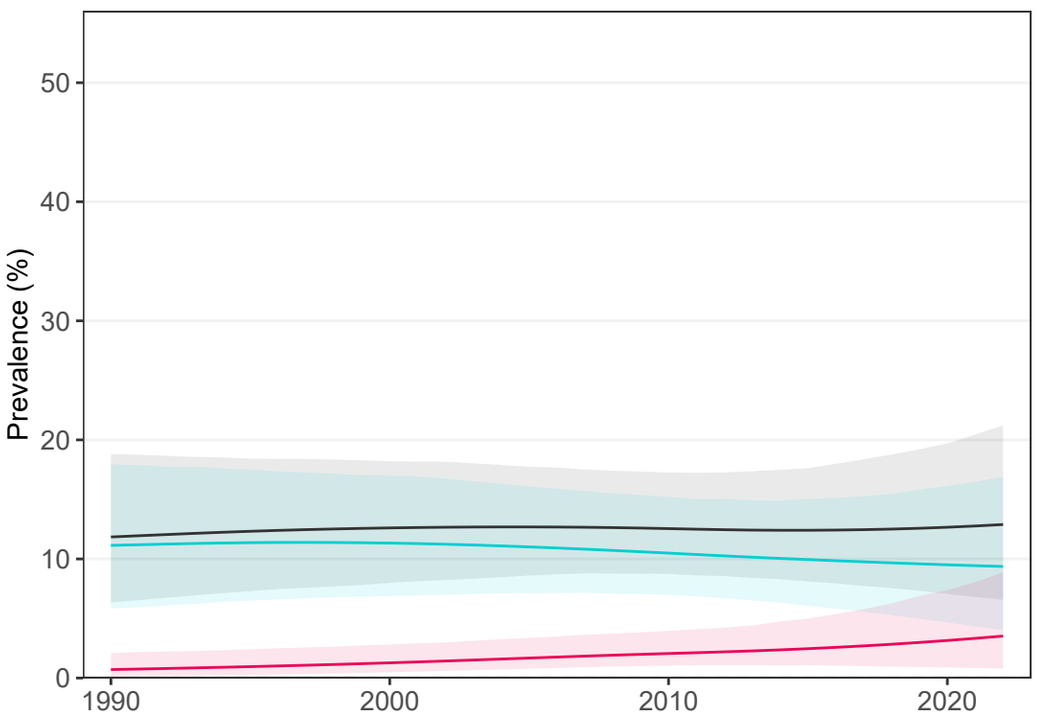


Namibia

School-aged children and adolescents

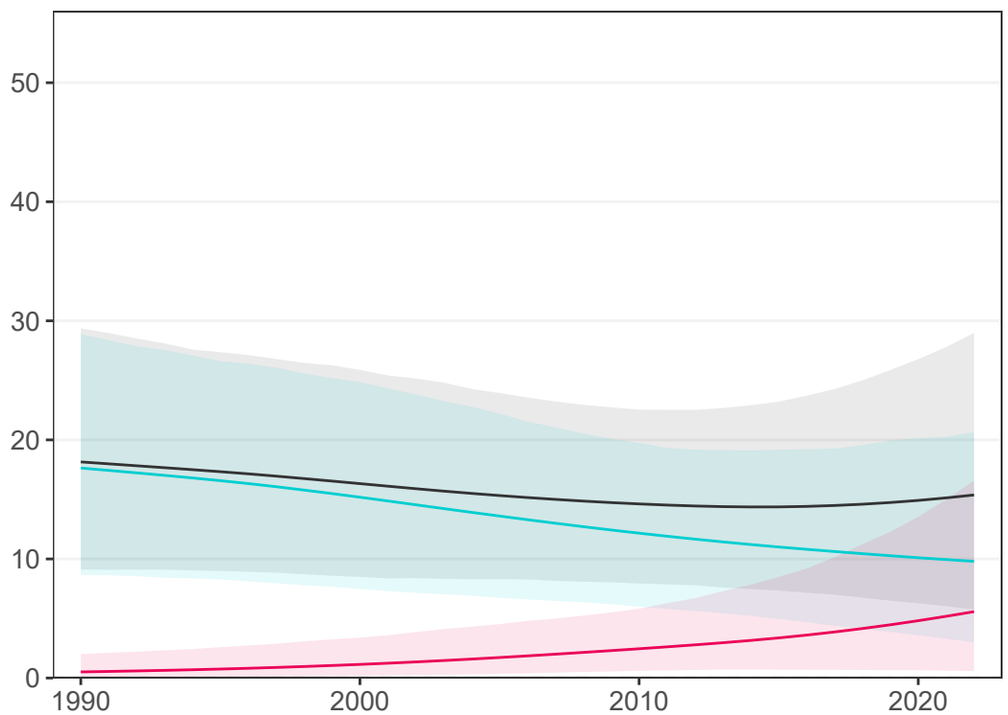
Girls

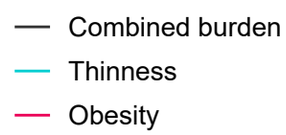
3 studies (2 national)



Boys

1 study (0 national)

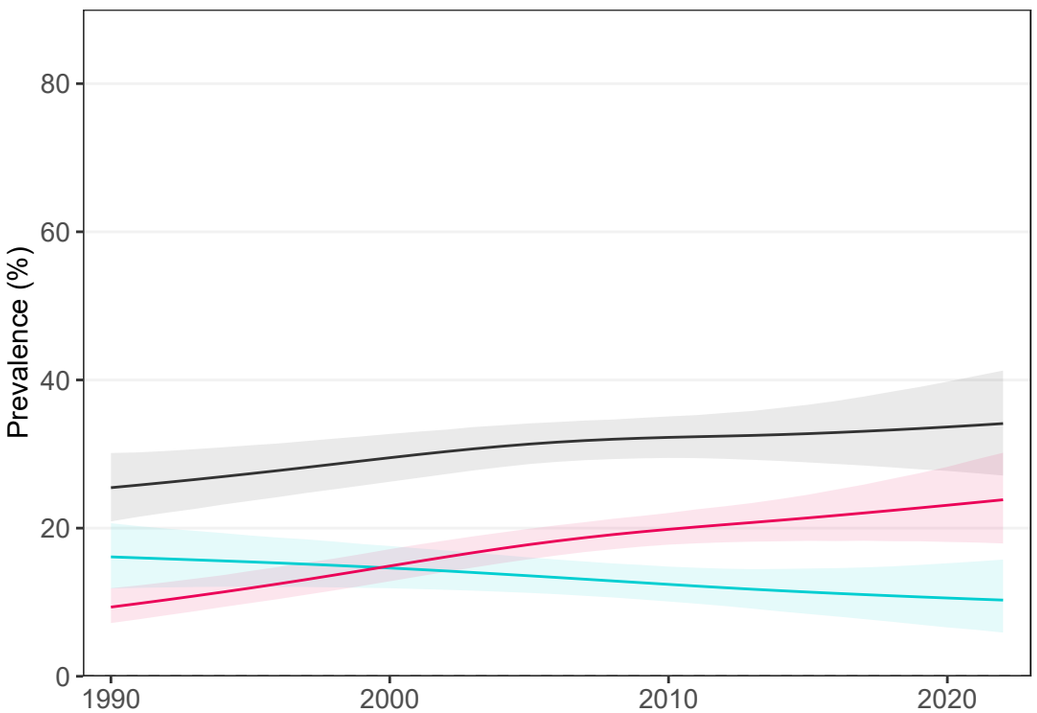




Adults

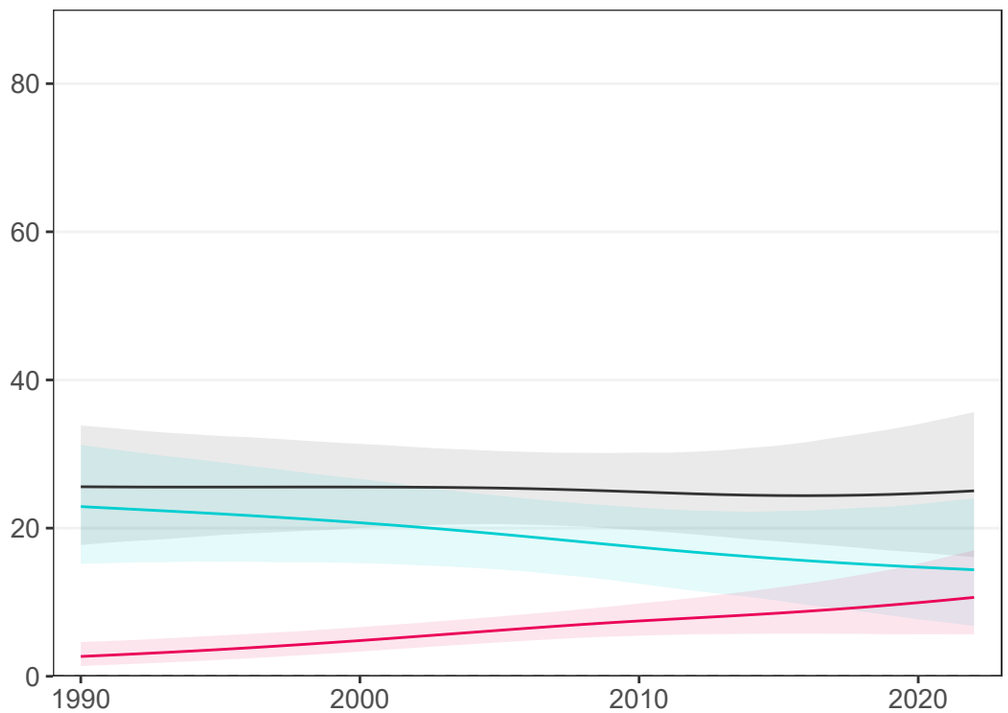
Women

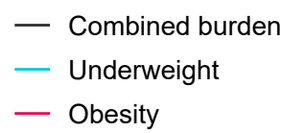
5 studies (4 national)



Men

2 studies (1 national)



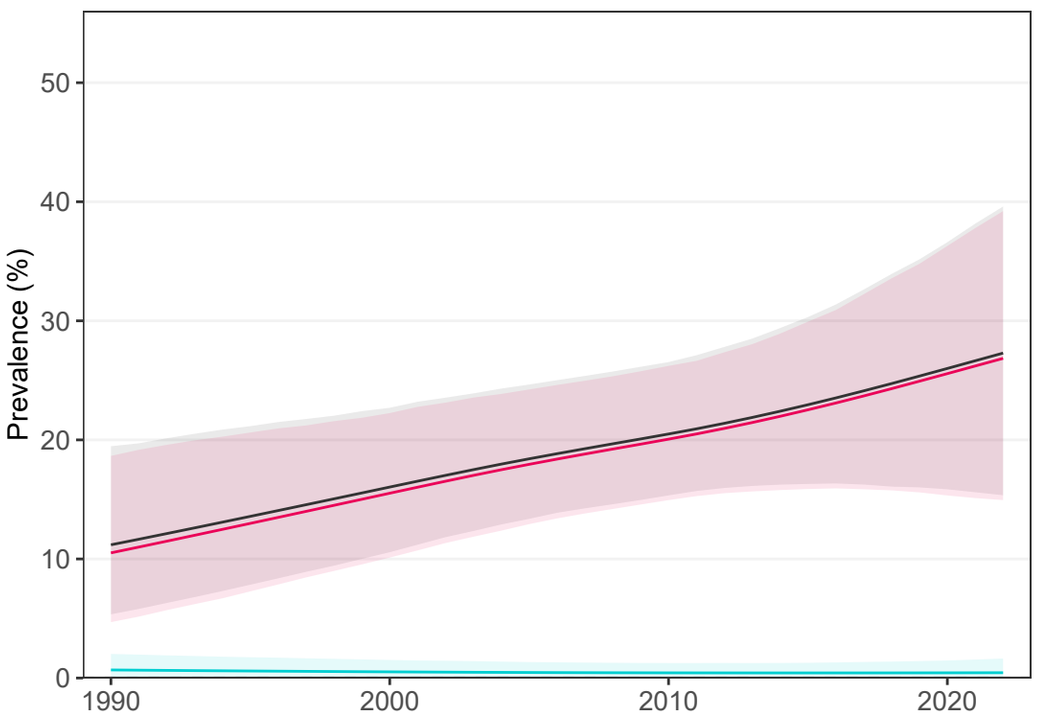


Nauru

School-aged children and adolescents

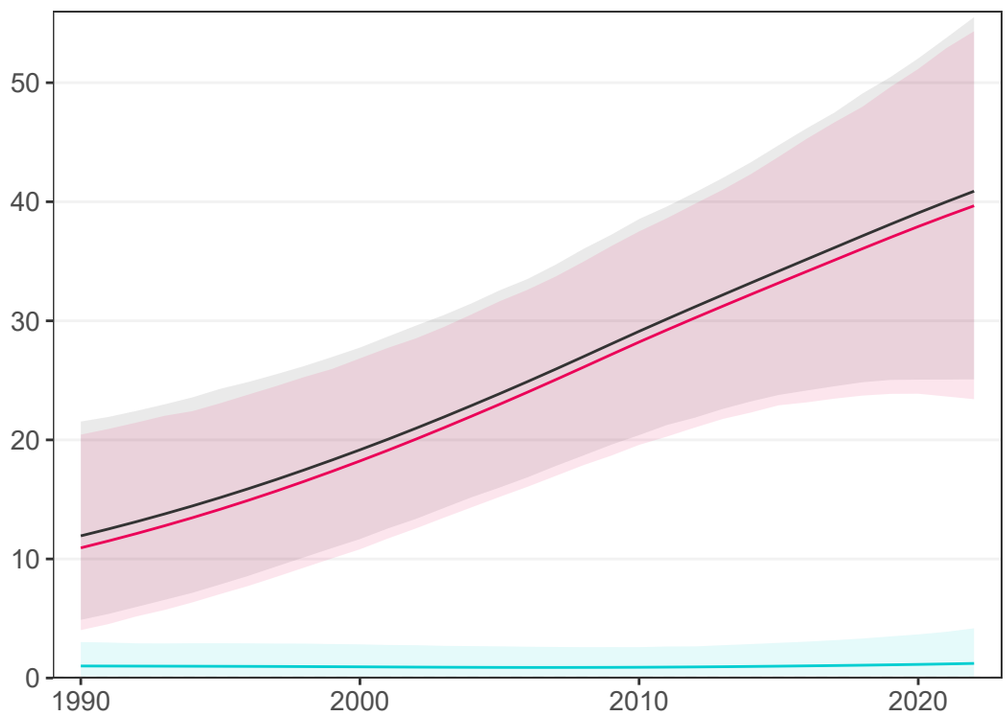
Girls

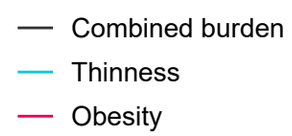
4 studies (4 national)



Boys

3 studies (3 national)

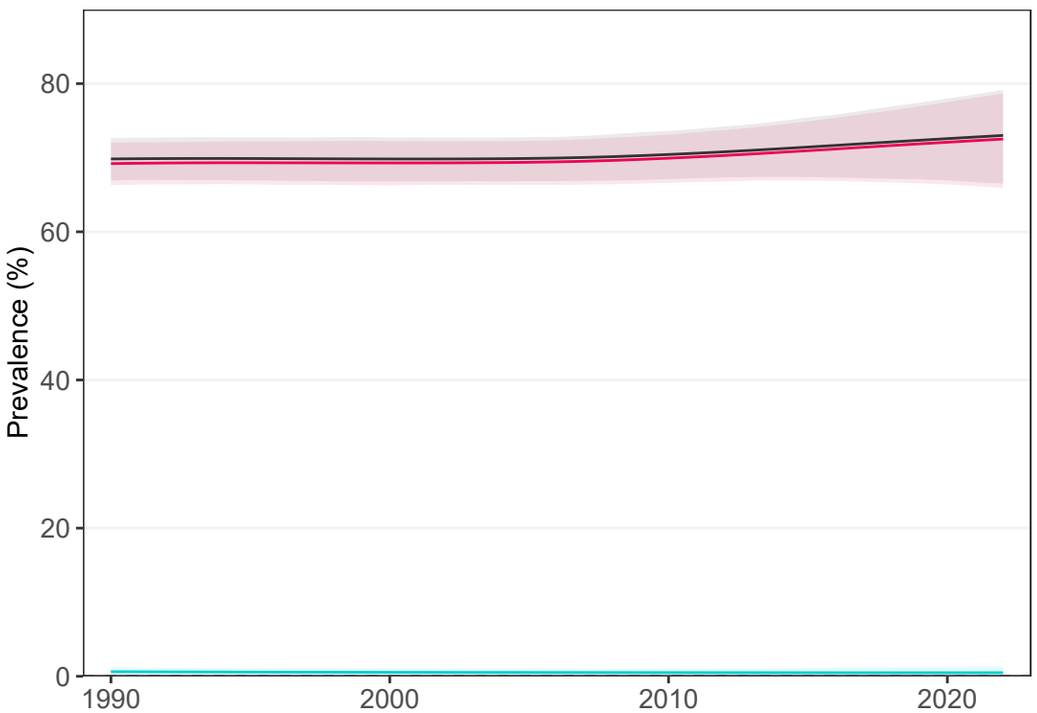




Adults

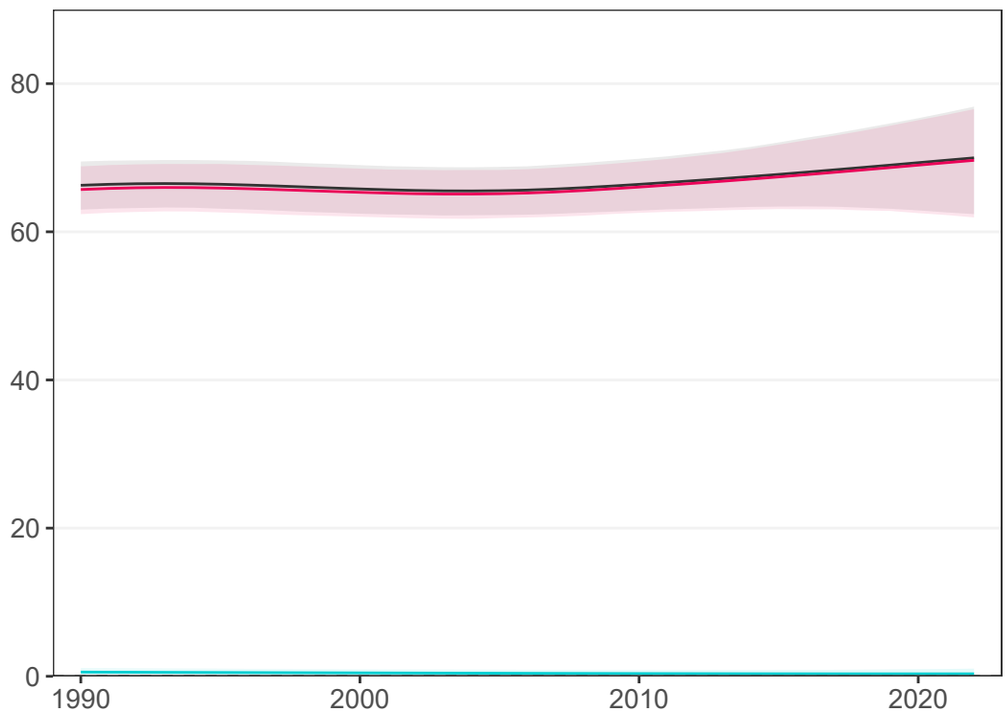
Women

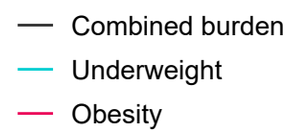
6 studies (6 national)



Men

6 studies (6 national)



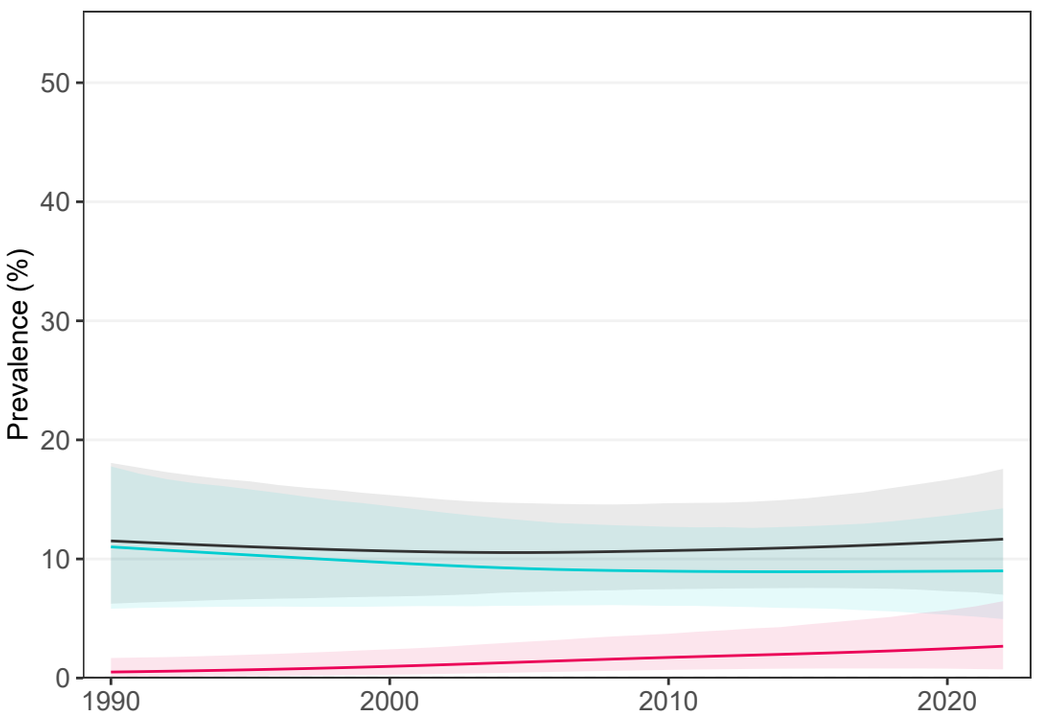


Nepal

School-aged children and adolescents

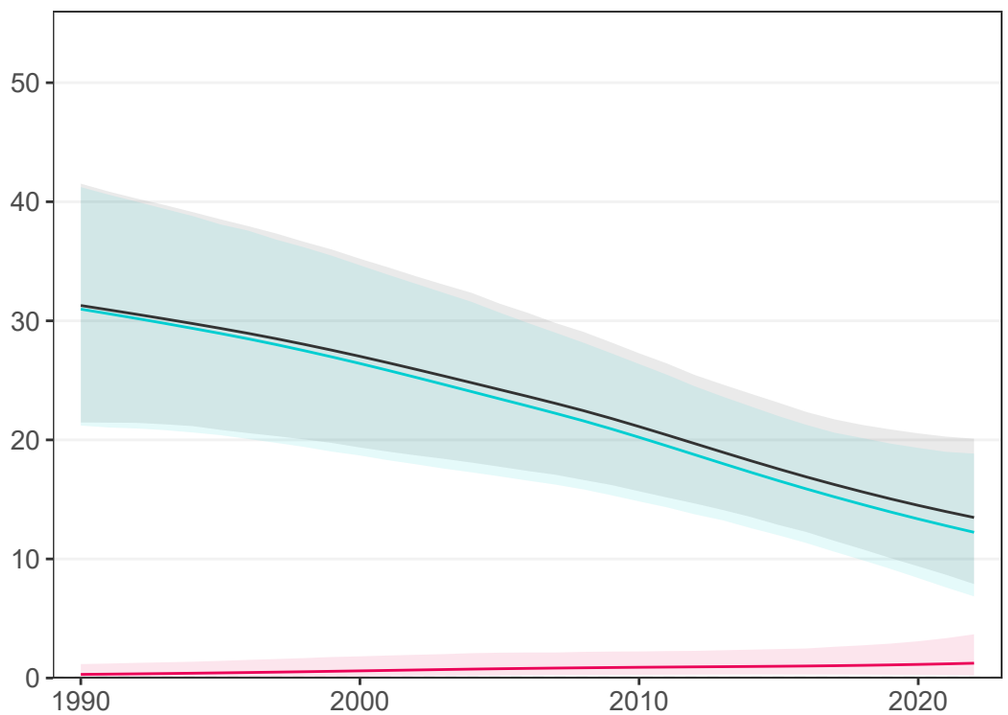
Girls

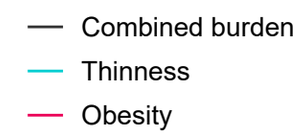
12 studies (6 national)



Boys

10 studies (4 national)

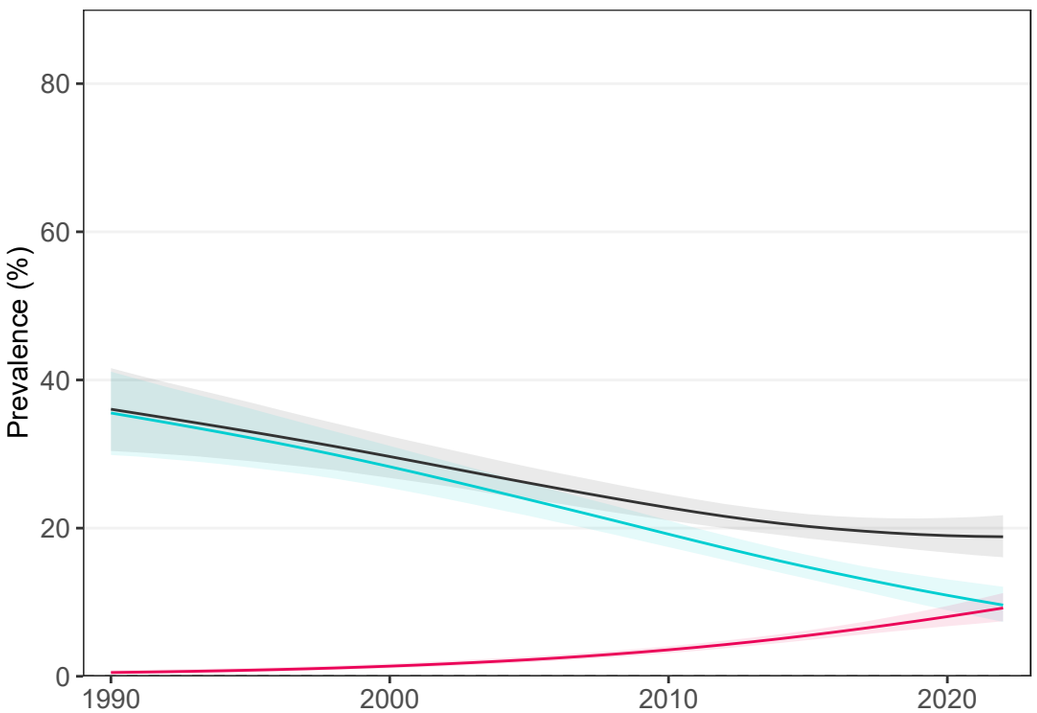




Adults

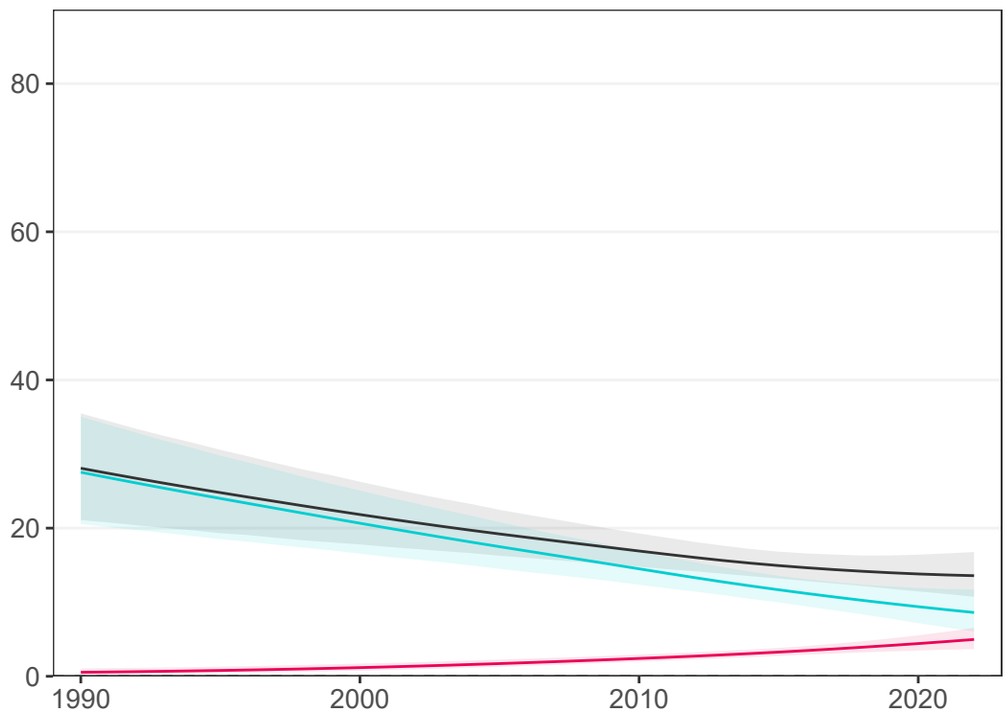
Women

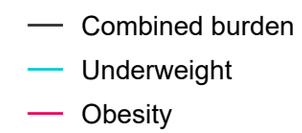
17 studies (9 national)



Men

13 studies (5 national)



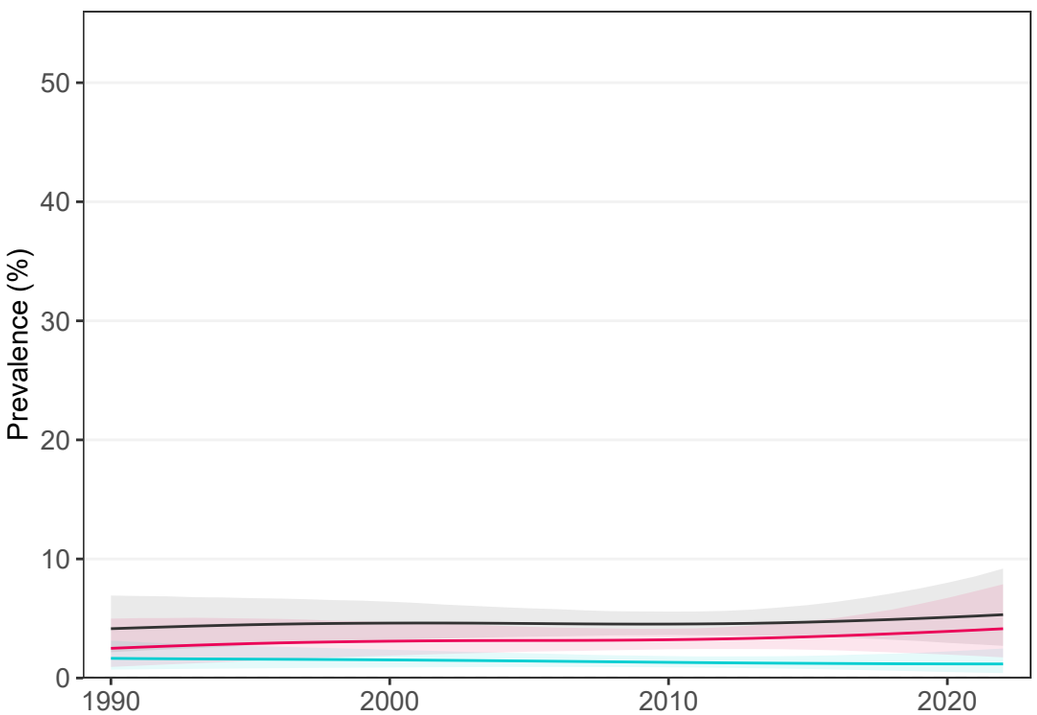


Netherlands

School-aged children and adolescents

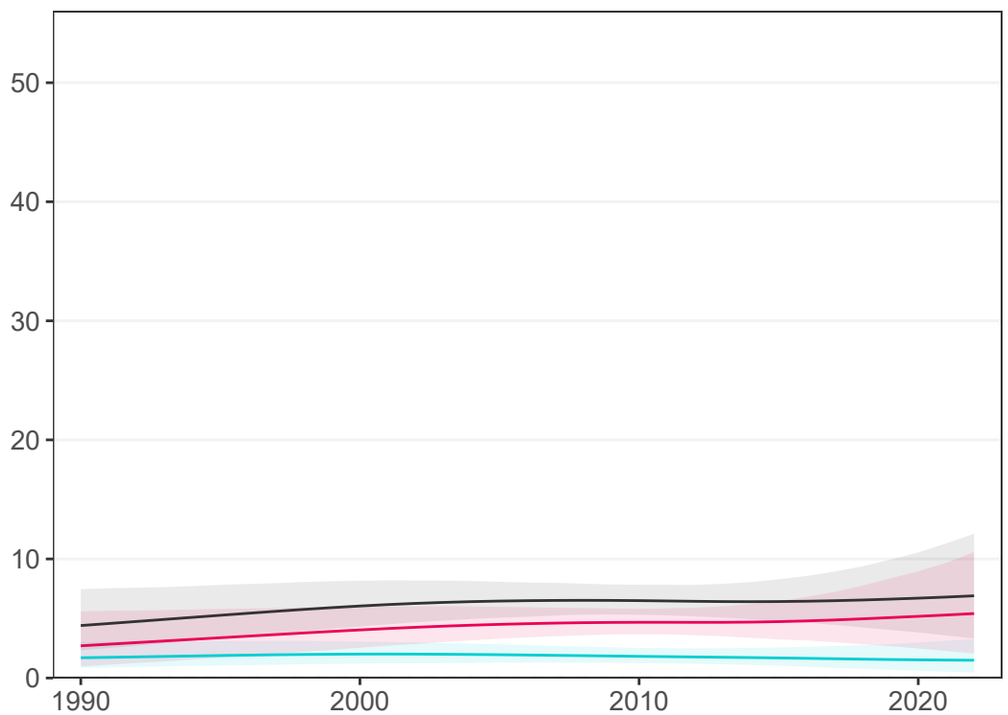
Girls

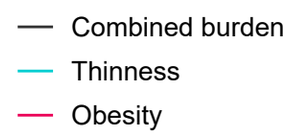
10 studies (5 national)



Boys

10 studies (5 national)

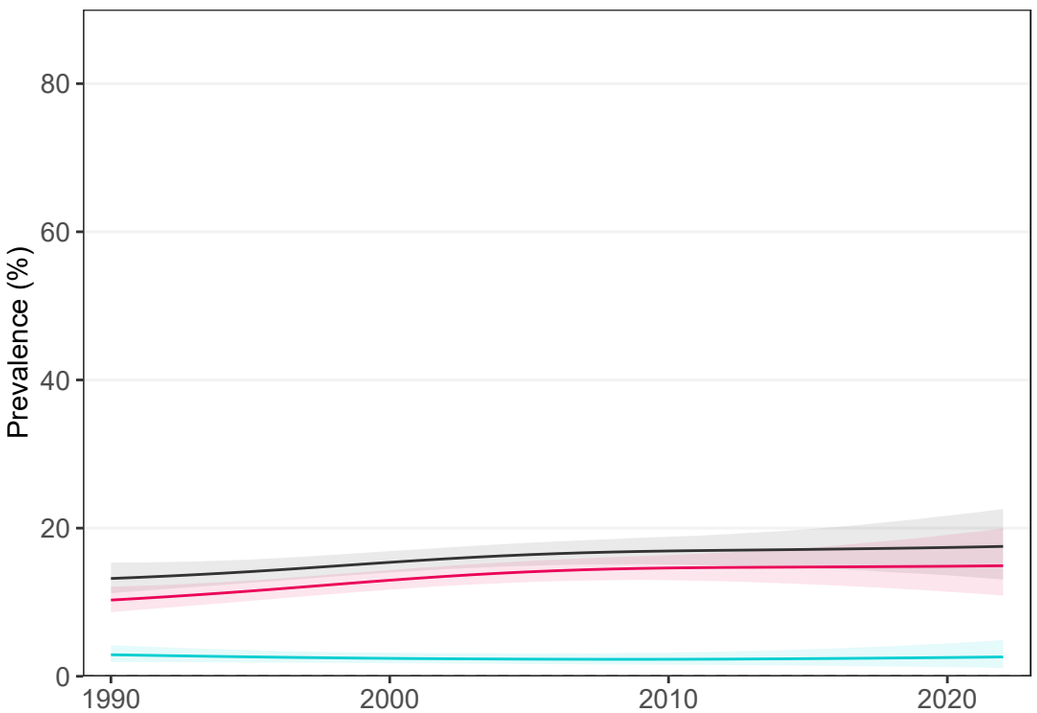




Adults

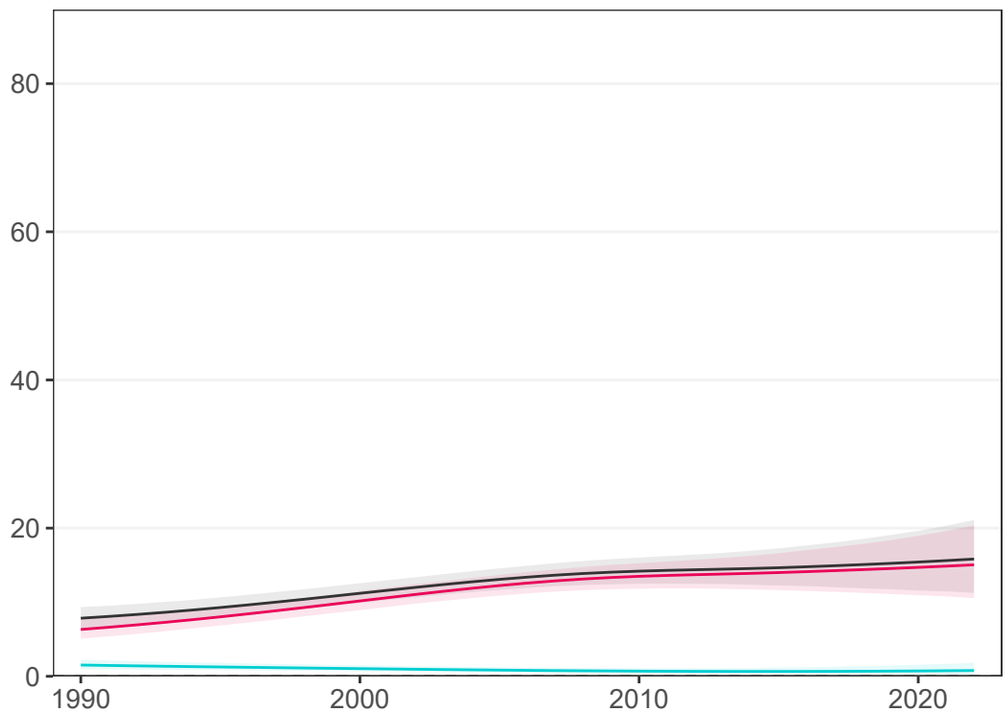
Women

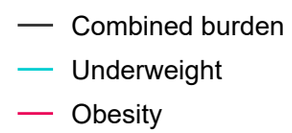
29 studies (1 national)



Men

30 studies (1 national)



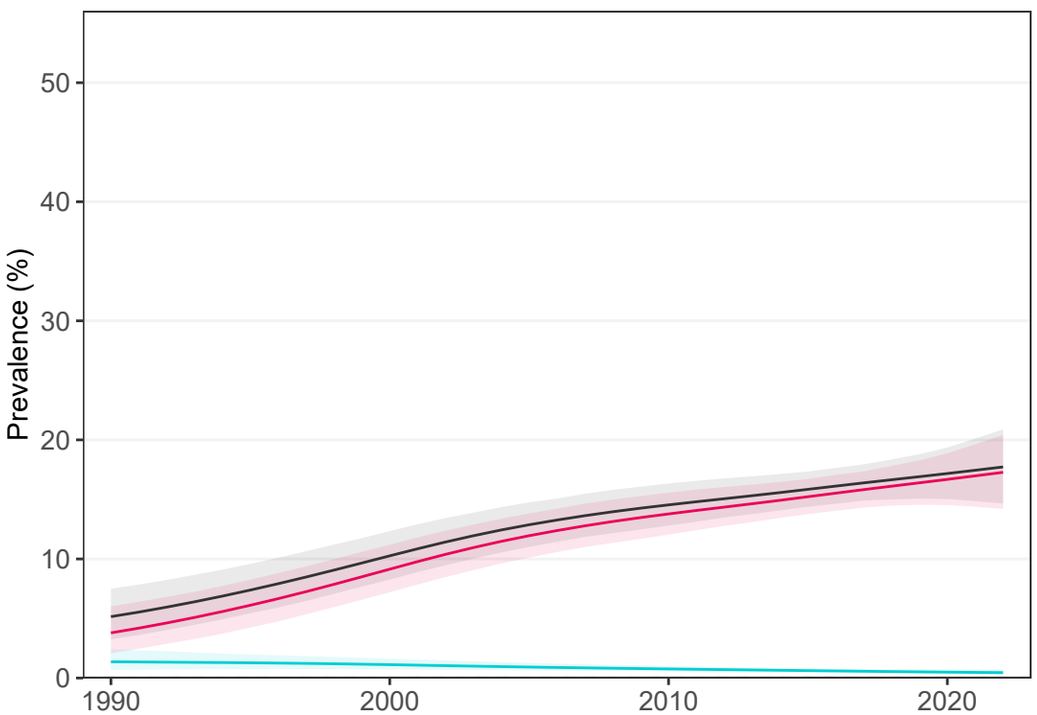


New Zealand

School-aged children and adolescents

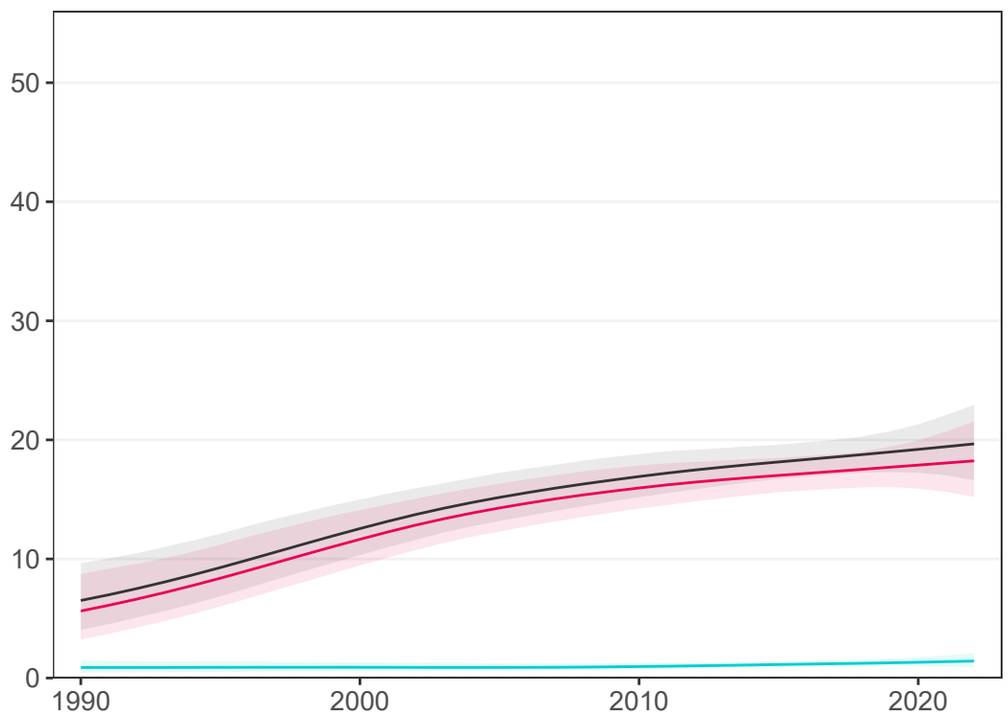
Girls

17 studies (16 national)



Boys

17 studies (16 national)

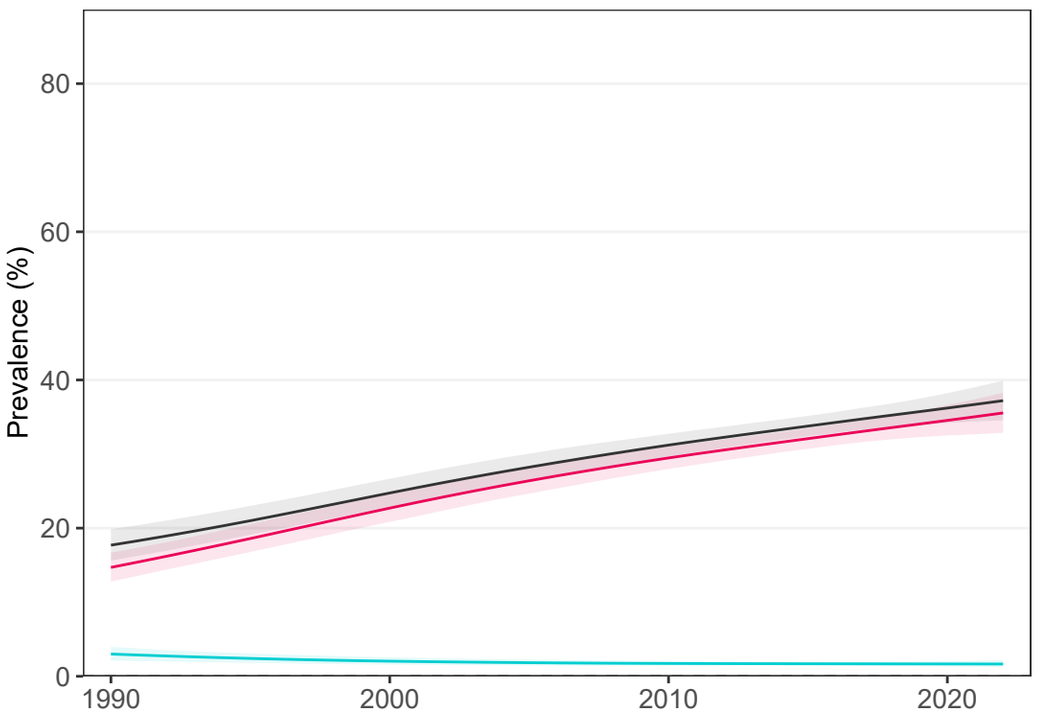


Combined burden
Thinness
Obesity

Adults

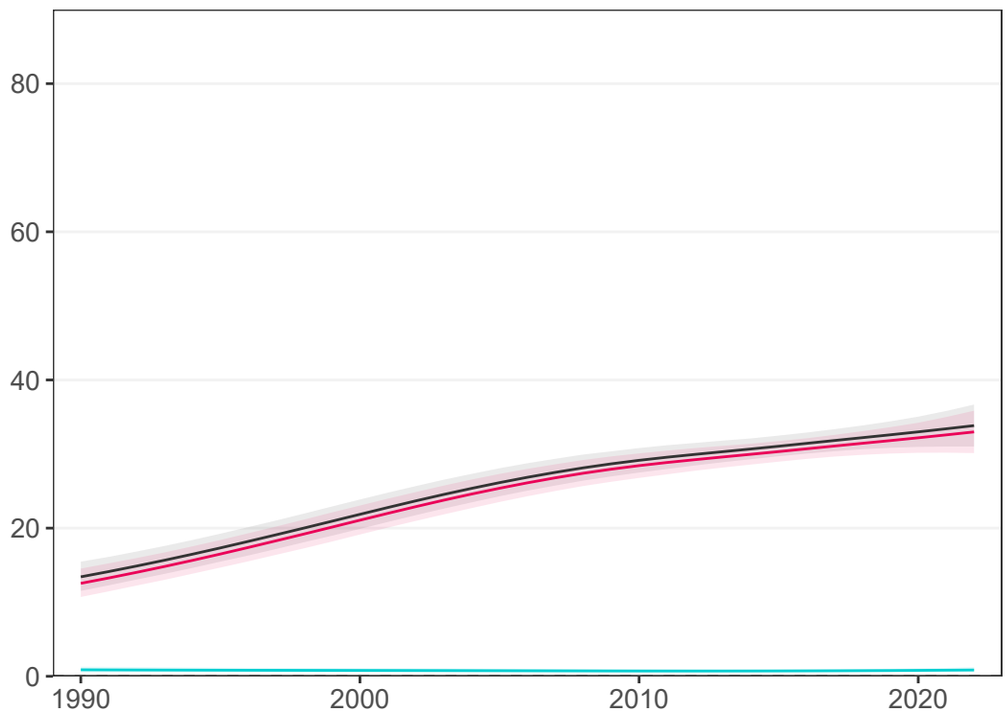
Women

18 studies (15 national)



Men

18 studies (15 national)



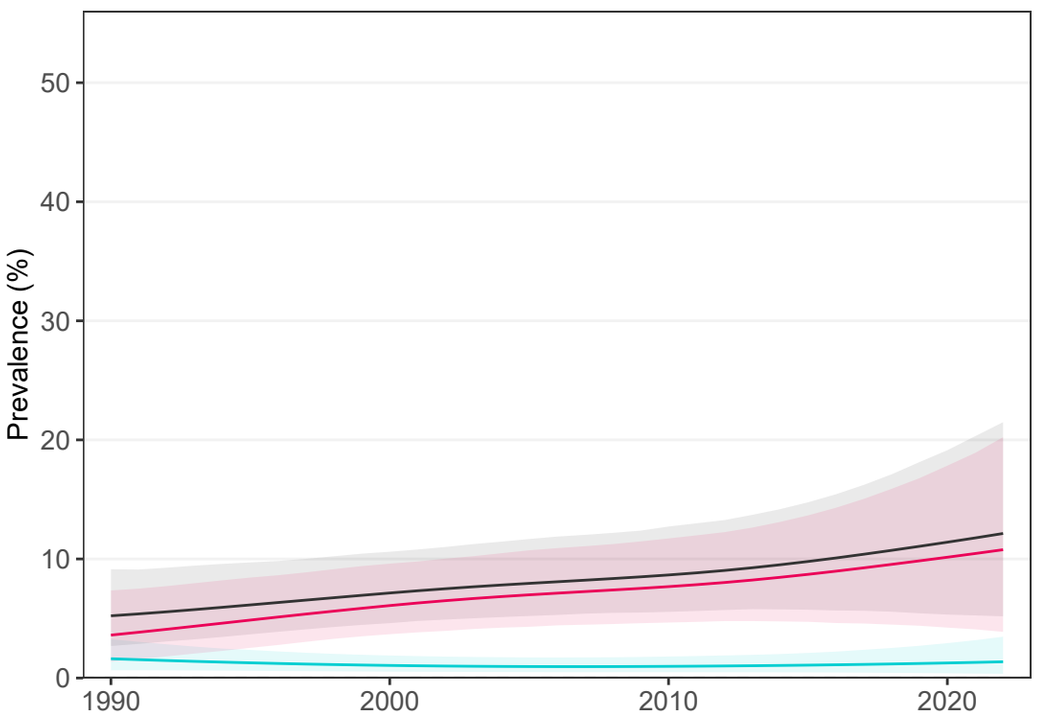
Combined burden
Underweight
Obesity

Nicaragua

School-aged children and adolescents

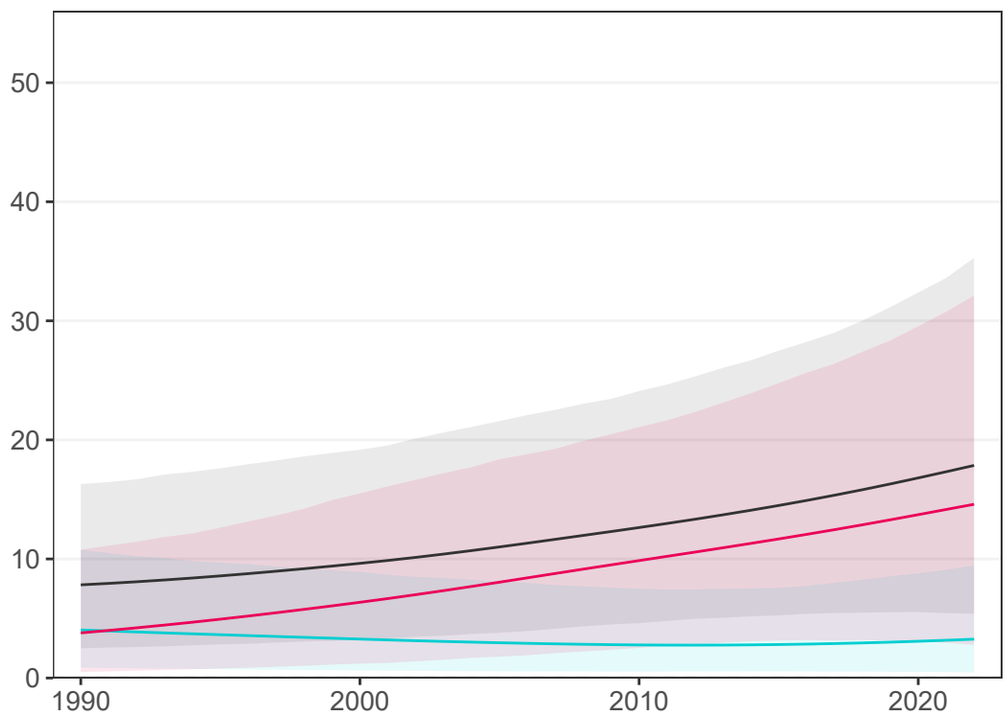
Girls

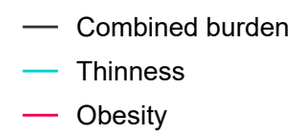
4 studies (4 national)



Boys

No studies

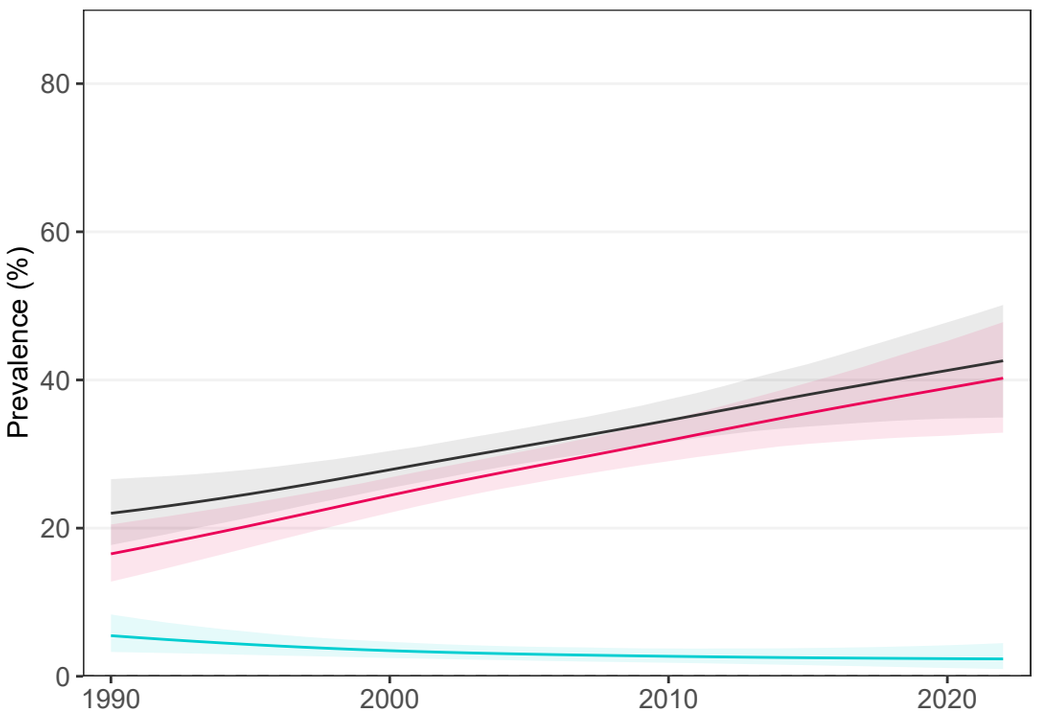




Adults

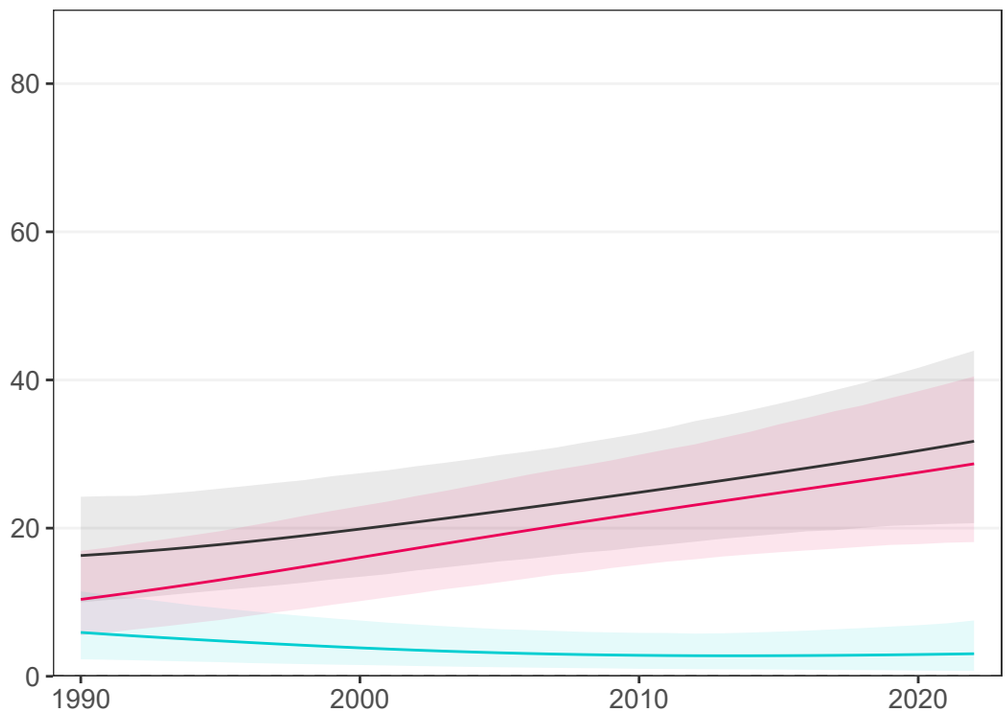
Women

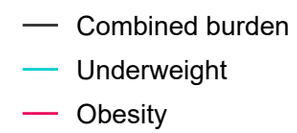
6 studies (5 national)



Men

1 study (0 national)



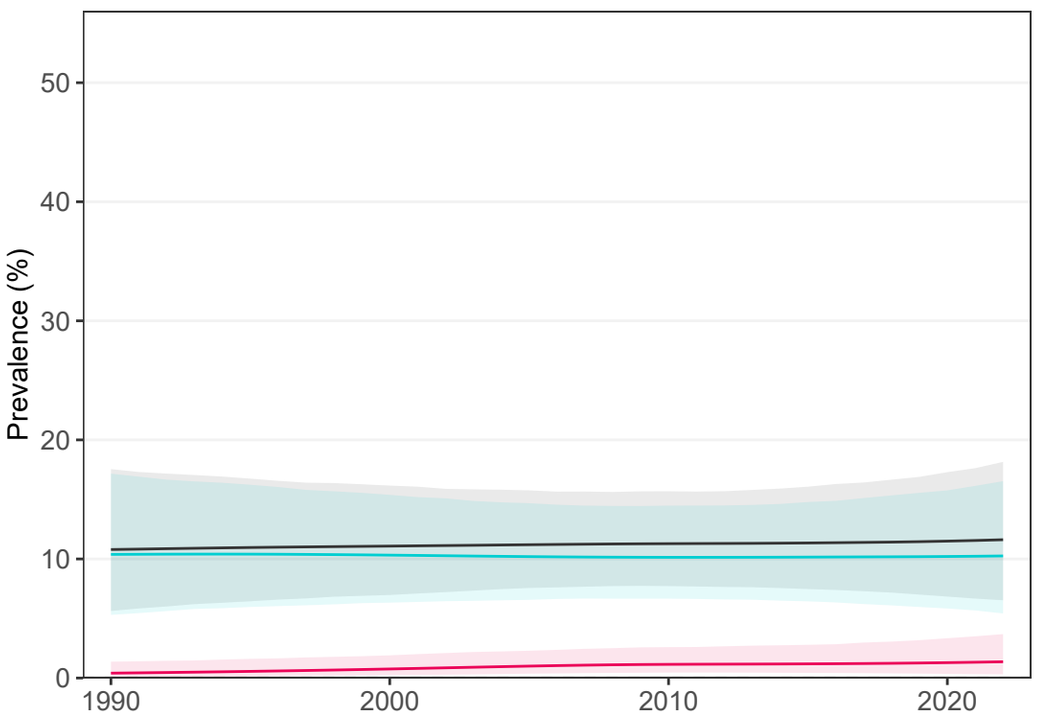


Niger

School-aged children and adolescents

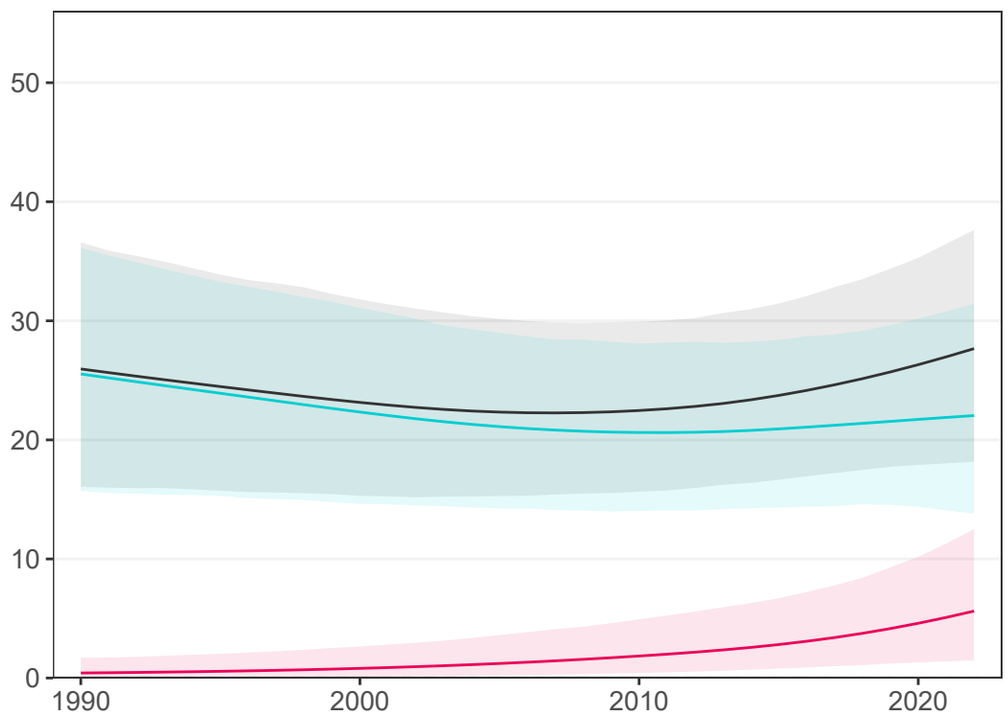
Girls

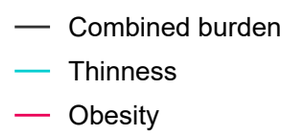
4 studies (4 national)



Boys

2 studies (2 national)

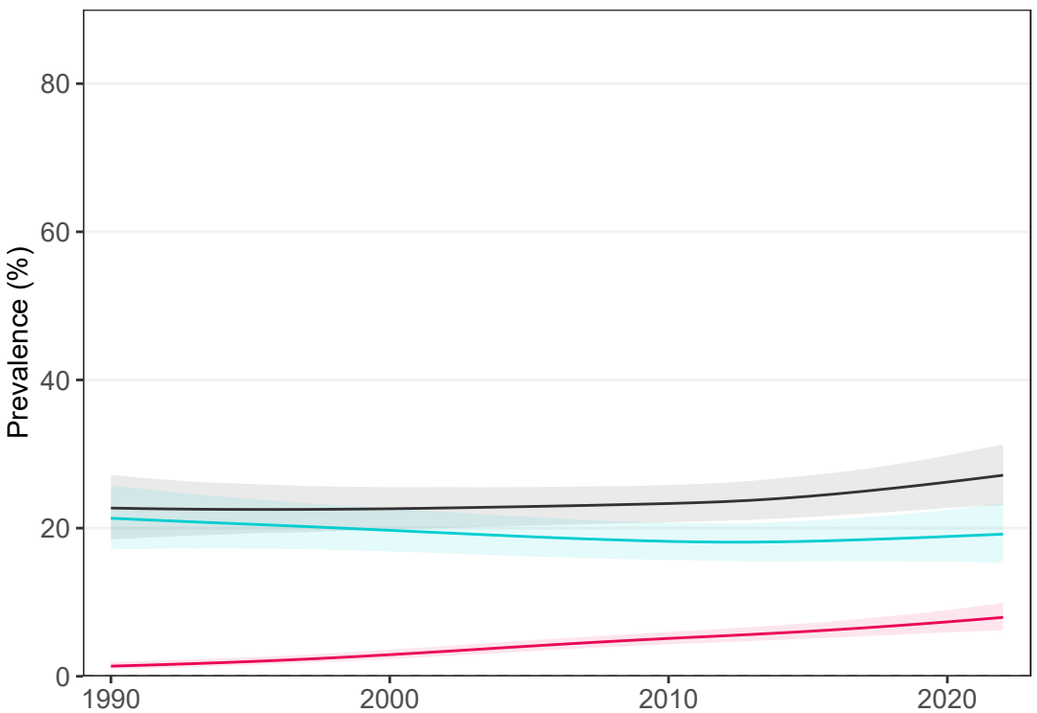




Adults

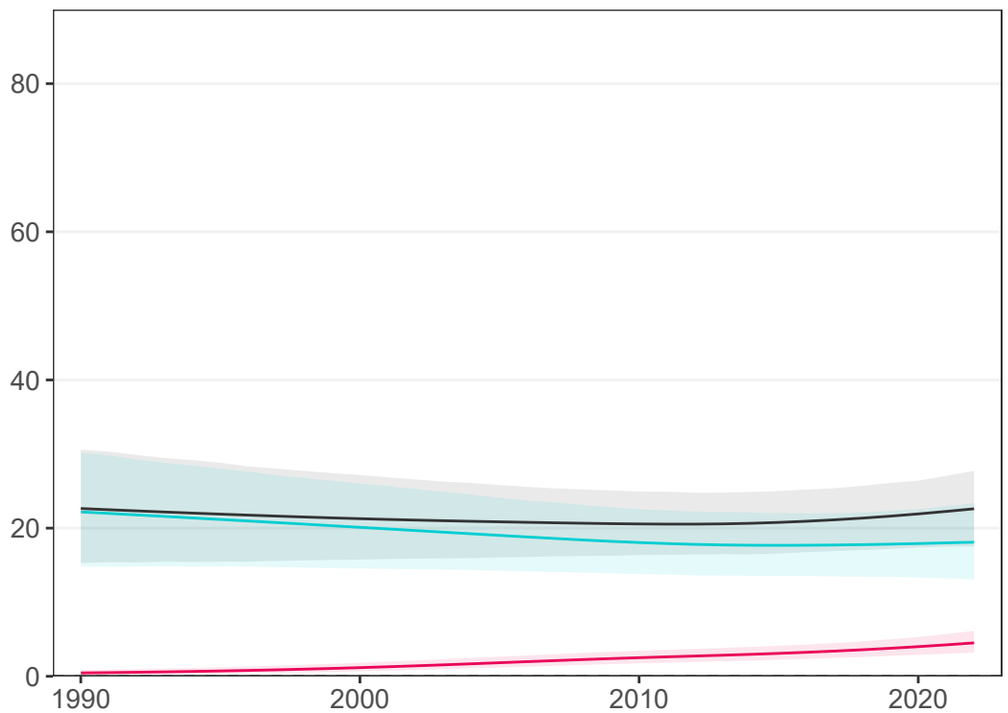
Women

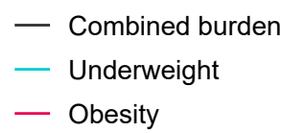
6 studies (6 national)



Men

2 studies (2 national)



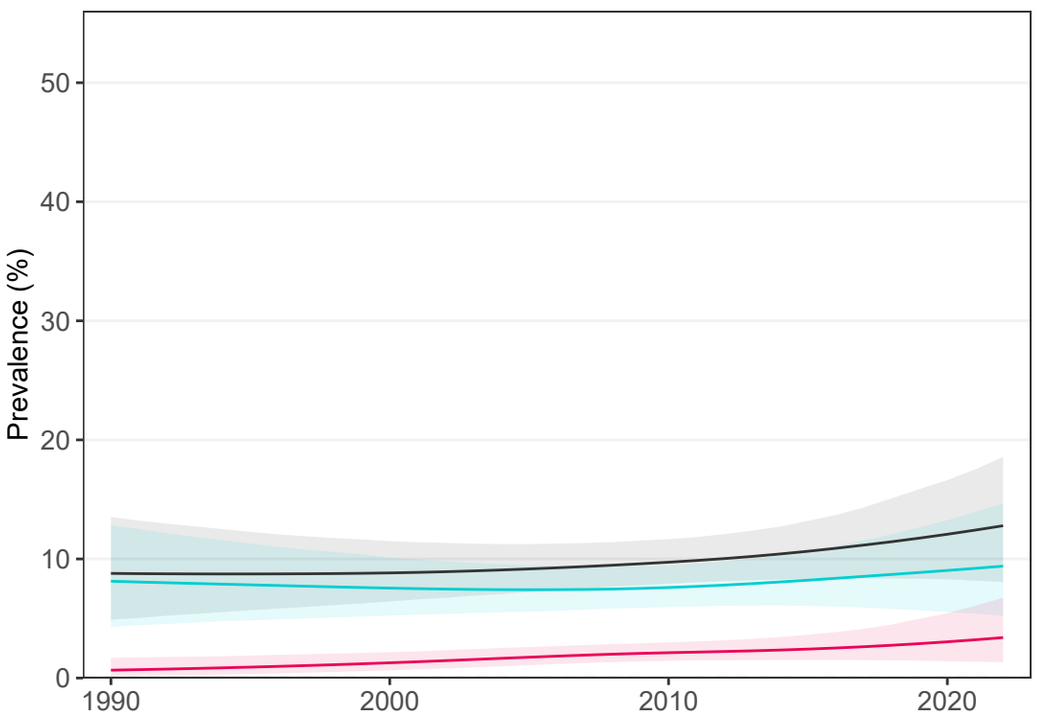


Nigeria

School-aged children and adolescents

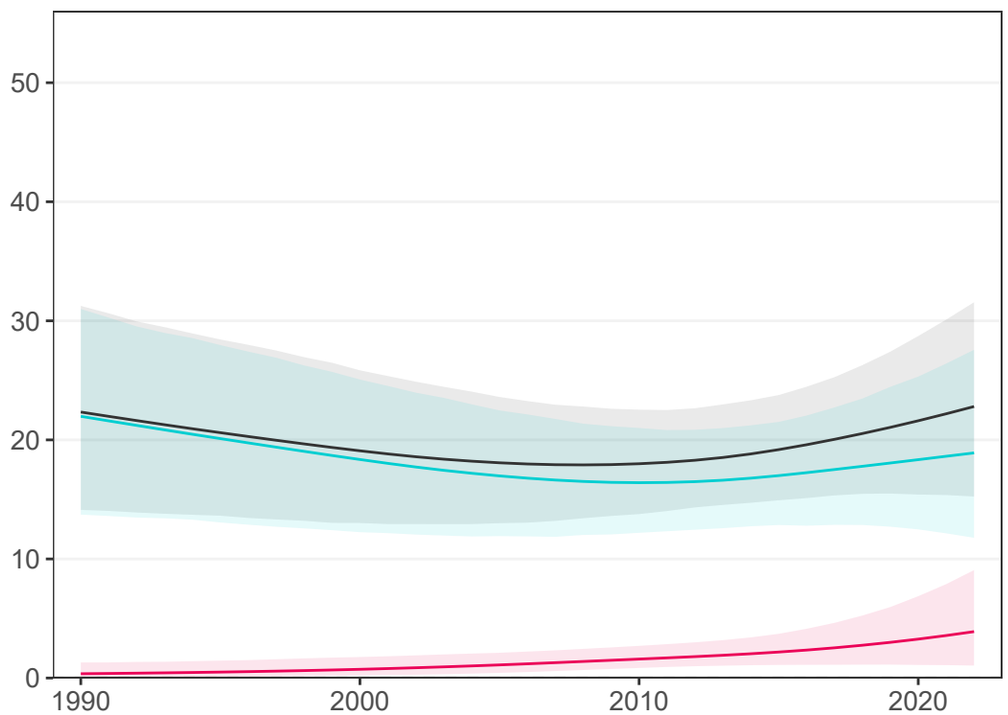
Girls

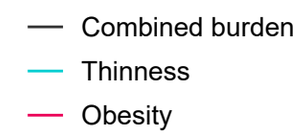
12 studies (4 national)



Boys

8 studies (1 national)

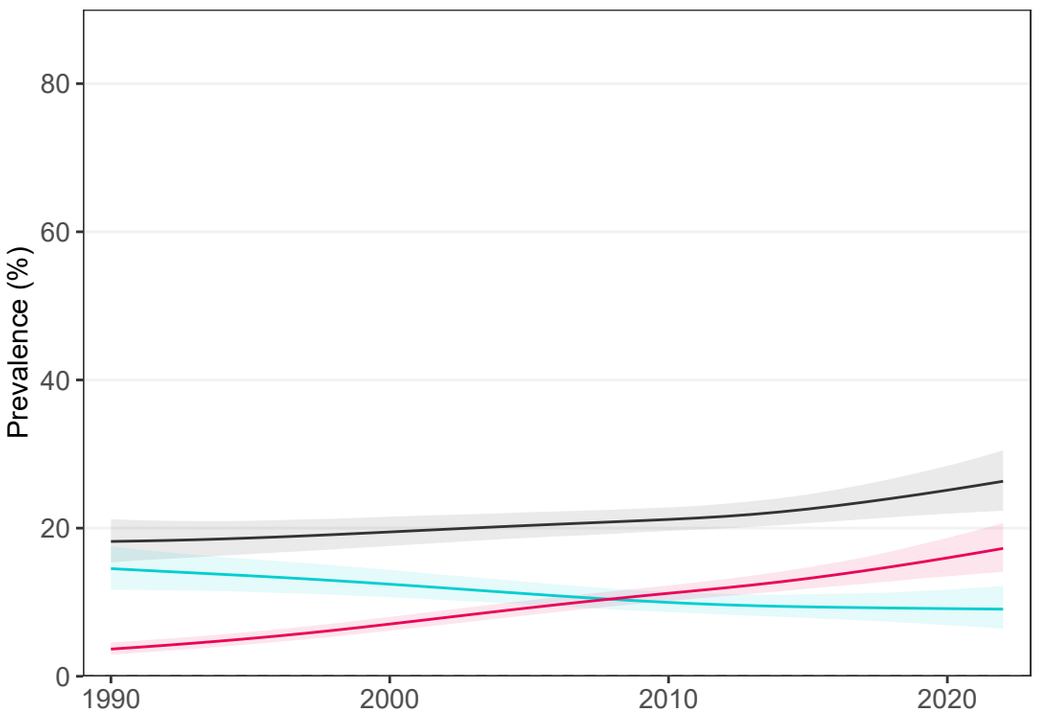




Adults

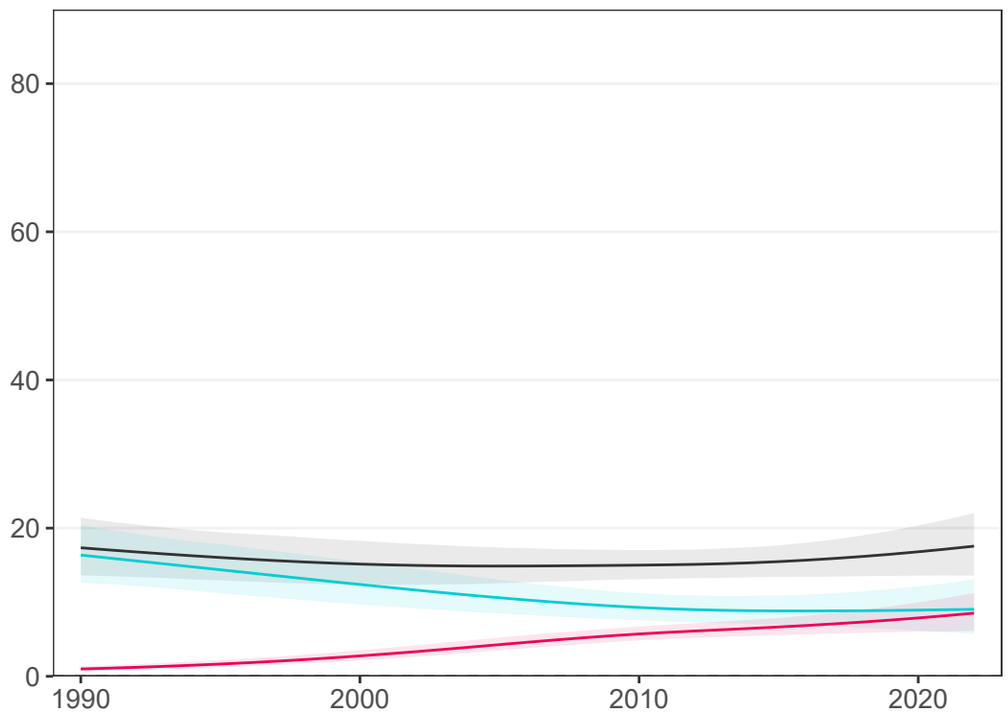
Women

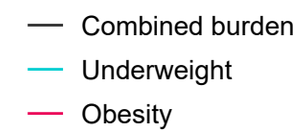
22 studies (7 national)



Men

19 studies (3 national)



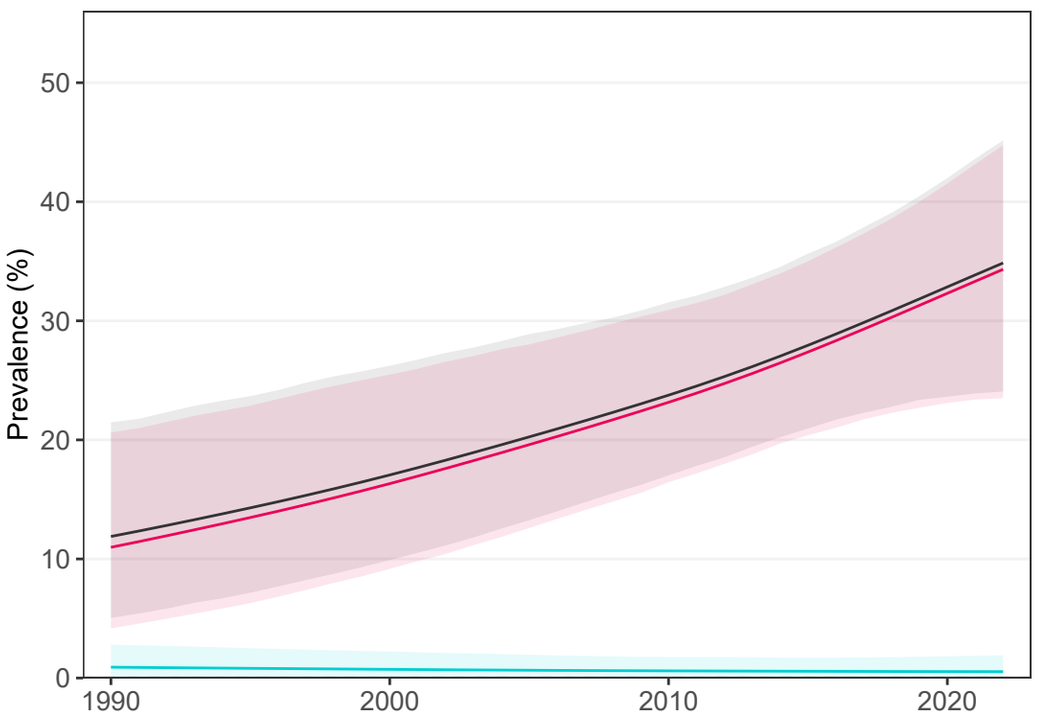


Niue

School-aged children and adolescents

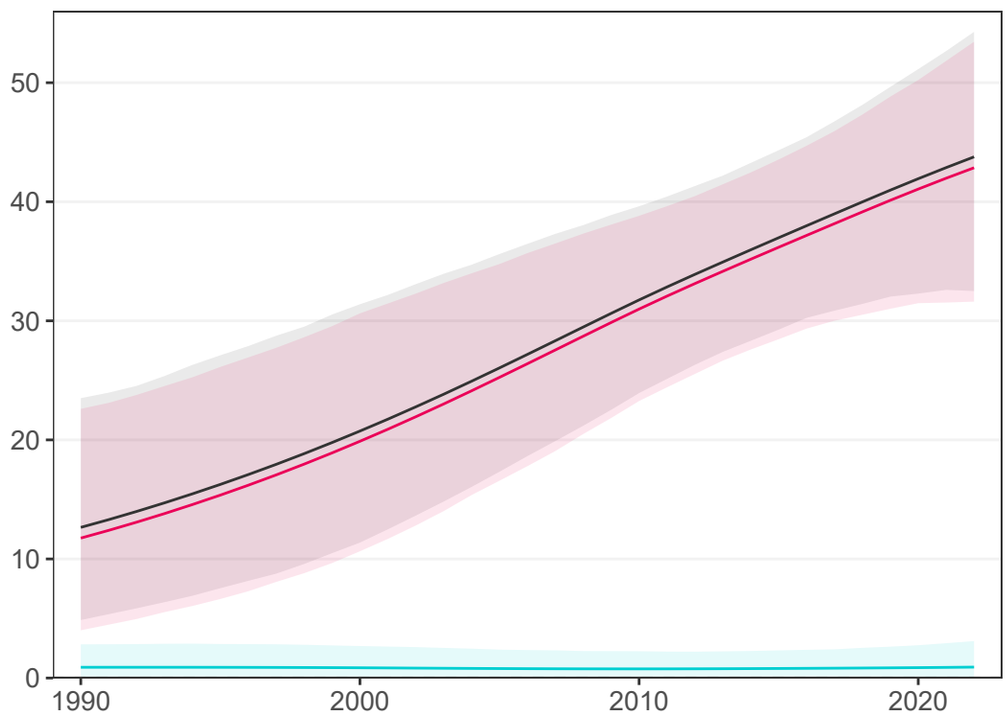
Girls

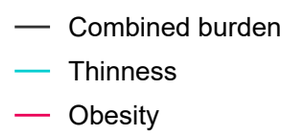
3 studies (3 national)



Boys

3 studies (3 national)

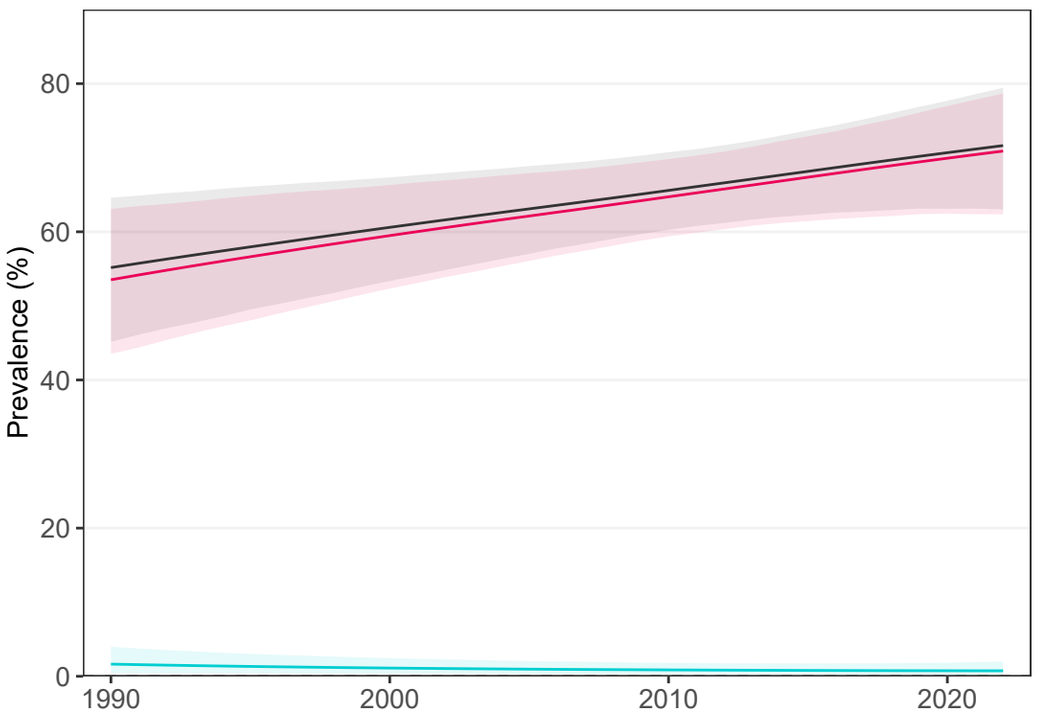




Adults

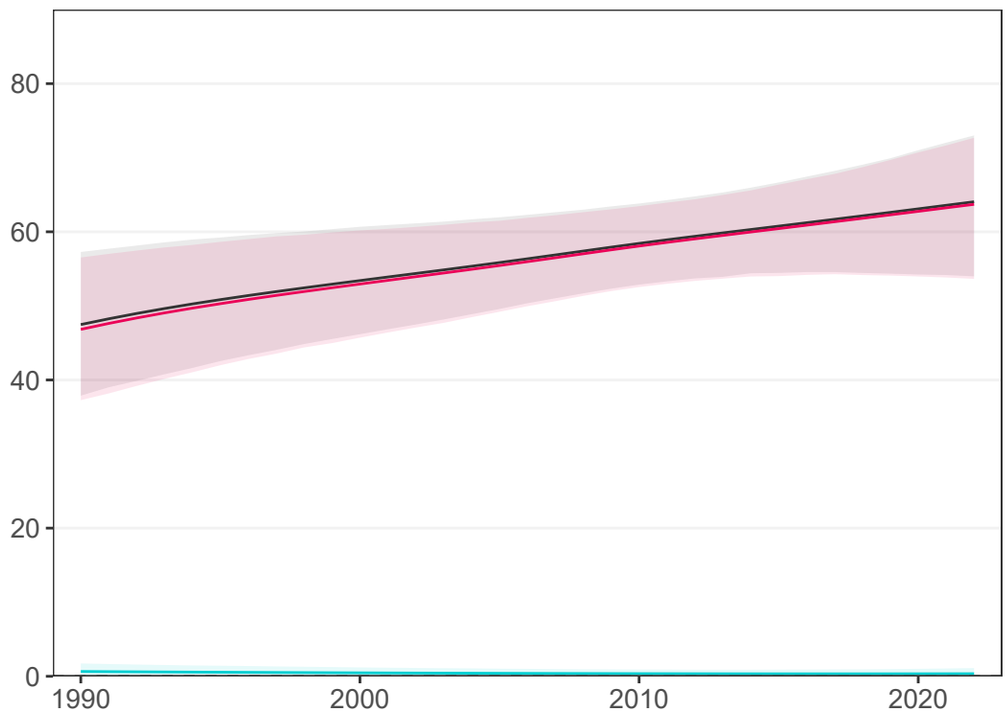
Women

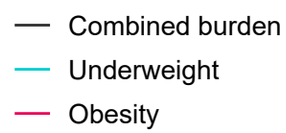
1 study (1 national)



Men

1 study (1 national)



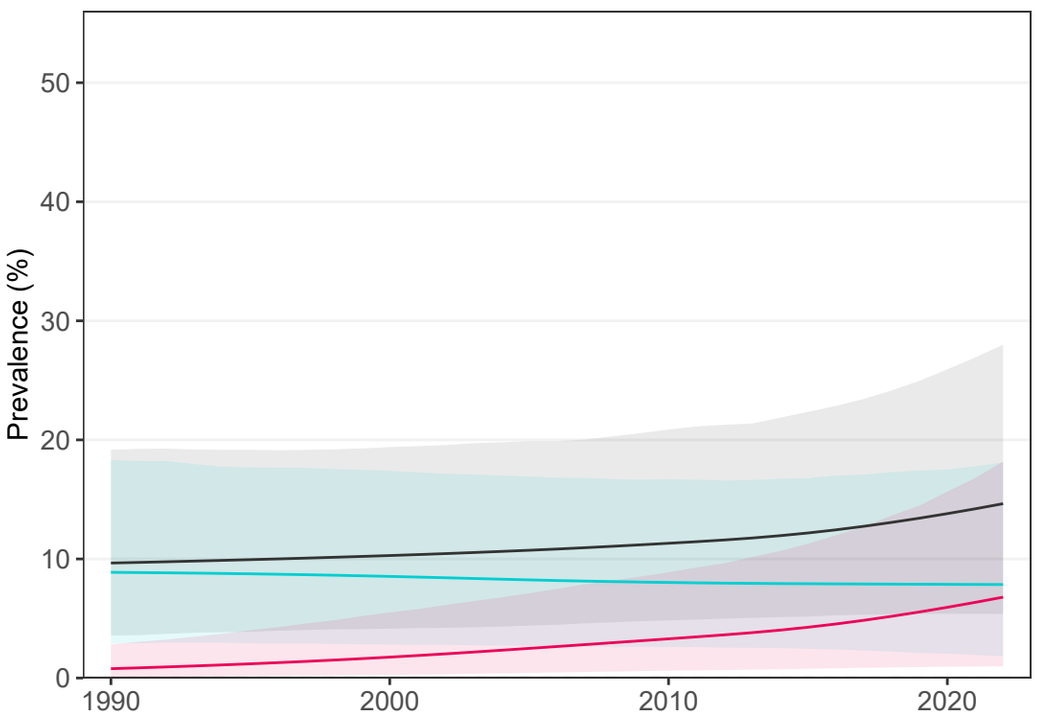


North Korea

School-aged children and adolescents

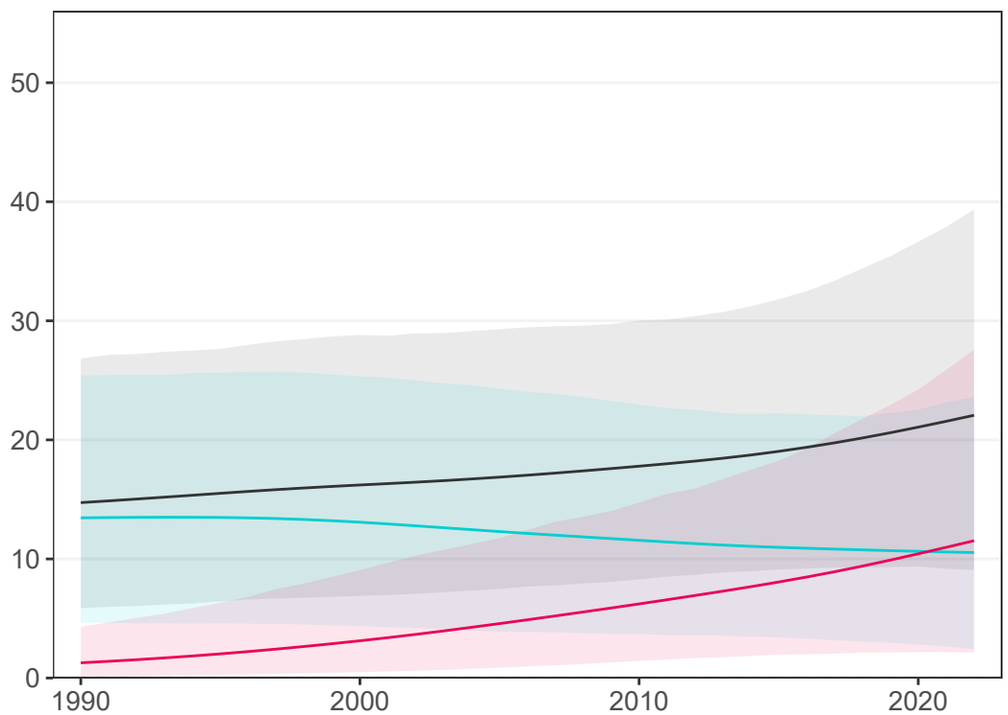
Girls

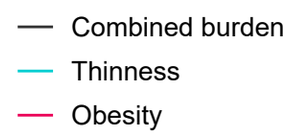
No studies



Boys

No studies

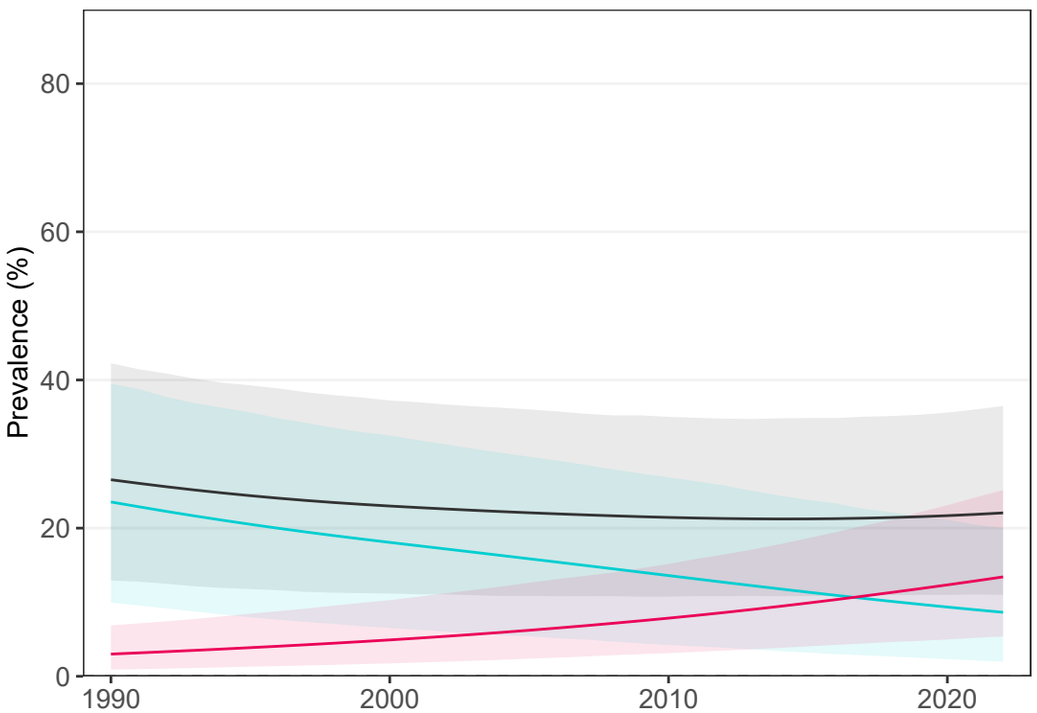




Adults

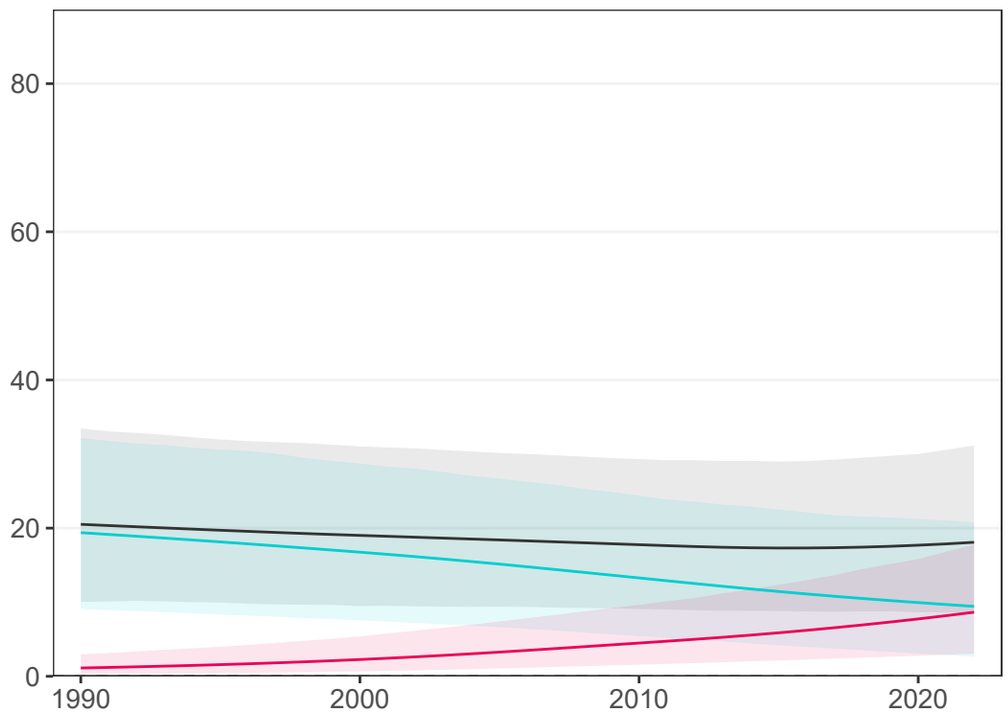
Women

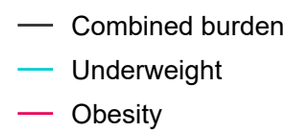
No studies



Men

No studies



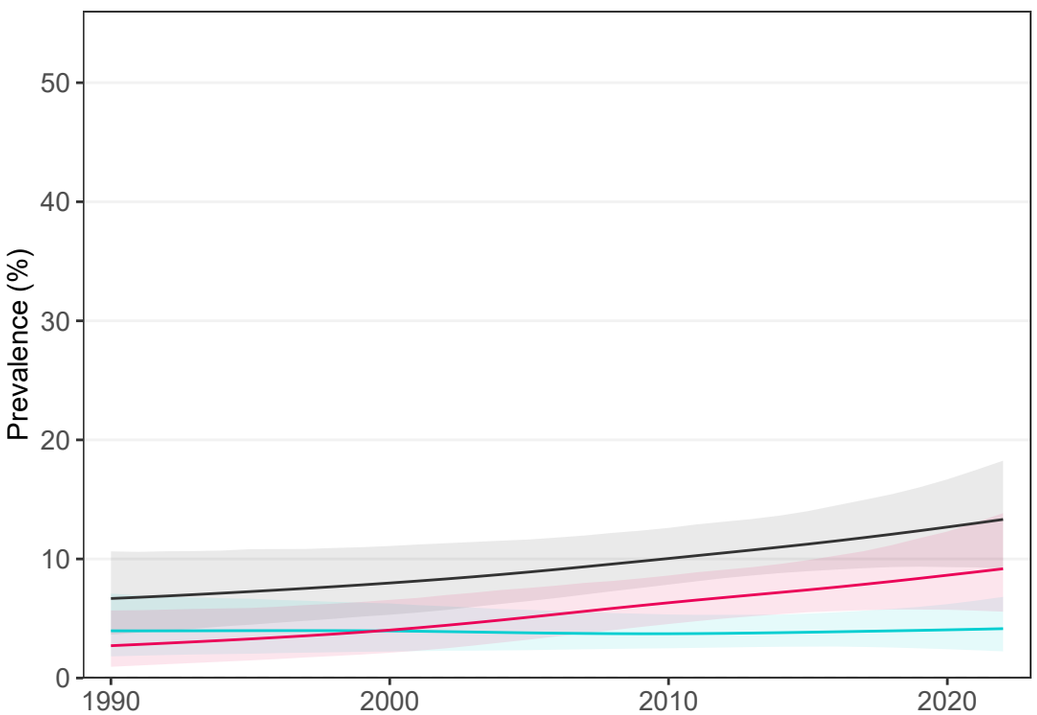


North Macedonia

School-aged children and adolescents

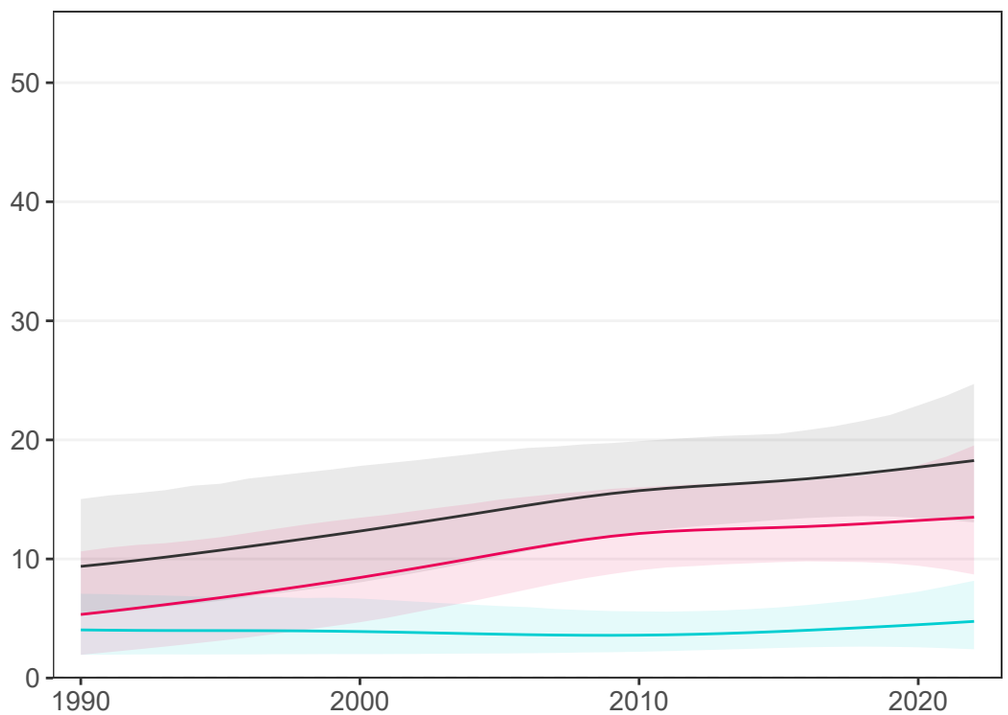
Girls

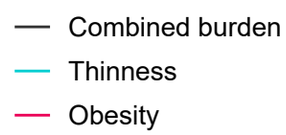
6 studies (6 national)



Boys

5 studies (5 national)

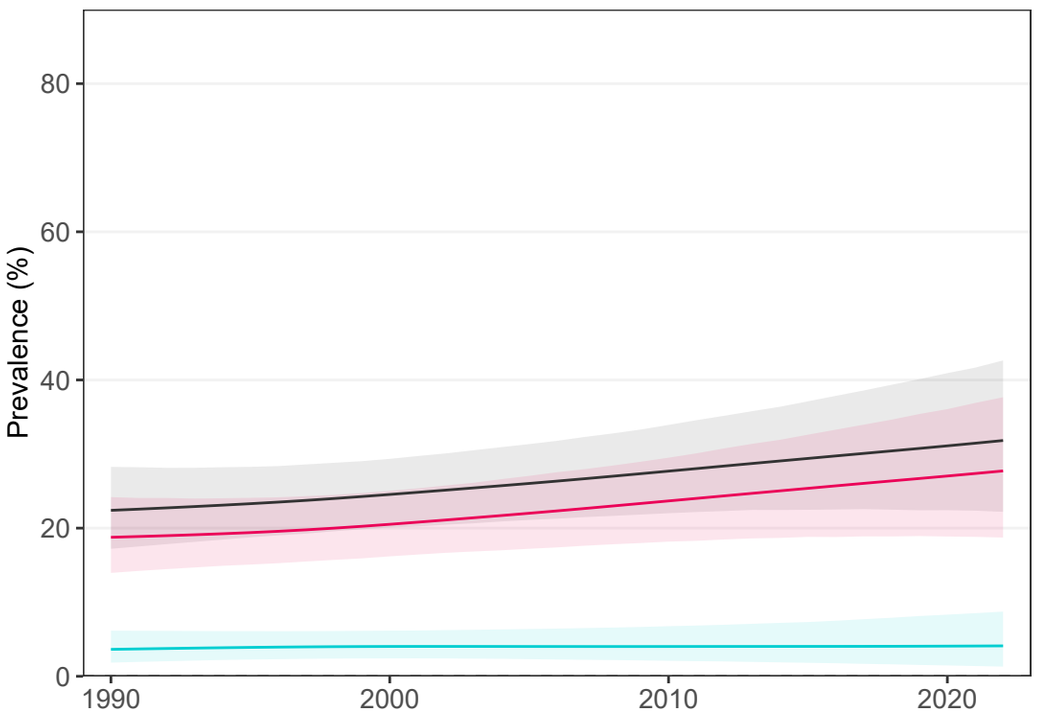




Adults

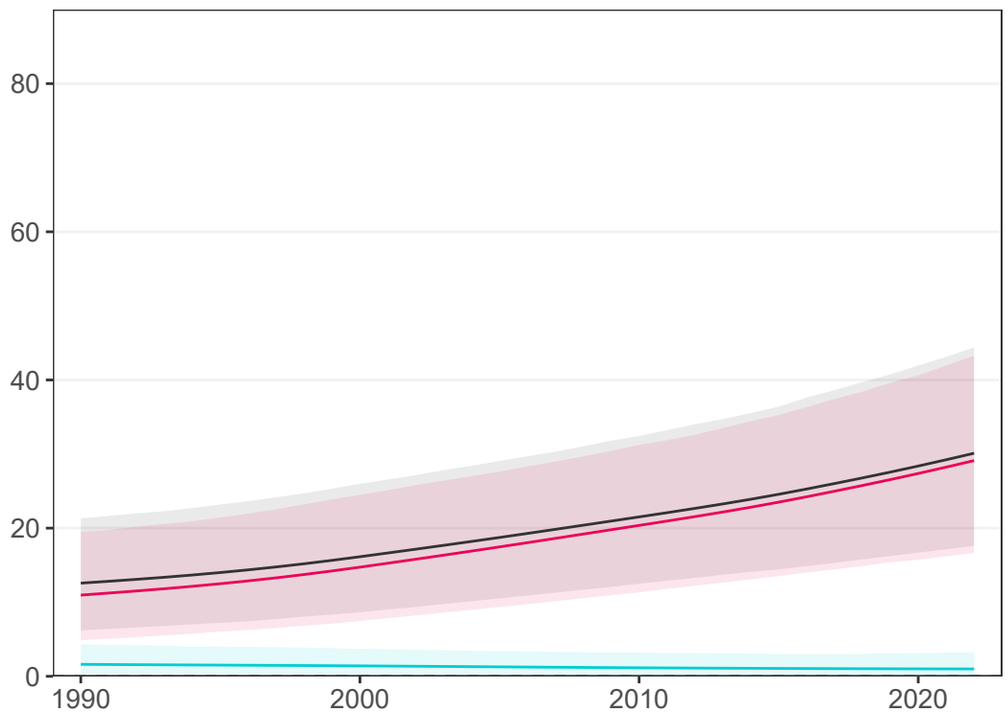
Women

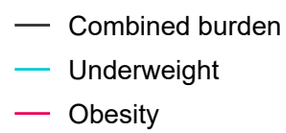
1 study (1 national)



Men

No studies



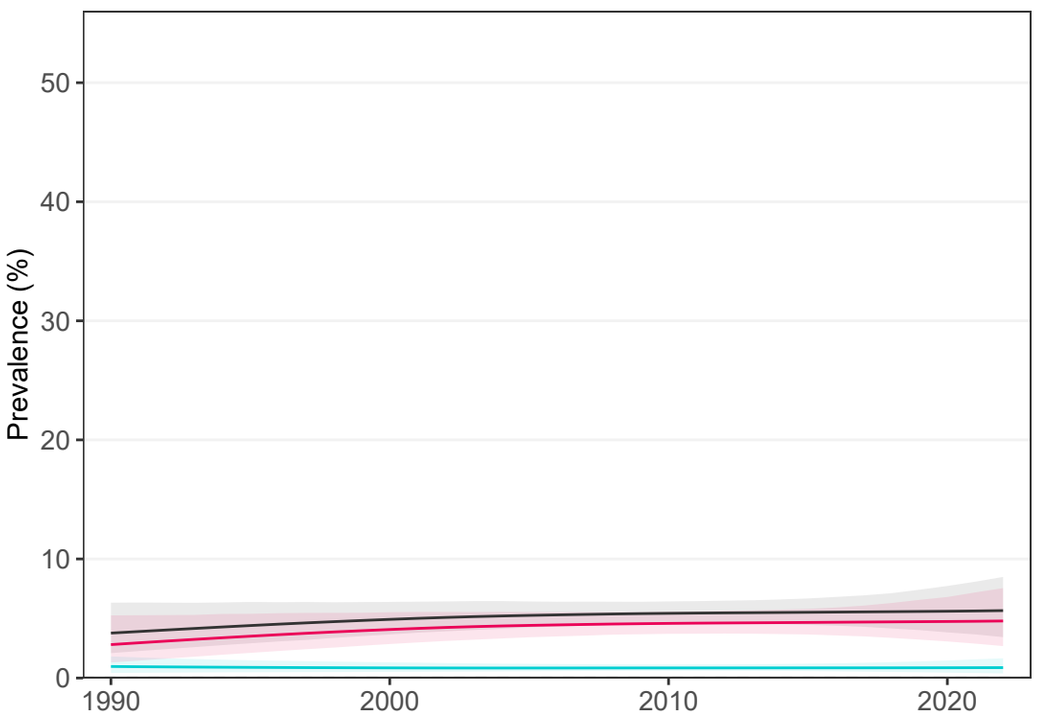


Norway

School-aged children and adolescents

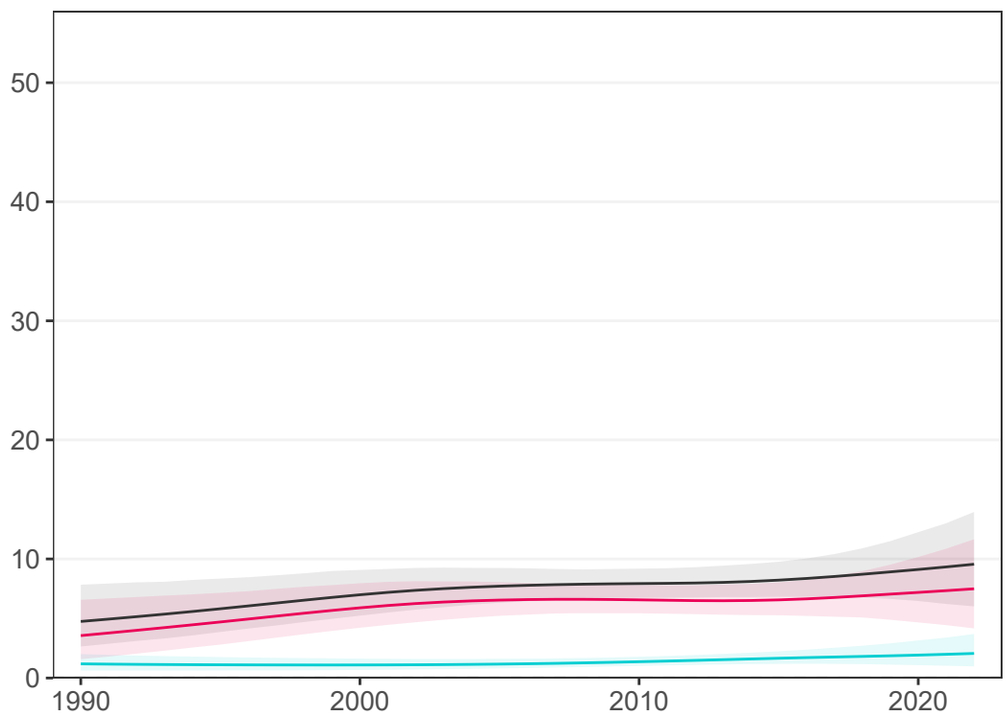
Girls

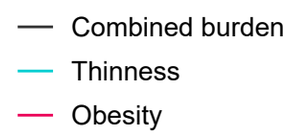
19 studies (5 national)



Boys

19 studies (5 national)

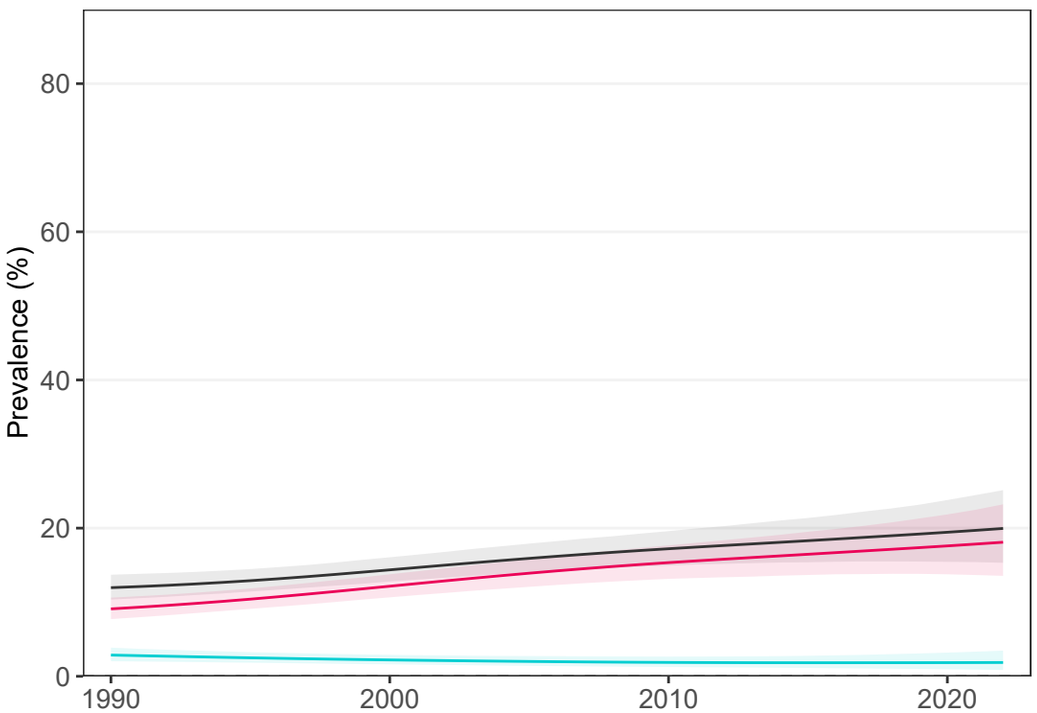




Adults

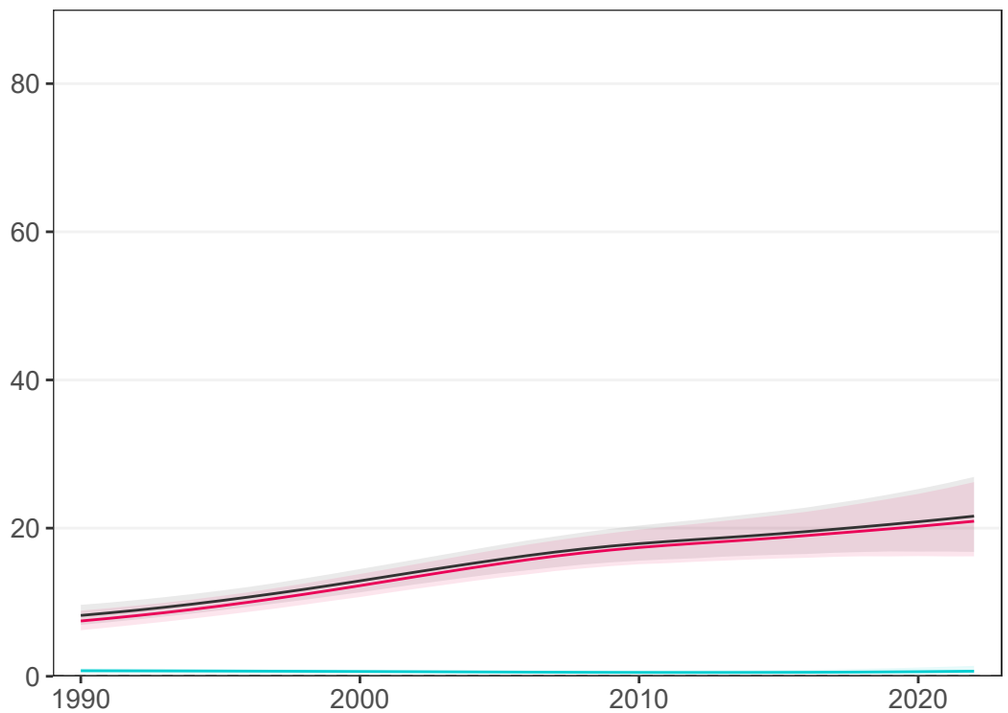
Women

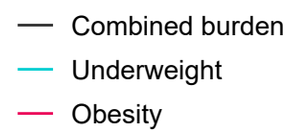
20 studies (0 national)



Men

20 studies (0 national)



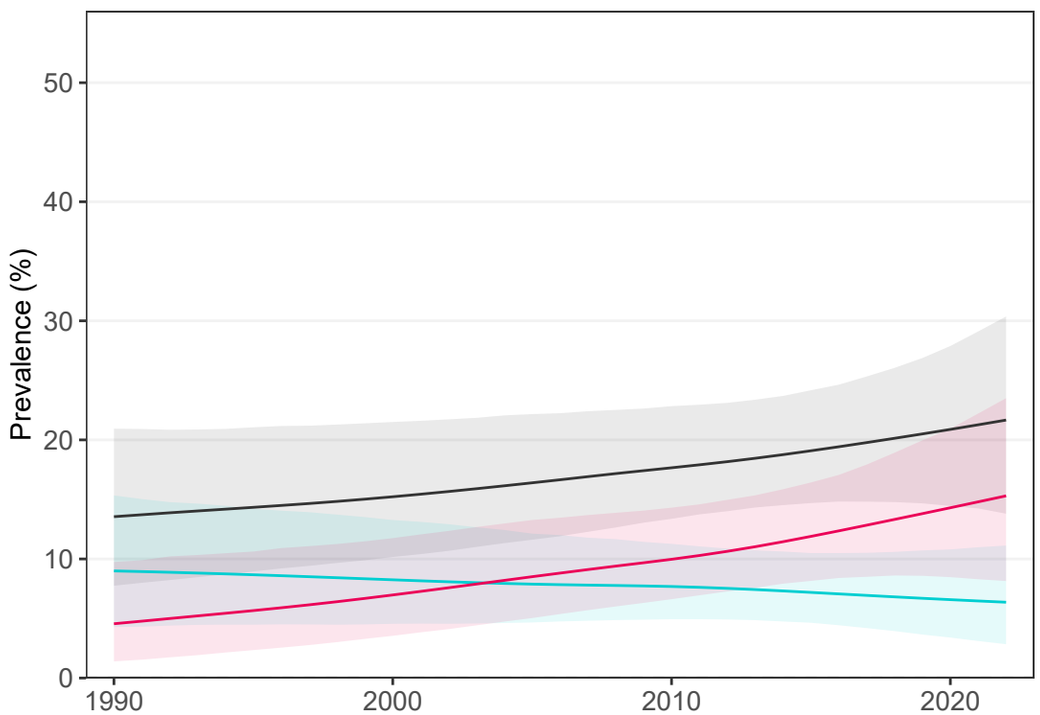


Oman

School-aged children and adolescents

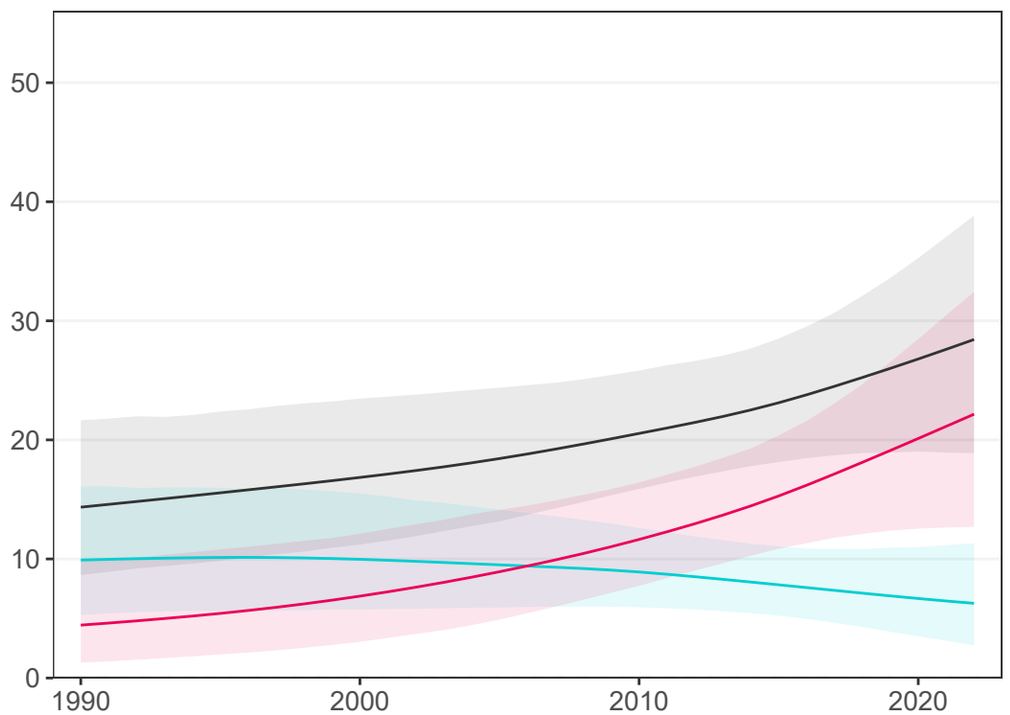
Girls

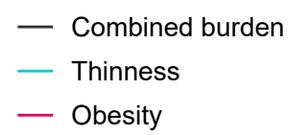
4 studies (4 national)



Boys

4 studies (4 national)

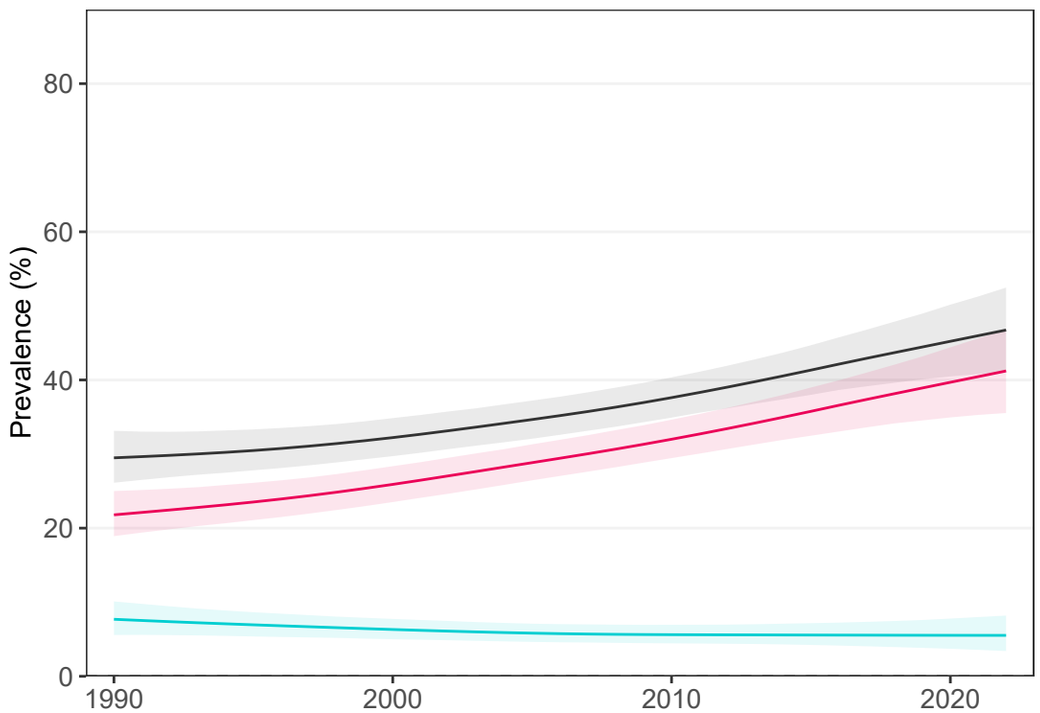




Adults

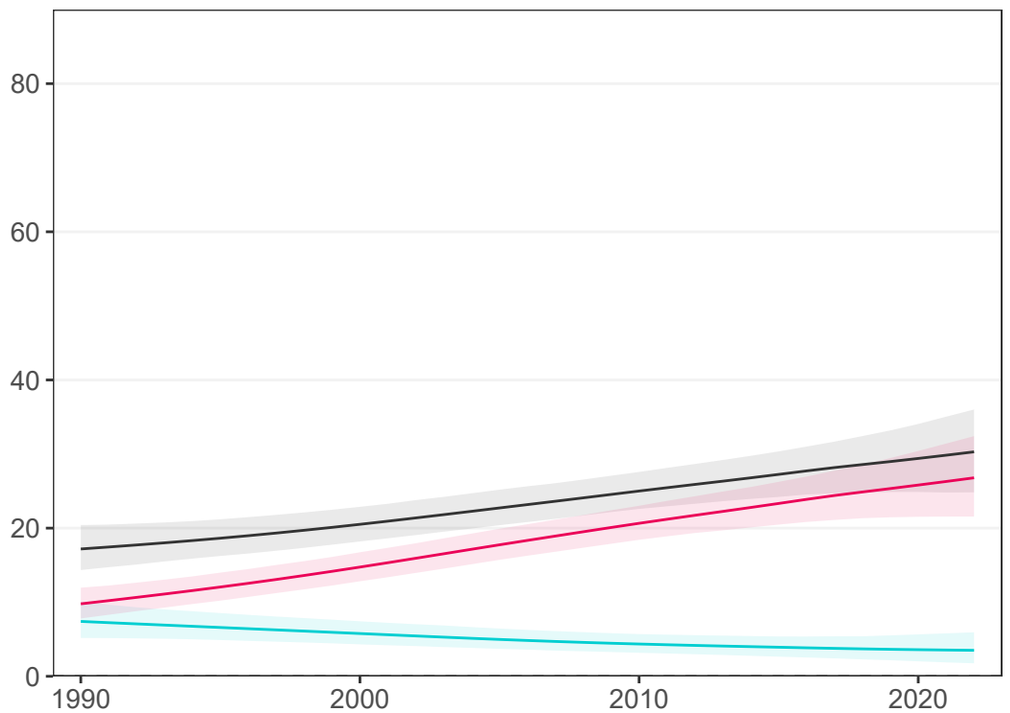
Women

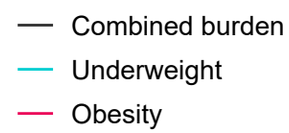
6 studies (4 national)



Men

6 studies (4 national)



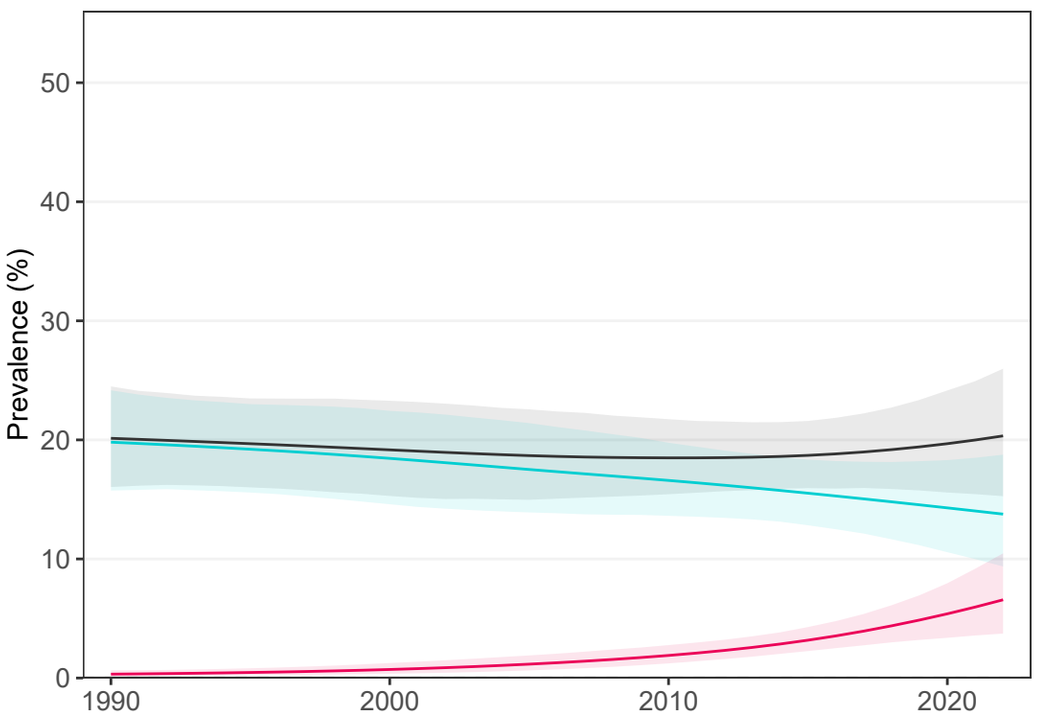


Pakistan

School-aged children and adolescents

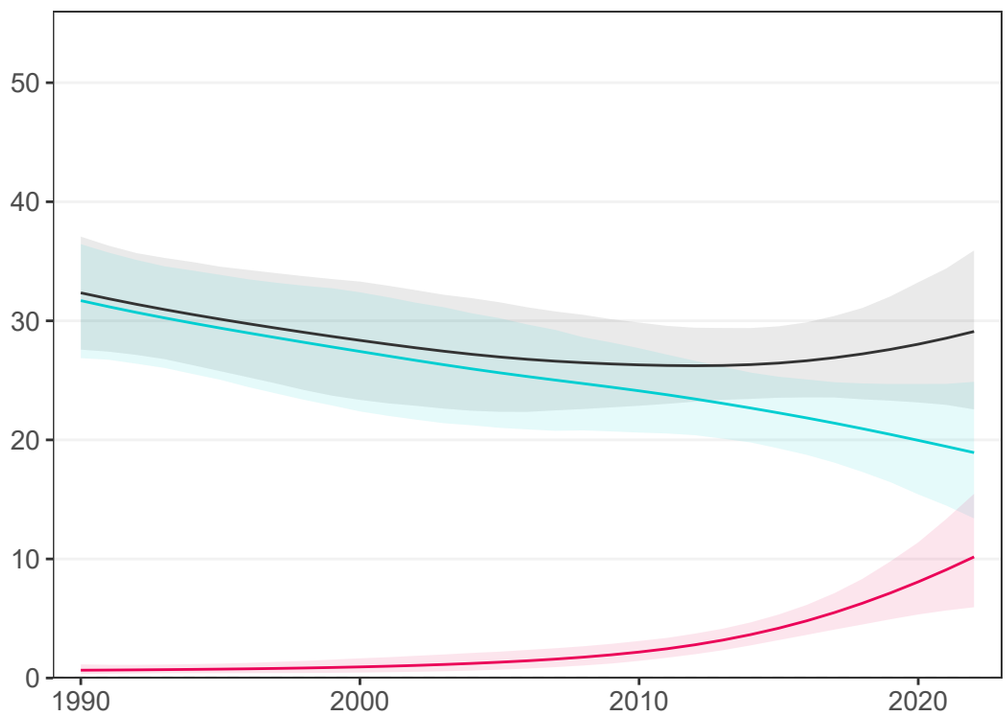
Girls

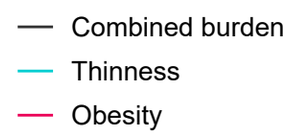
5 studies (3 national)



Boys

5 studies (3 national)

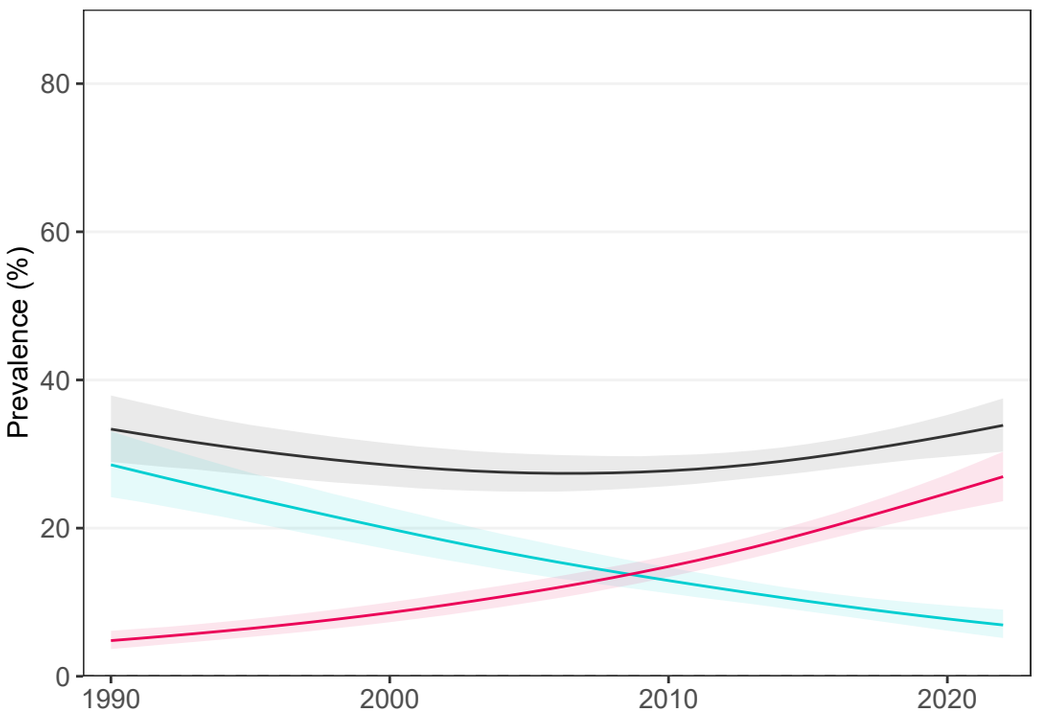




Adults

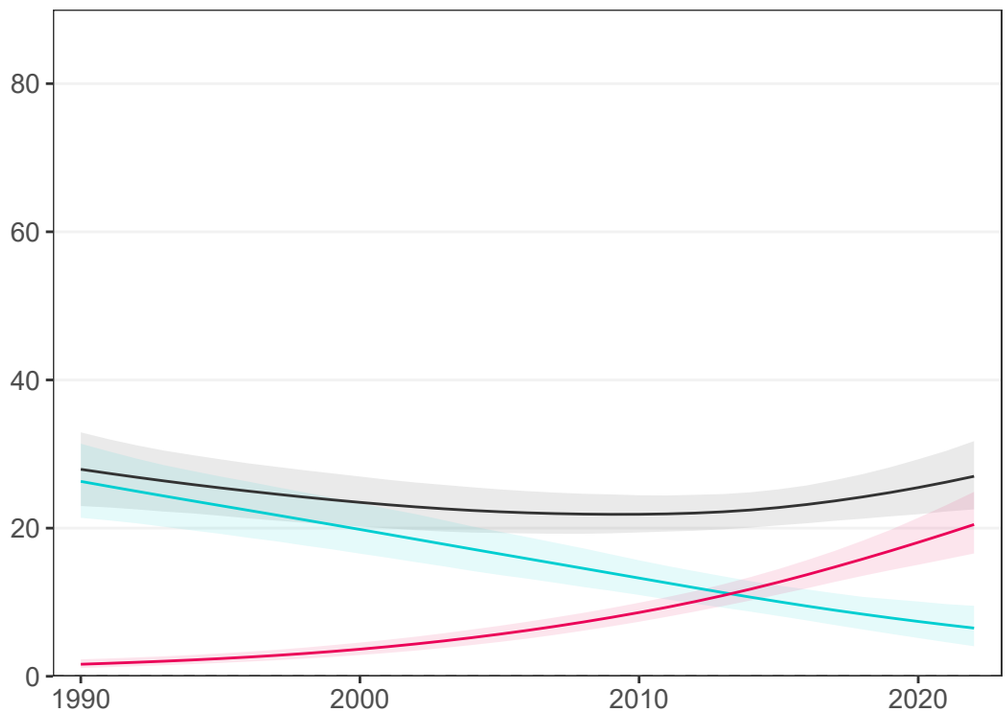
Women

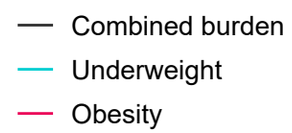
11 studies (7 national)



Men

9 studies (5 national)



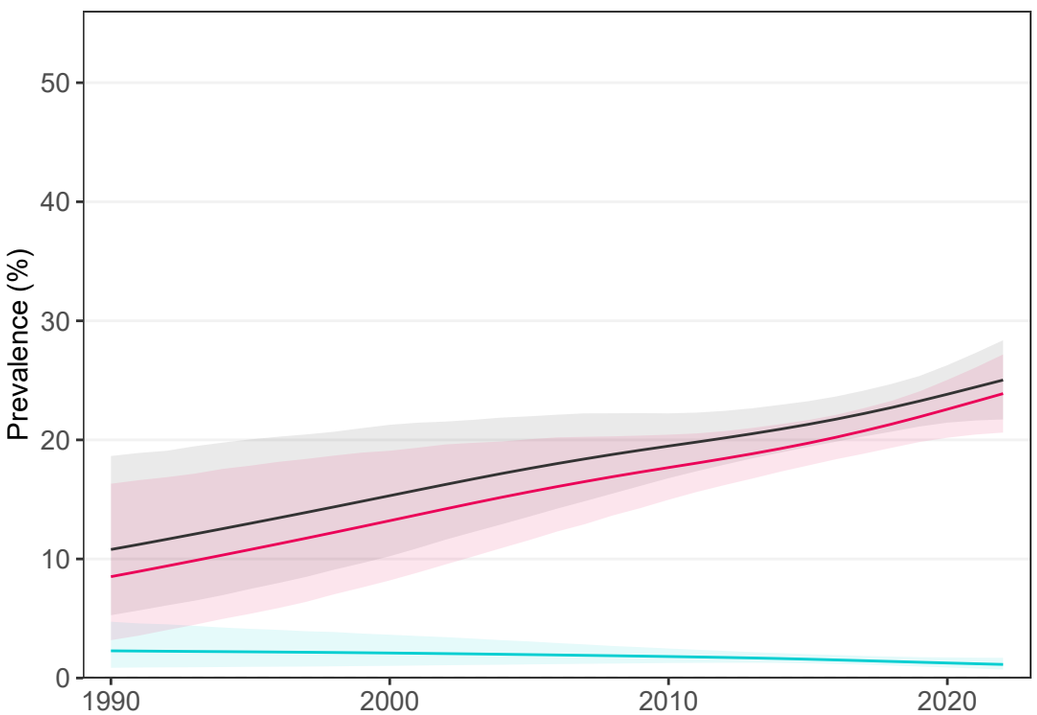


Palau

School-aged children and adolescents

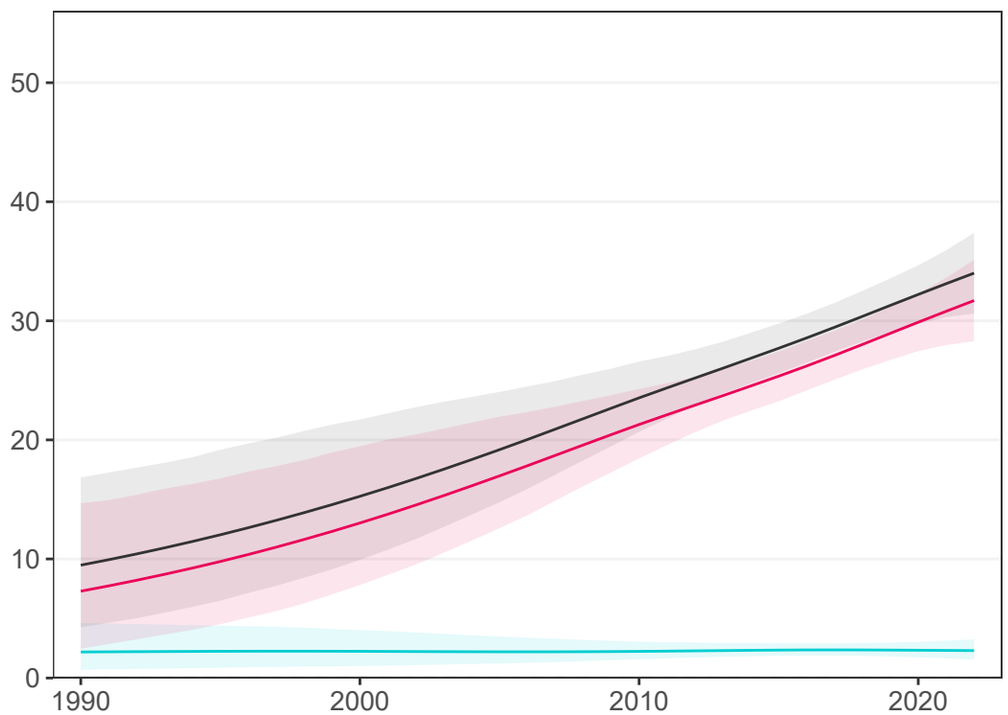
Girls

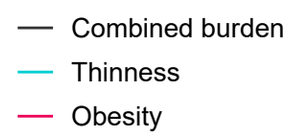
14 studies (14 national)



Boys

14 studies (14 national)

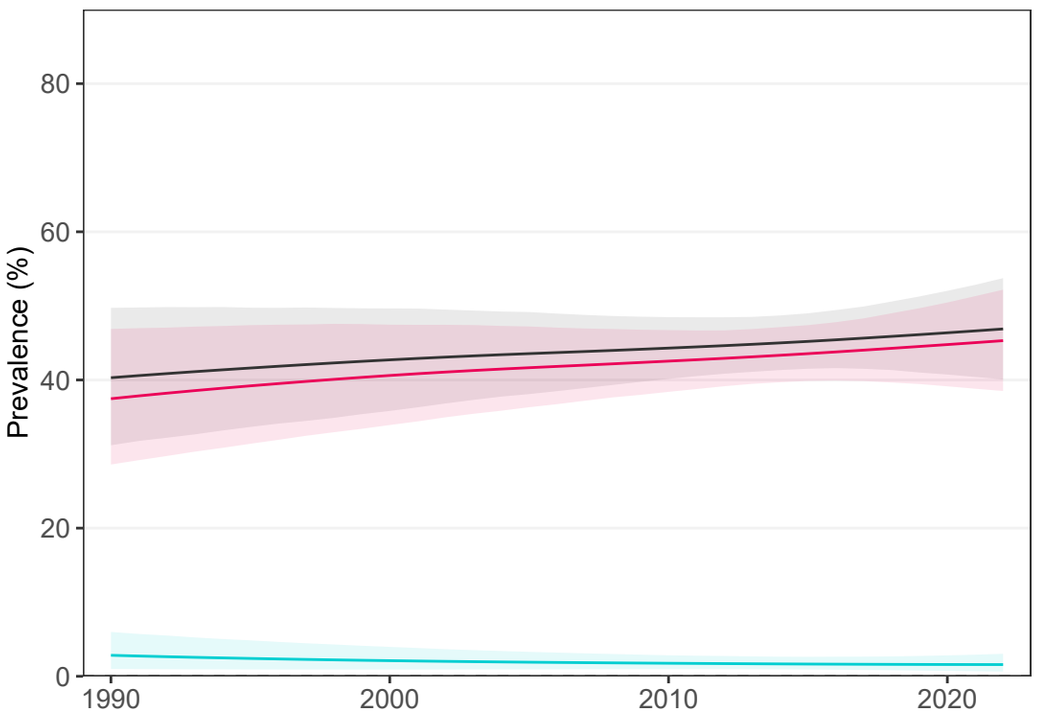




Adults

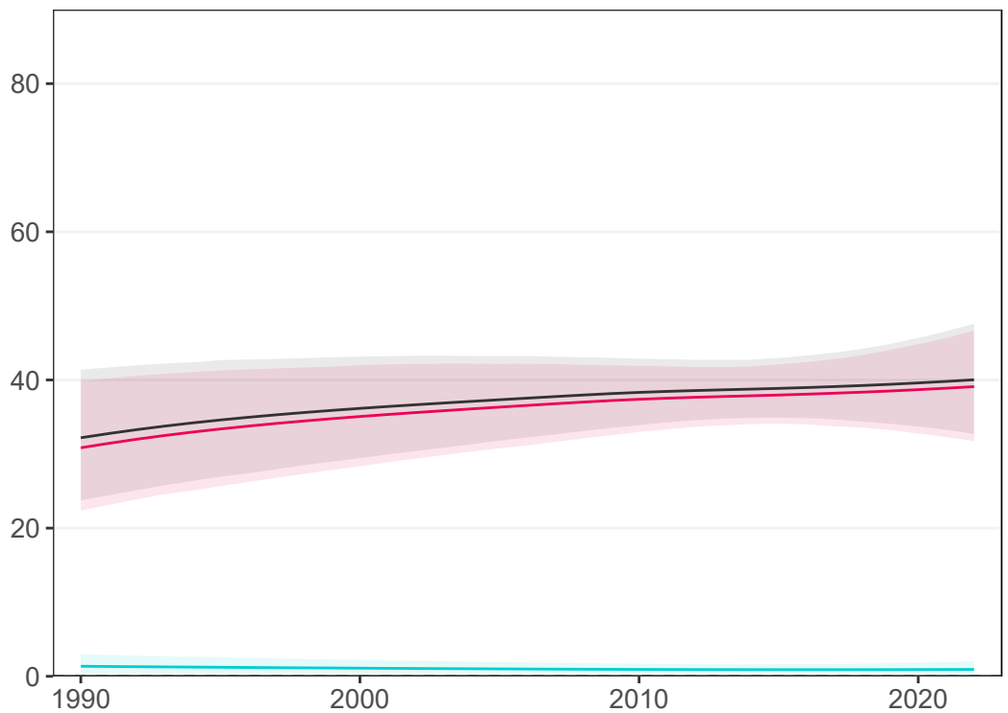
Women

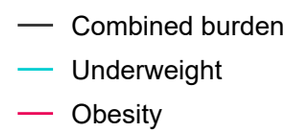
2 studies (2 national)



Men

2 studies (2 national)



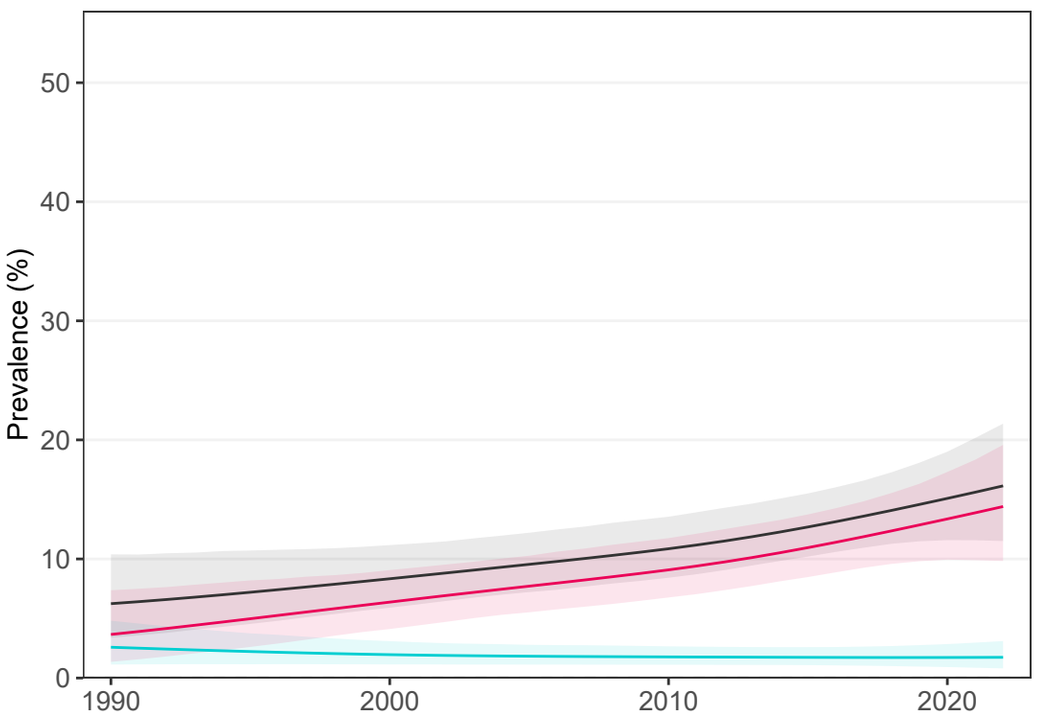


Panama

School-aged children and adolescents

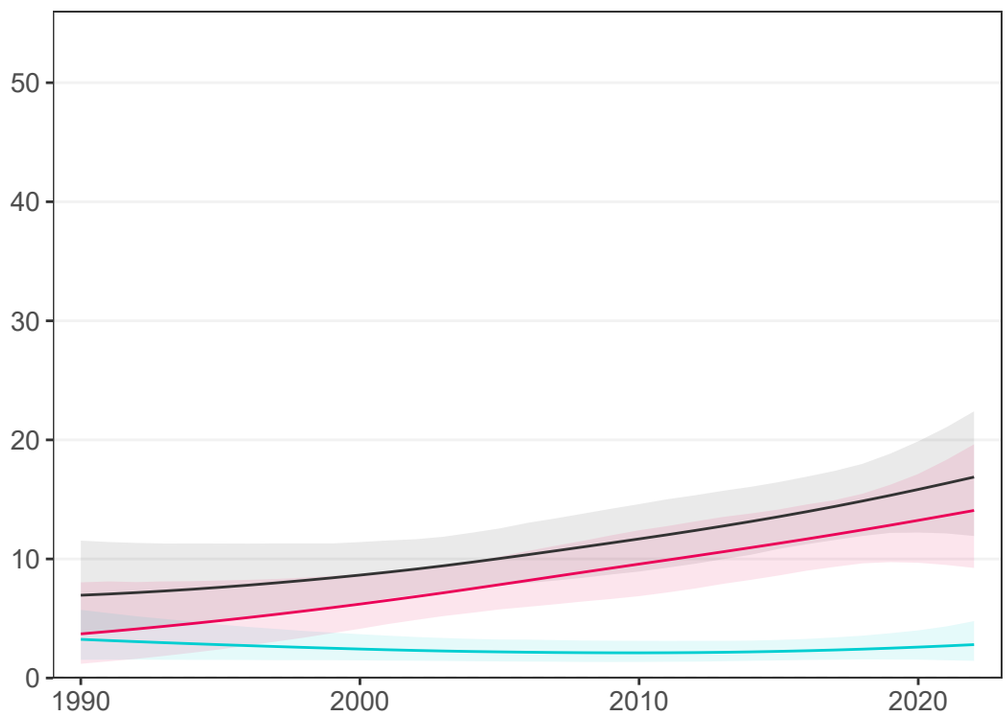
Girls

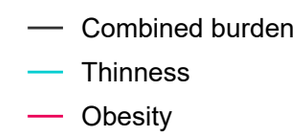
4 studies (3 national)



Boys

4 studies (3 national)

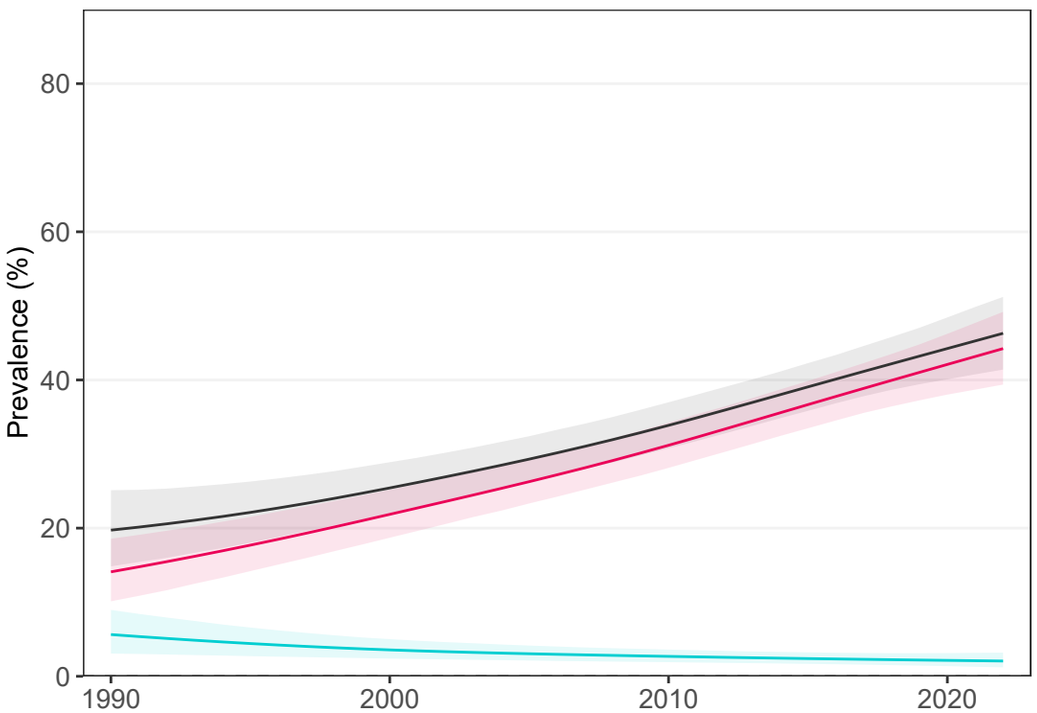




Adults

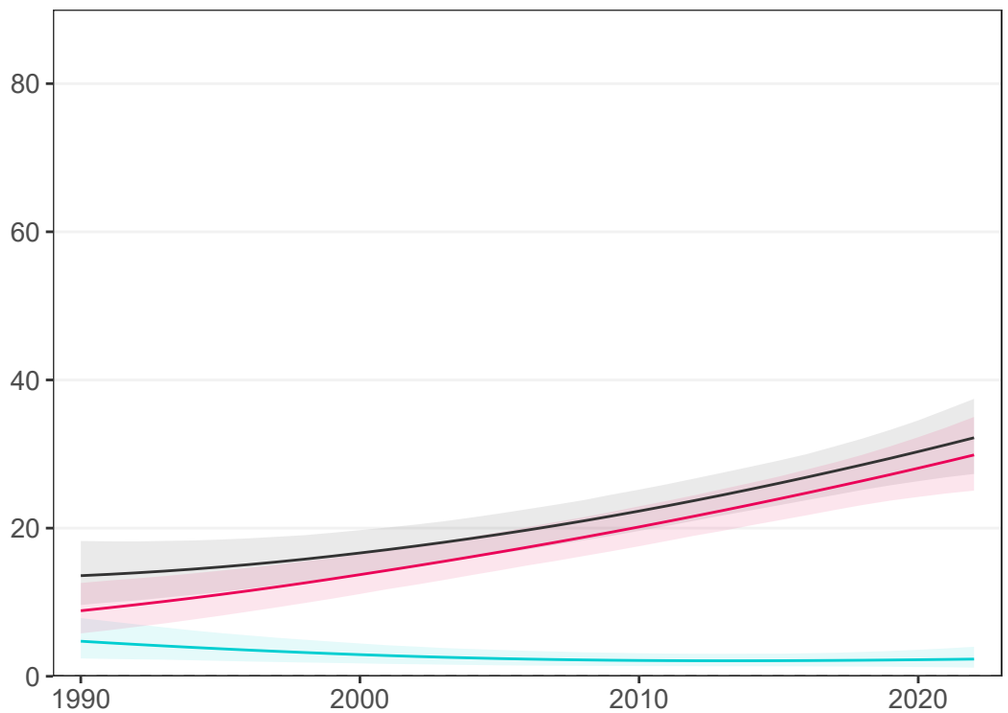
Women

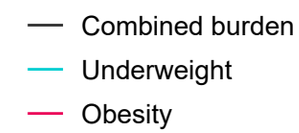
3 studies (2 national)



Men

3 studies (2 national)



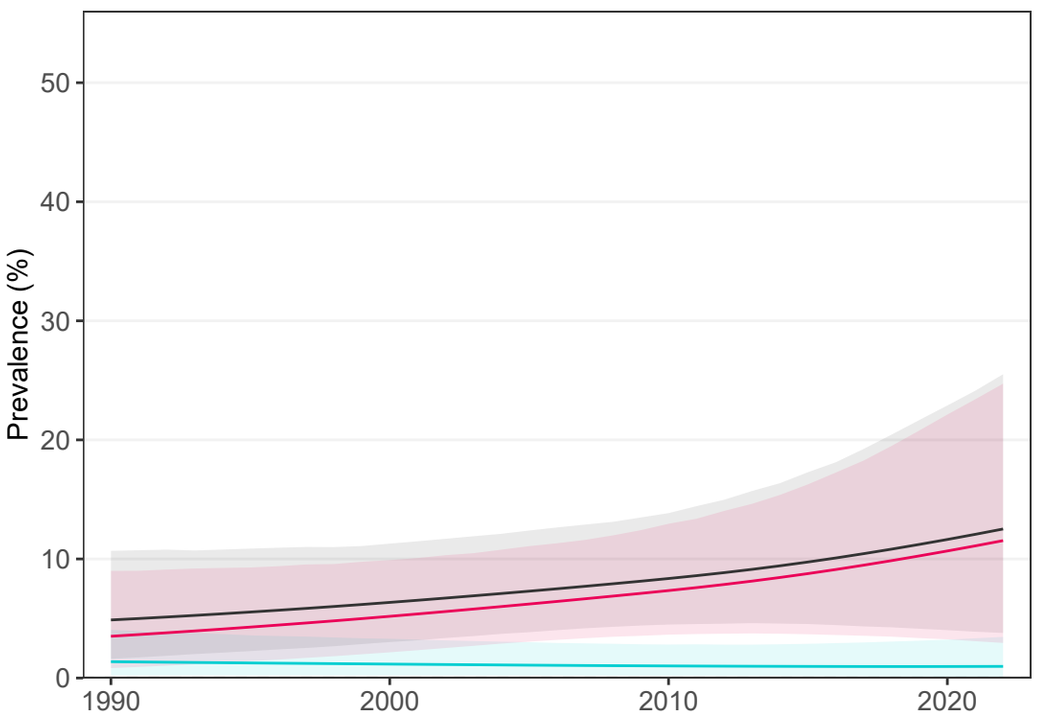


Papua New Guinea

School-aged children and adolescents

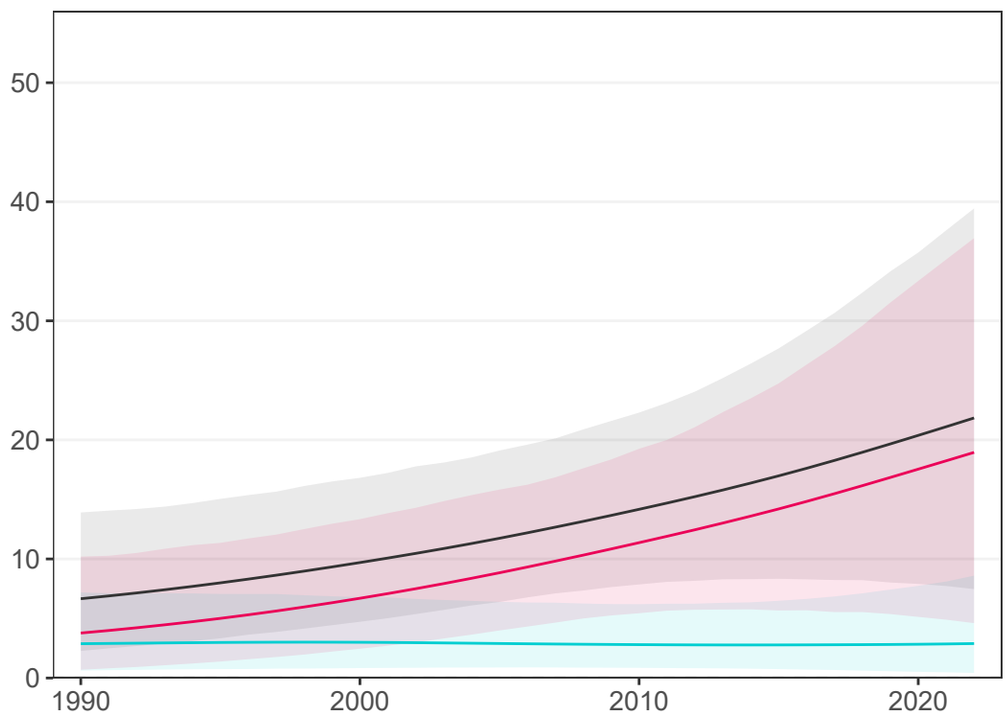
Girls

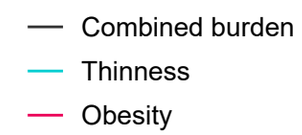
1 study (1 national)



Boys

1 study (1 national)

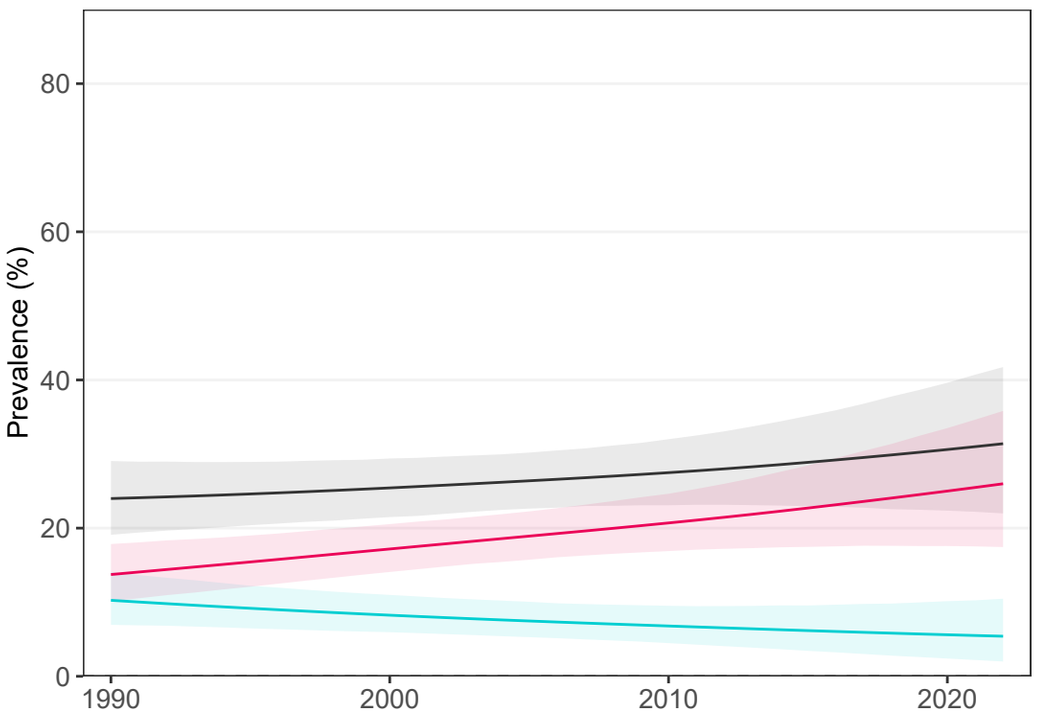




Adults

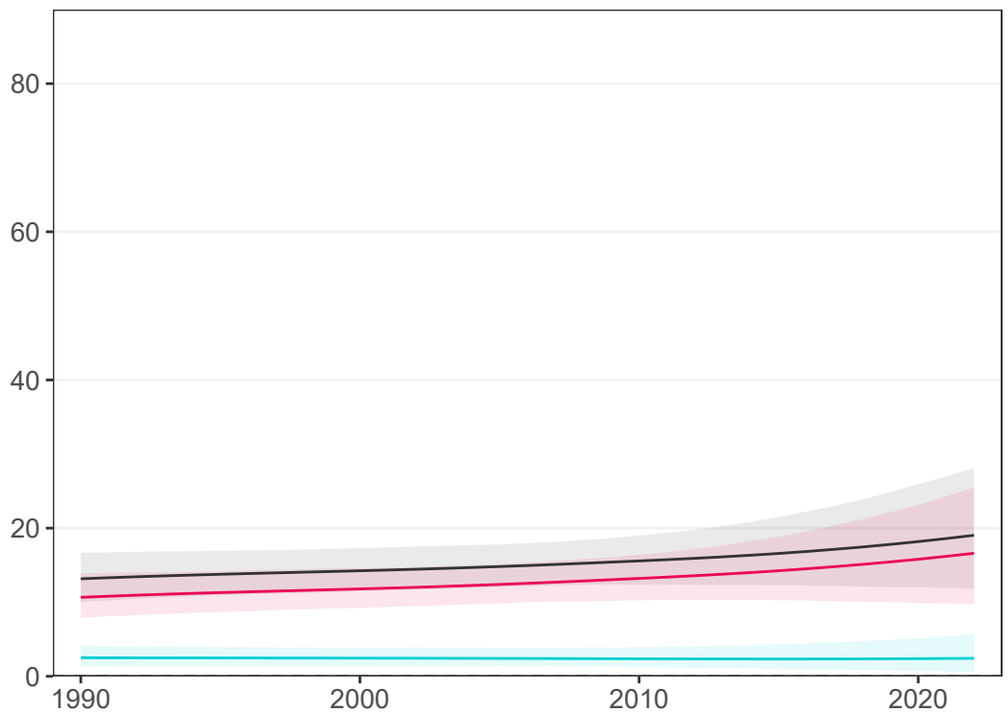
Women

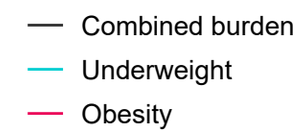
3 studies (1 national)



Men

3 studies (1 national)



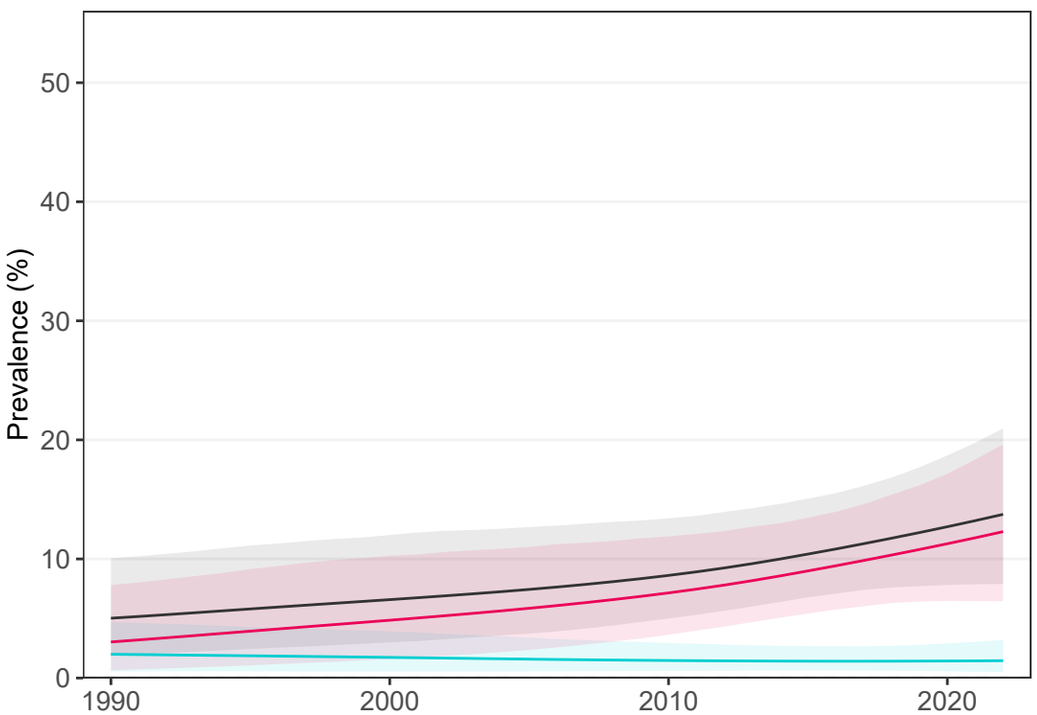


Paraguay

School-aged children and adolescents

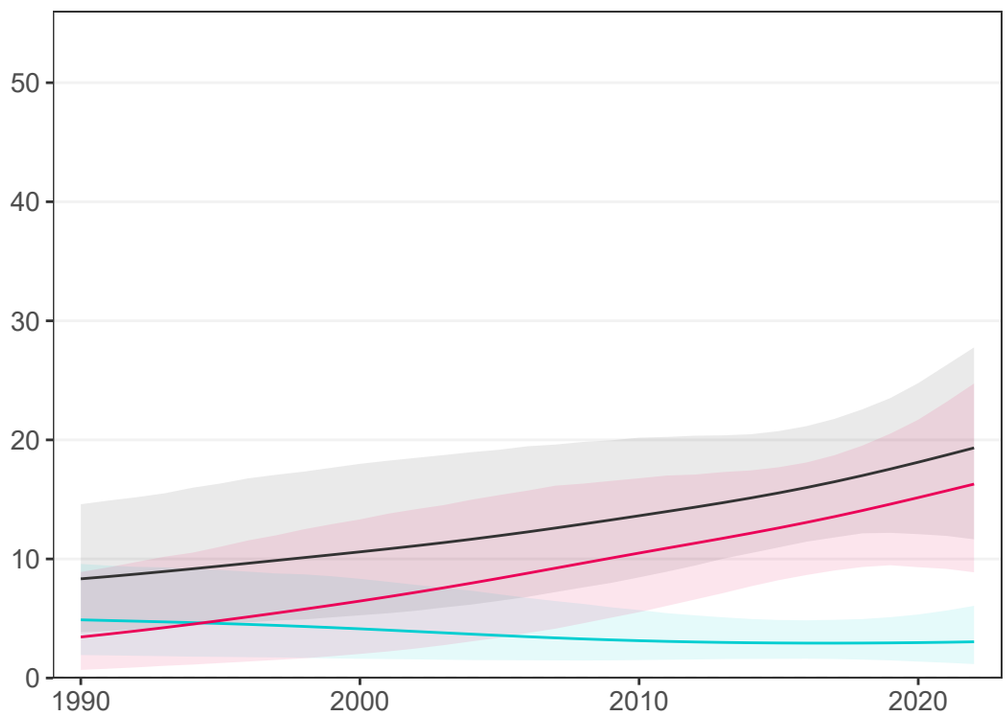
Girls

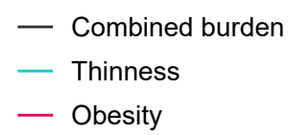
2 studies (2 national)



Boys

2 studies (2 national)

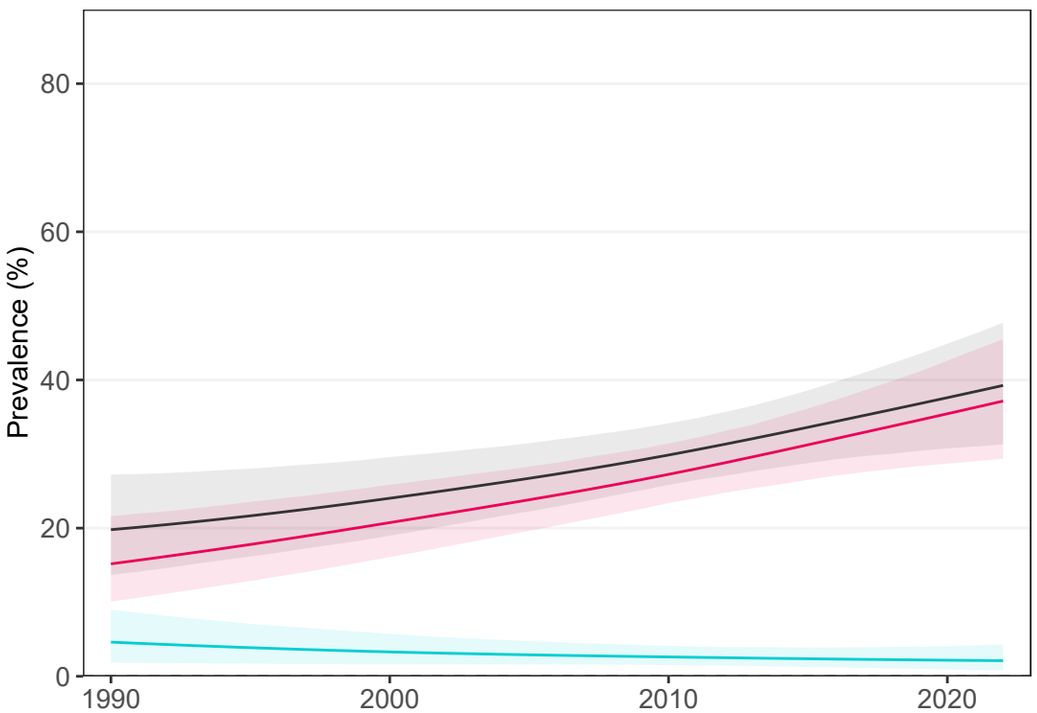




Adults

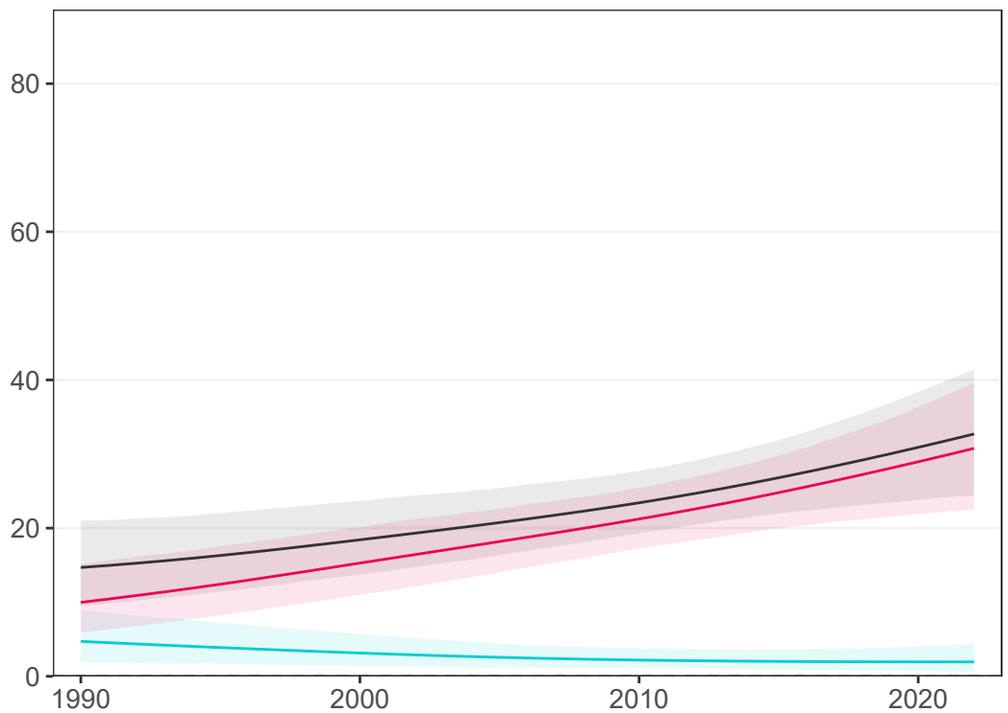
Women

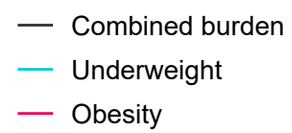
1 study (1 national)



Men

1 study (1 national)



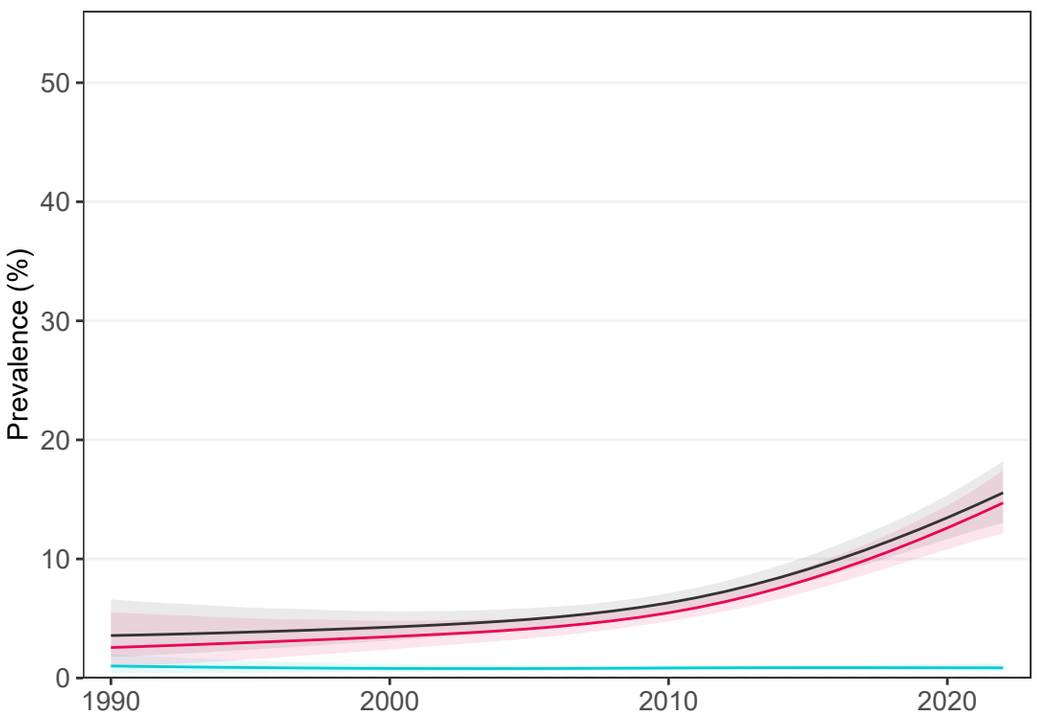


Peru

School-aged children and adolescents

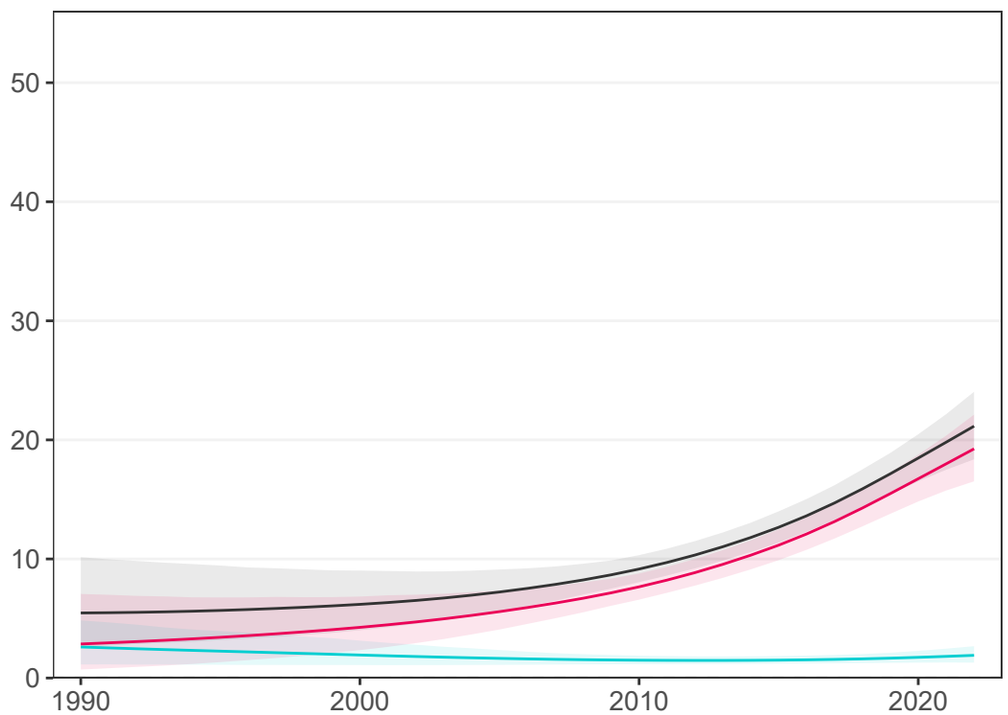
Girls

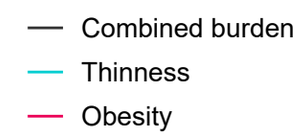
29 studies (24 national)



Boys

21 studies (16 national)

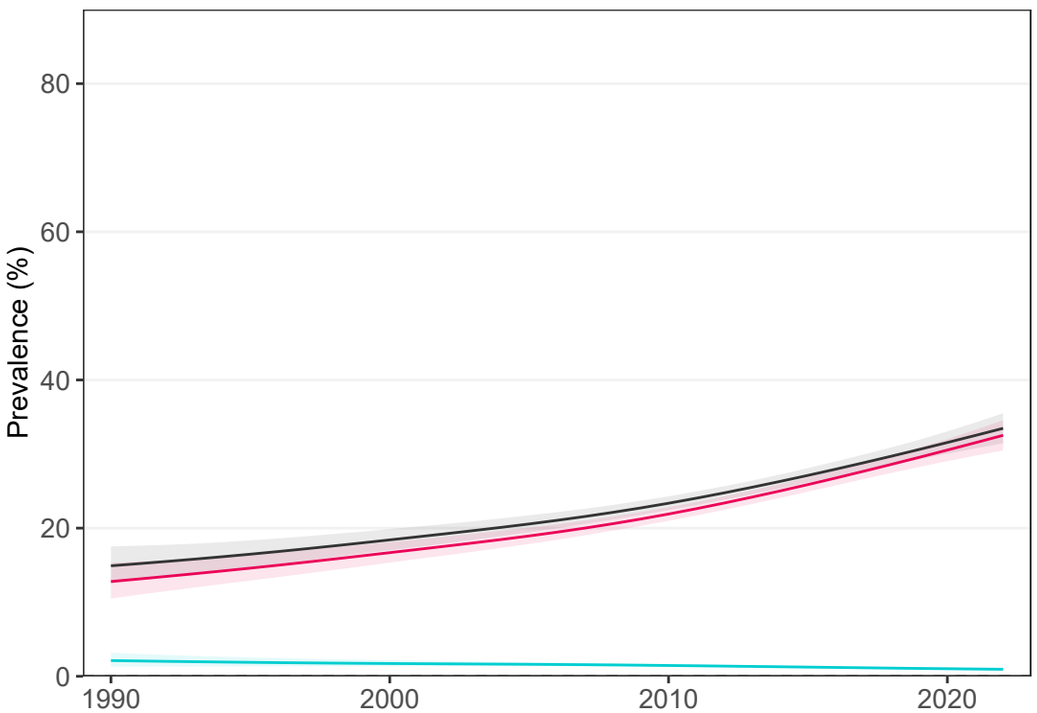




Adults

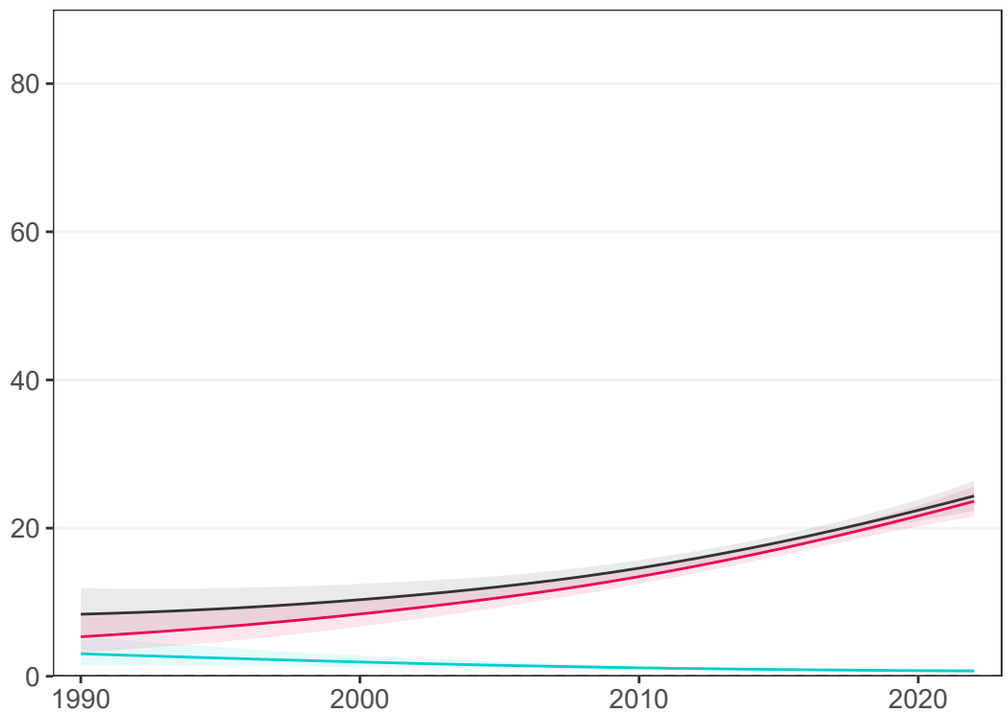
Women

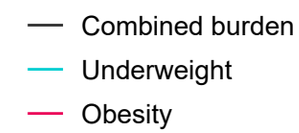
40 studies (26 national)



Men

30 studies (16 national)



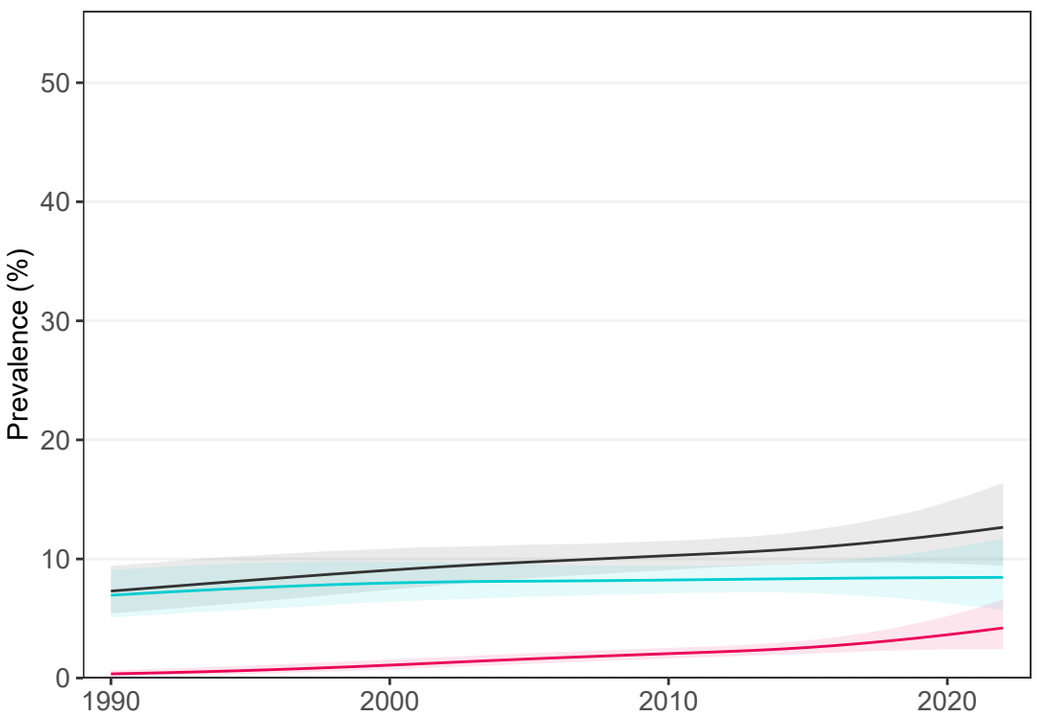


Philippines

School-aged children and adolescents

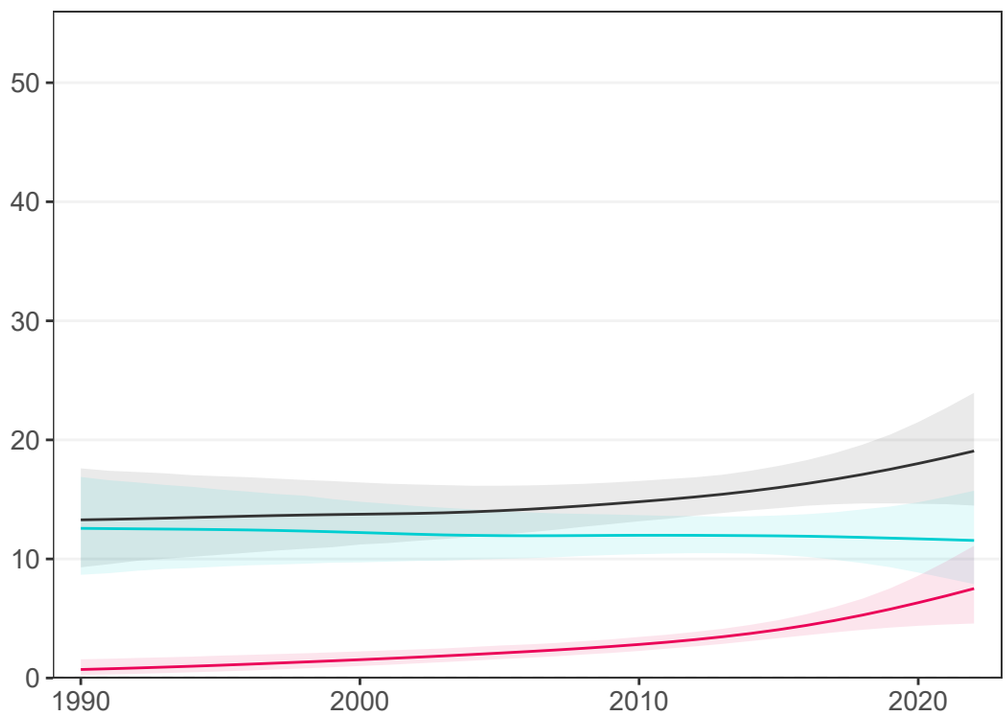
Girls

26 studies (10 national)



Boys

9 studies (6 national)

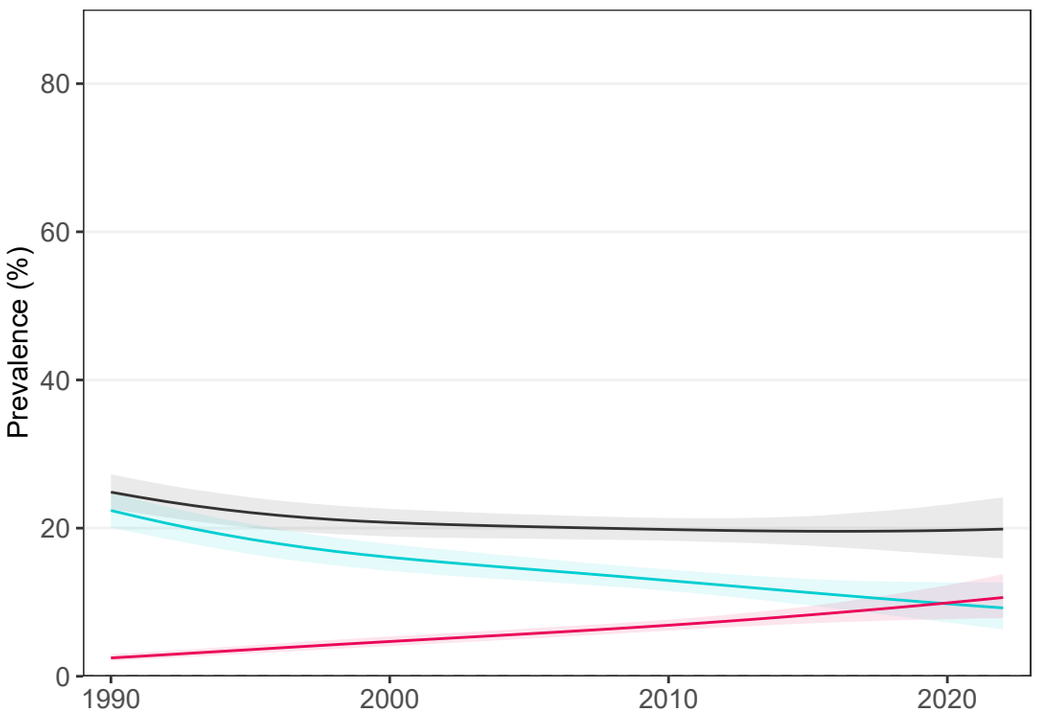


Combined burden
Thinness
Obesity

Adults

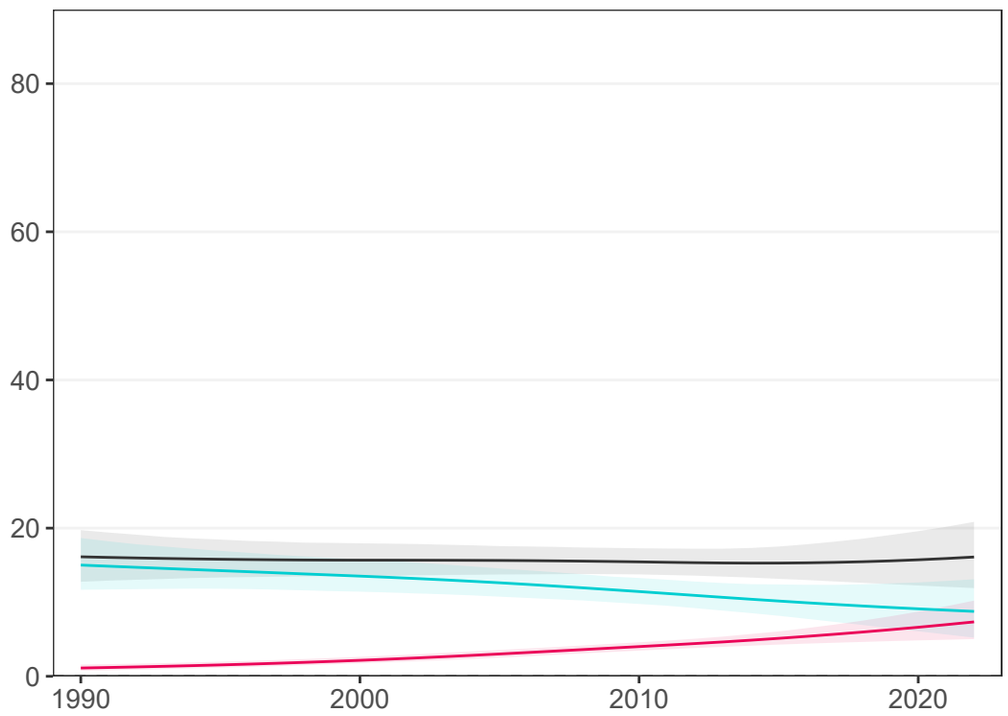
Women

30 studies (8 national)



Men

12 studies (7 national)



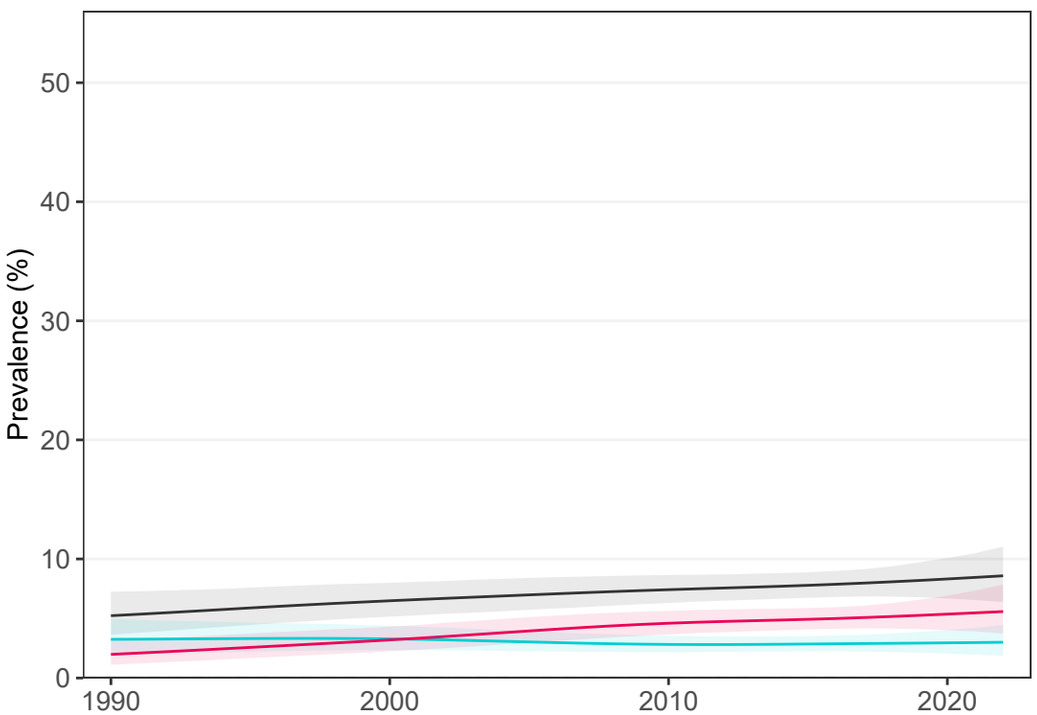
Combined burden
Underweight
Obesity

Poland

School-aged children and adolescents

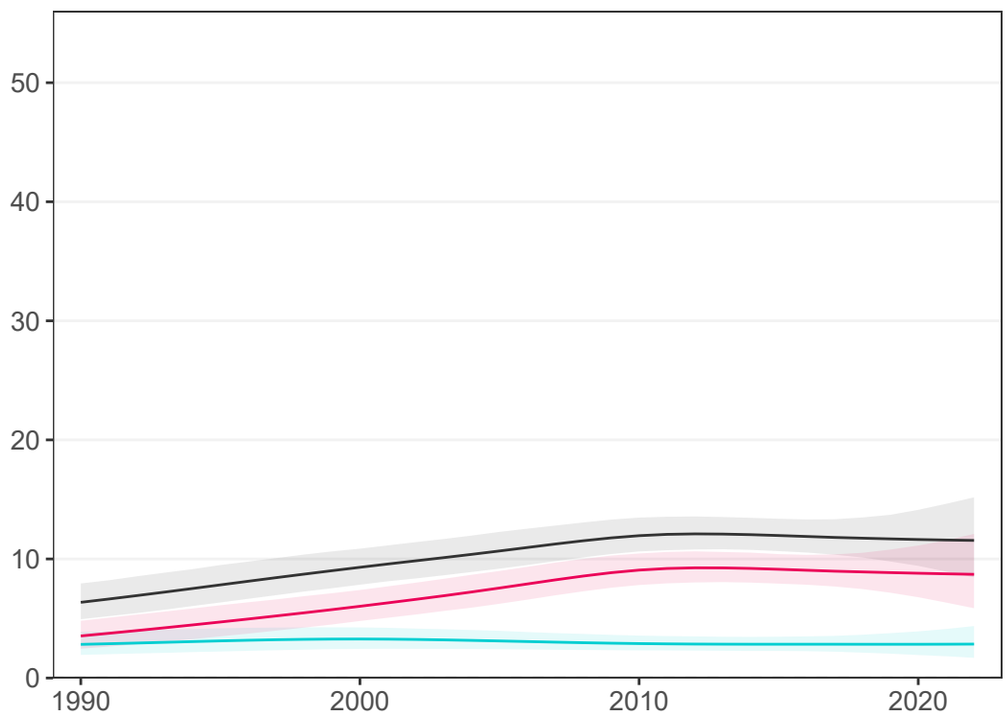
Girls

31 studies (9 national)



Boys

47 studies (13 national)

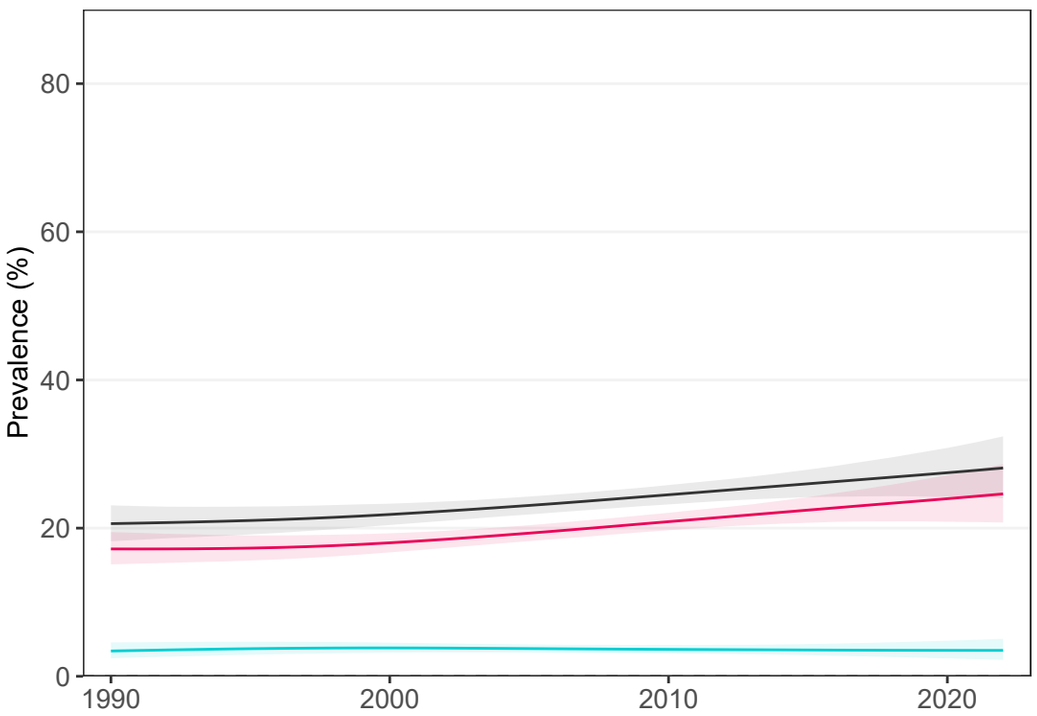


Combined burden
Thinness
Obesity

Adults

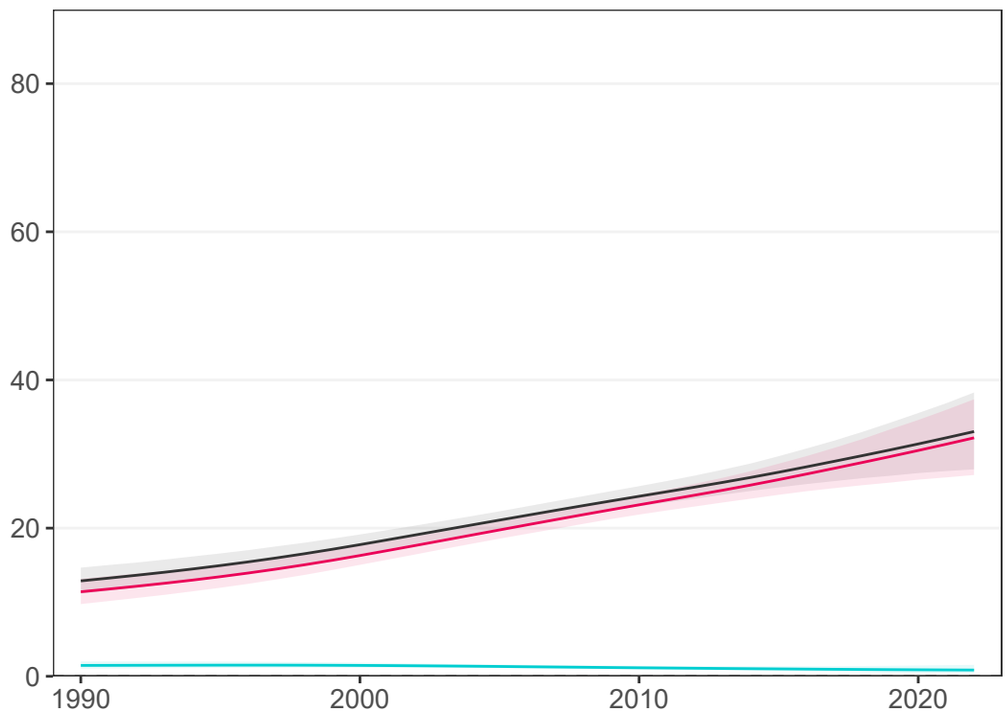
Women

35 studies (11 national)



Men

53 studies (15 national)



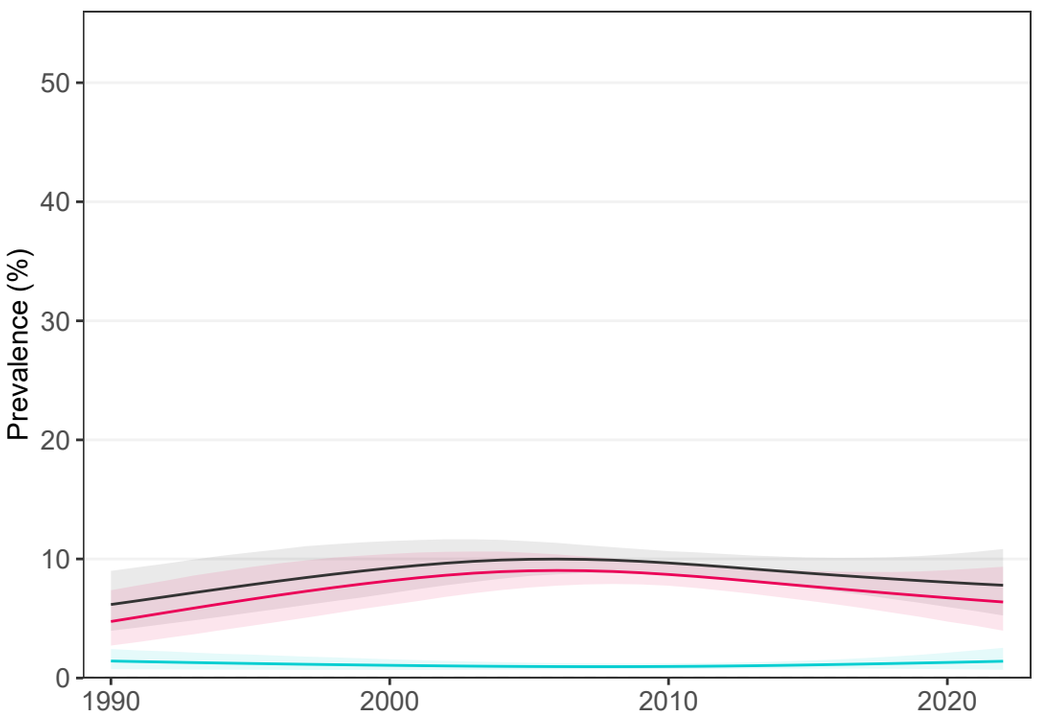
Combined burden
Underweight
Obesity

Portugal

School-aged children and adolescents

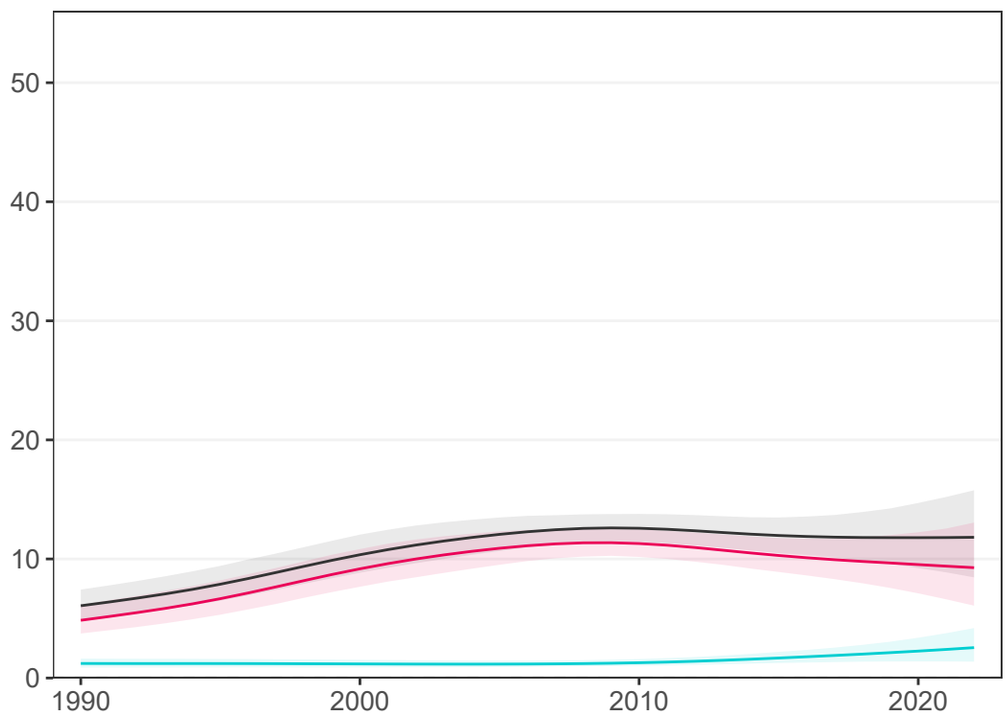
Girls

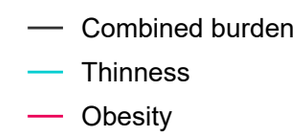
32 studies (9 national)



Boys

48 studies (25 national)

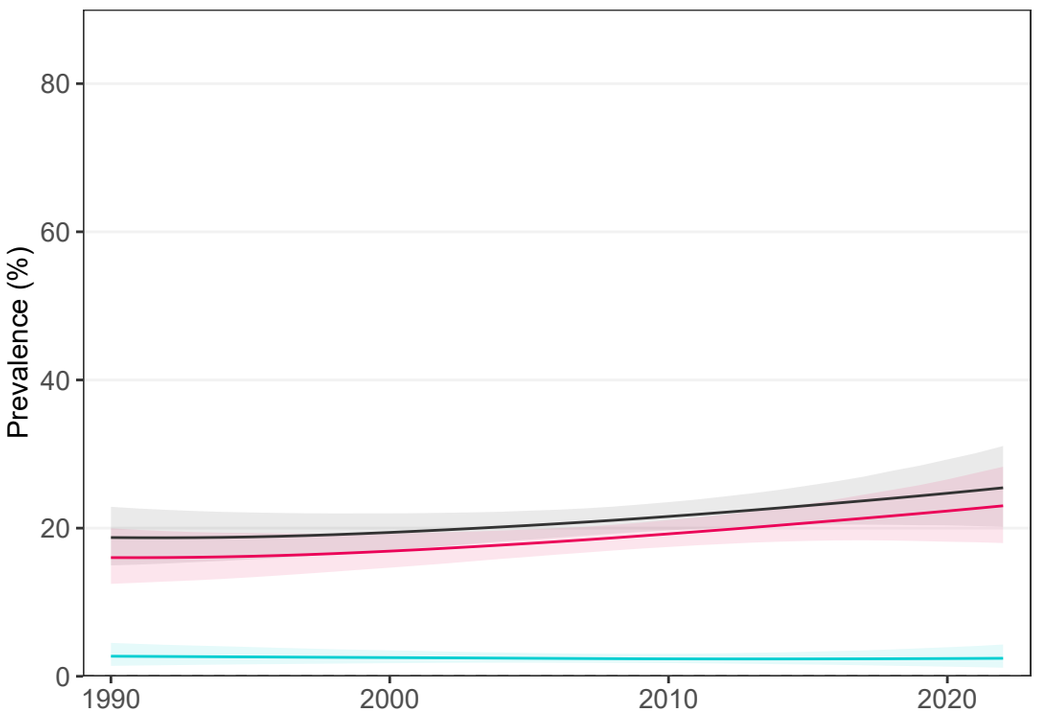




Adults

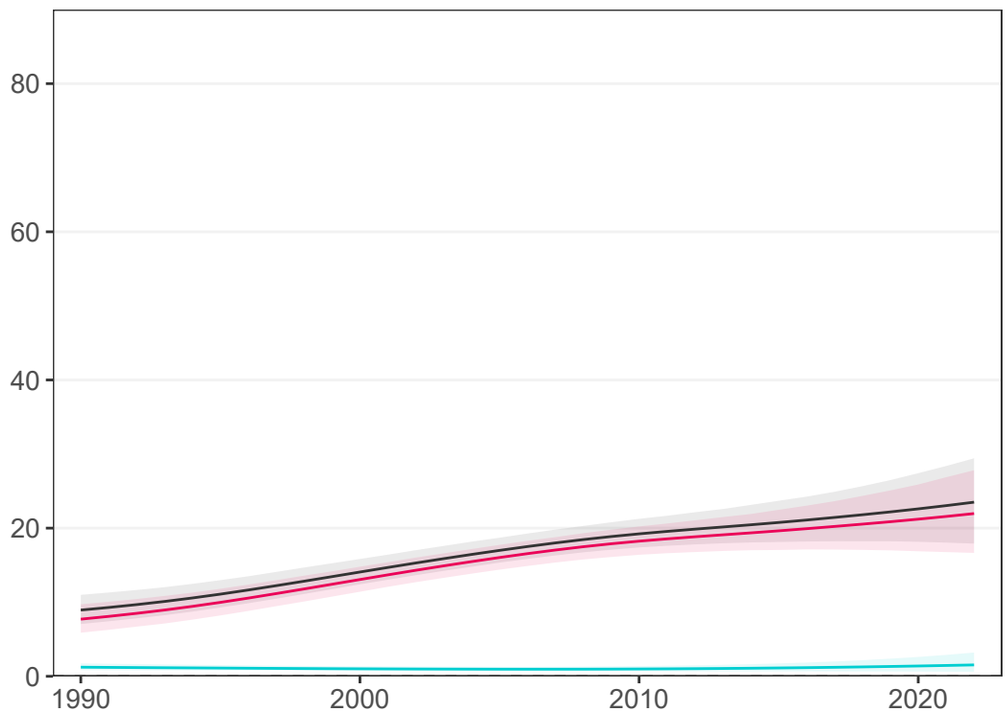
Women

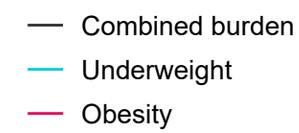
11 studies (3 national)



Men

26 studies (19 national)



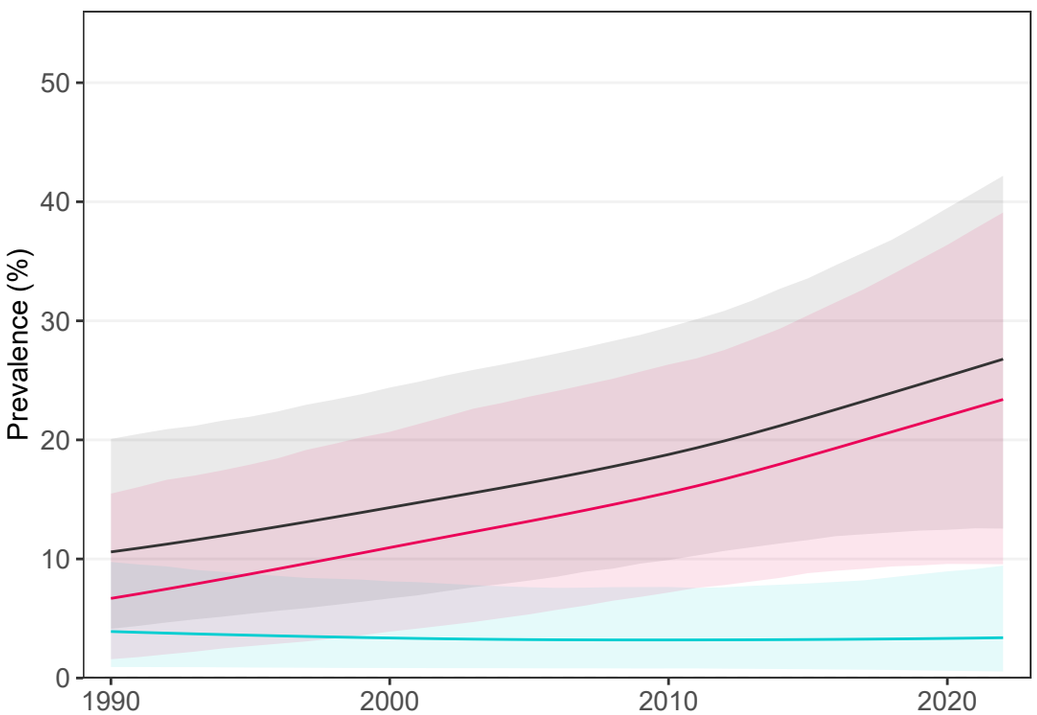


Puerto Rico

School-aged children and adolescents

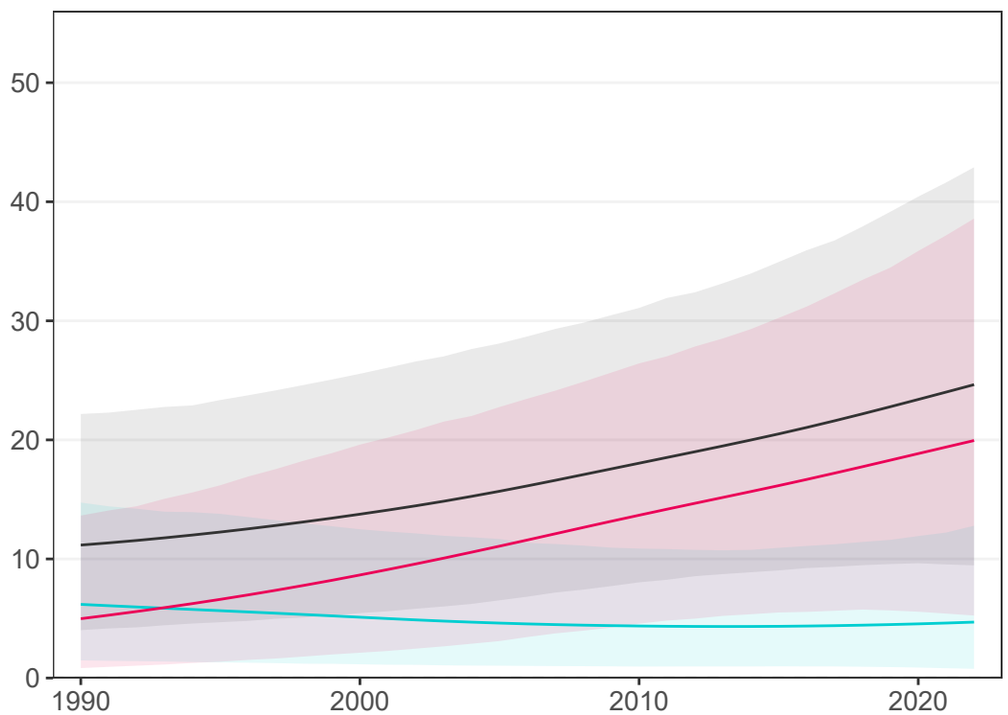
Girls

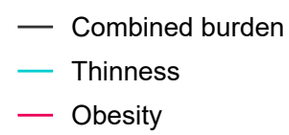
1 study (0 national)



Boys

No studies

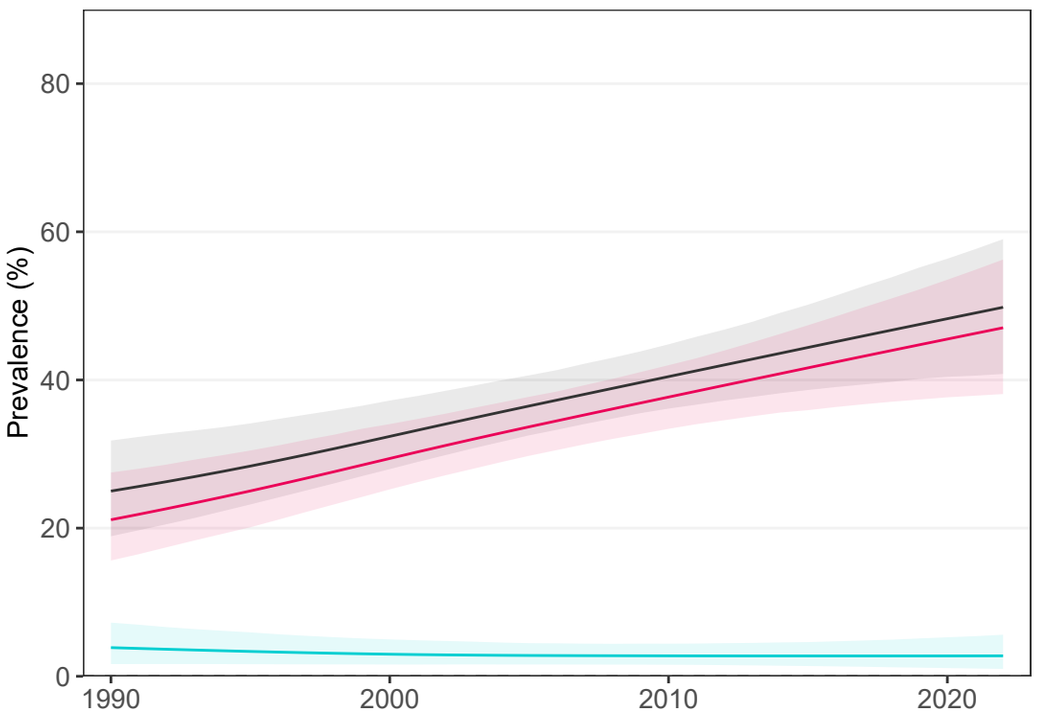




Adults

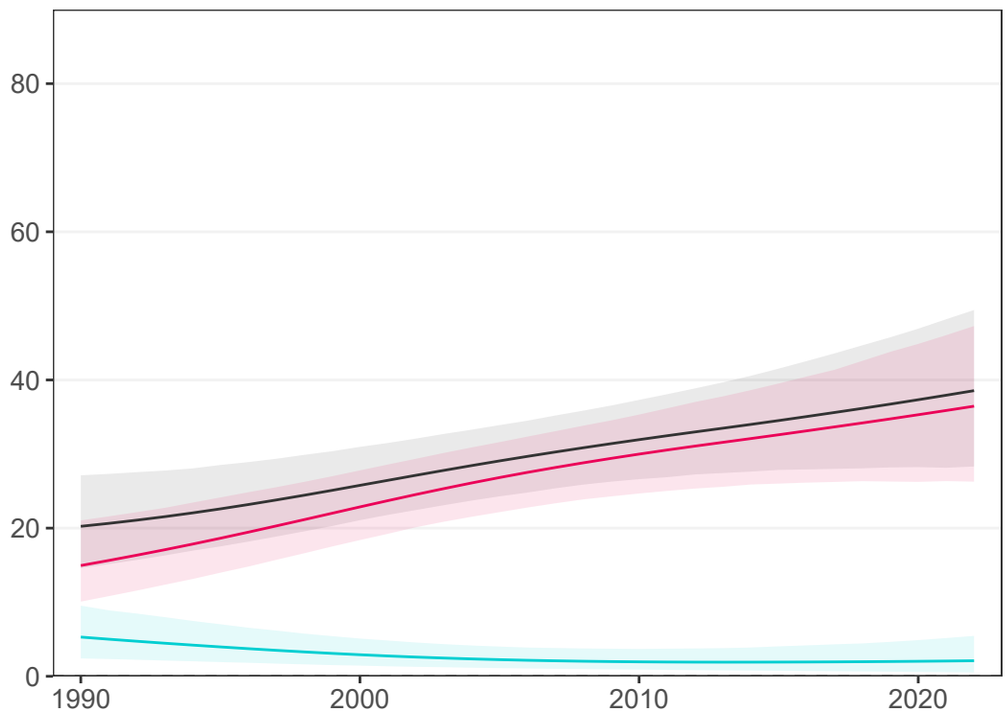
Women

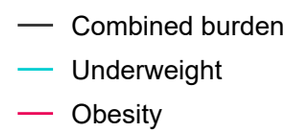
4 studies (2 national)



Men

3 studies (2 national)



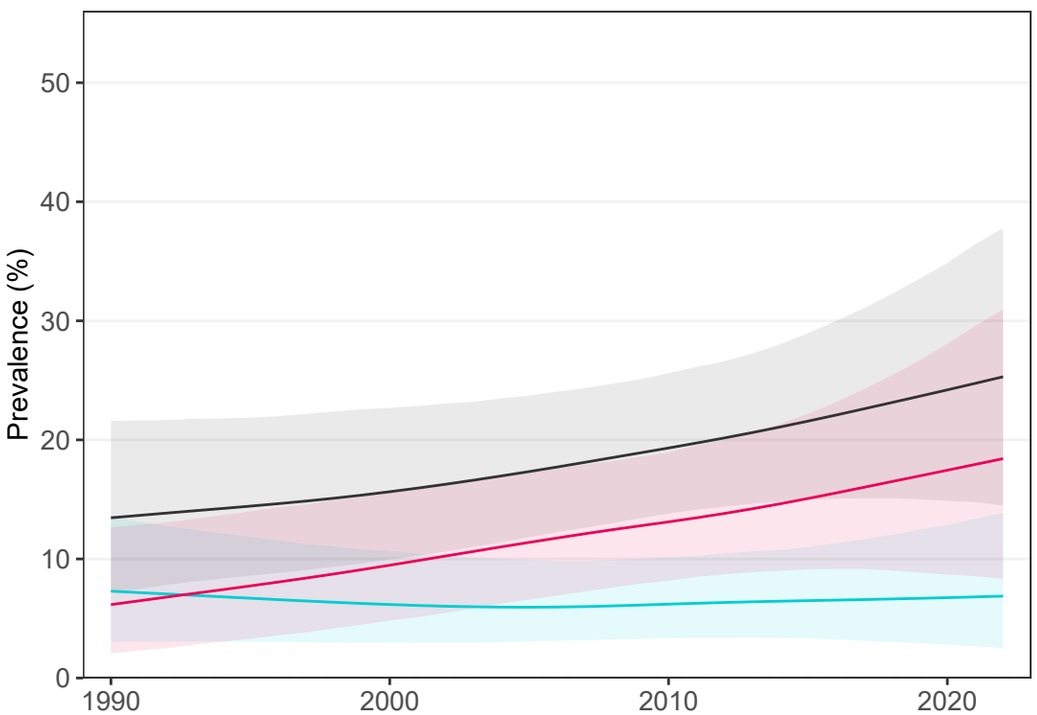


Qatar

School-aged children and adolescents

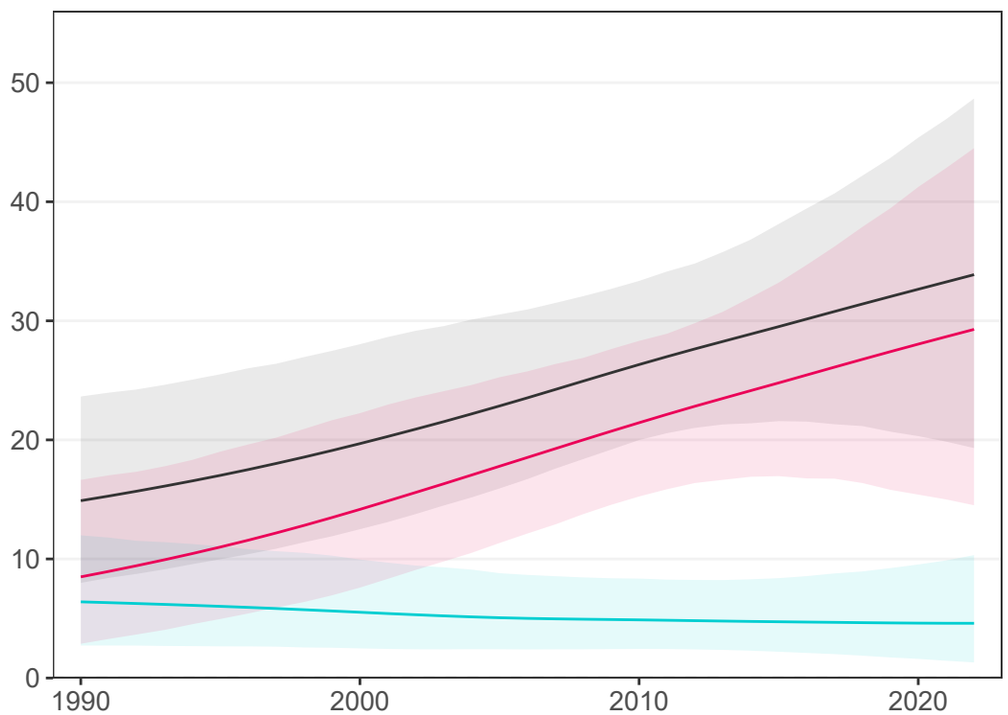
Girls

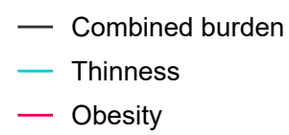
3 studies (3 national)



Boys

3 studies (3 national)

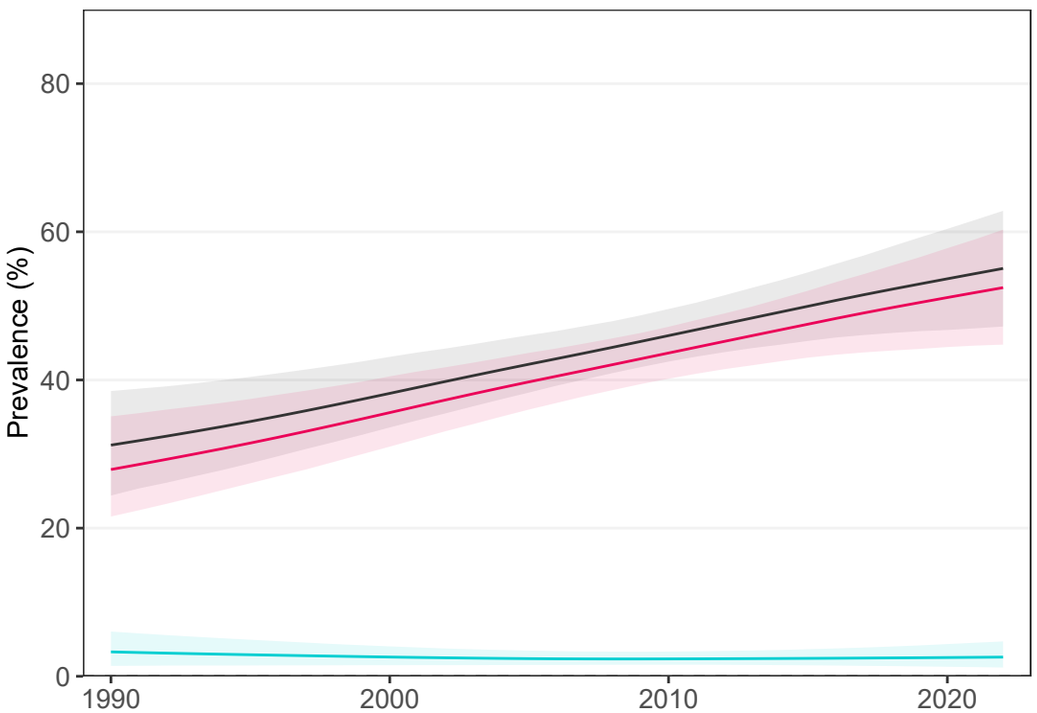




Adults

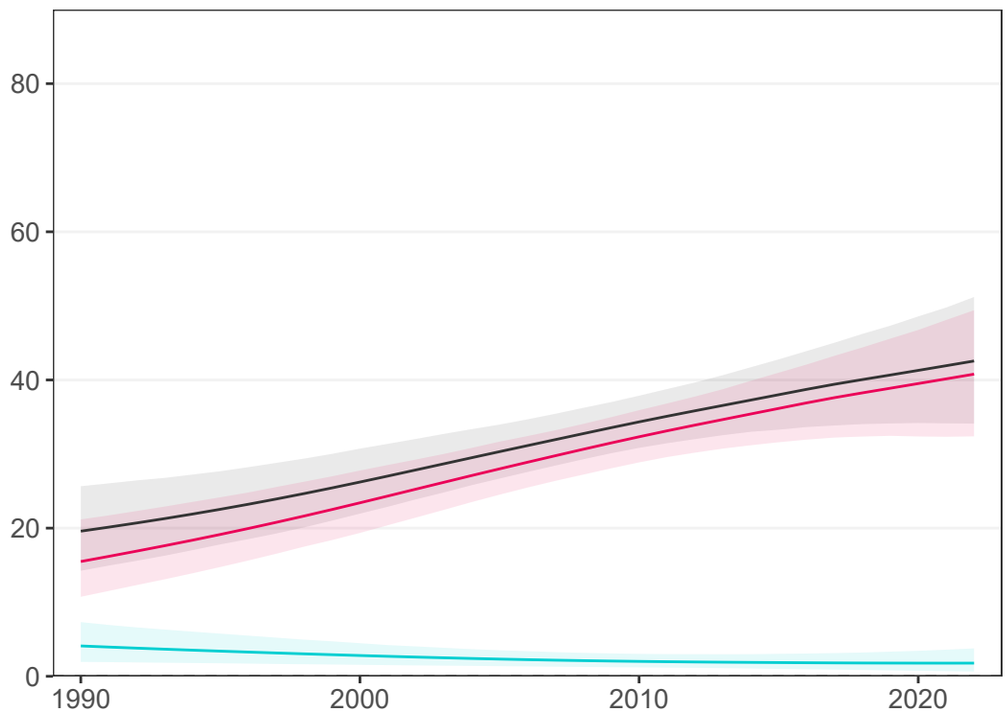
Women

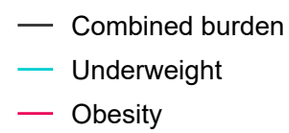
2 studies (2 national)



Men

2 studies (2 national)



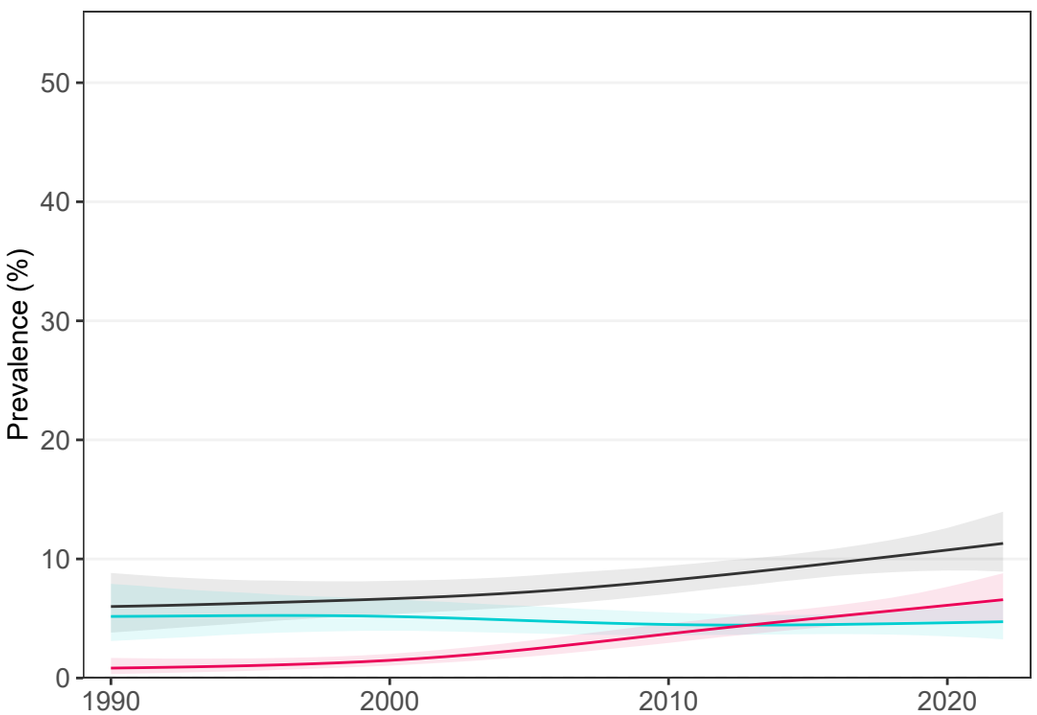


Romania

School-aged children and adolescents

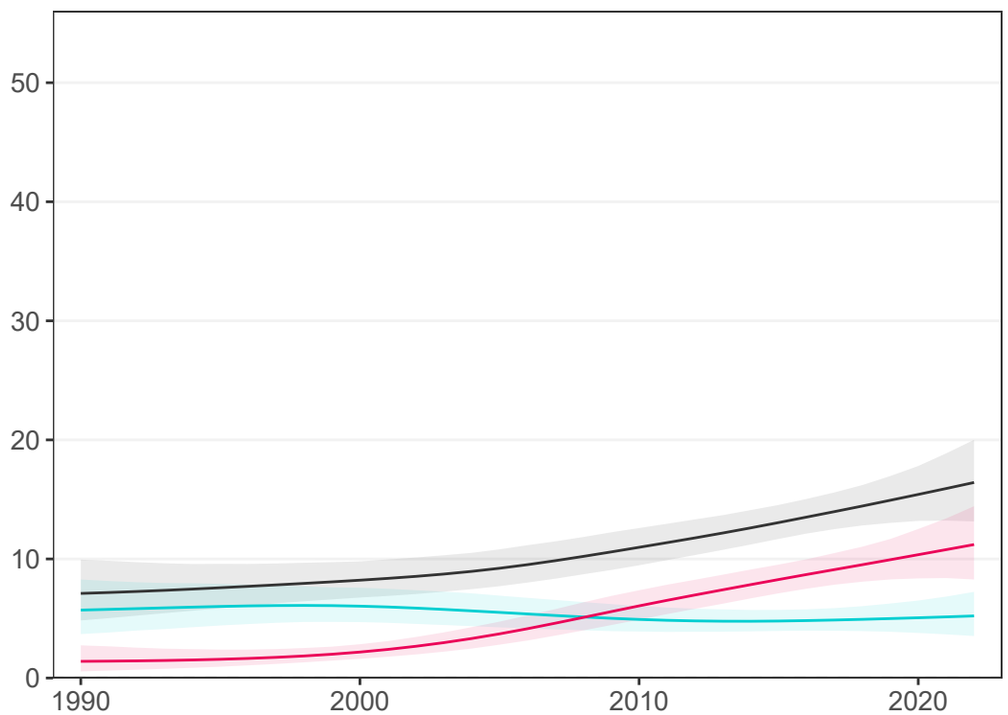
Girls

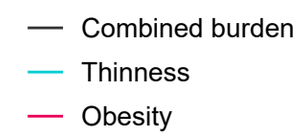
31 studies (7 national)



Boys

31 studies (7 national)

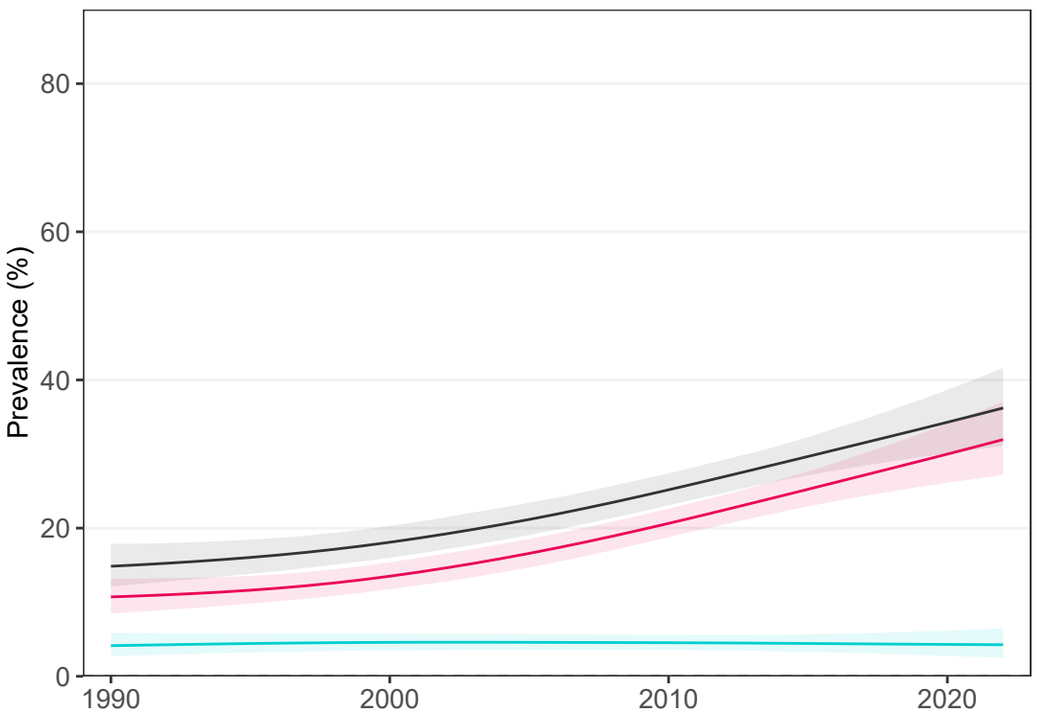




Adults

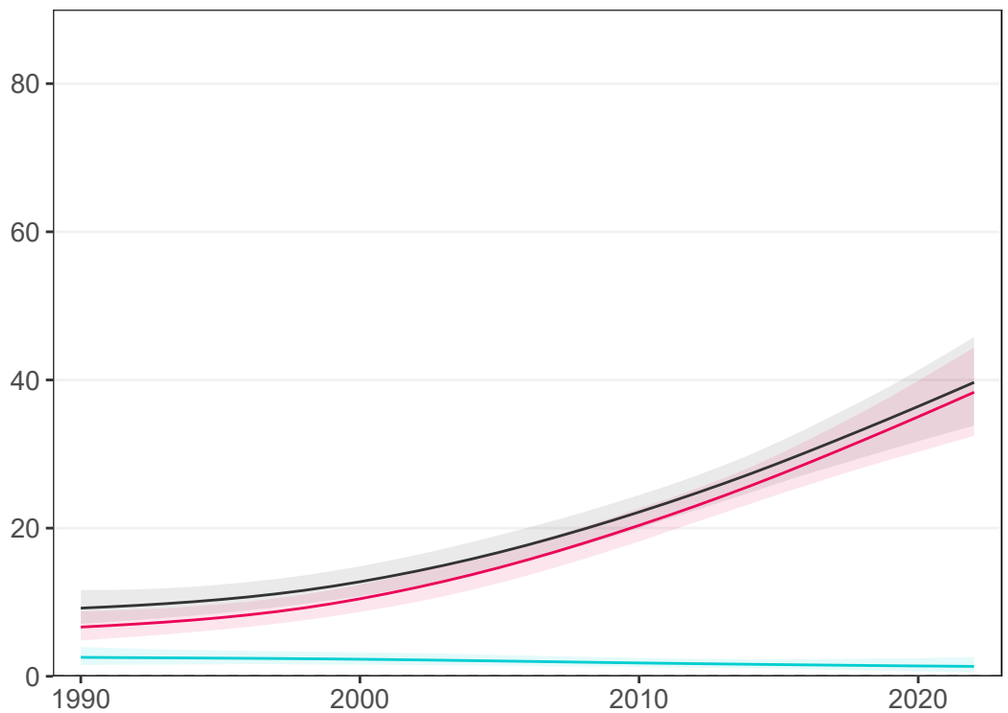
Women

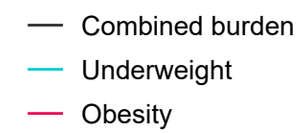
9 studies (6 national)



Men

9 studies (6 national)



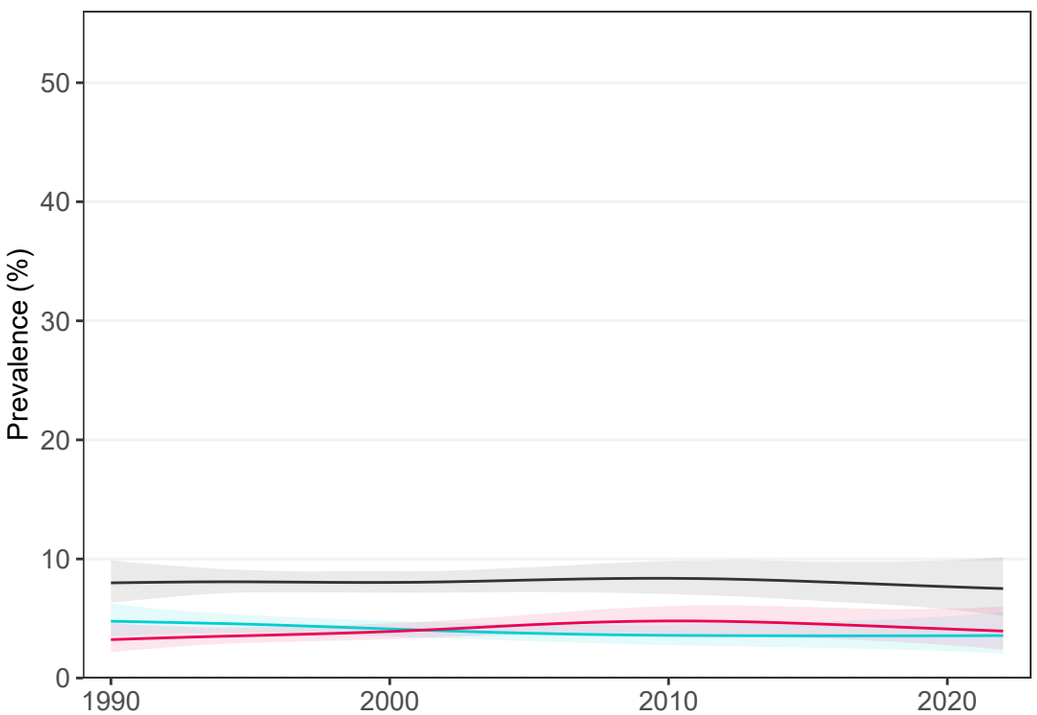


Russian Federation

School-aged children and adolescents

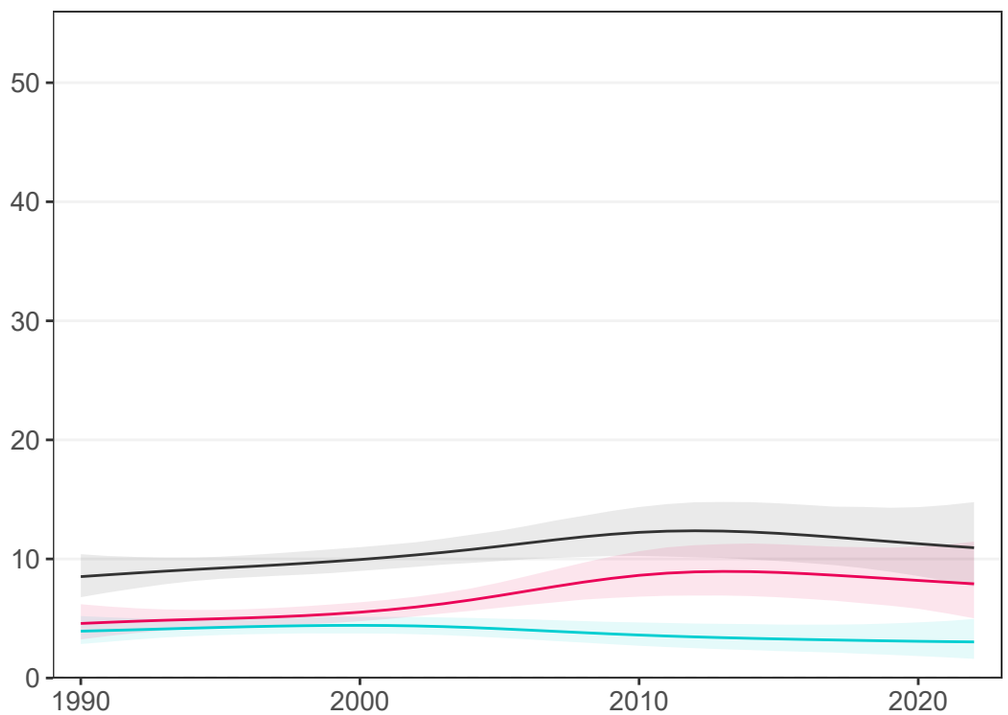
Girls

28 studies (13 national)



Boys

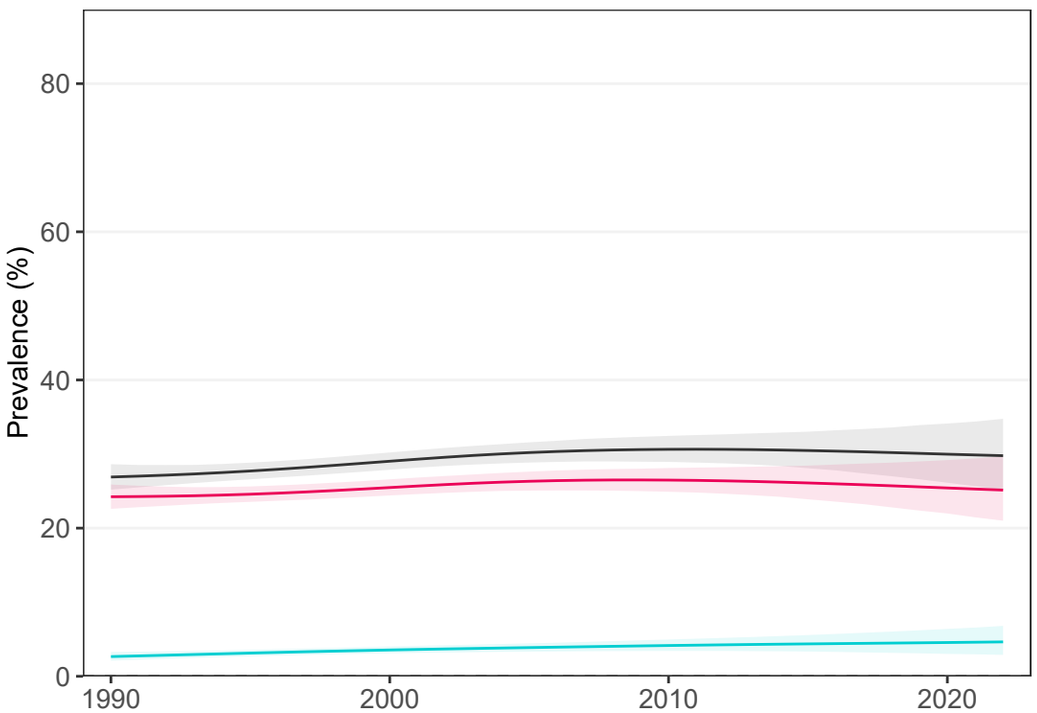
28 studies (13 national)



Adults

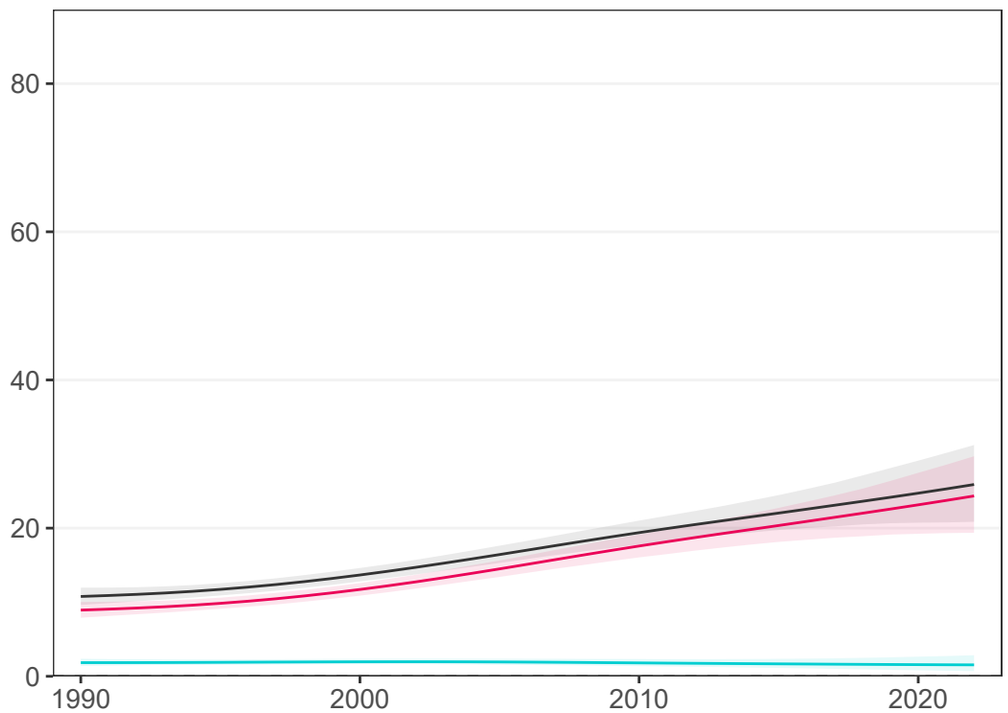
Women

41 studies (15 national)



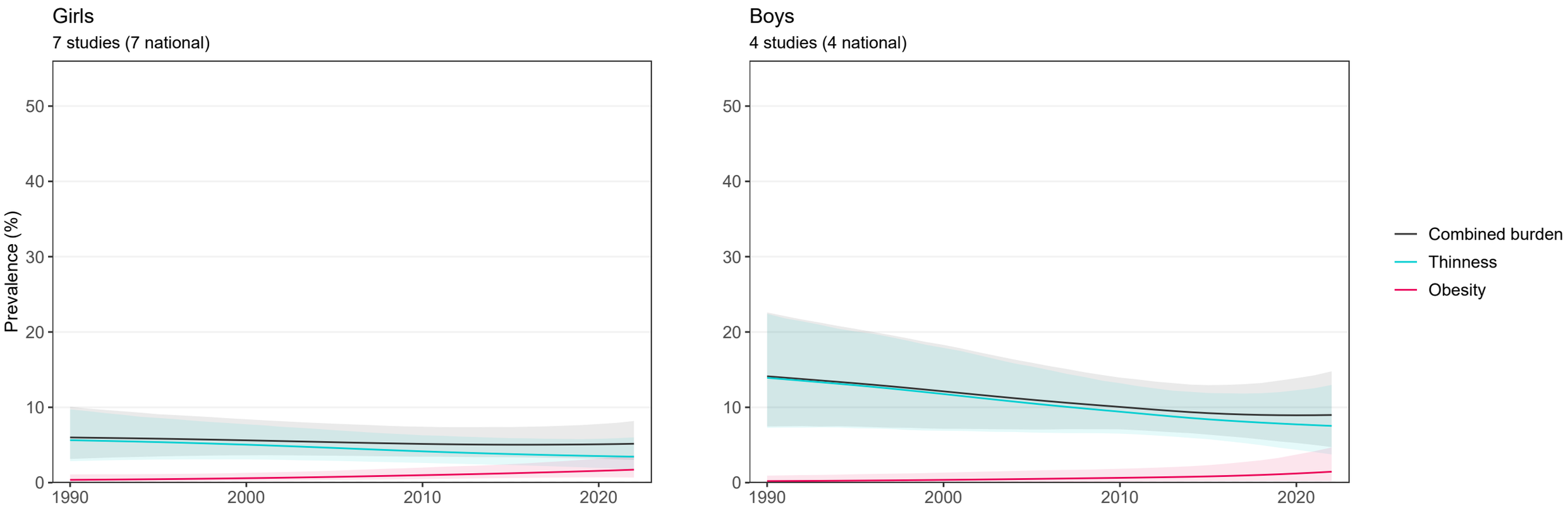
Men

42 studies (15 national)

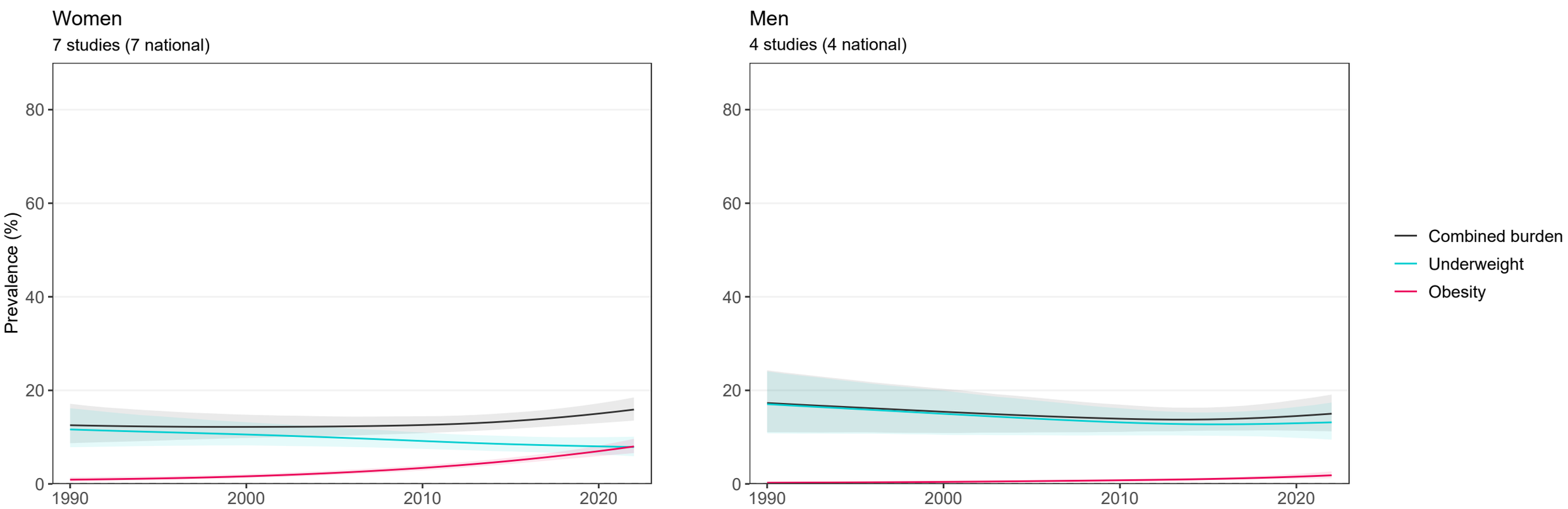


Rwanda

School-aged children and adolescents



Adults

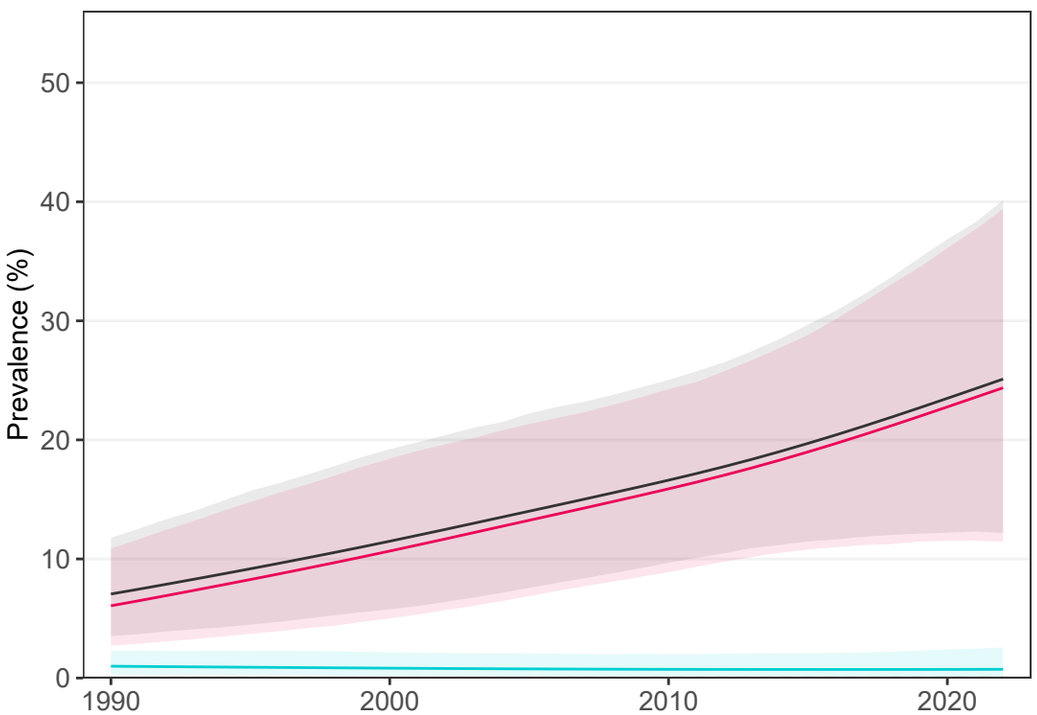


Samoa

School-aged children and adolescents

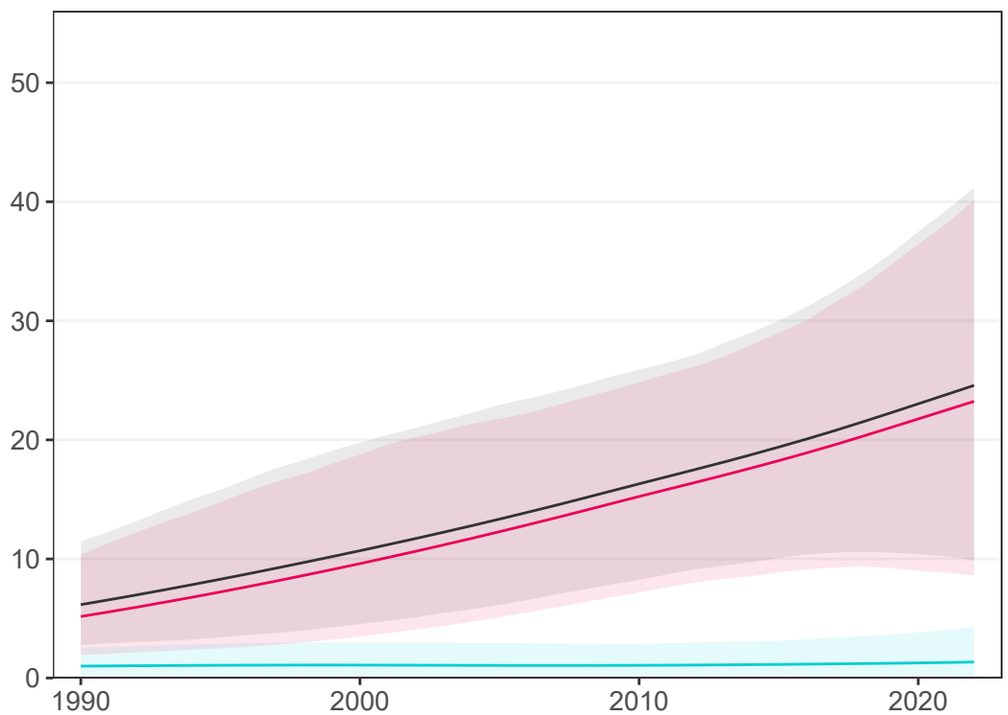
Girls

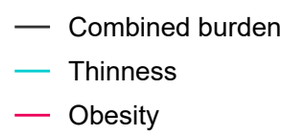
2 studies (2 national)



Boys

2 studies (2 national)

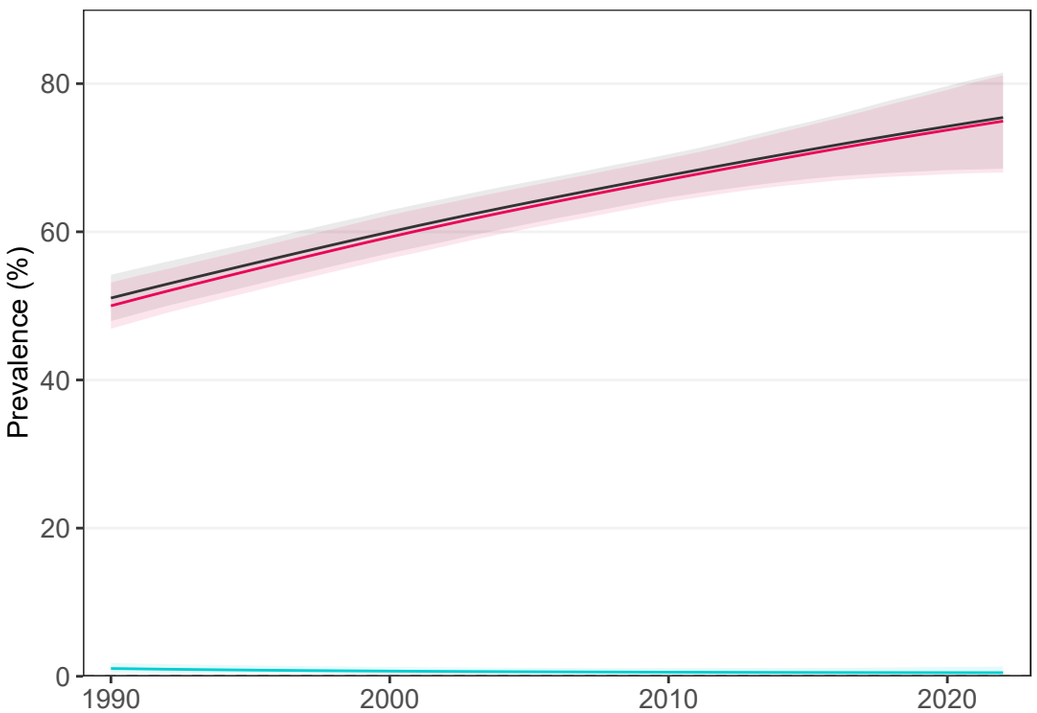




Adults

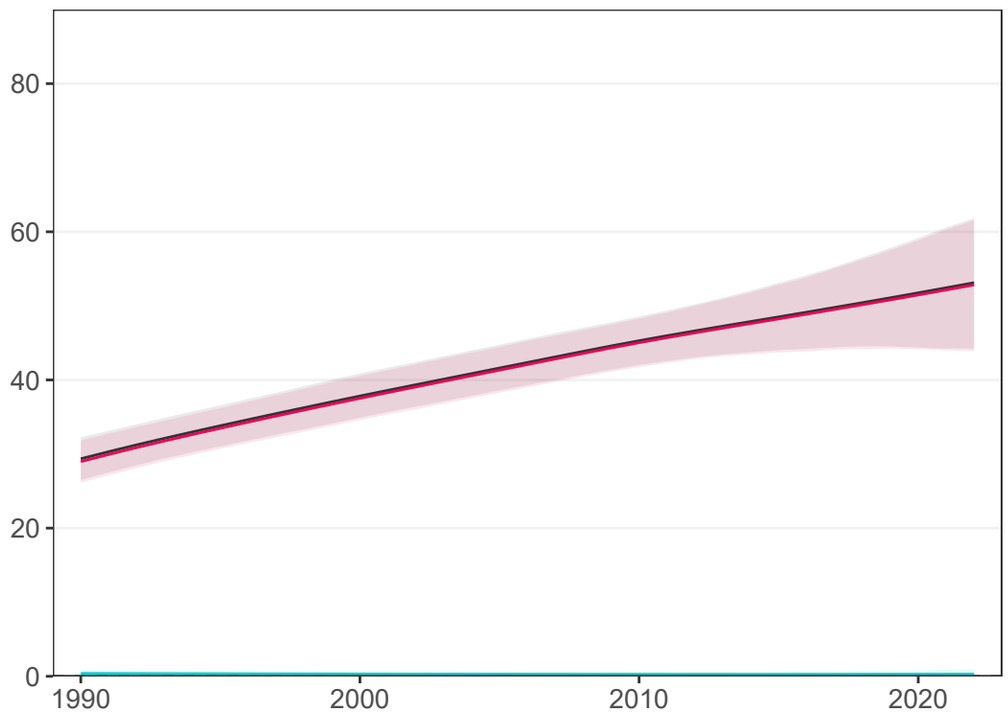
Women

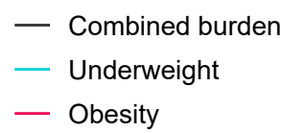
9 studies (7 national)



Men

9 studies (7 national)



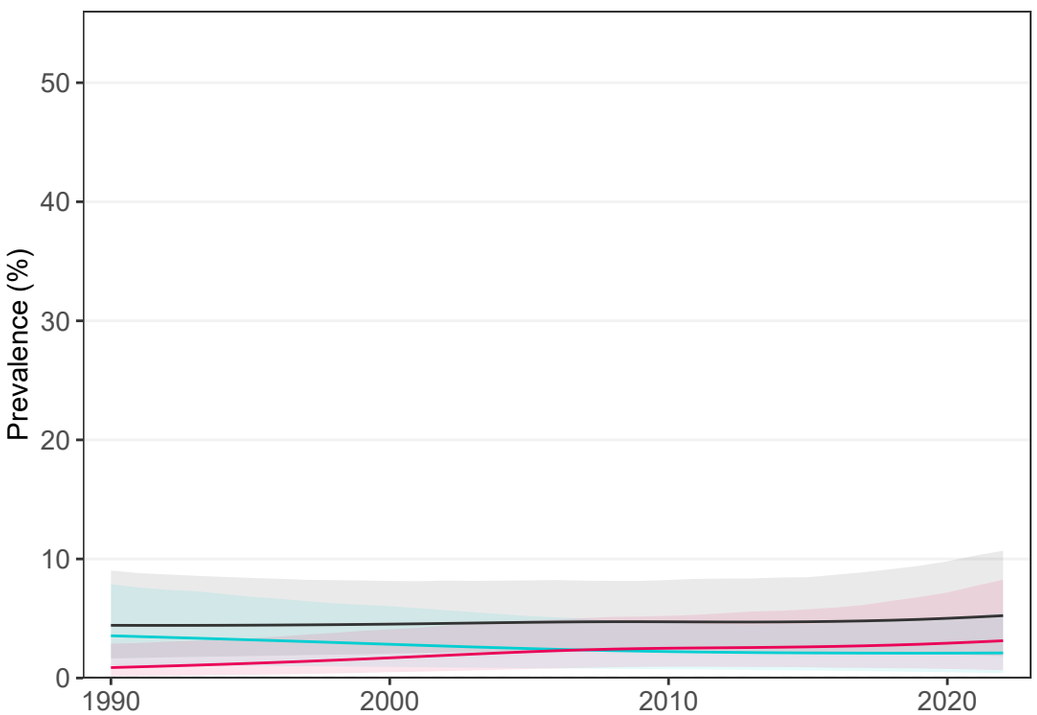


Sao Tome & Principe

School-aged children and adolescents

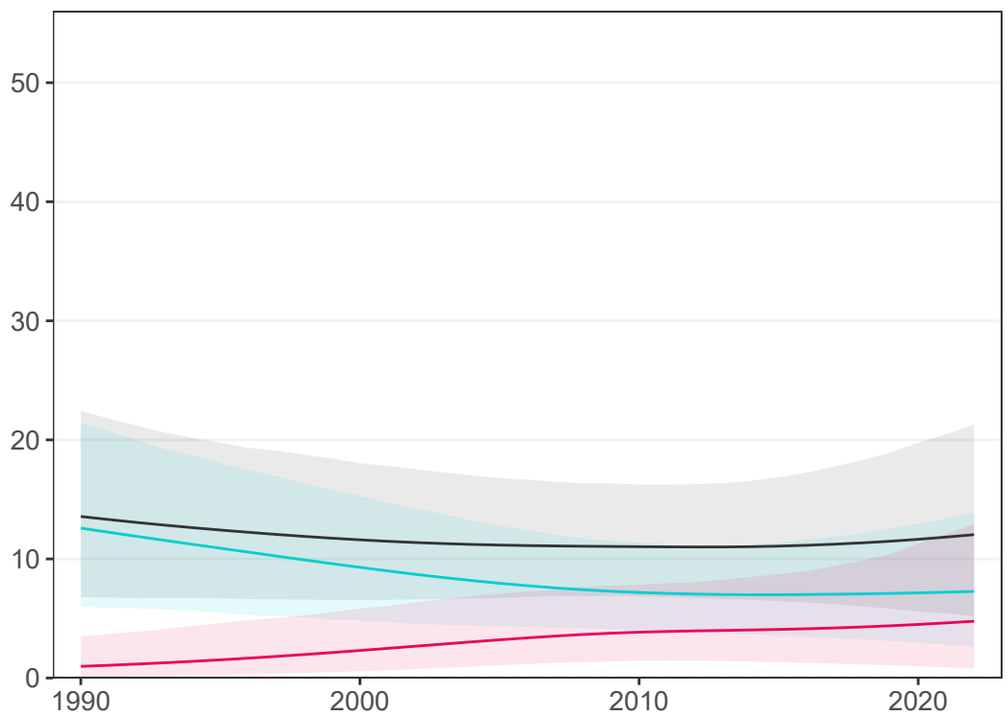
Girls

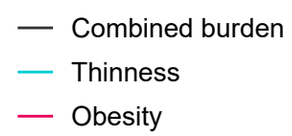
2 studies (2 national)



Boys

2 studies (2 national)

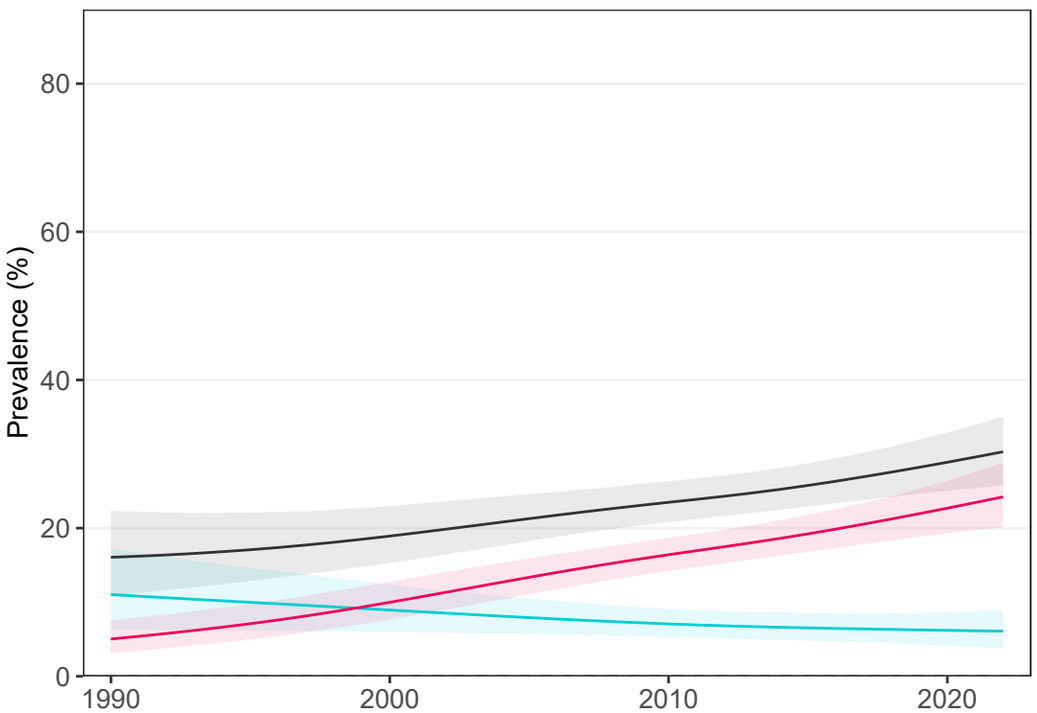




Adults

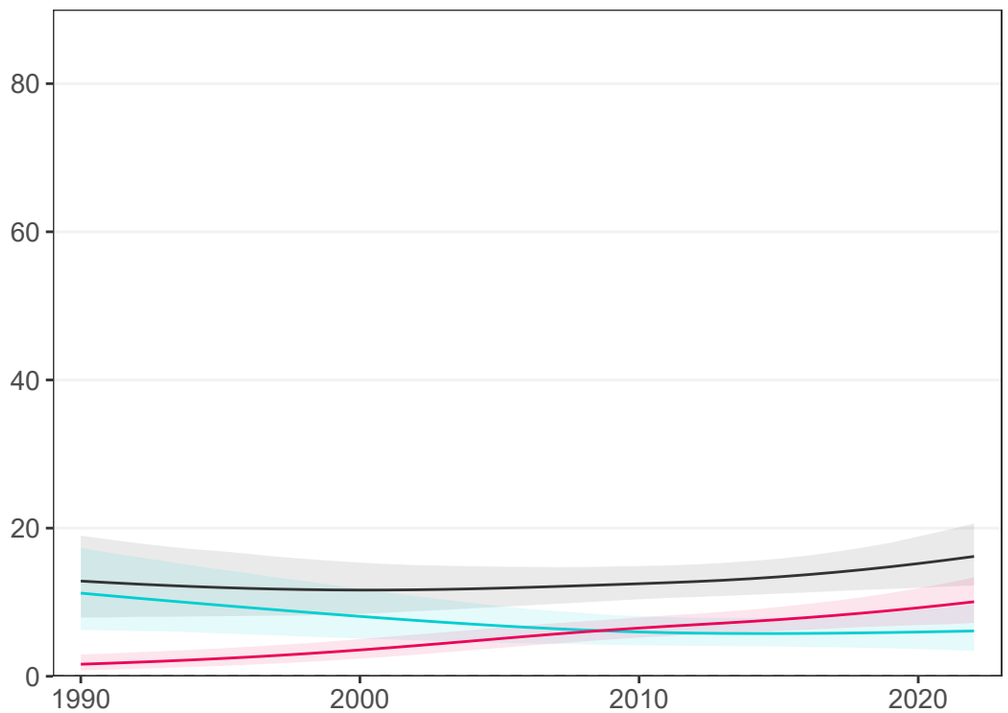
Women

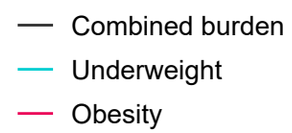
3 studies (3 national)



Men

3 studies (3 national)



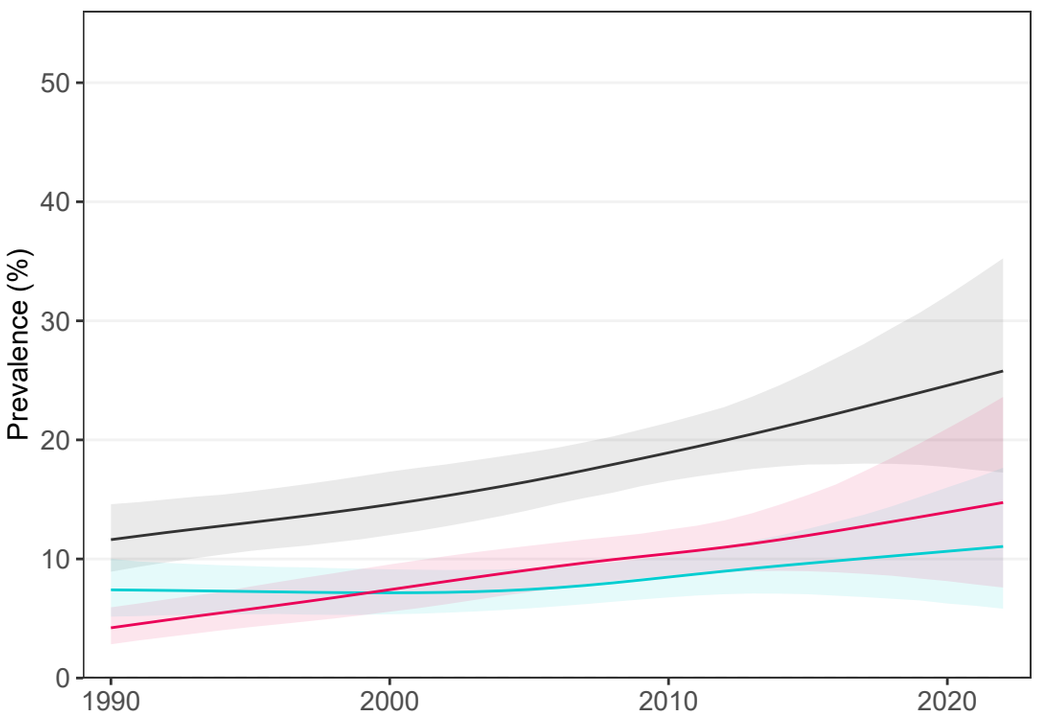


Saudi Arabia

School-aged children and adolescents

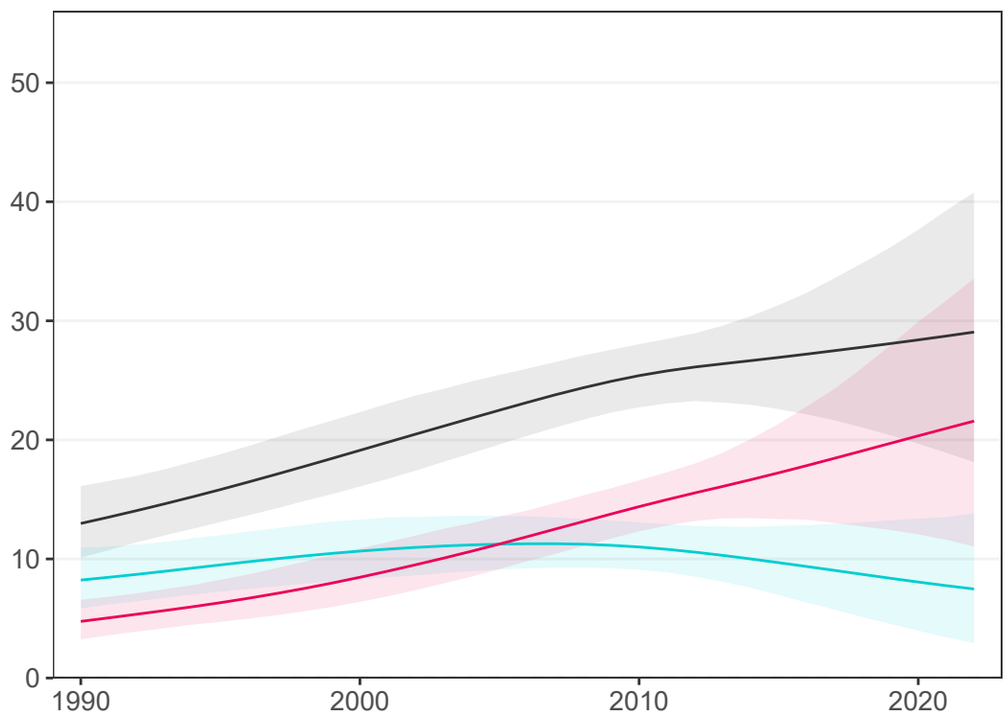
Girls

9 studies (7 national)



Boys

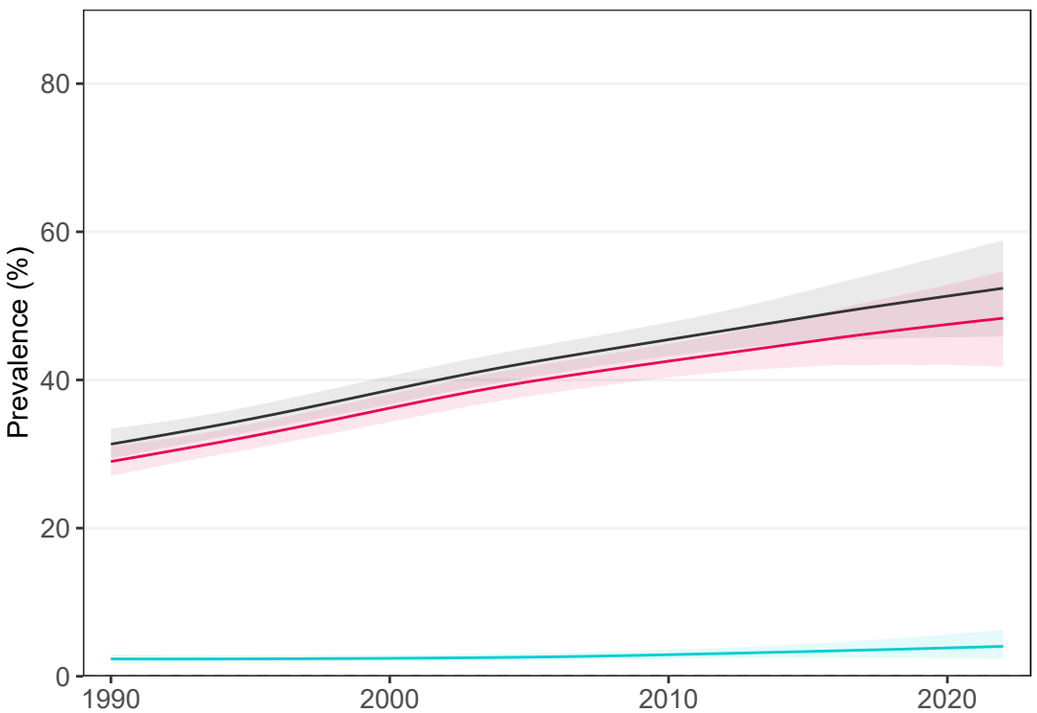
9 studies (7 national)



Adults

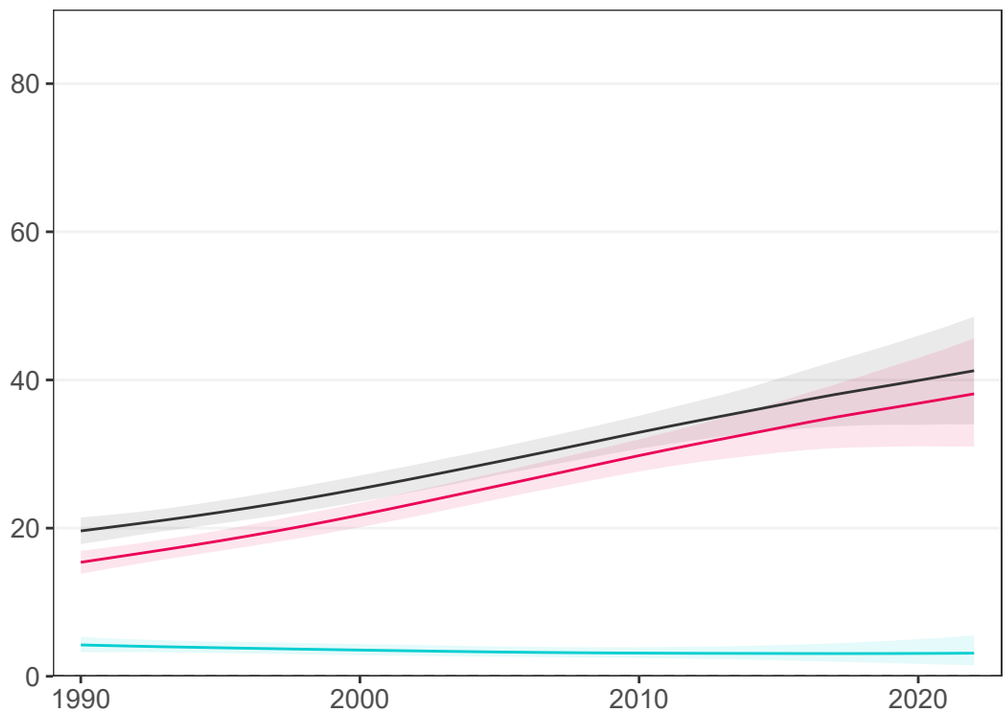
Women

15 studies (12 national)



Men

15 studies (12 national)

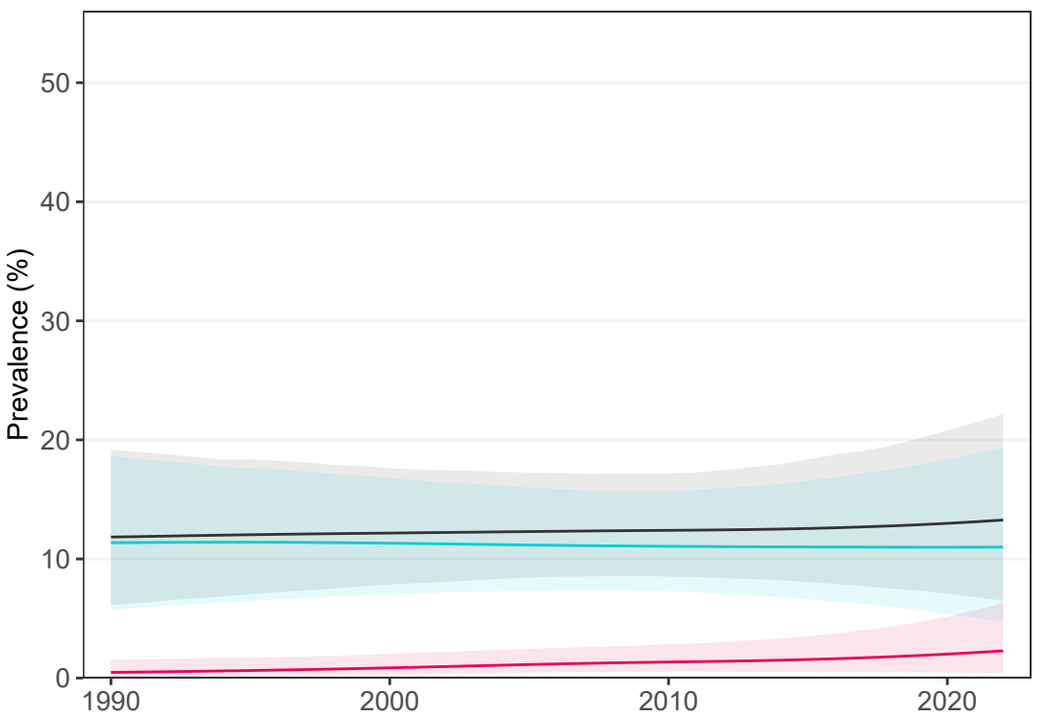


Senegal

School-aged children and adolescents

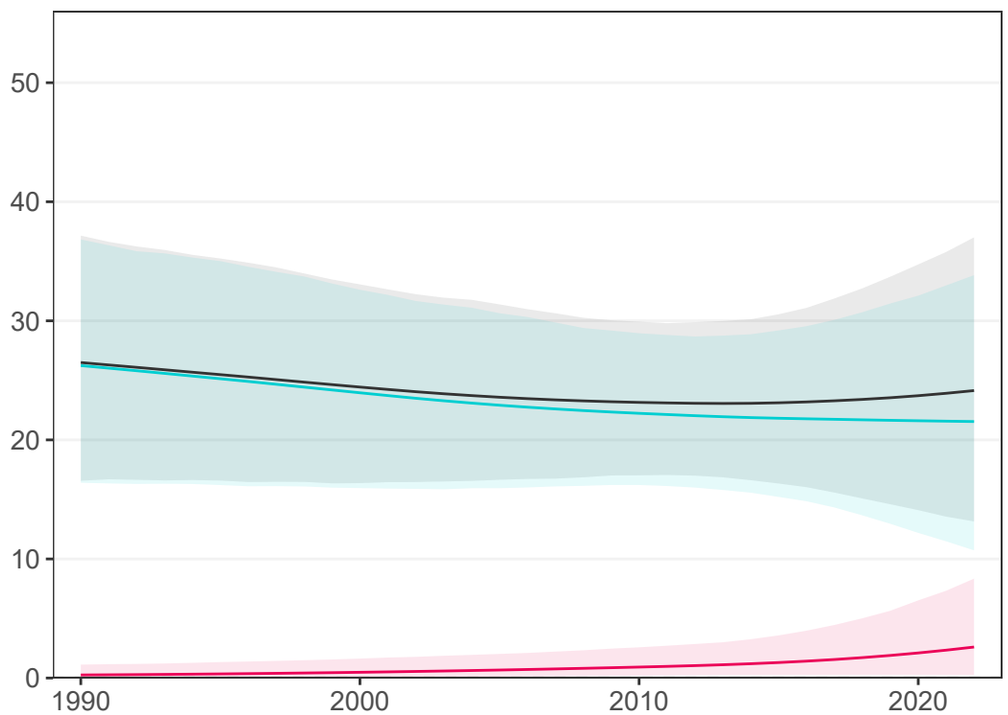
Girls

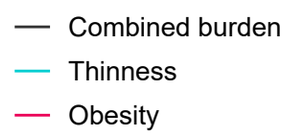
3 studies (2 national)



Boys

2 studies (1 national)

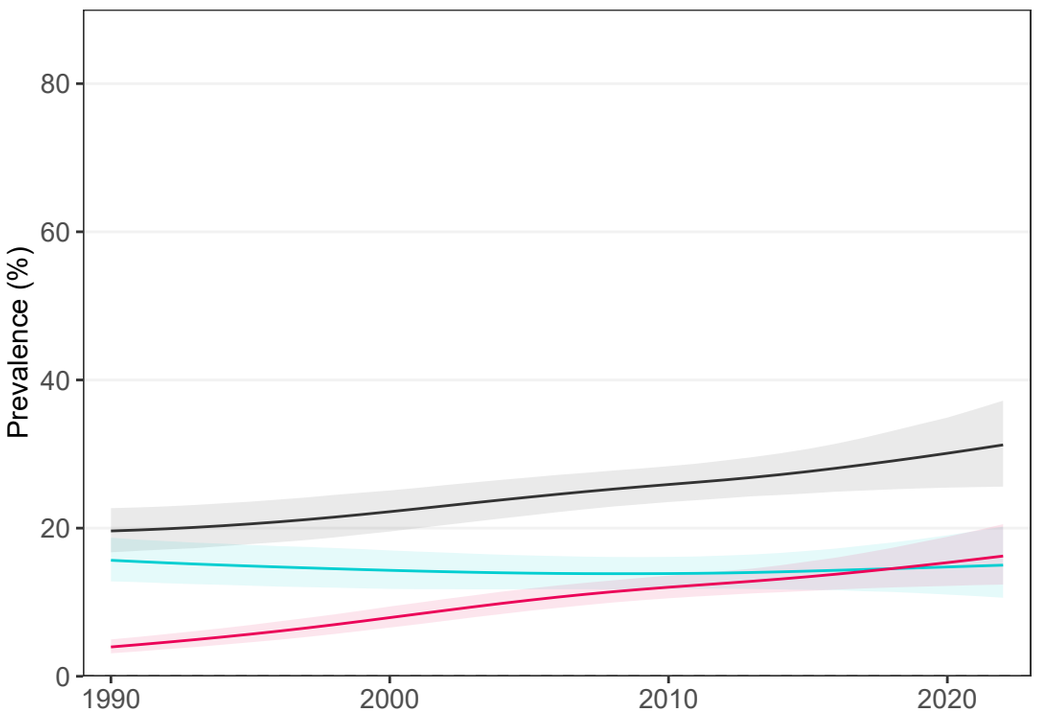




Adults

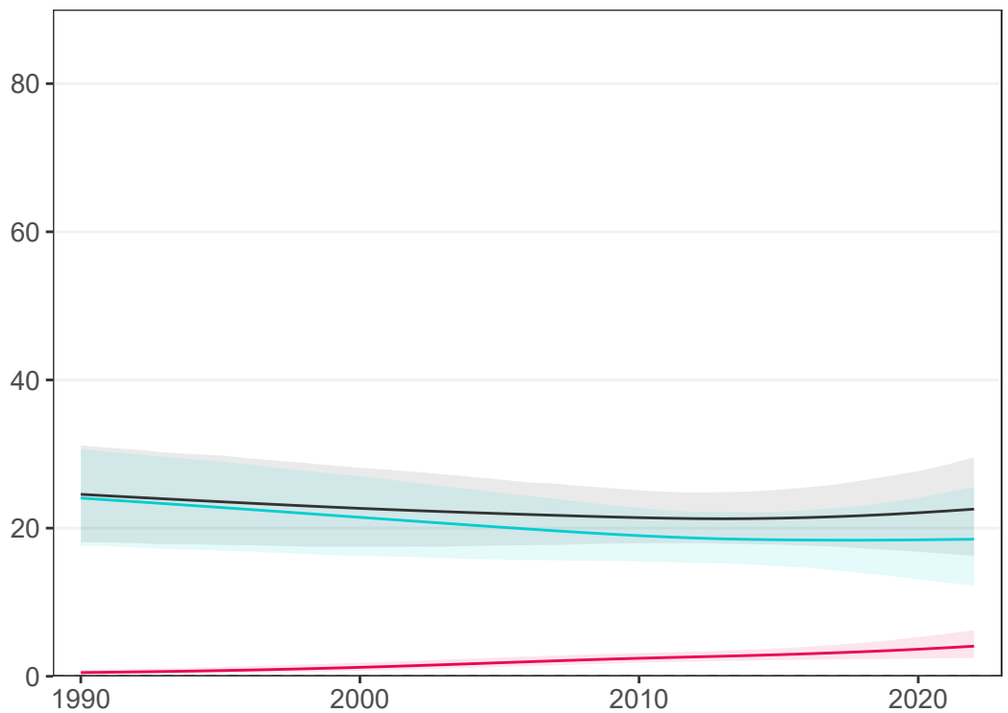
Women

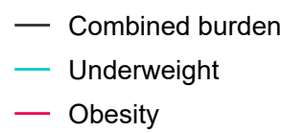
10 studies (5 national)



Men

5 studies (2 national)



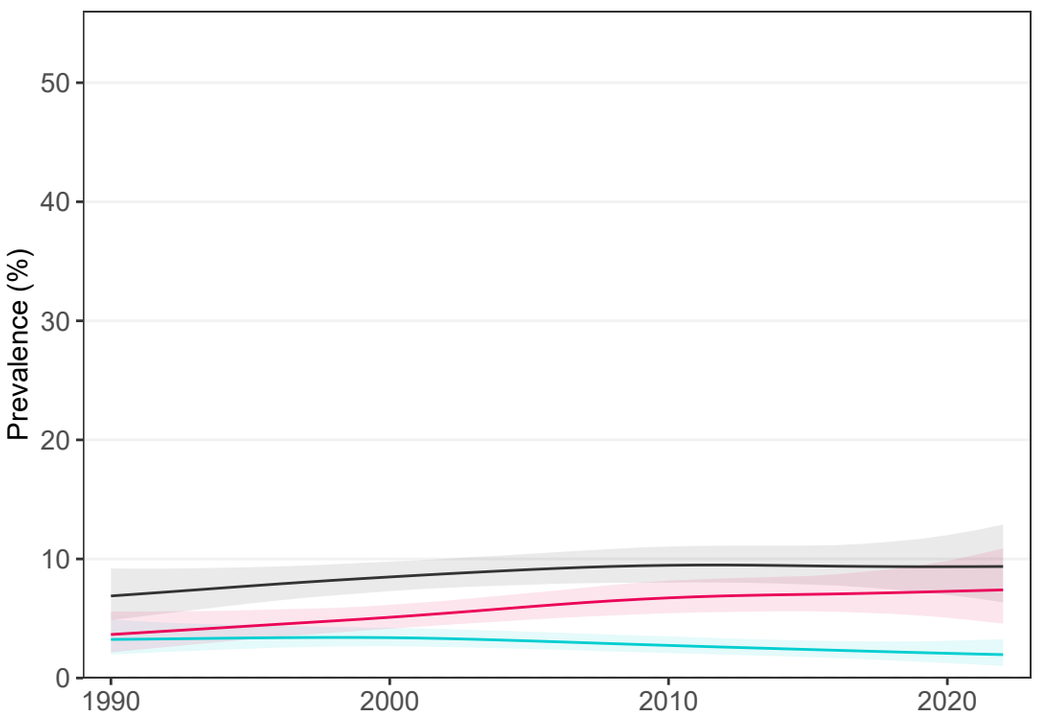


Serbia

School-aged children and adolescents

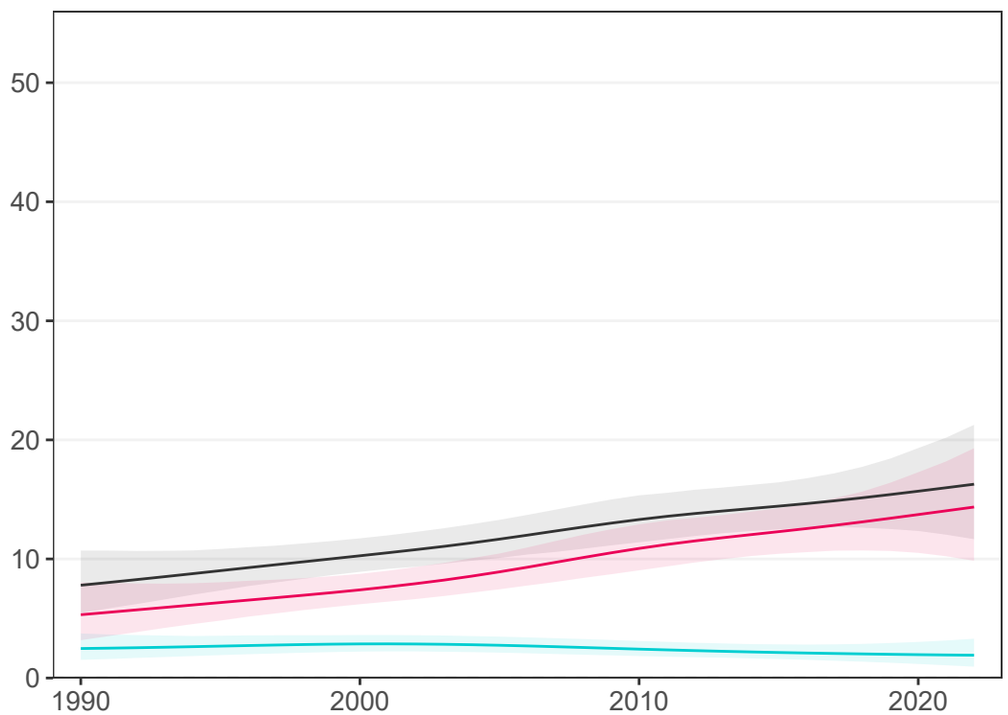
Girls

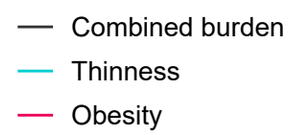
24 studies (7 national)



Boys

25 studies (8 national)

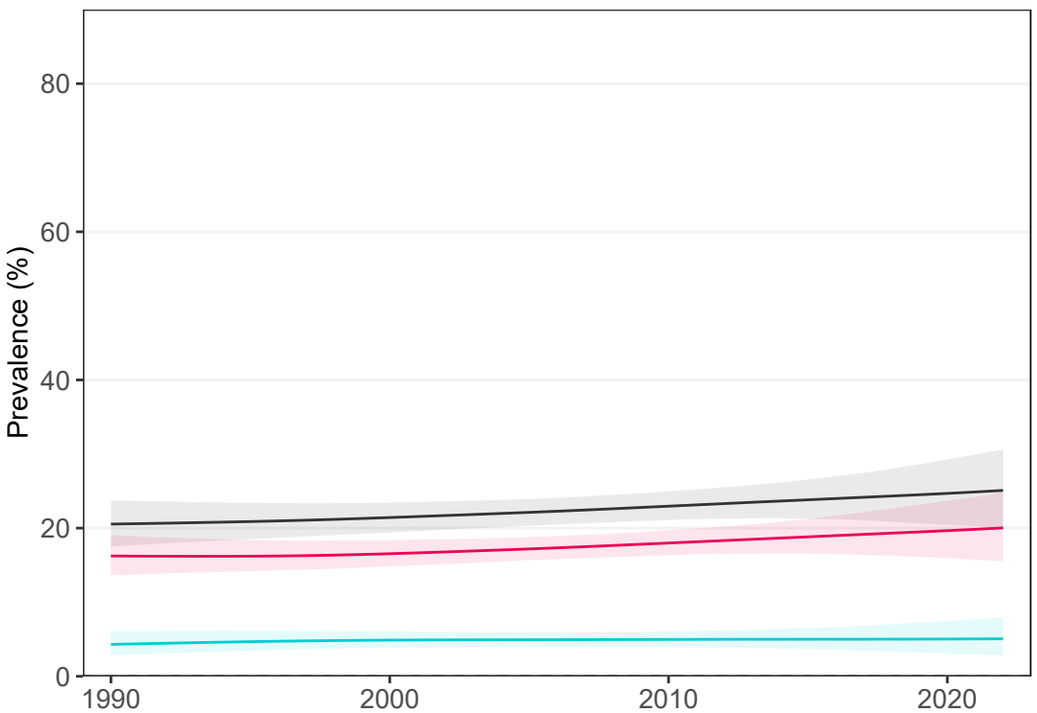




Adults

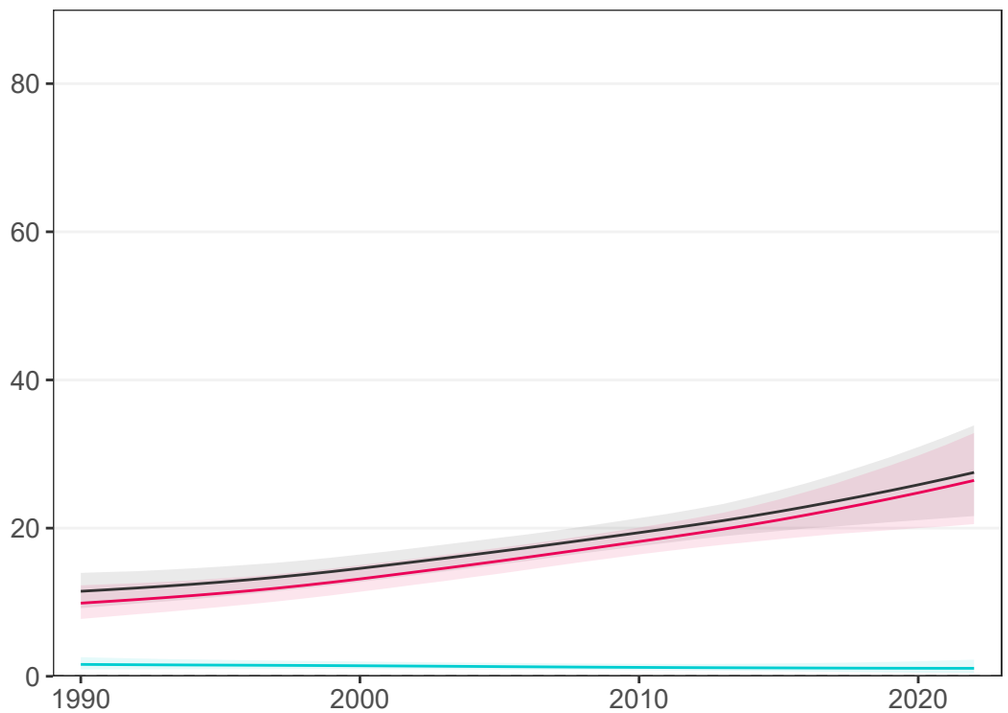
Women

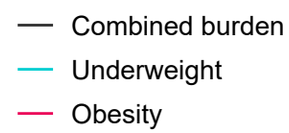
12 studies (4 national)



Men

12 studies (4 national)



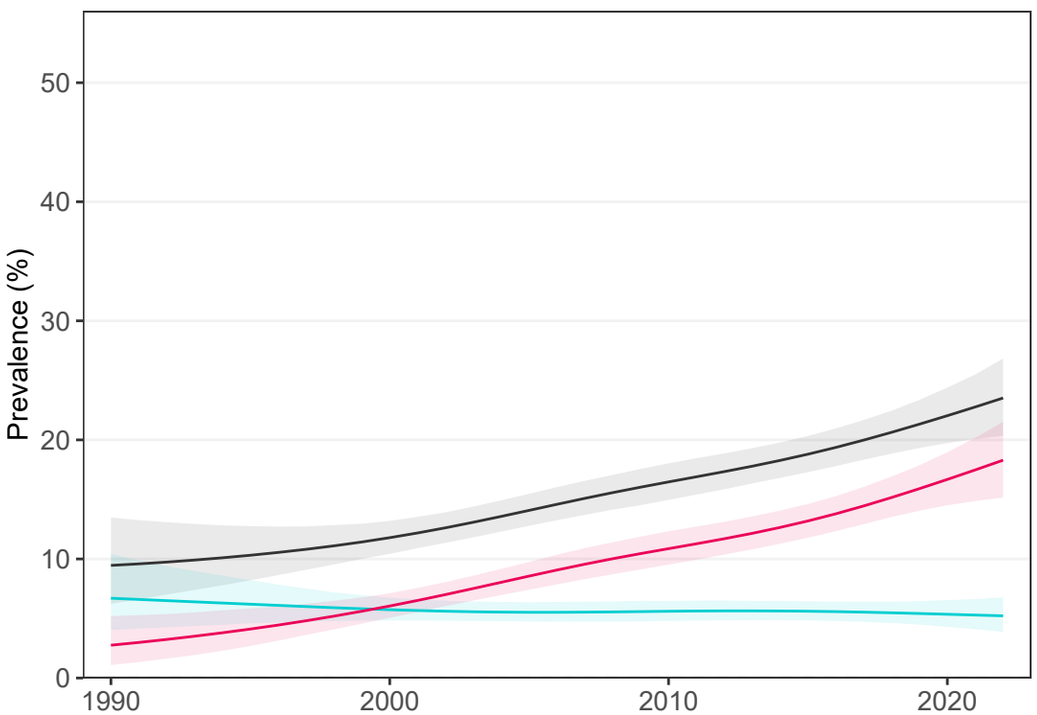


Seychelles

School-aged children and adolescents

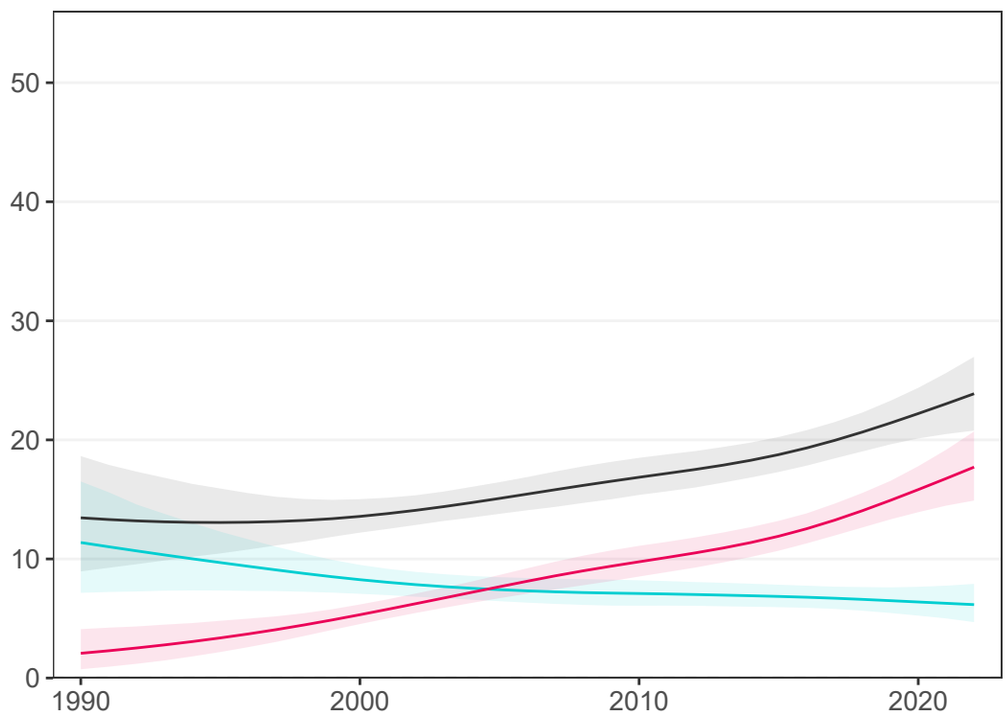
Girls

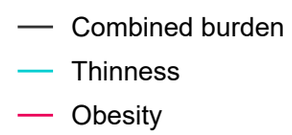
22 studies (22 national)



Boys

22 studies (22 national)

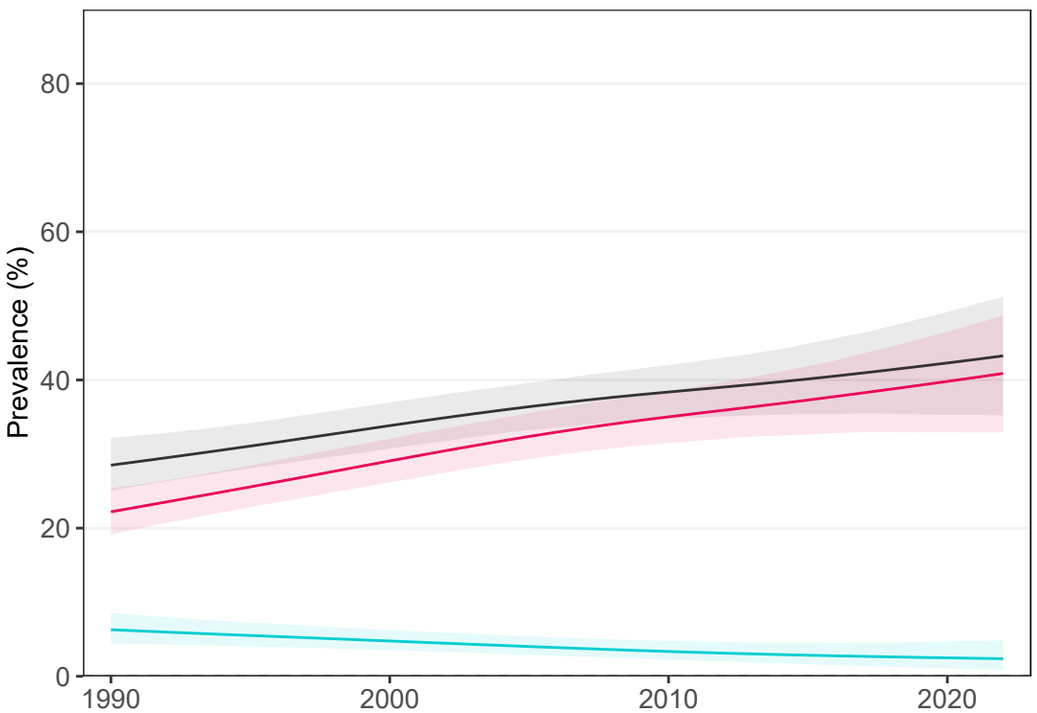




Adults

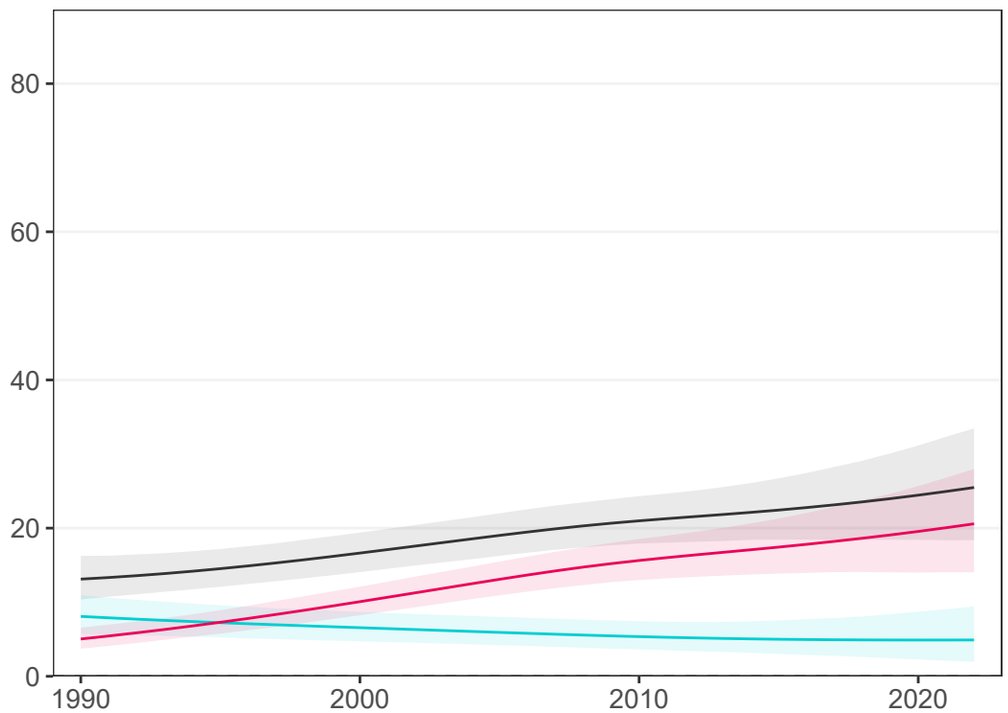
Women

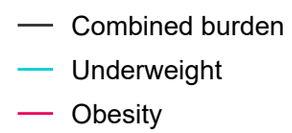
5 studies (5 national)



Men

5 studies (5 national)



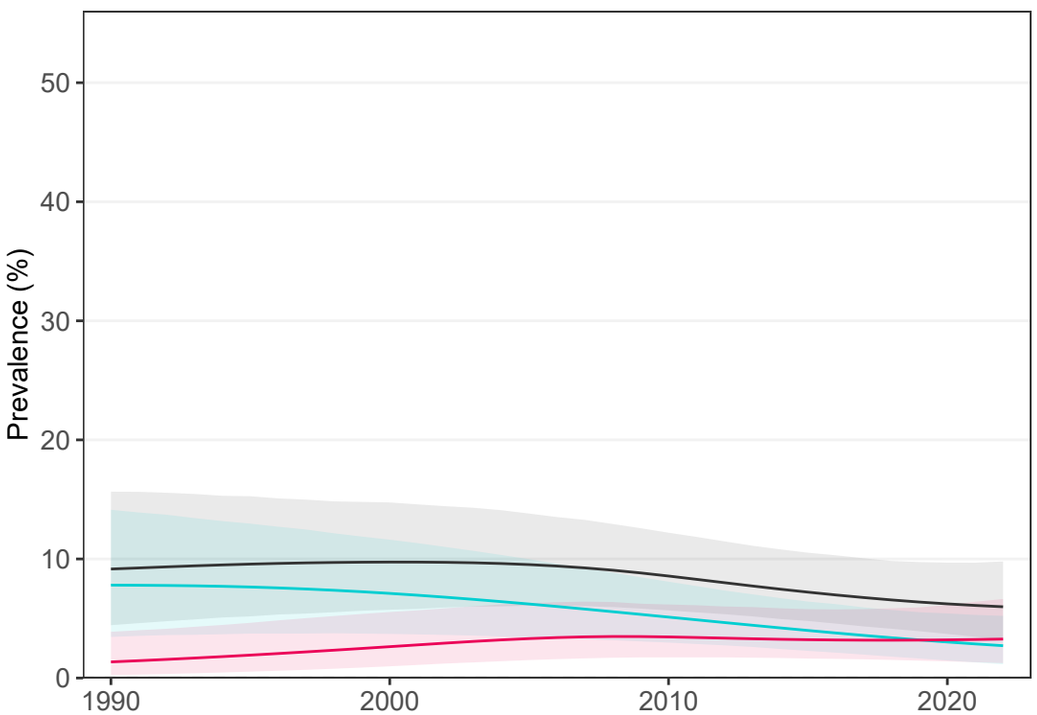


Sierra Leone

School-aged children and adolescents

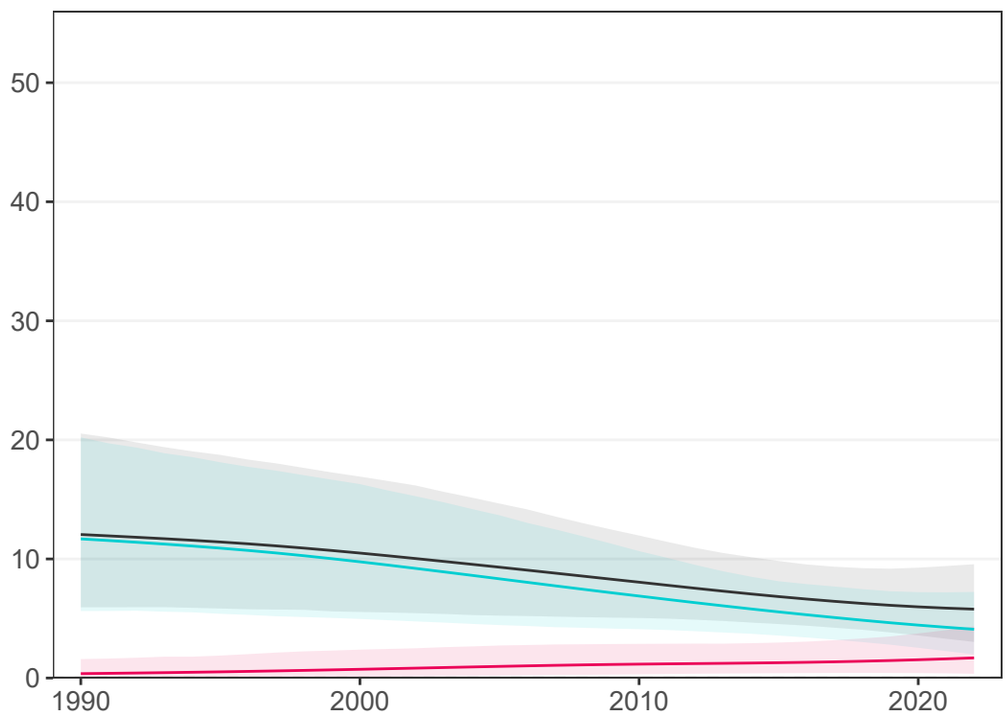
Girls

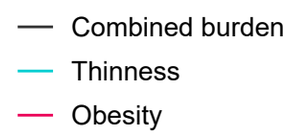
3 studies (3 national)



Boys

2 studies (2 national)

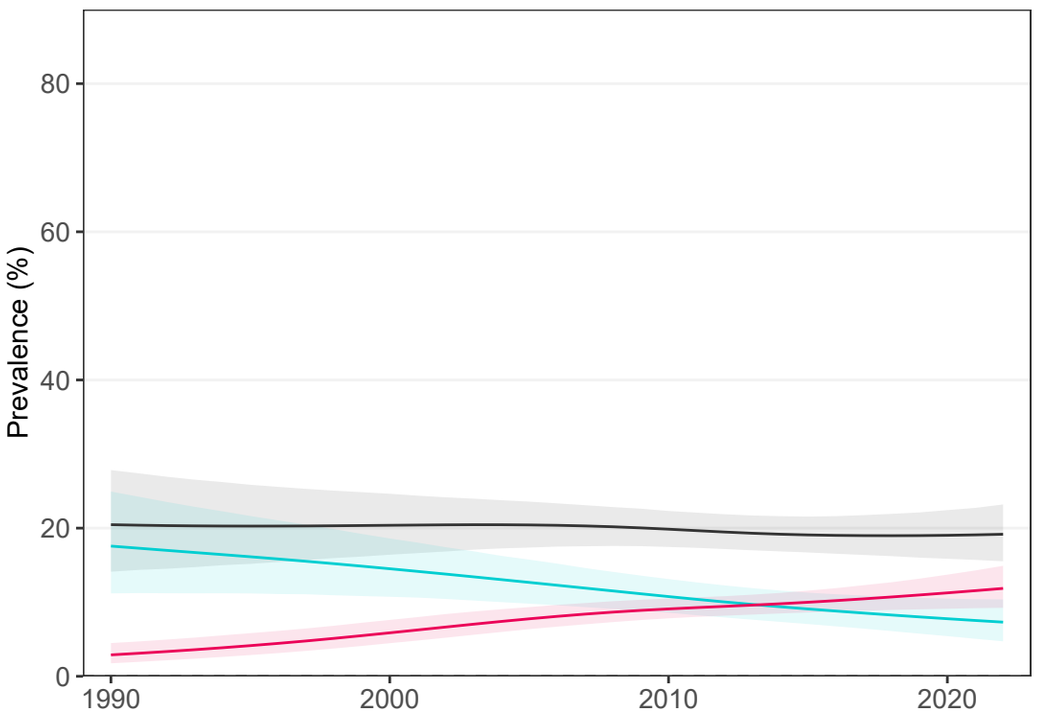




Adults

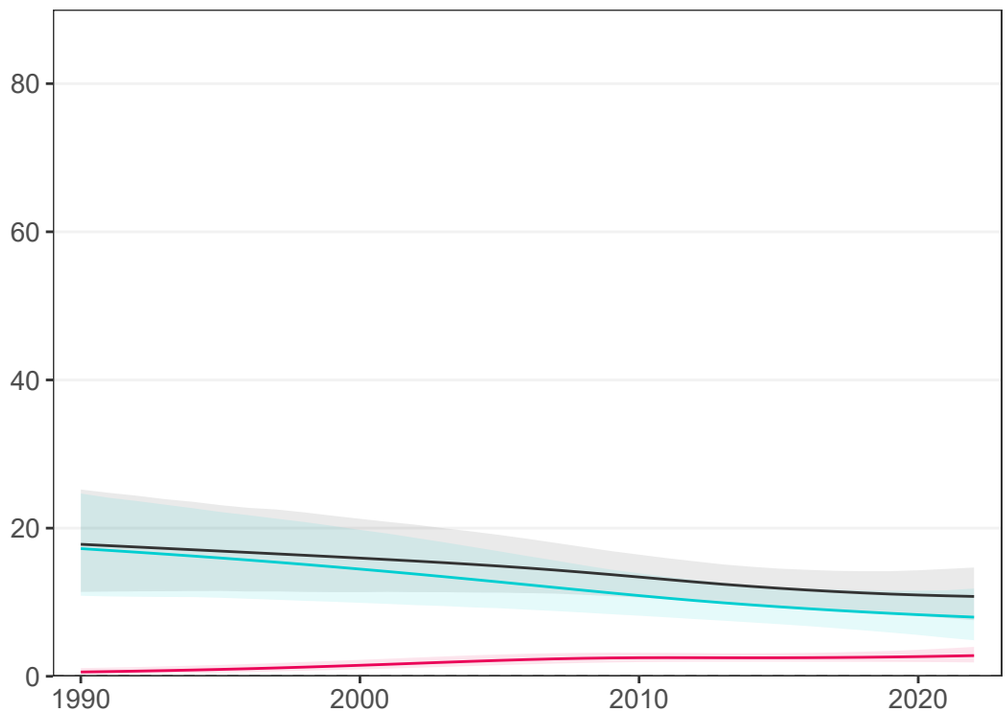
Women

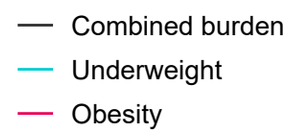
4 studies (4 national)



Men

3 studies (3 national)



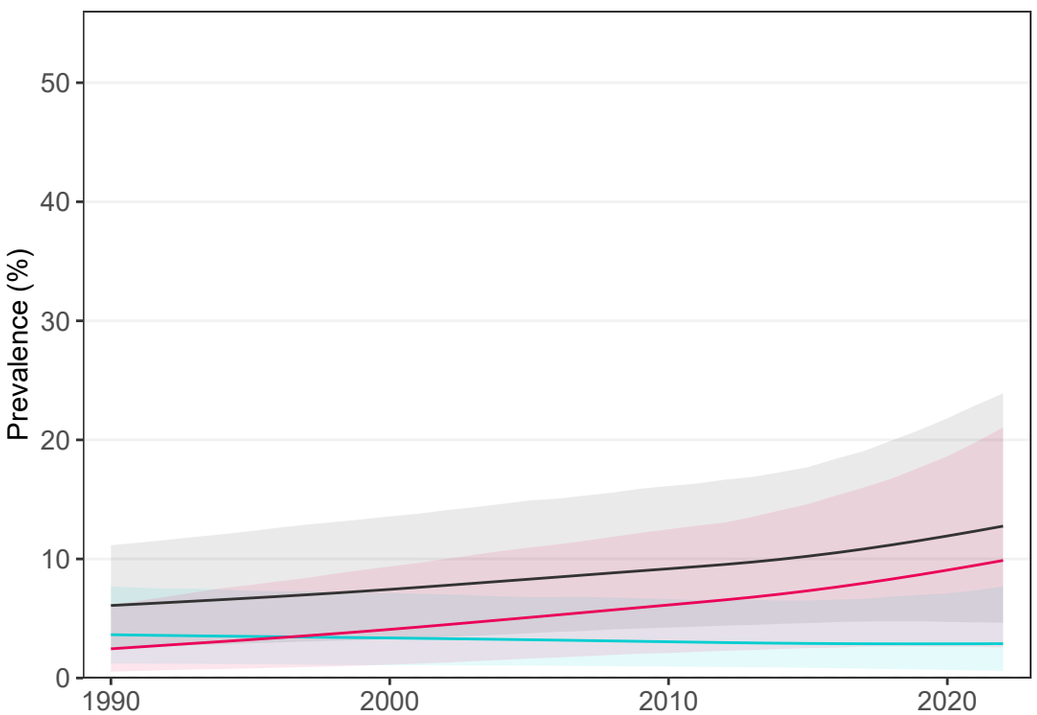


Singapore

School-aged children and adolescents

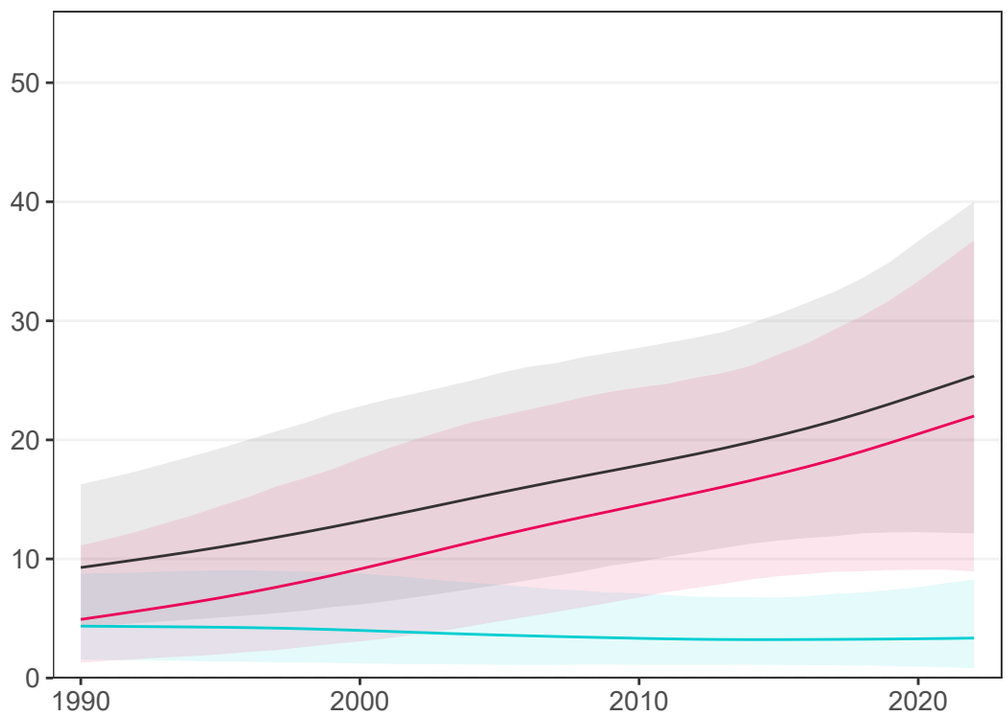
Girls

3 studies (3 national)



Boys

3 studies (3 national)

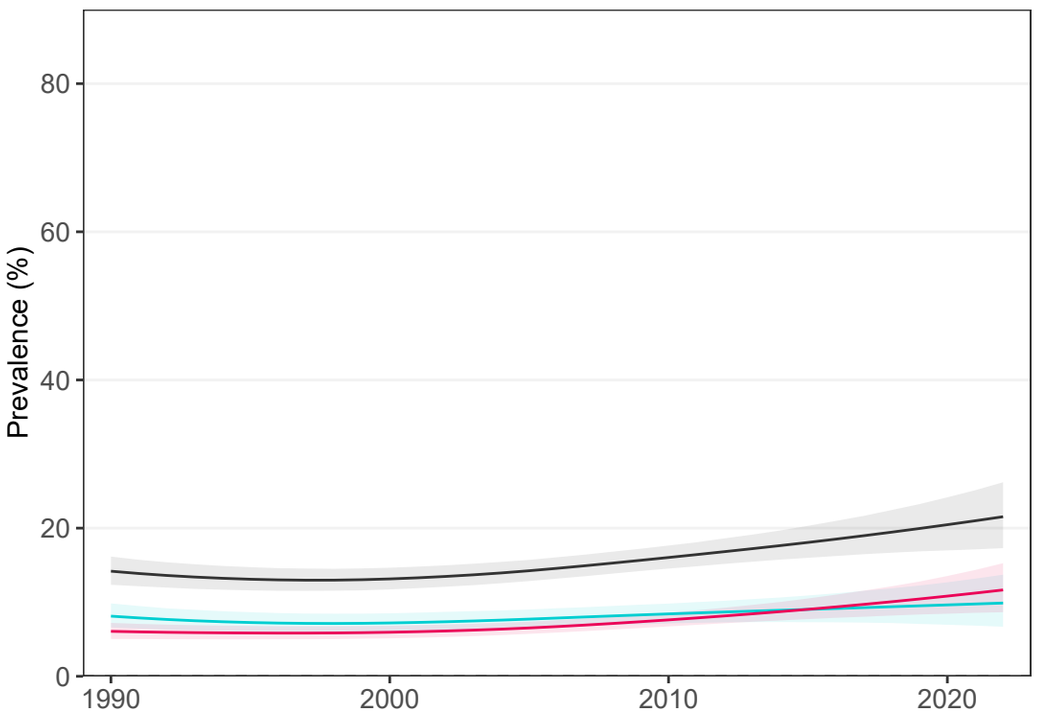


Combined burden
Thinness
Obesity

Adults

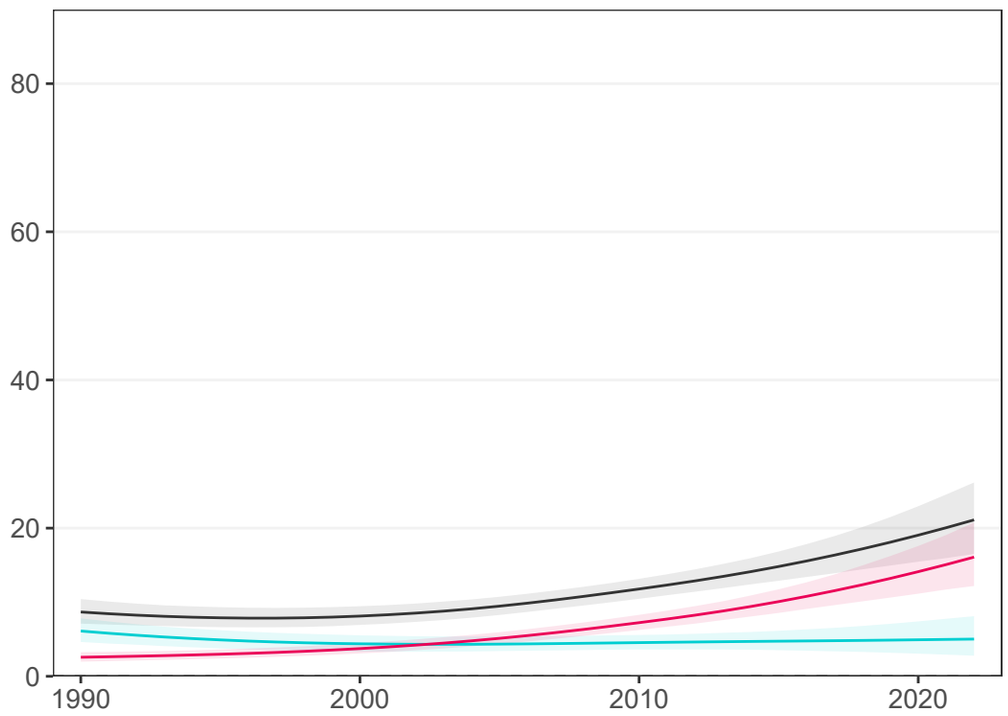
Women

14 studies (10 national)



Men

14 studies (10 national)



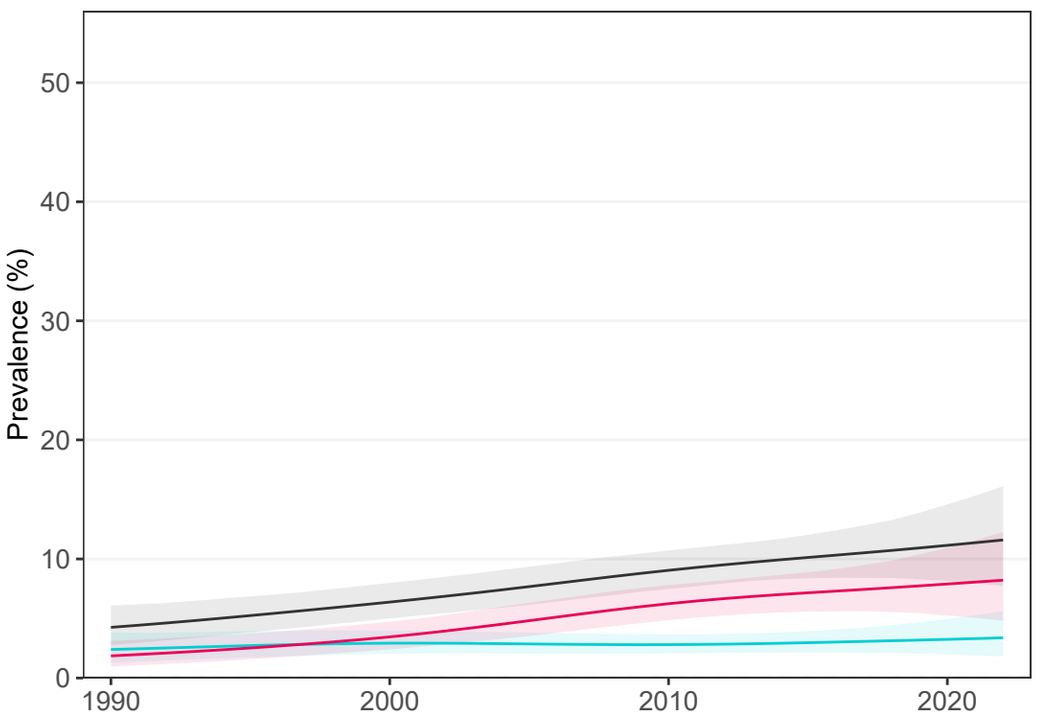
Combined burden
Underweight
Obesity

Slovakia

School-aged children and adolescents

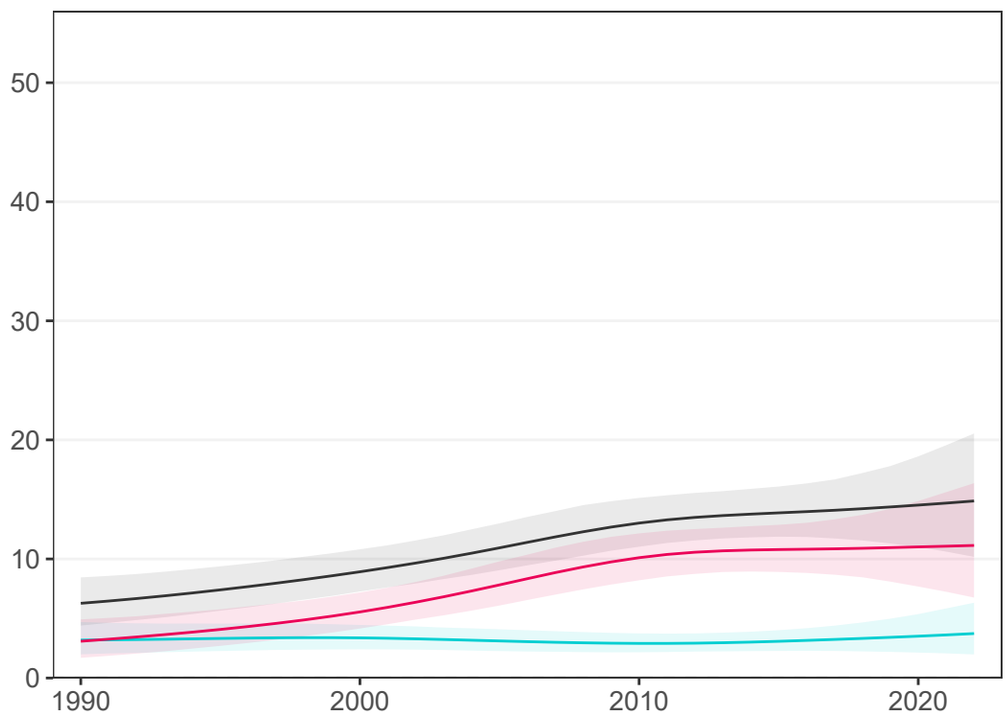
Girls

11 studies (10 national)



Boys

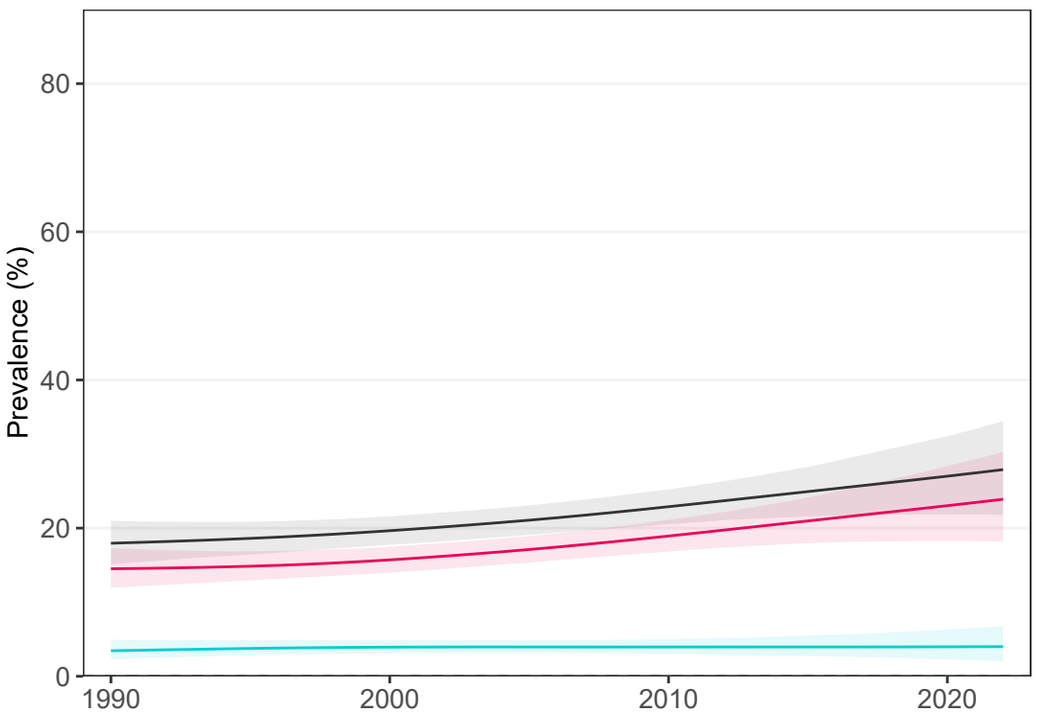
11 studies (10 national)



Adults

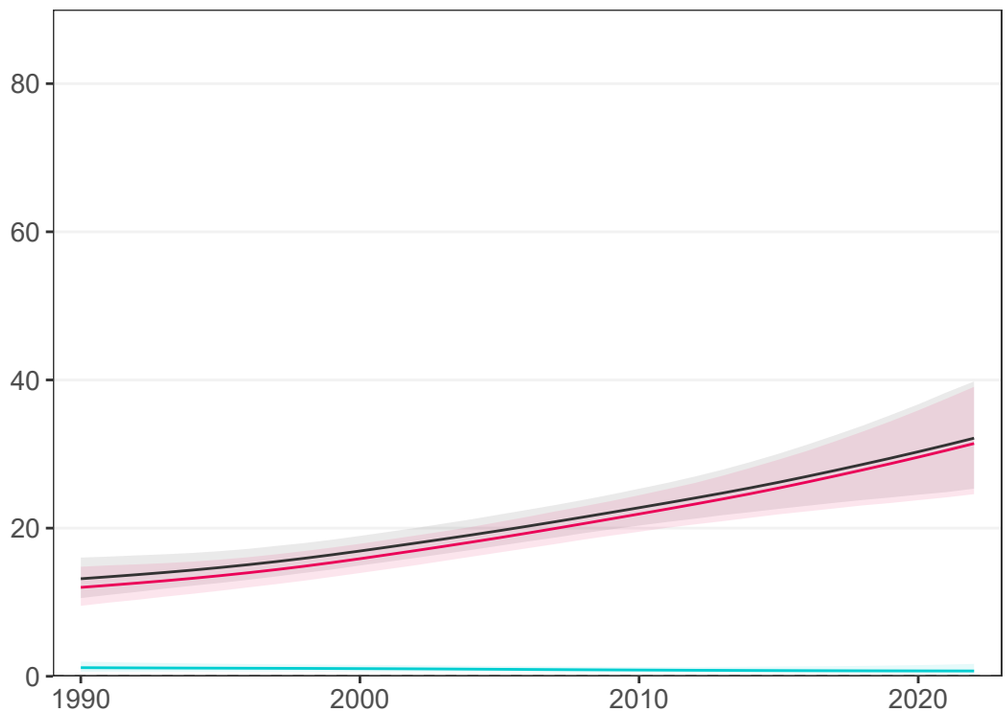
Women

7 studies (7 national)



Men

7 studies (7 national)

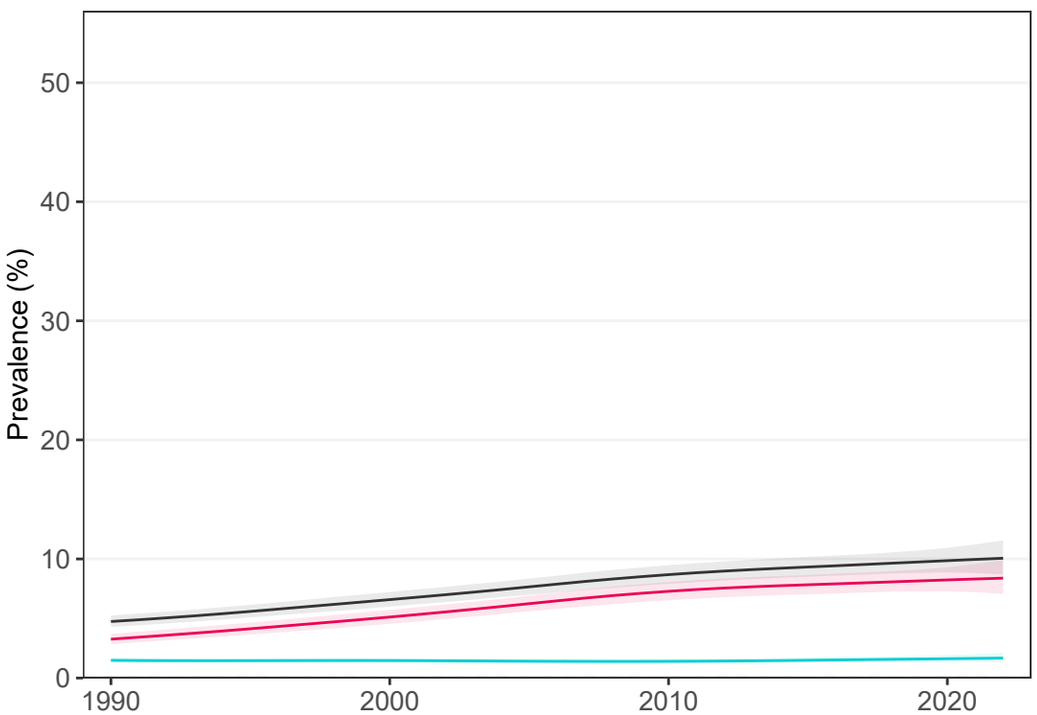


Slovenia

School-aged children and adolescents

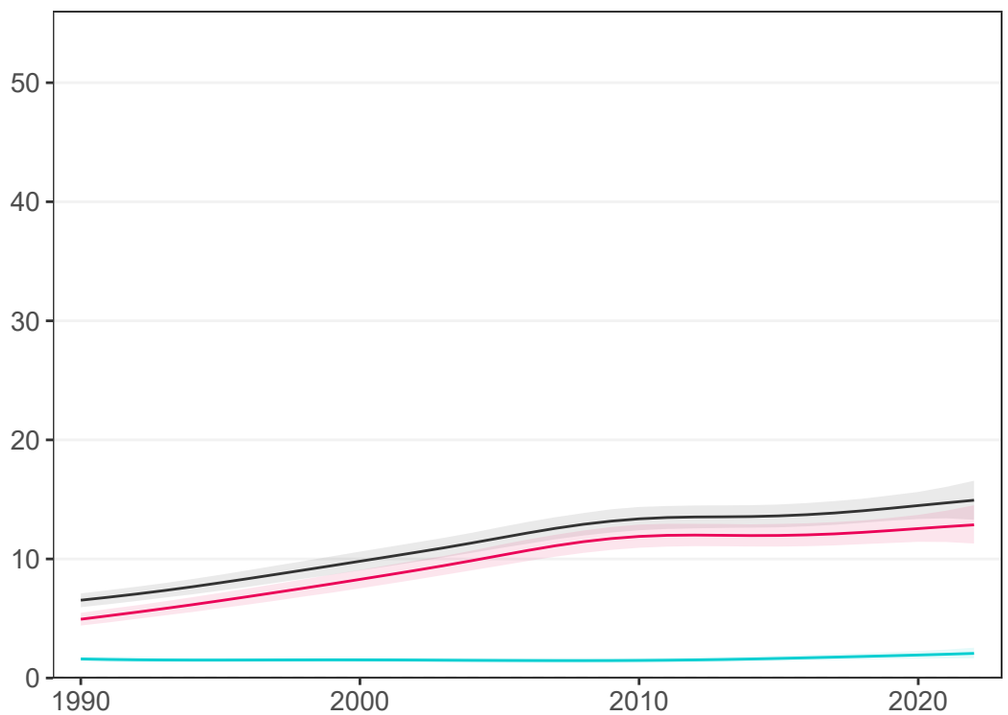
Girls

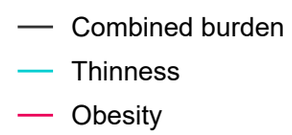
52 studies (50 national)



Boys

52 studies (50 national)

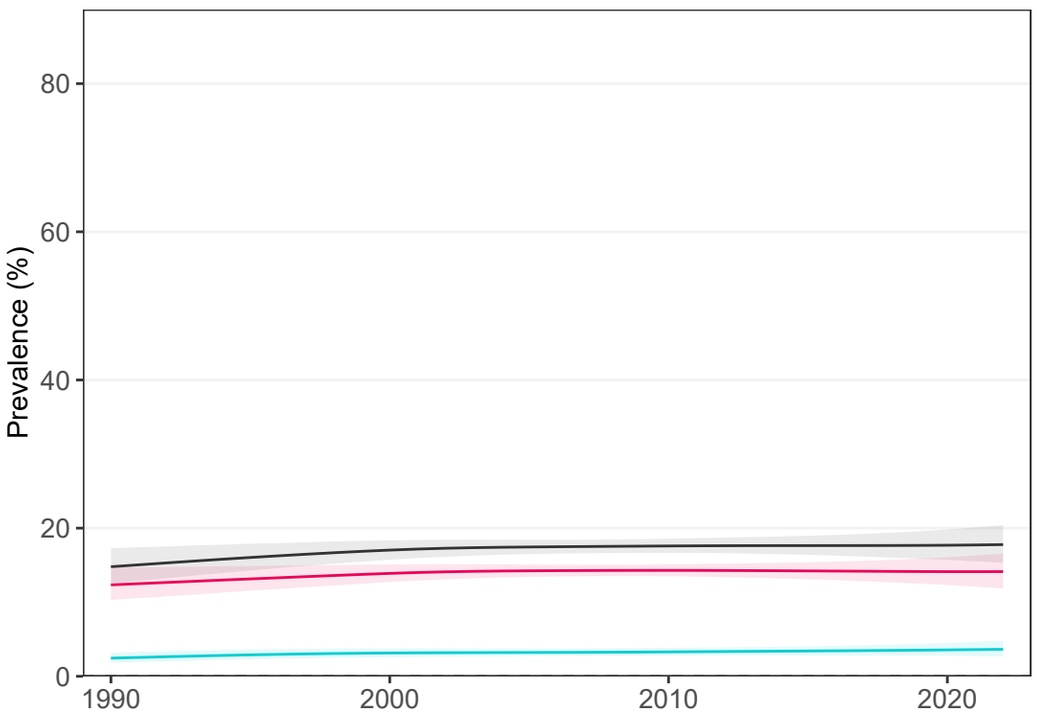




Adults

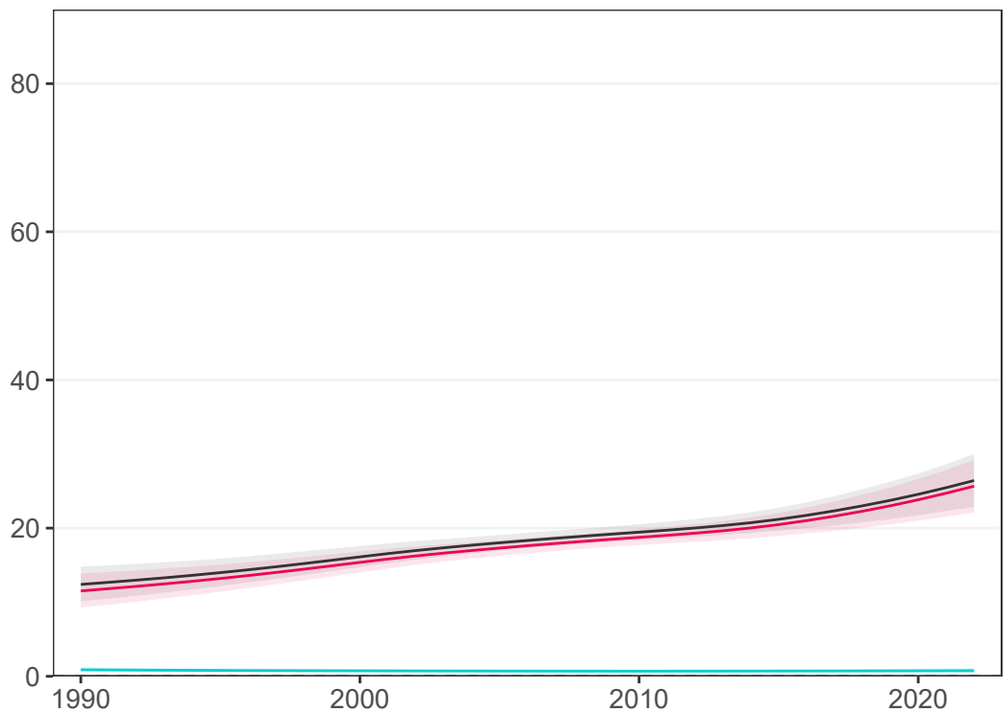
Women

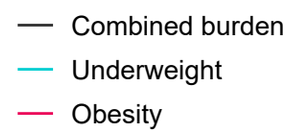
60 studies (58 national)



Men

60 studies (58 national)



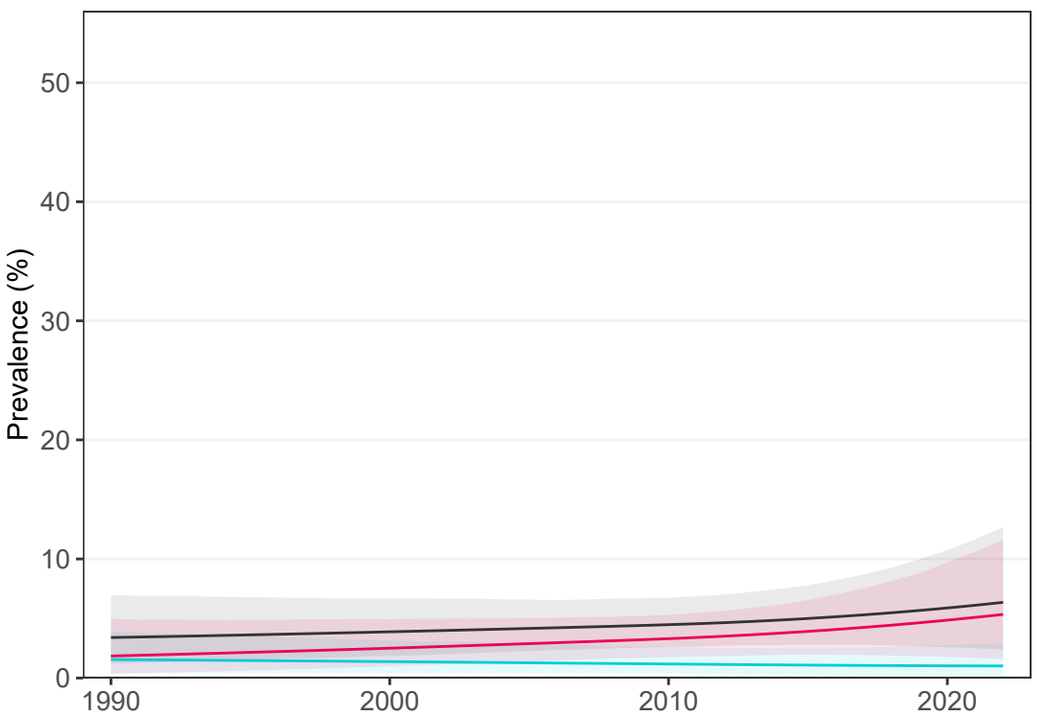


Solomon Islands

School-aged children and adolescents

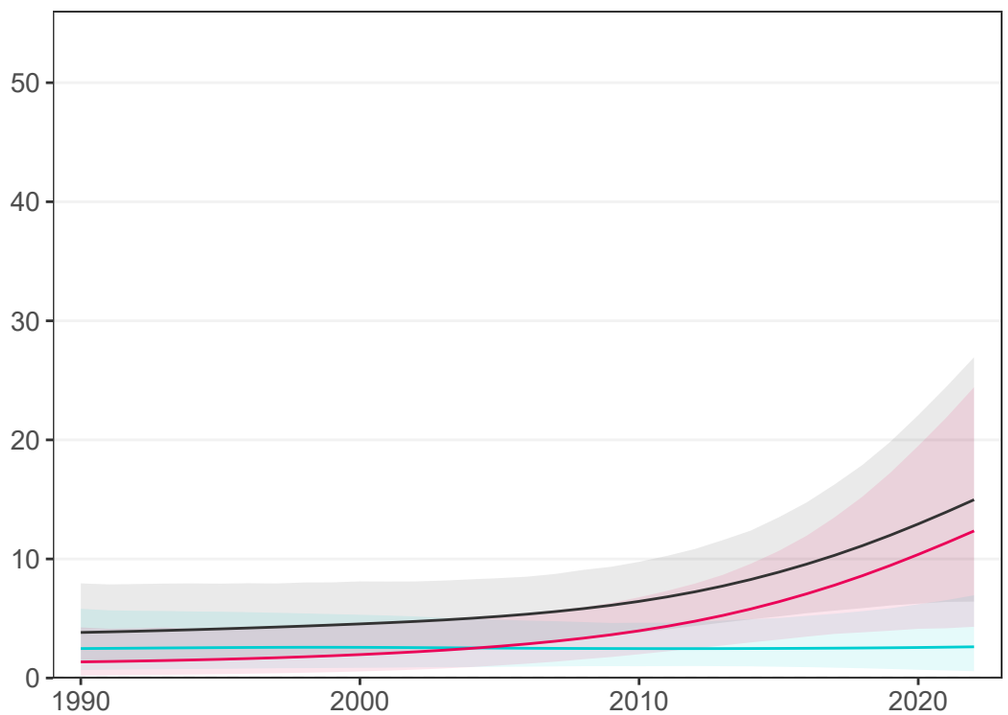
Girls

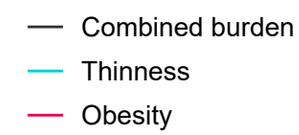
6 studies (1 national)



Boys

7 studies (1 national)

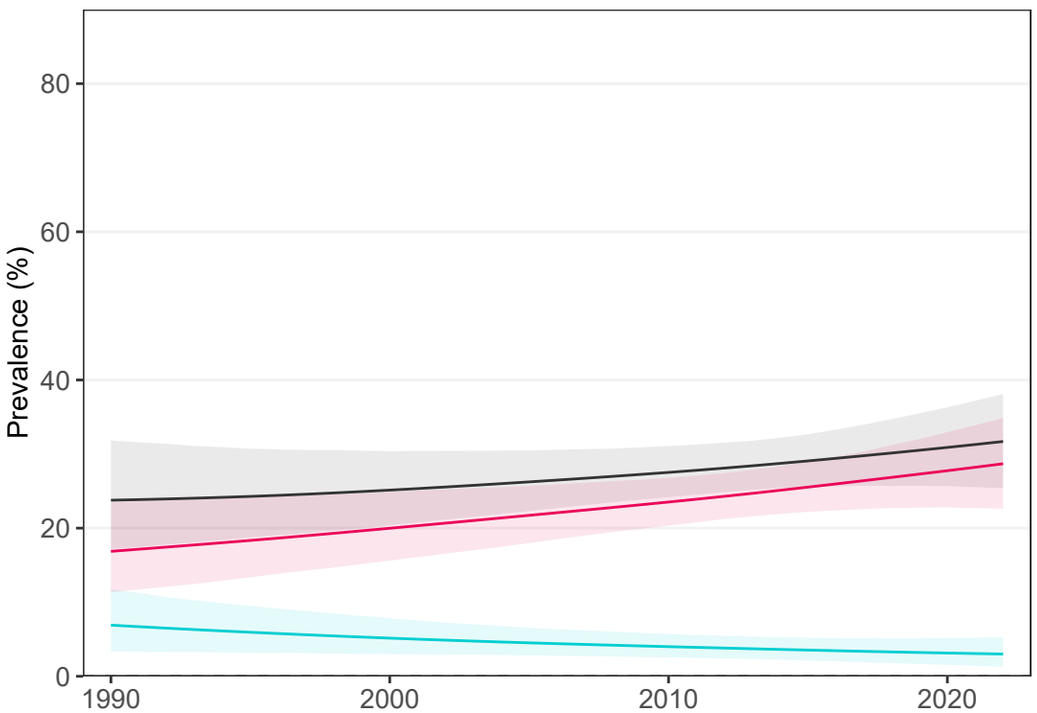




Adults

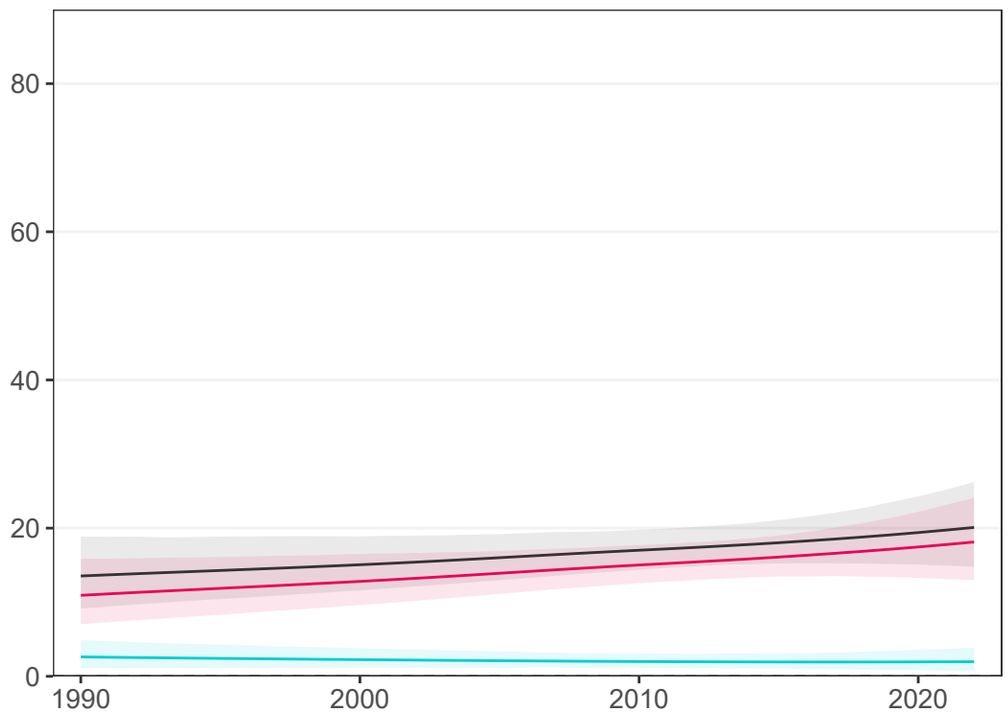
Women

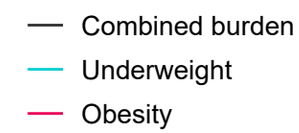
7 studies (1 national)



Men

7 studies (1 national)



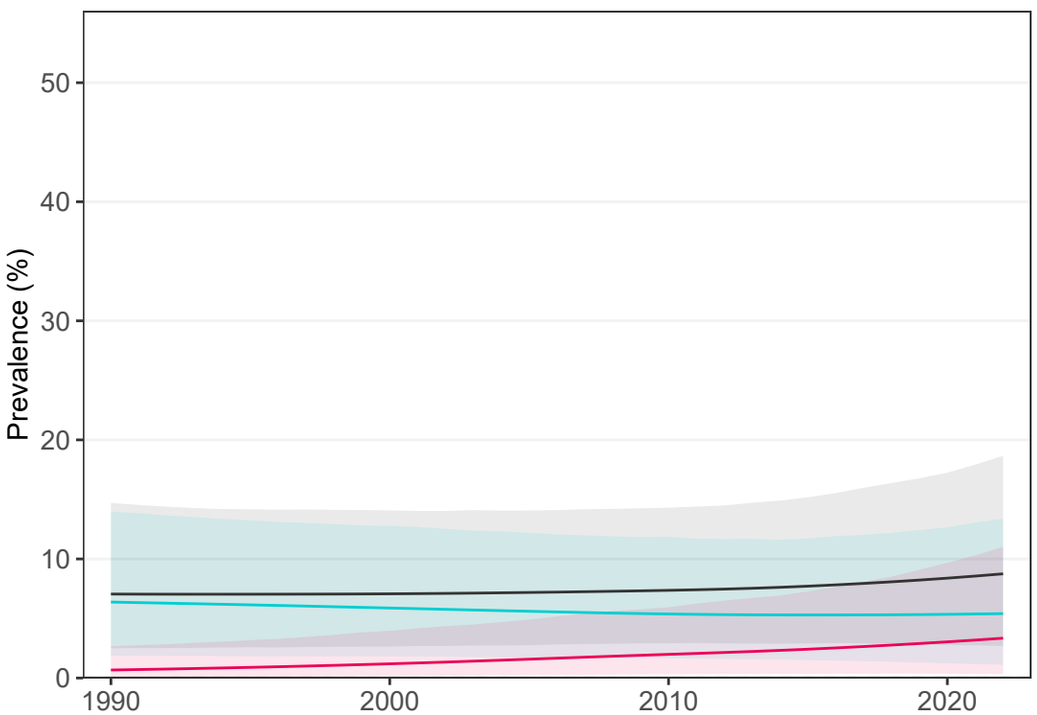


Somalia

School-aged children and adolescents

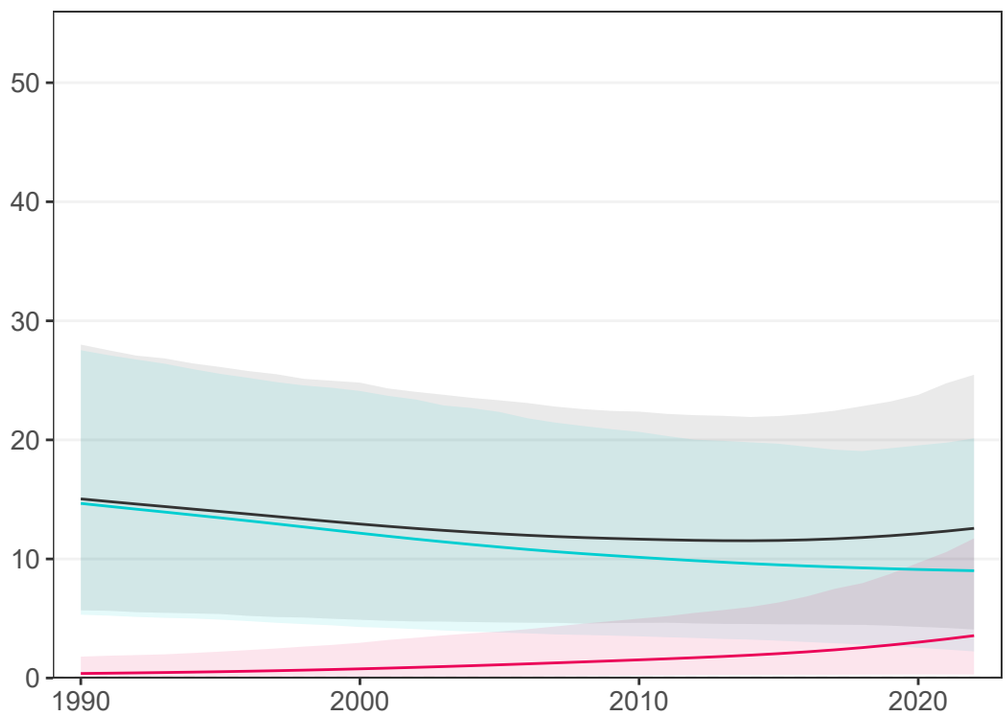
Girls

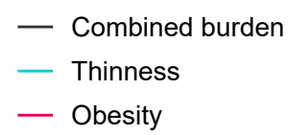
No studies



Boys

No studies

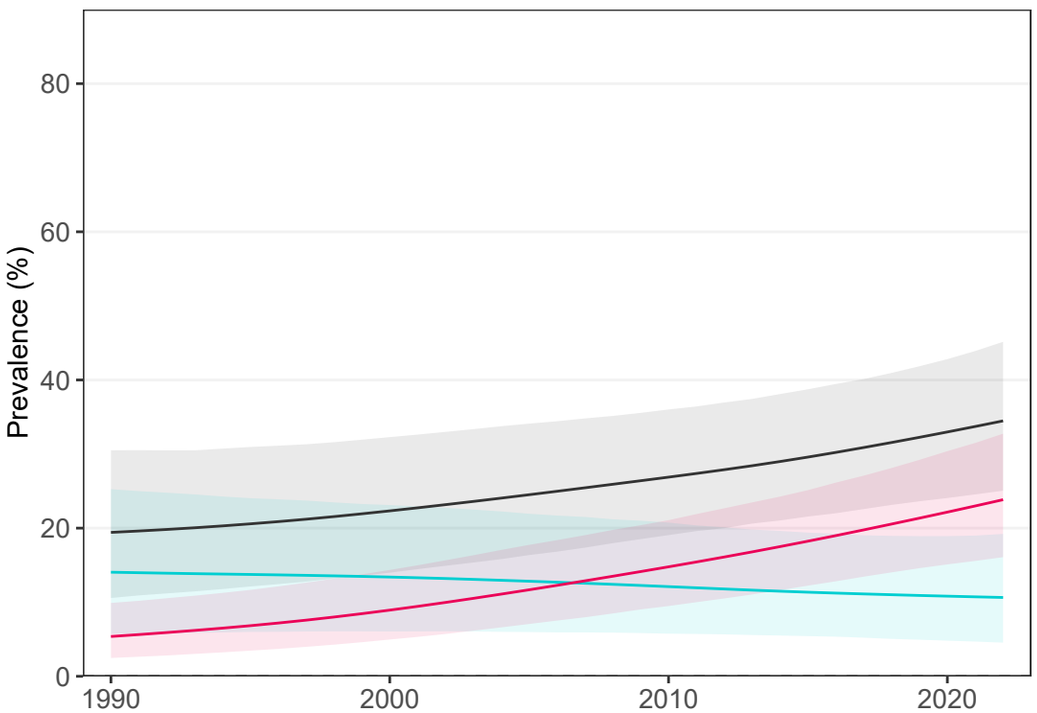




Adults

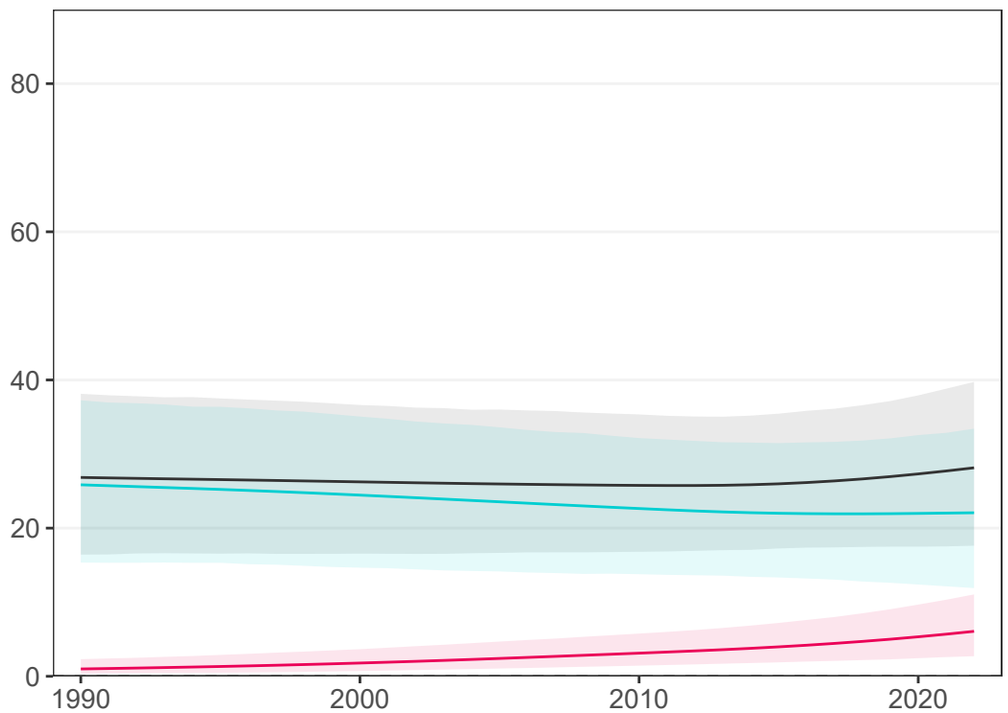
Women

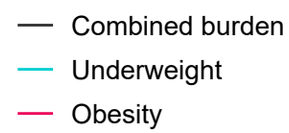
1 study (0 national)



Men

1 study (0 national)



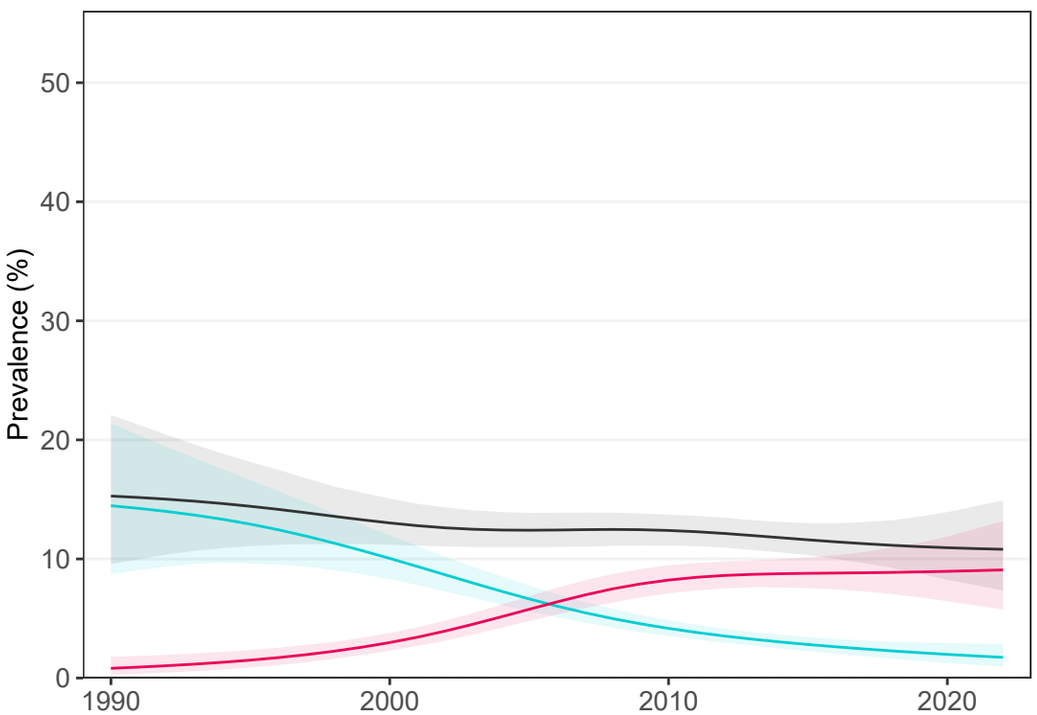


South Africa

School-aged children and adolescents

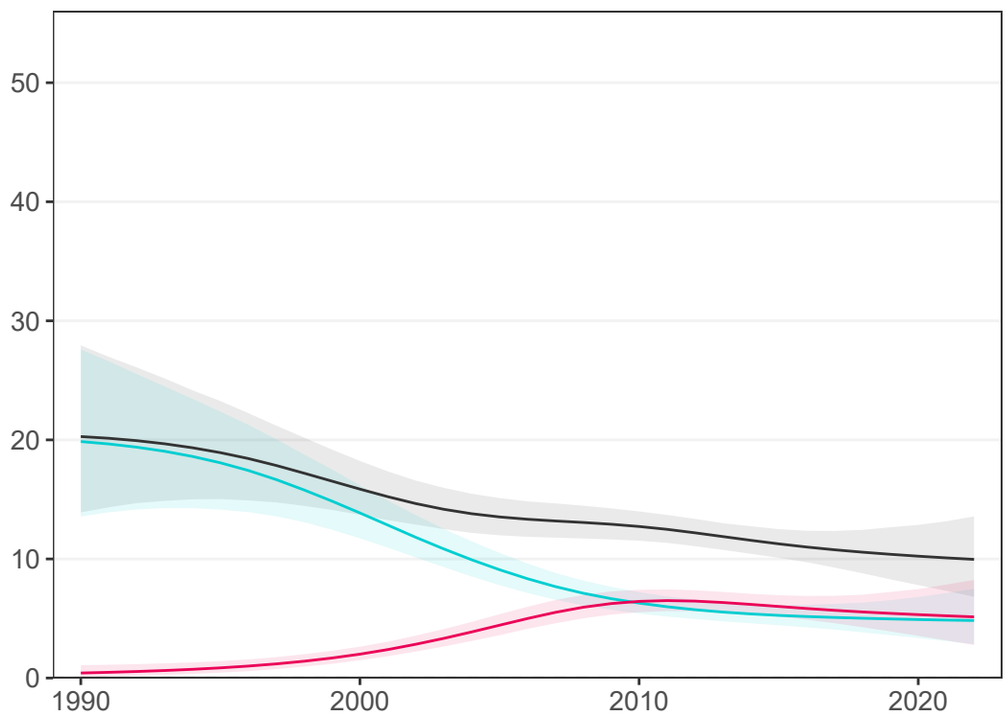
Girls

25 studies (11 national)



Boys

25 studies (11 national)

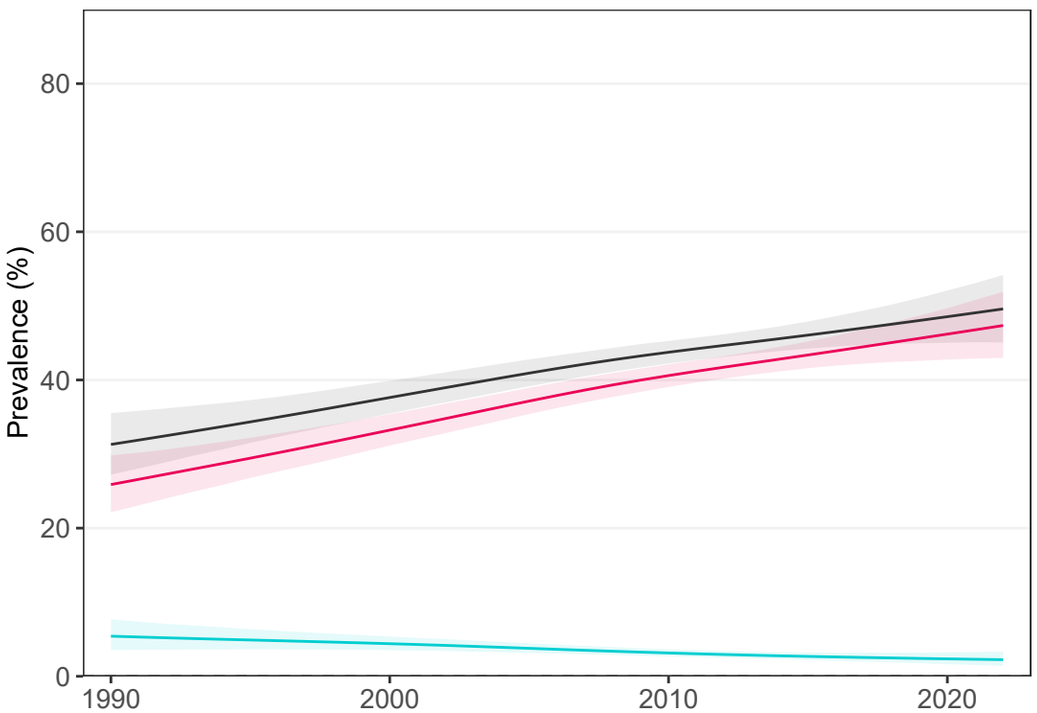


Combined burden
Thinness
Obesity

Adults

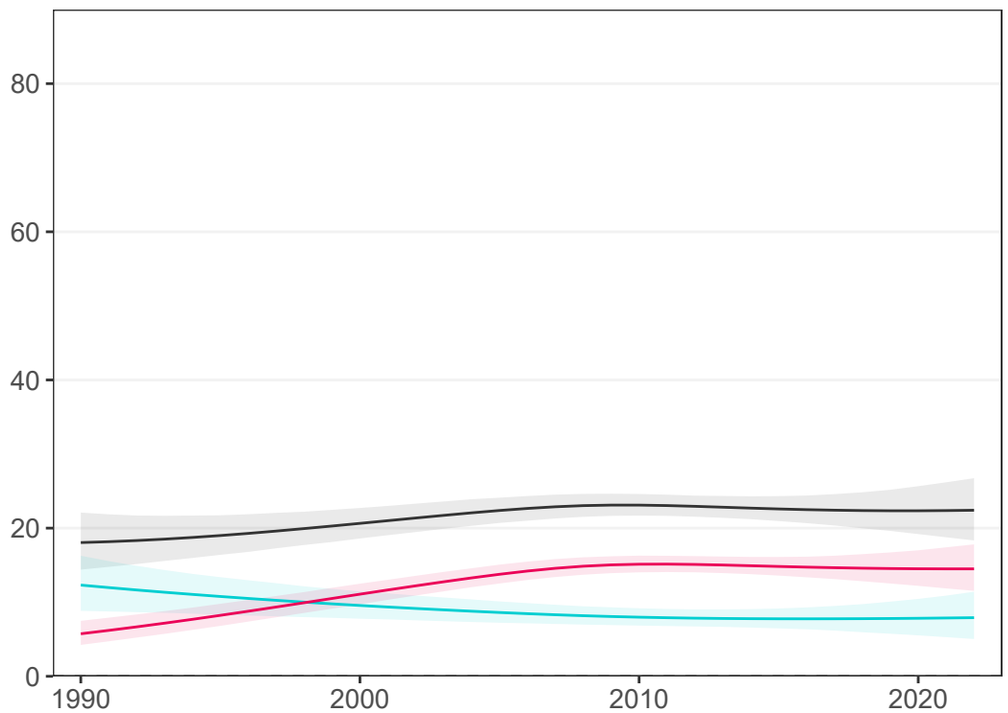
Women

22 studies (12 national)



Men

22 studies (12 national)



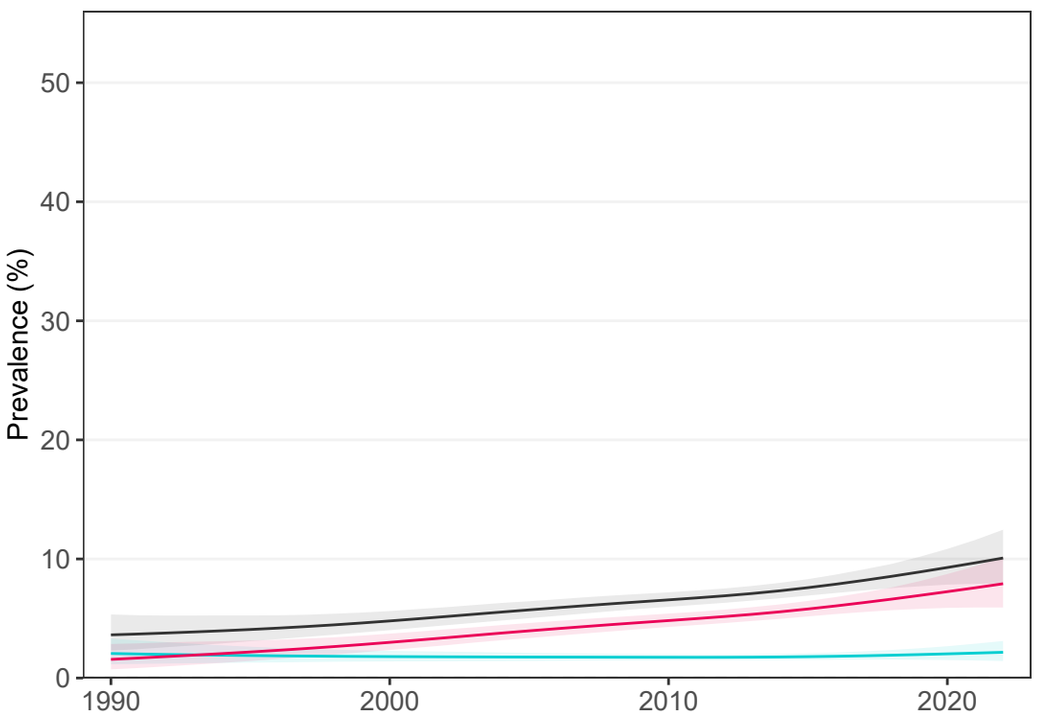
Combined burden
Underweight
Obesity

South Korea

School-aged children and adolescents

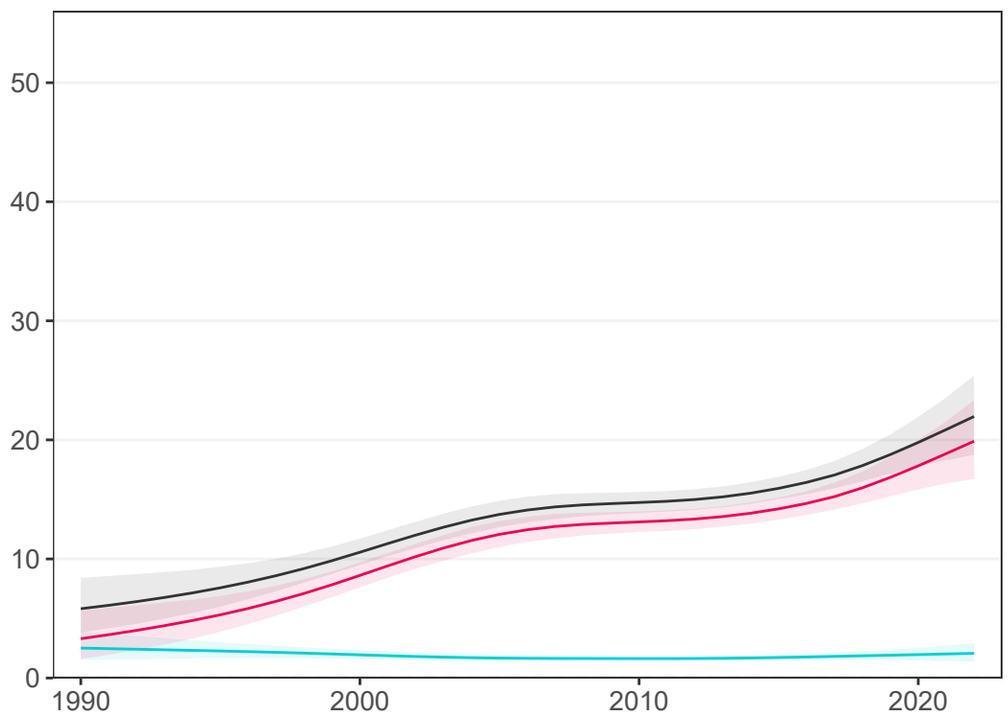
Girls

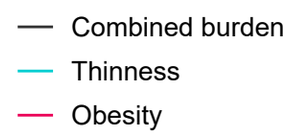
29 studies (28 national)



Boys

48 studies (47 national)

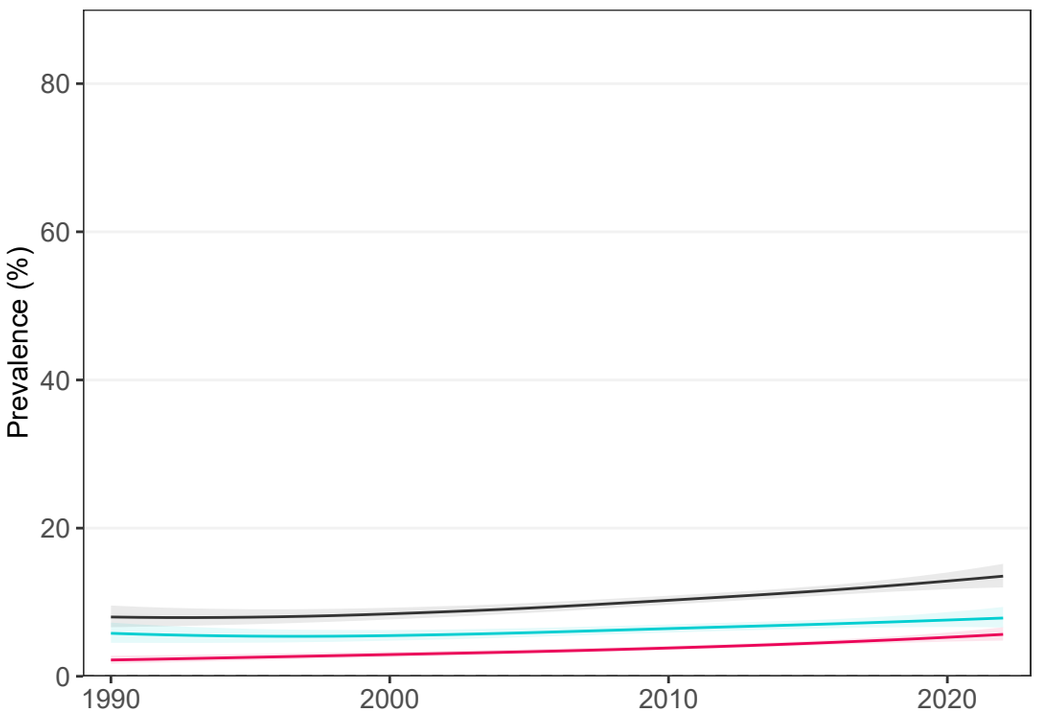




Adults

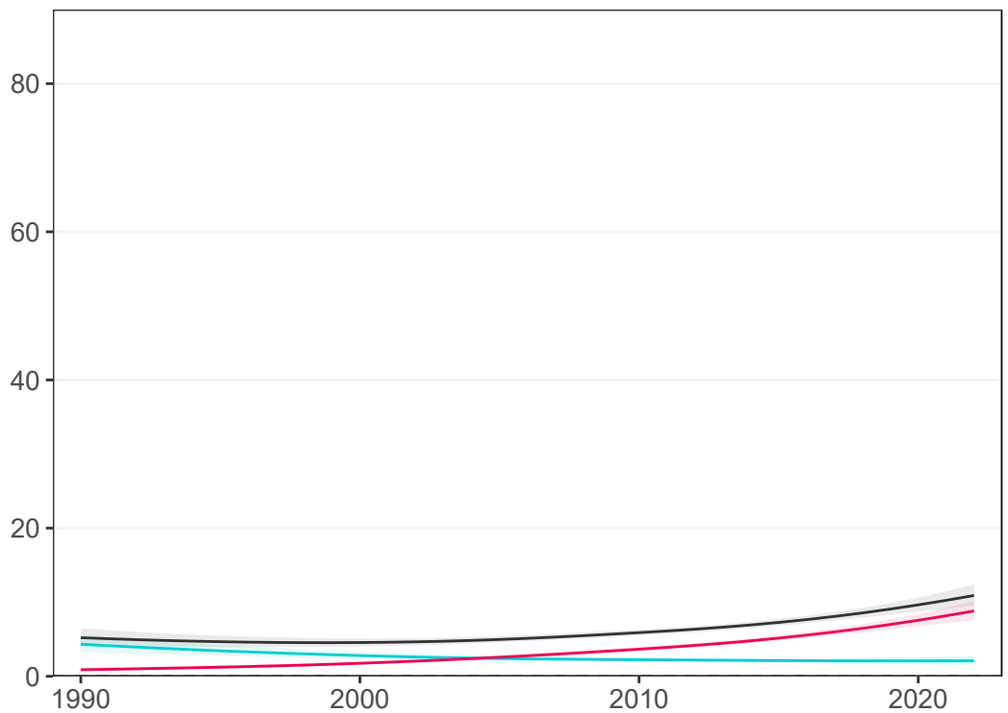
Women

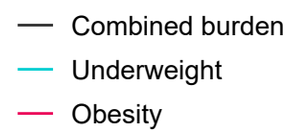
41 studies (38 national)



Men

60 studies (57 national)



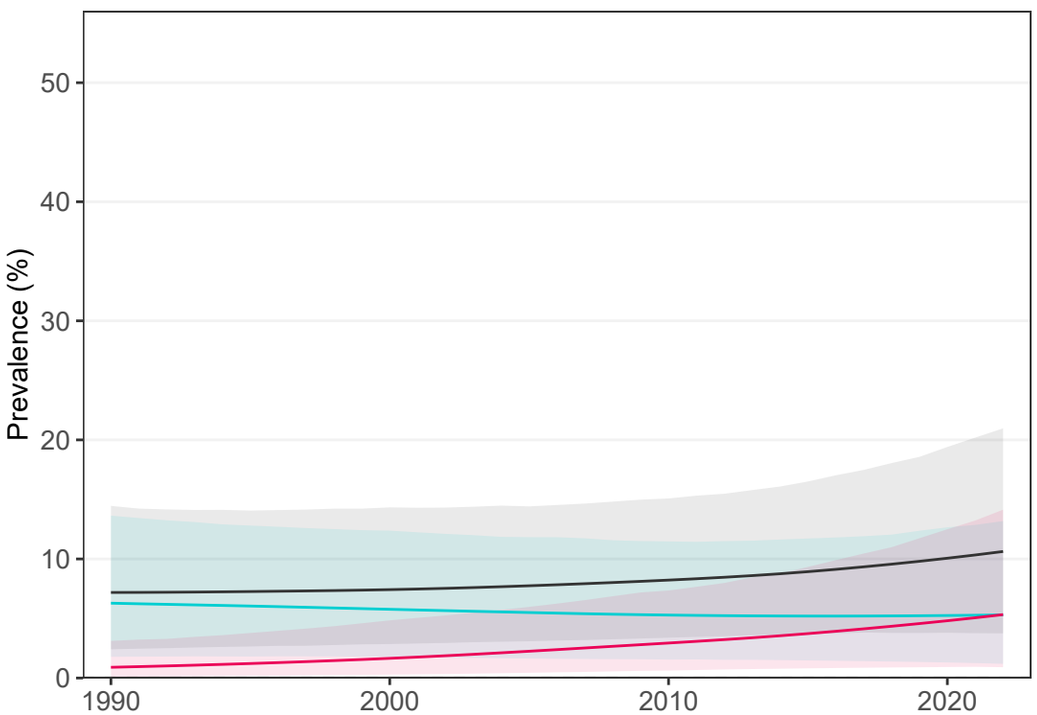


South Sudan

School-aged children and adolescents

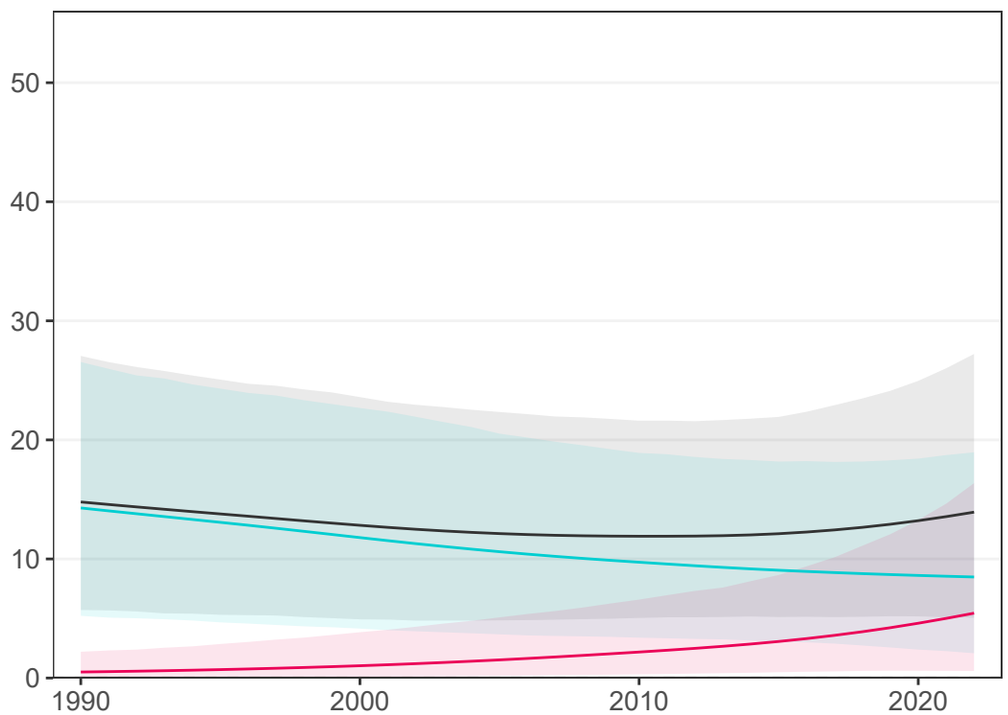
Girls

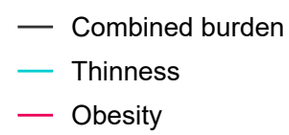
1 study (0 national)



Boys

1 study (0 national)

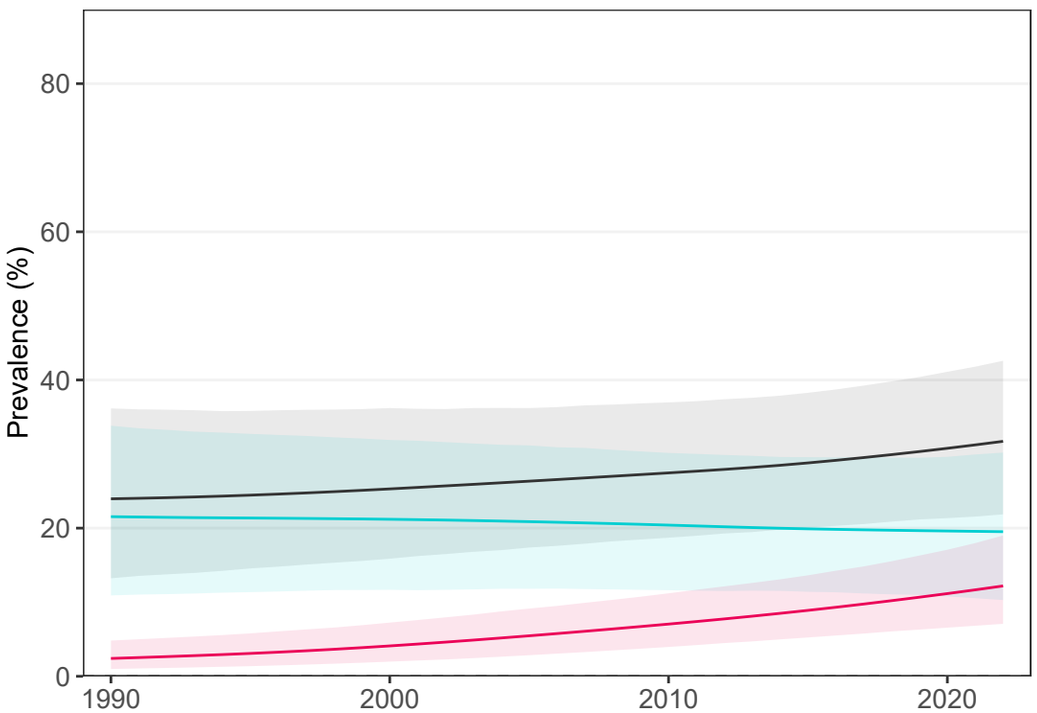




Adults

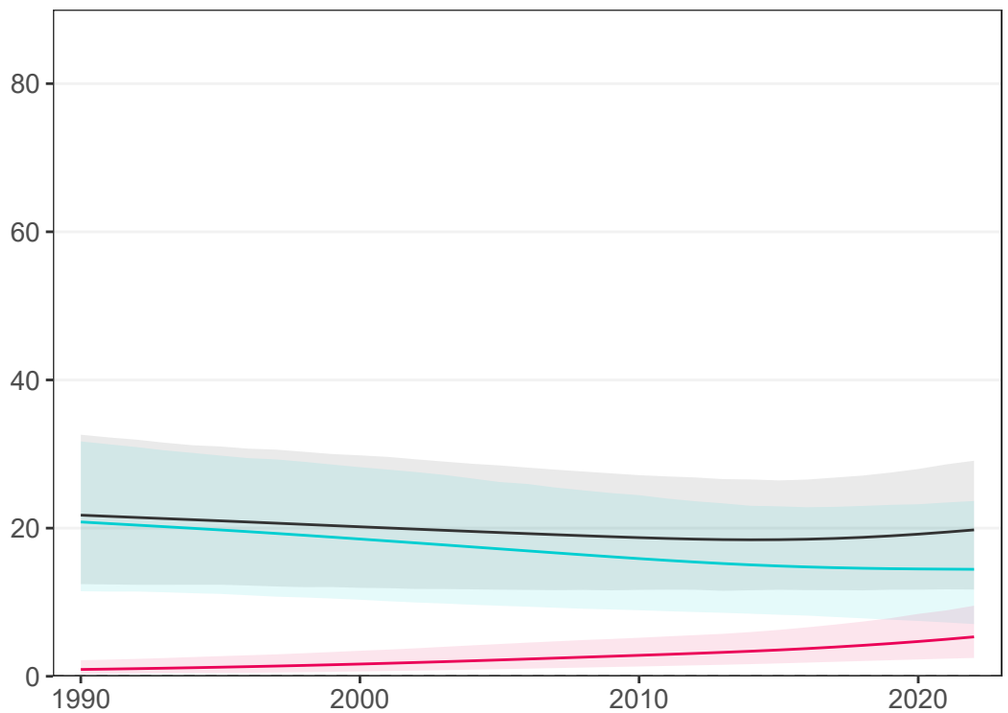
Women

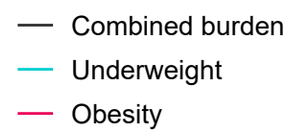
1 study (0 national)



Men

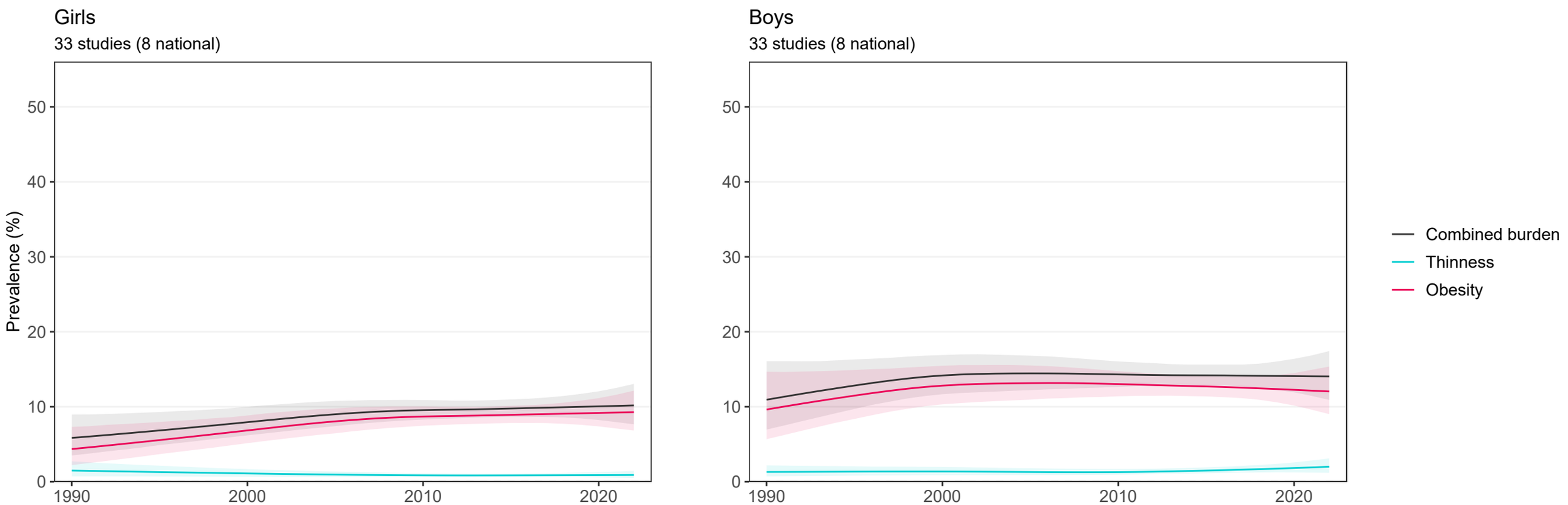
1 study (0 national)



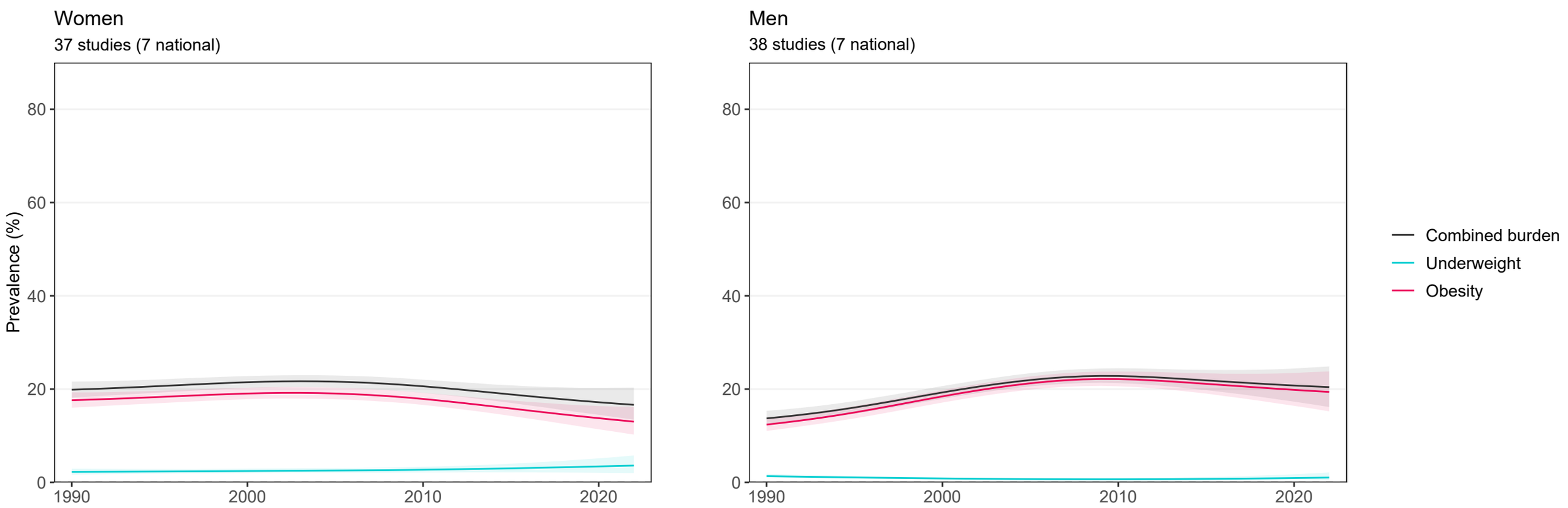


Spain

School-aged children and adolescents



Adults

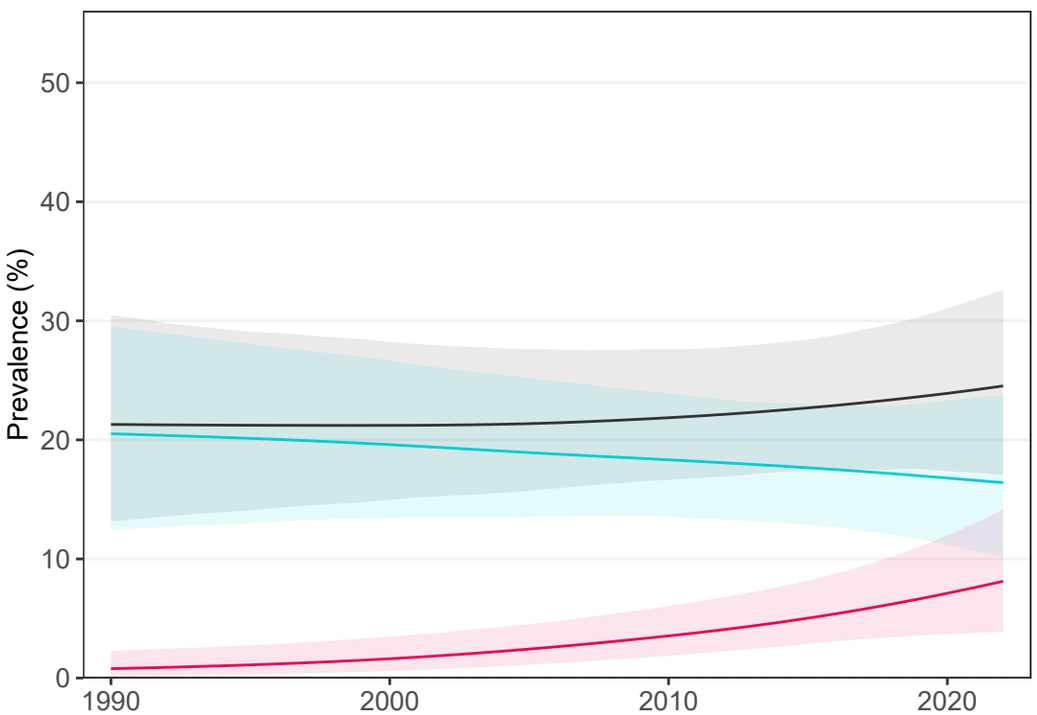


Sri Lanka

School-aged children and adolescents

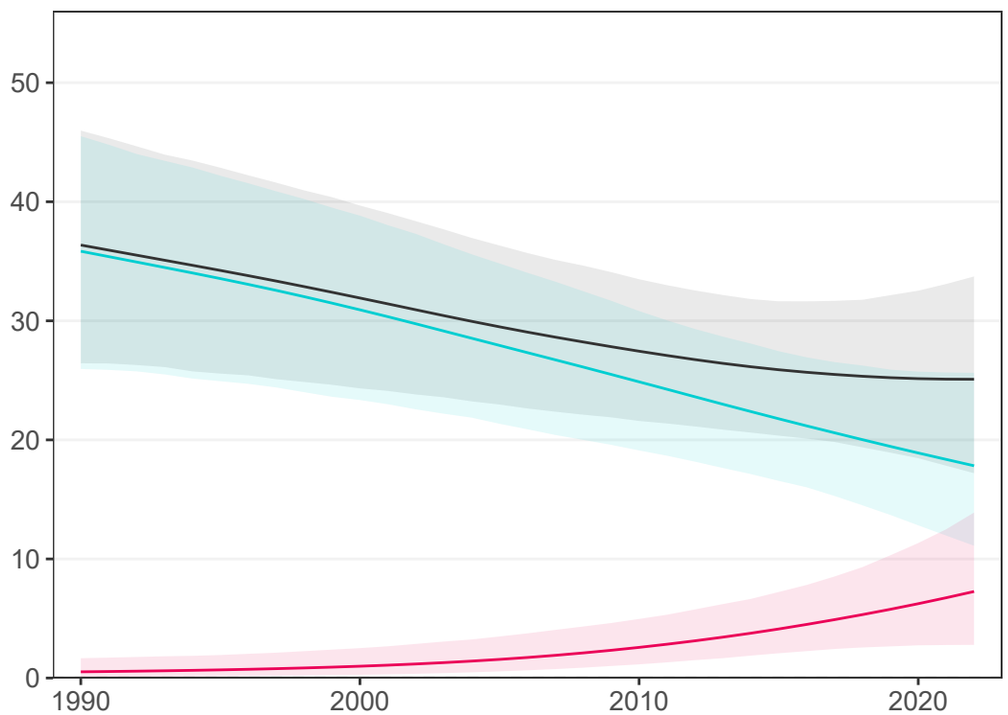
Girls

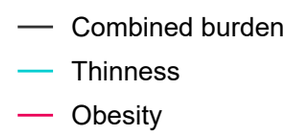
5 studies (5 national)



Boys

5 studies (5 national)

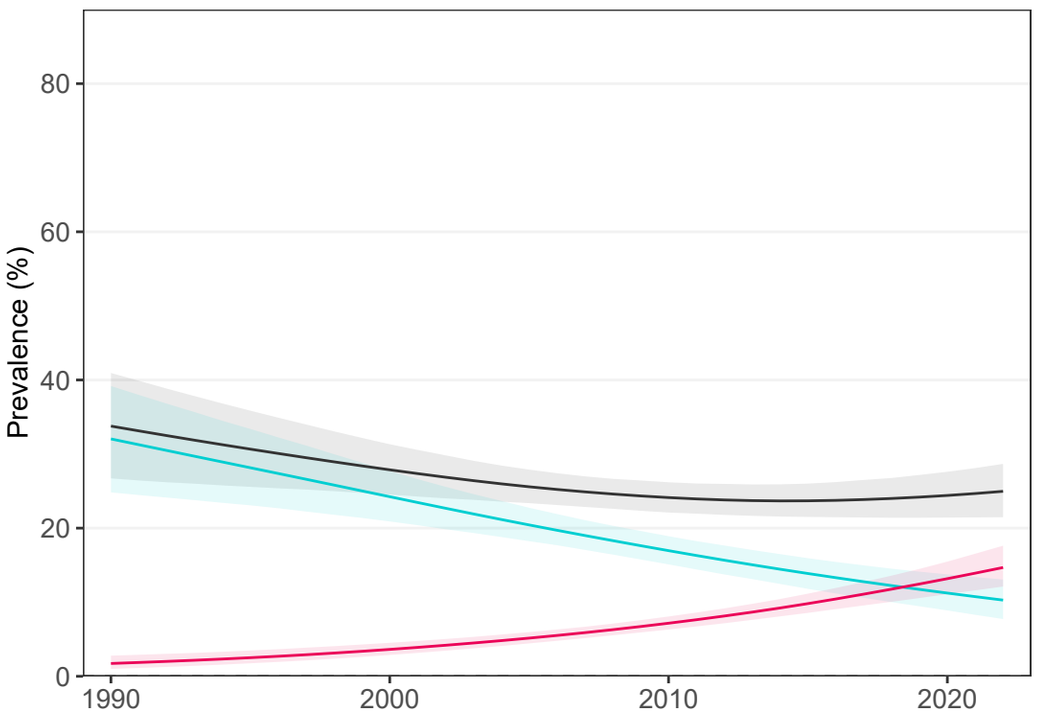




Adults

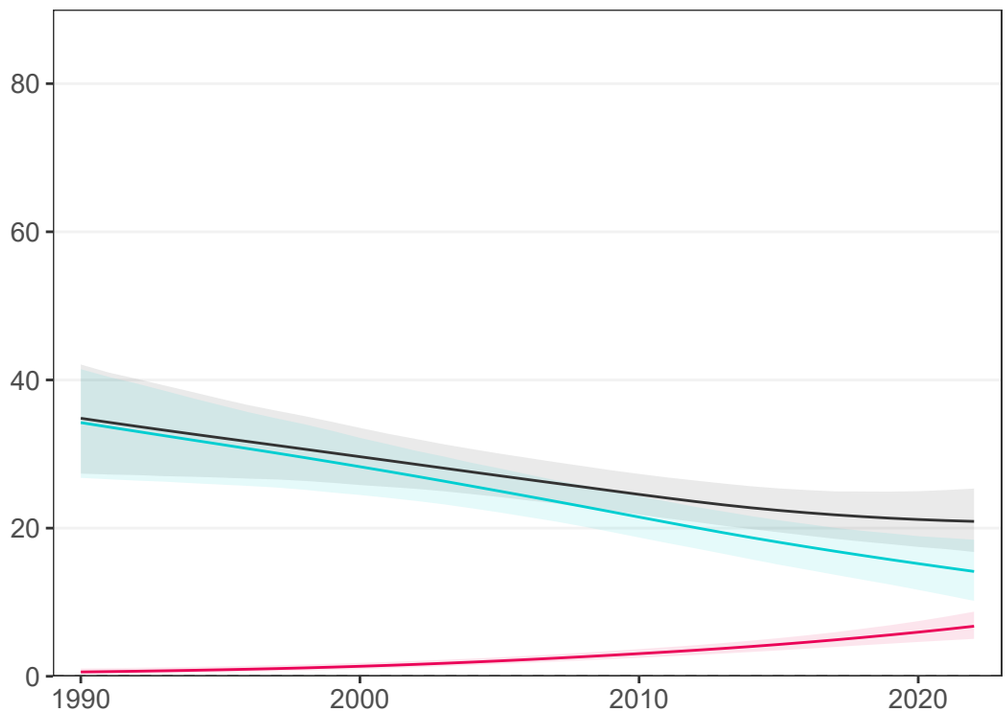
Women

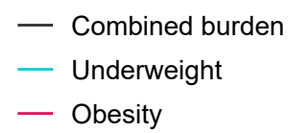
9 studies (5 national)



Men

8 studies (4 national)



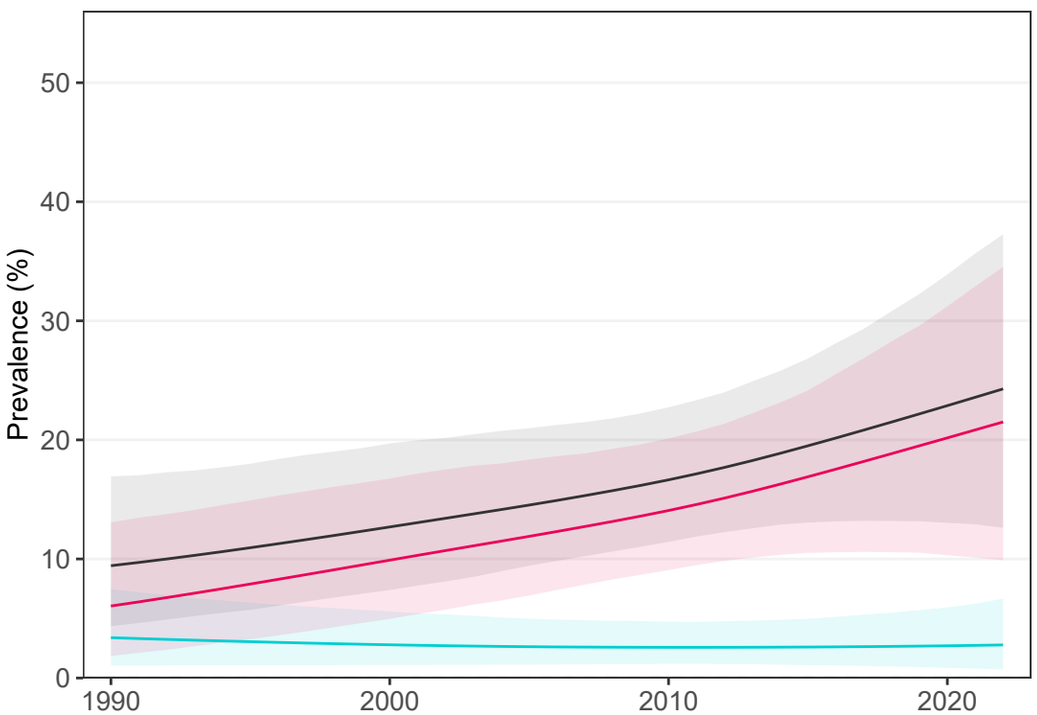


St. Kitts & Nevis

School-aged children and adolescents

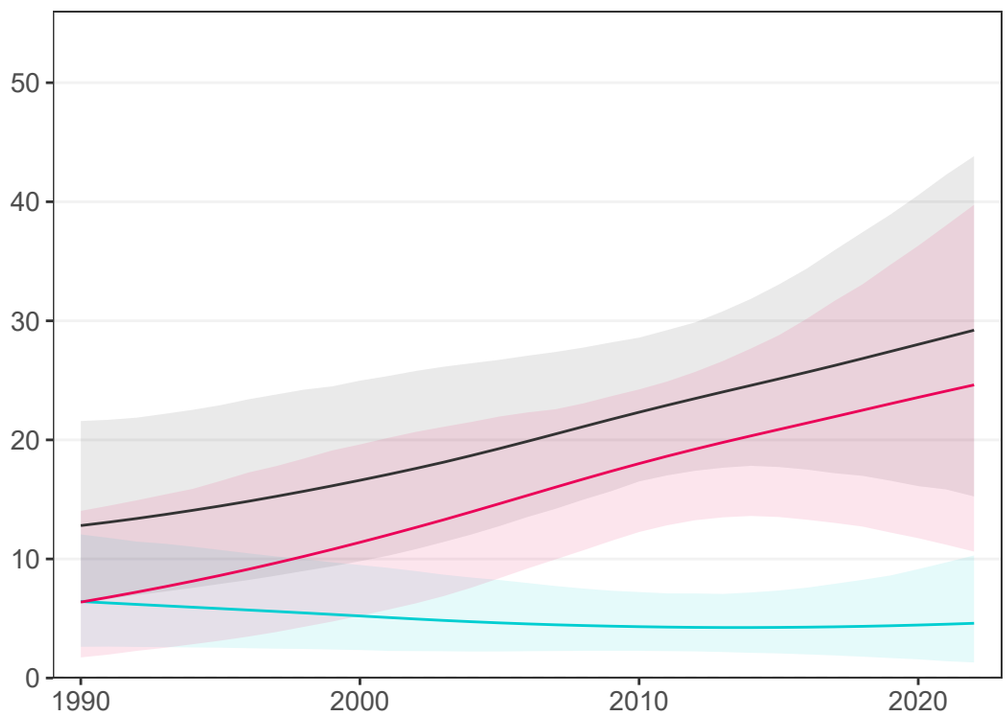
Girls

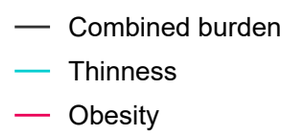
1 study (1 national)



Boys

1 study (1 national)

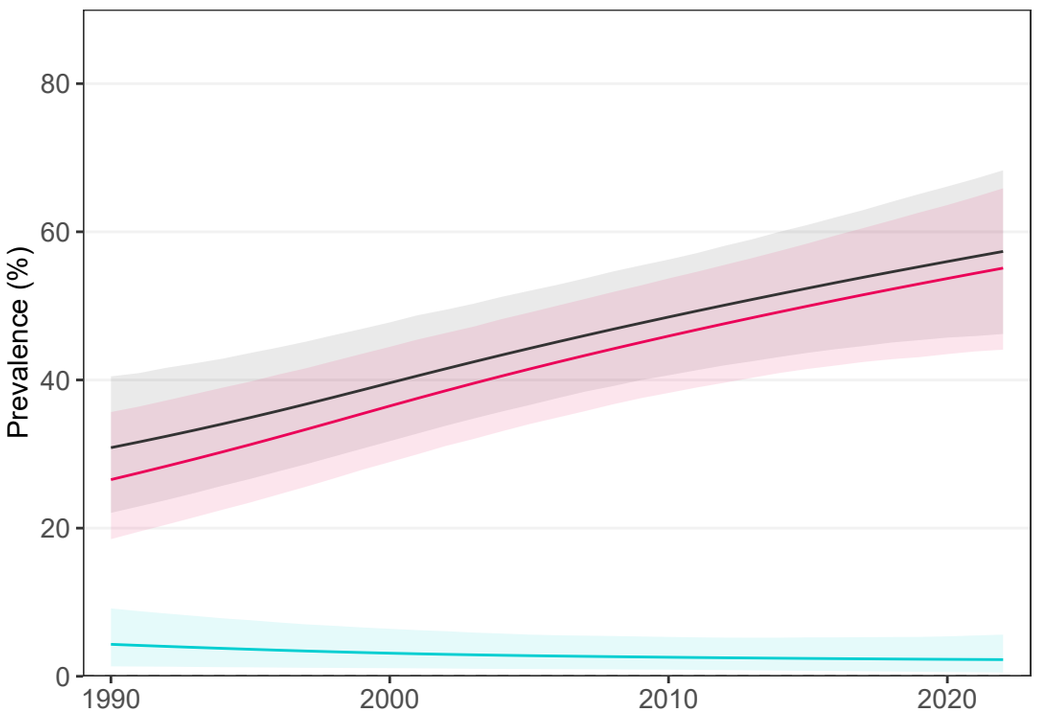




Adults

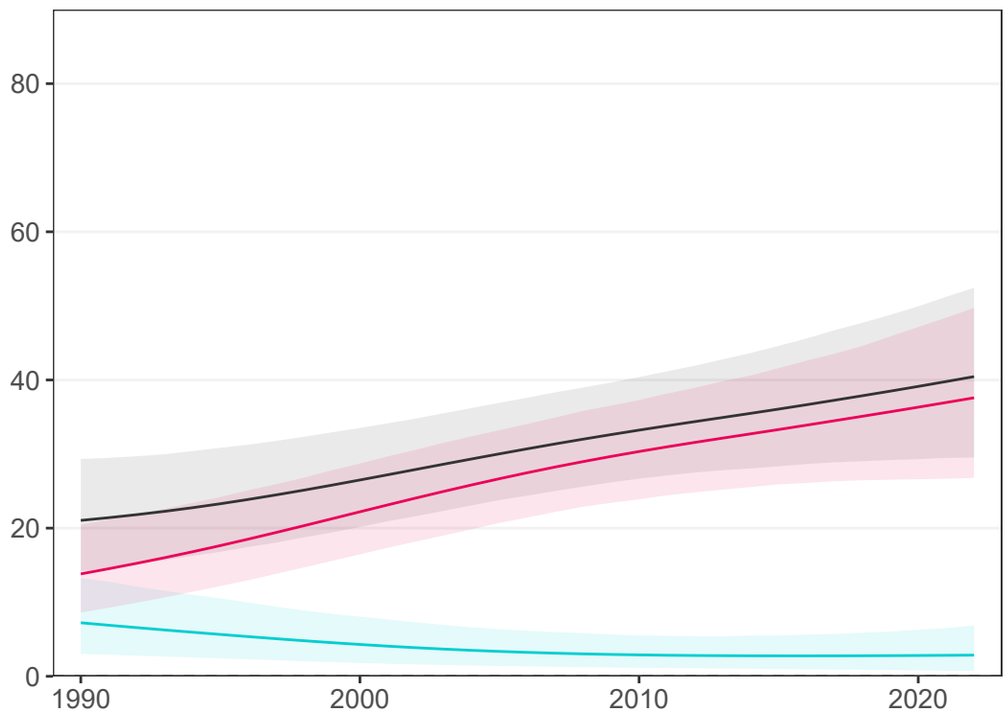
Women

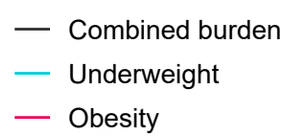
1 study (0 national)



Men

1 study (0 national)



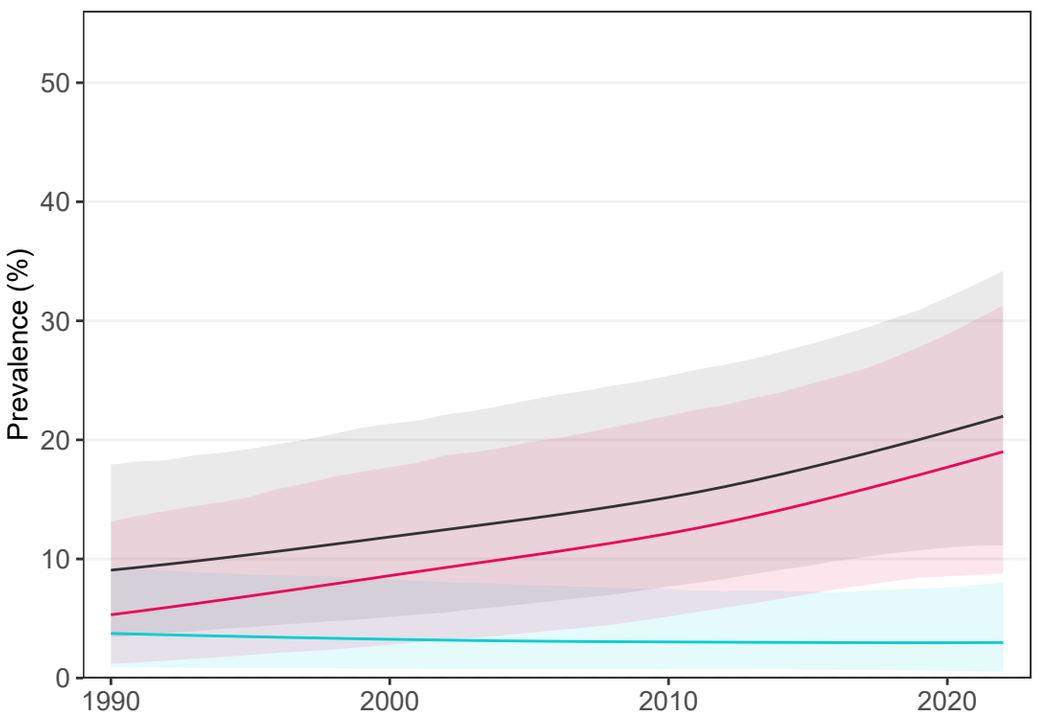


St. Lucia

School-aged children and adolescents

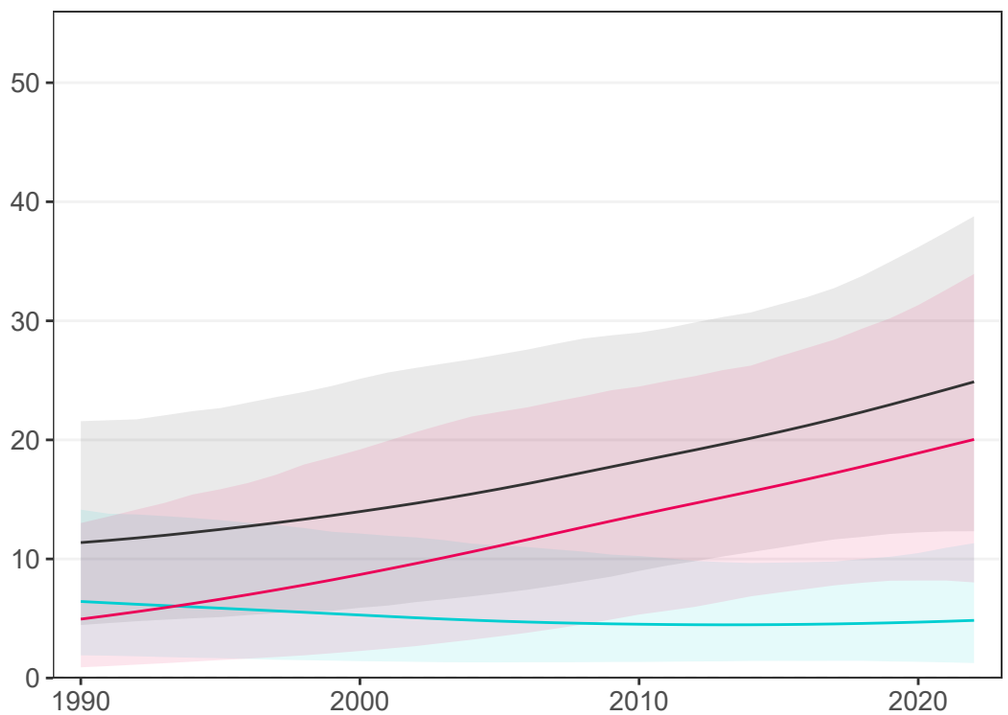
Girls

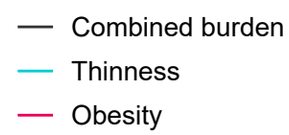
1 study (1 national)



Boys

1 study (1 national)

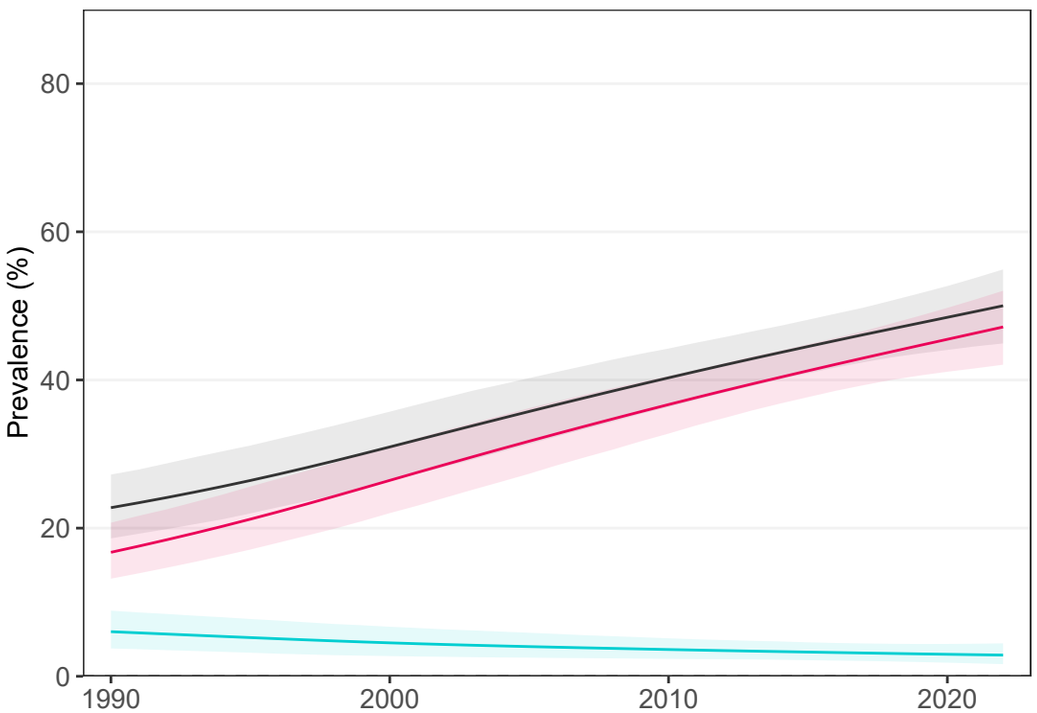




Adults

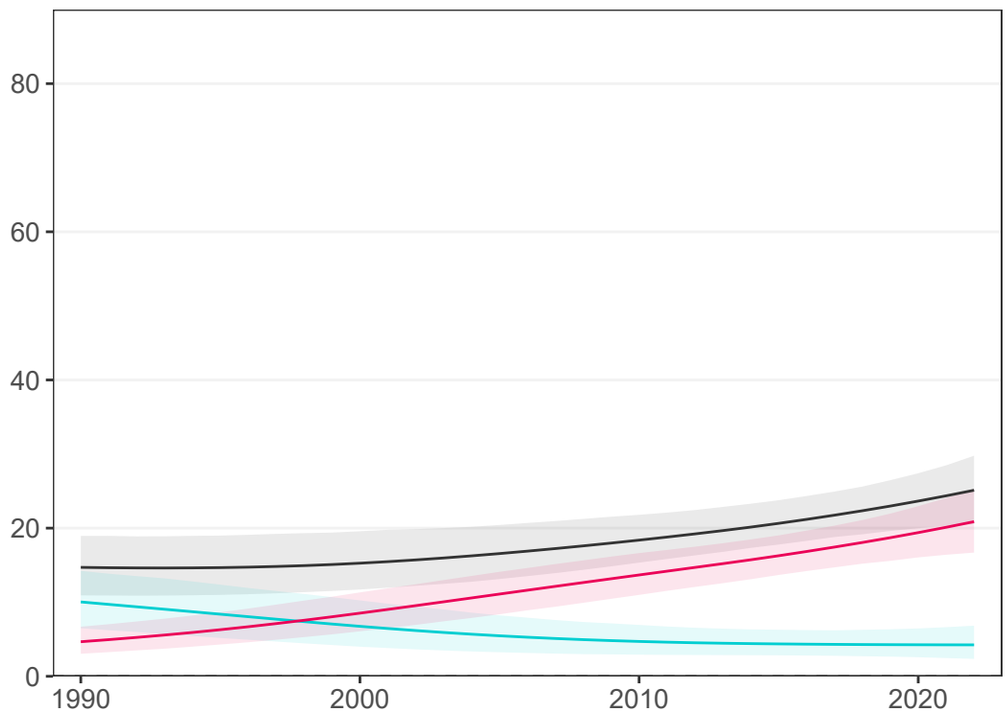
Women

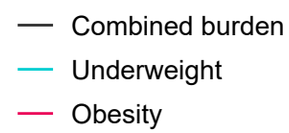
4 studies (3 national)



Men

4 studies (3 national)



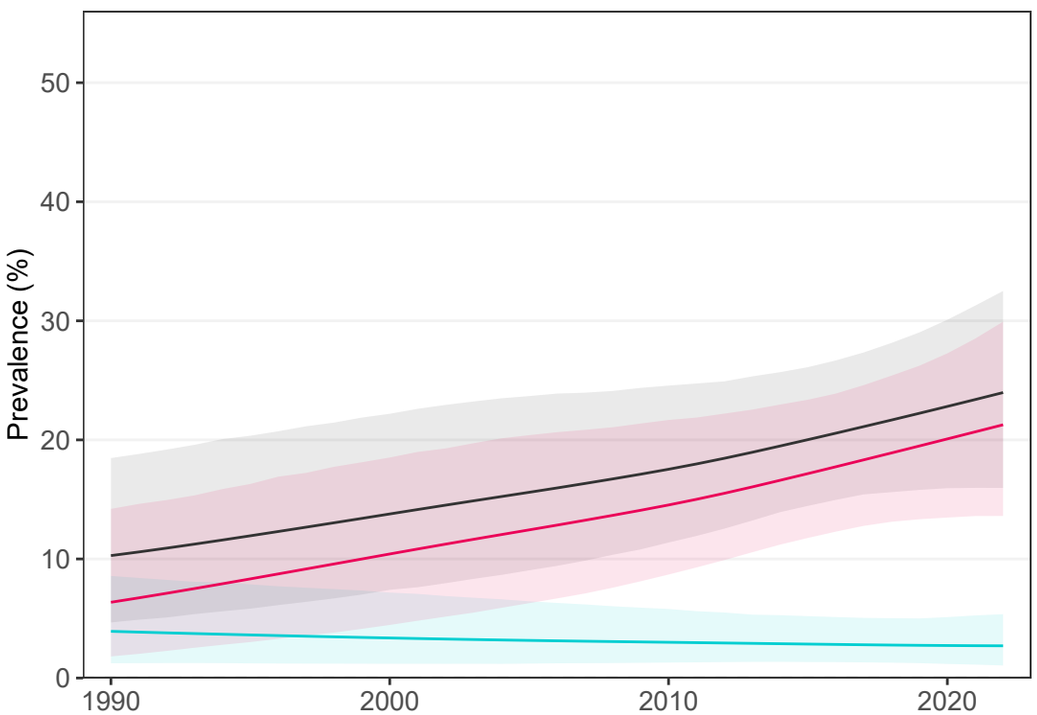


St. Vincent & the Grenadines

School-aged children and adolescents

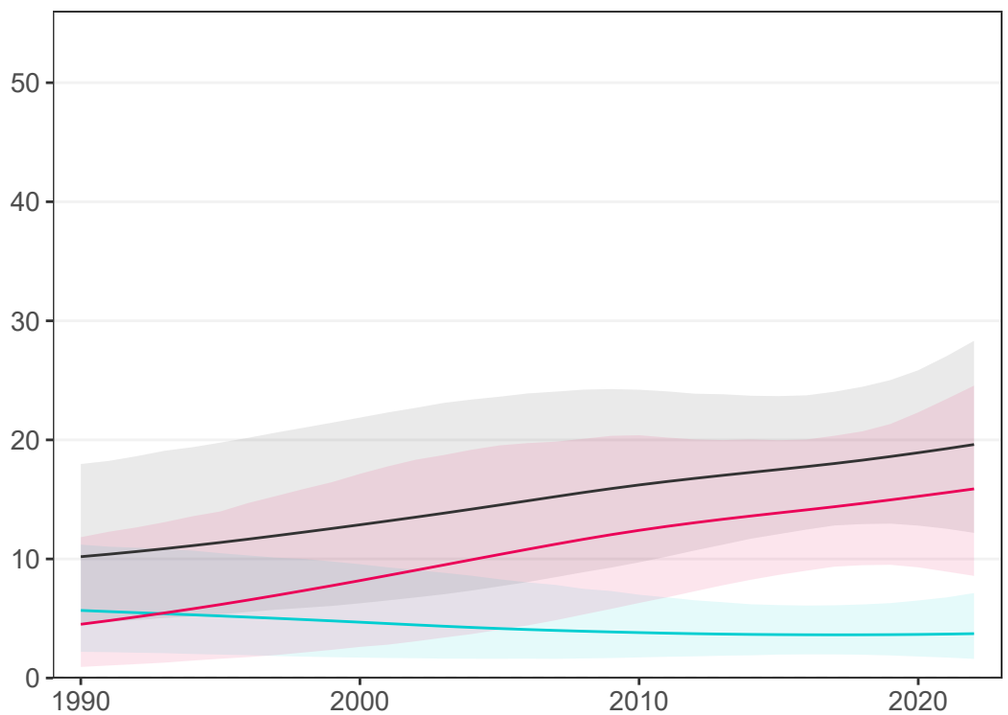
Girls

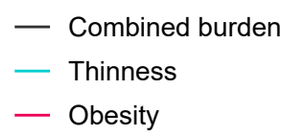
2 studies (2 national)



Boys

2 studies (2 national)

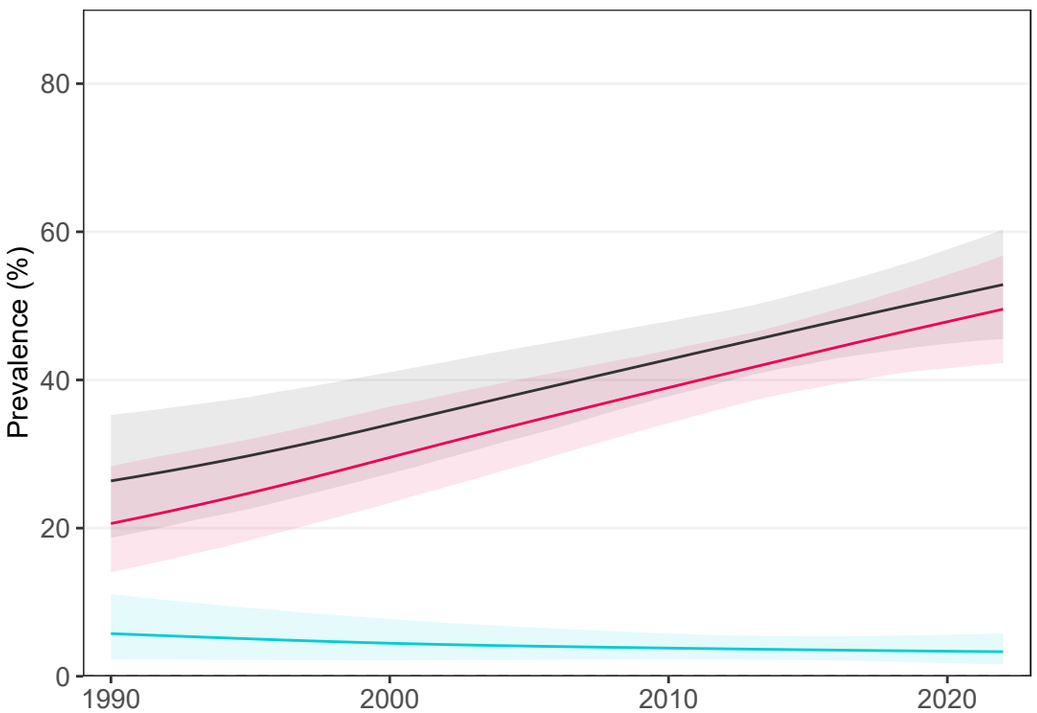




Adults

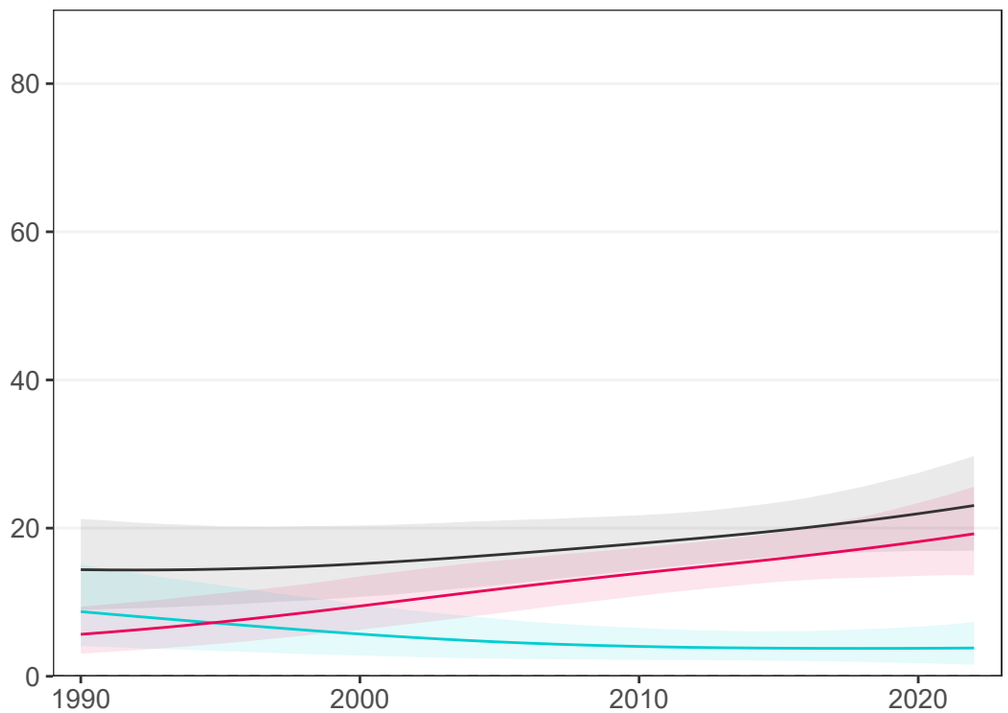
Women

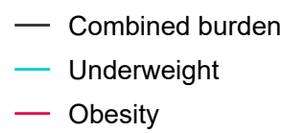
1 study (1 national)



Men

1 study (1 national)



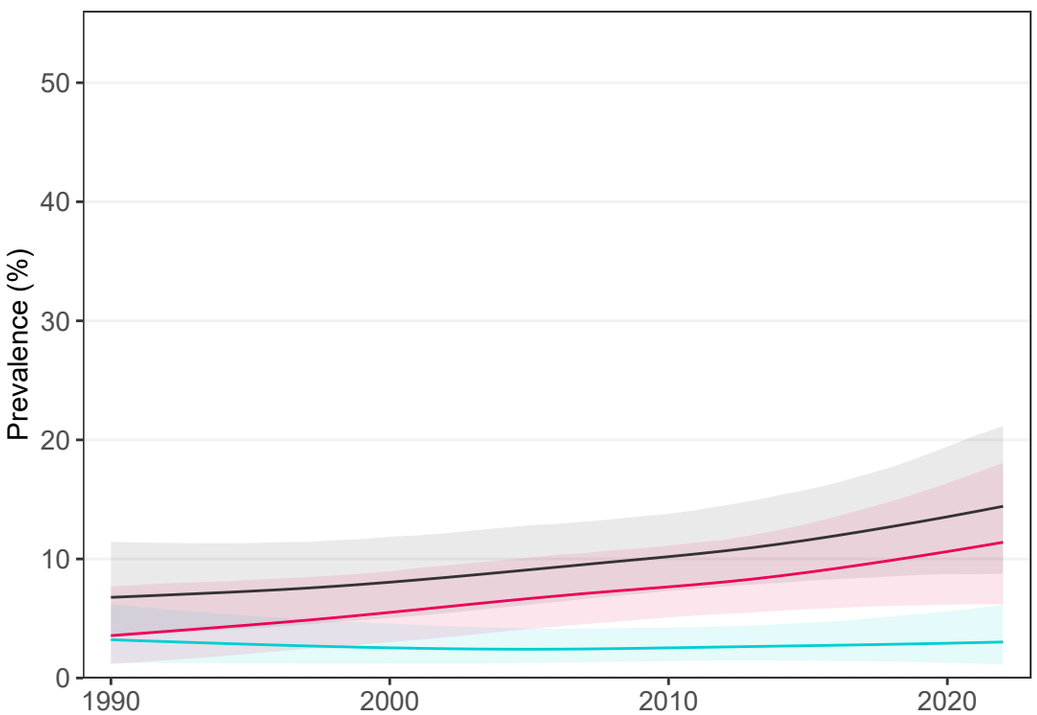


State of Palestine

School-aged children and adolescents

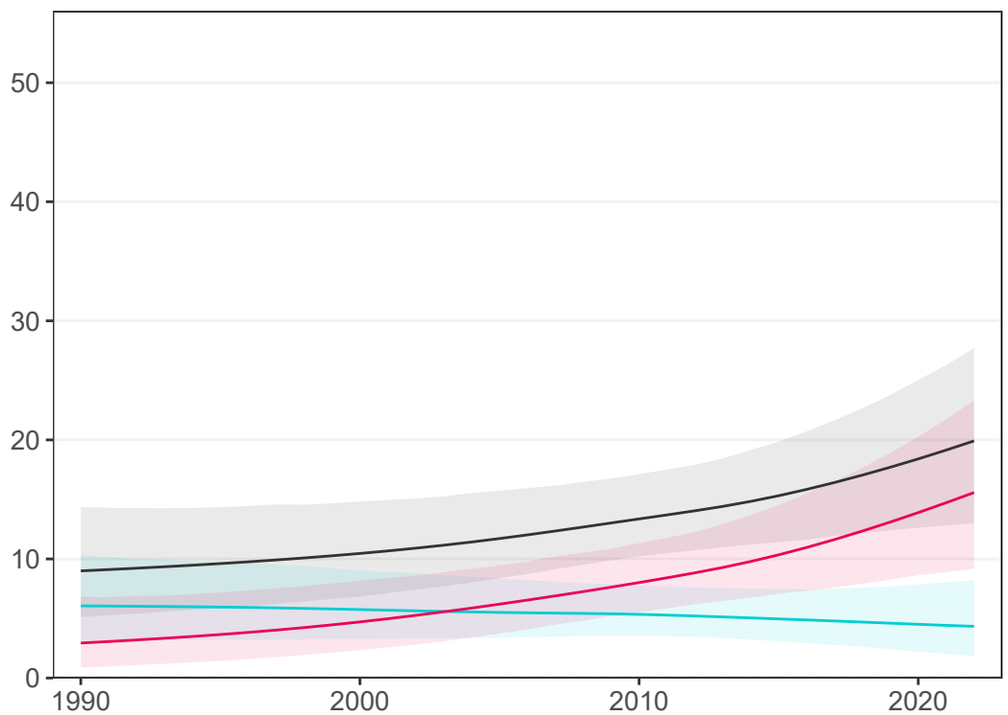
Girls

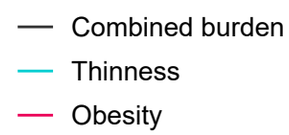
7 studies (5 national)



Boys

5 studies (5 national)

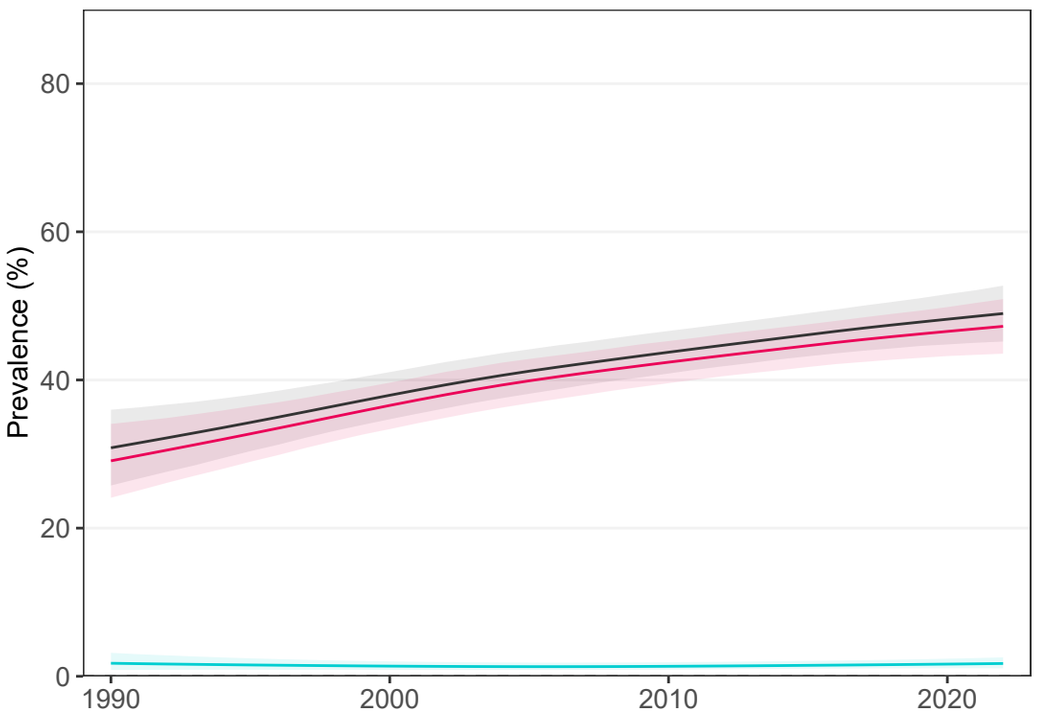




Adults

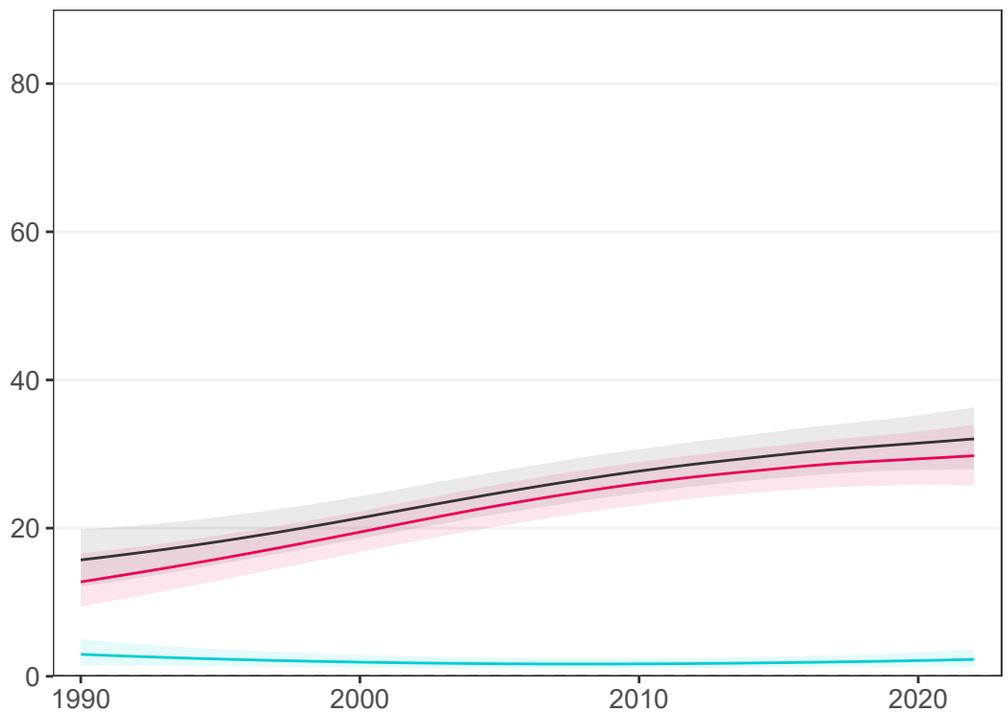
Women

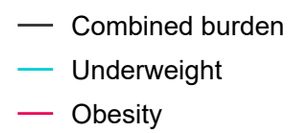
7 studies (4 national)



Men

7 studies (4 national)



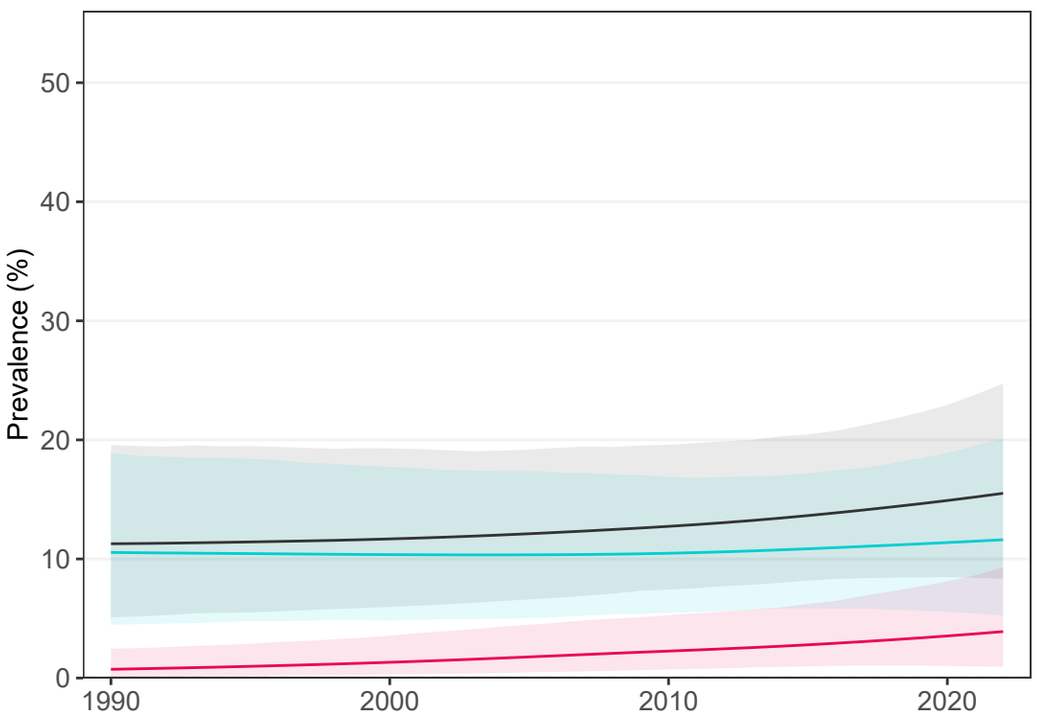


Sudan

School-aged children and adolescents

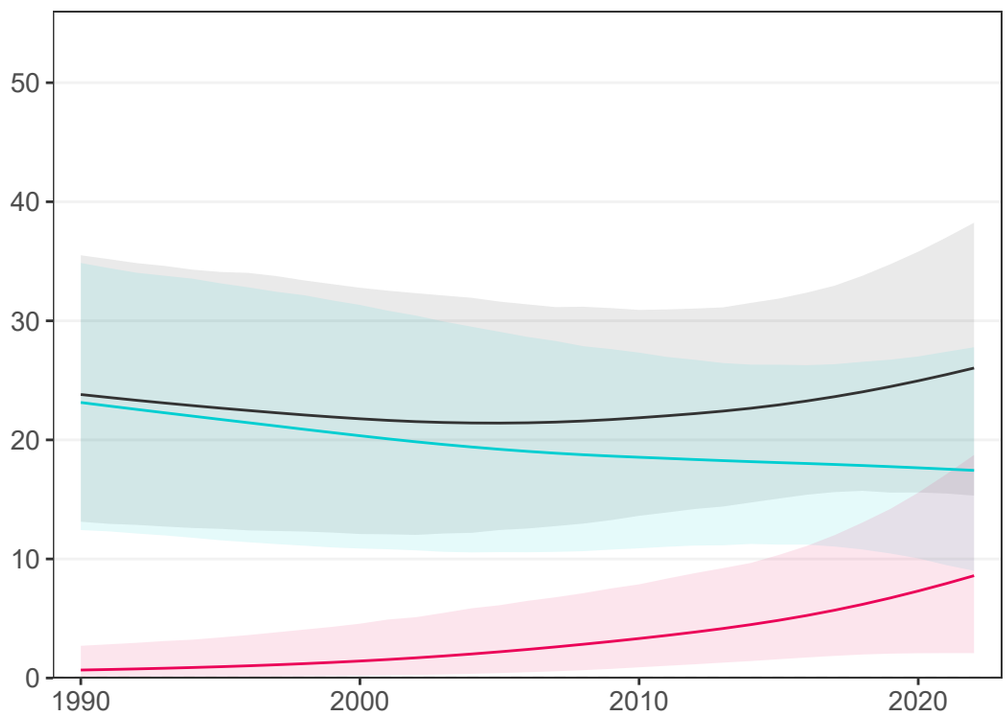
Girls

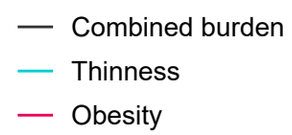
1 study (1 national)



Boys

1 study (1 national)

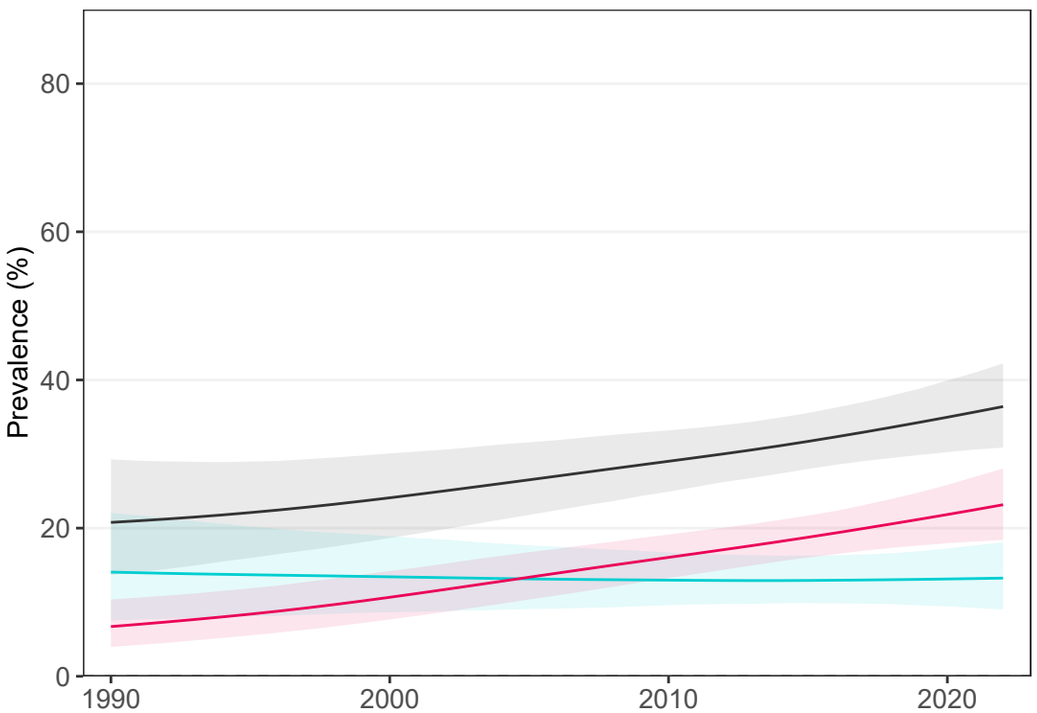




Adults

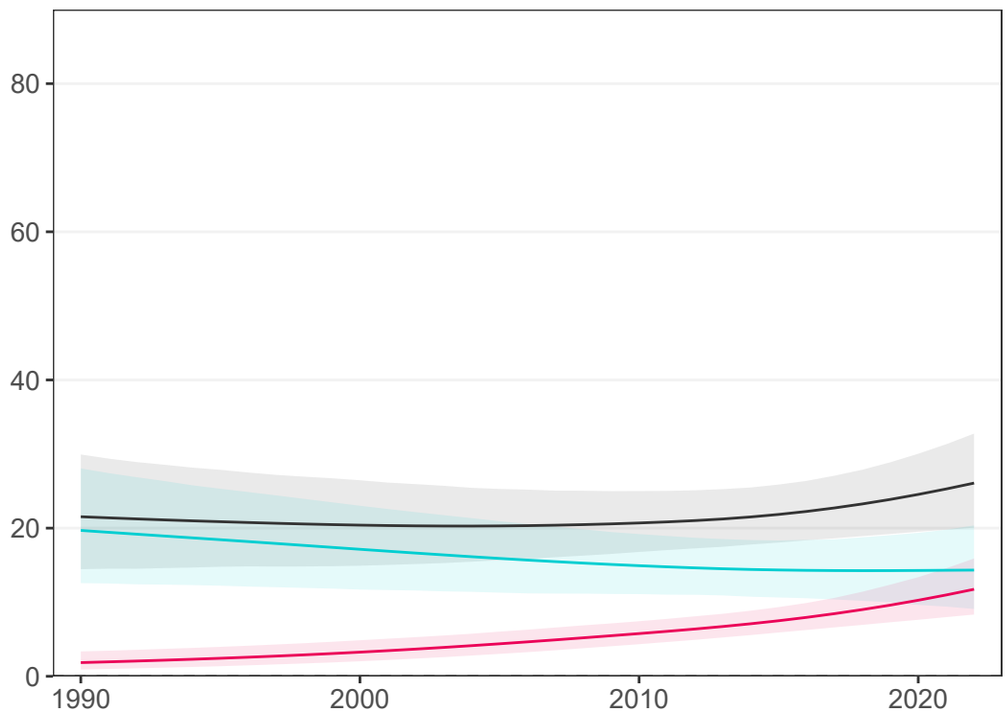
Women

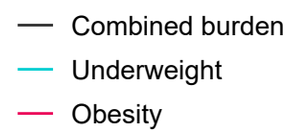
3 studies (1 national)



Men

3 studies (1 national)



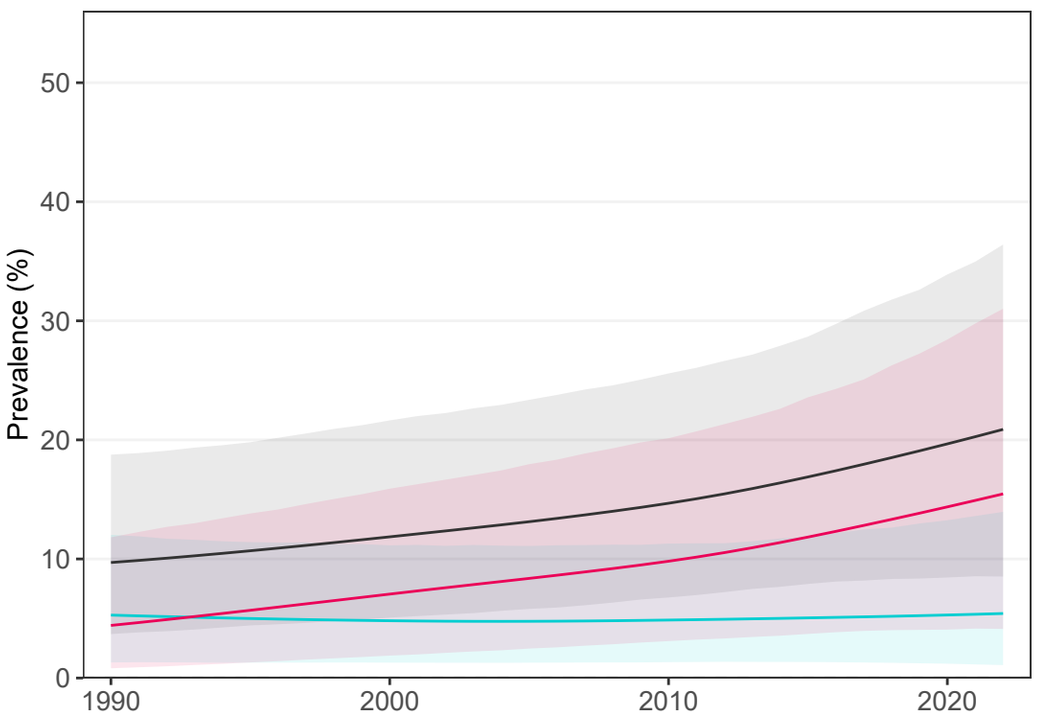


Suriname

School-aged children and adolescents

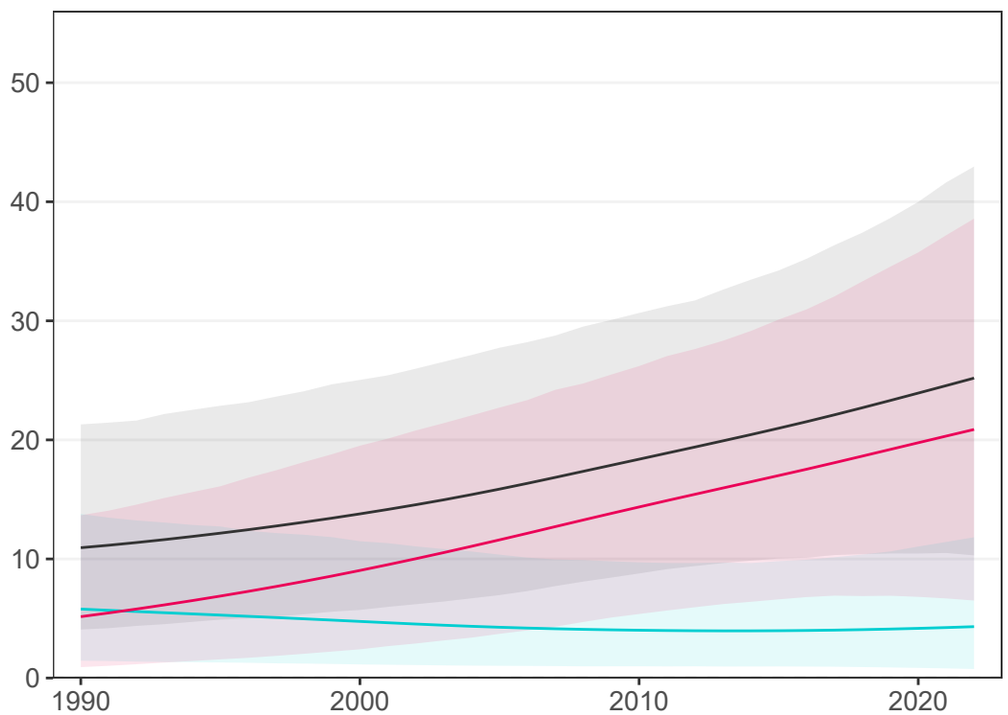
Girls

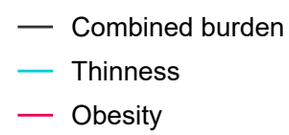
1 study (0 national)



Boys

1 study (0 national)

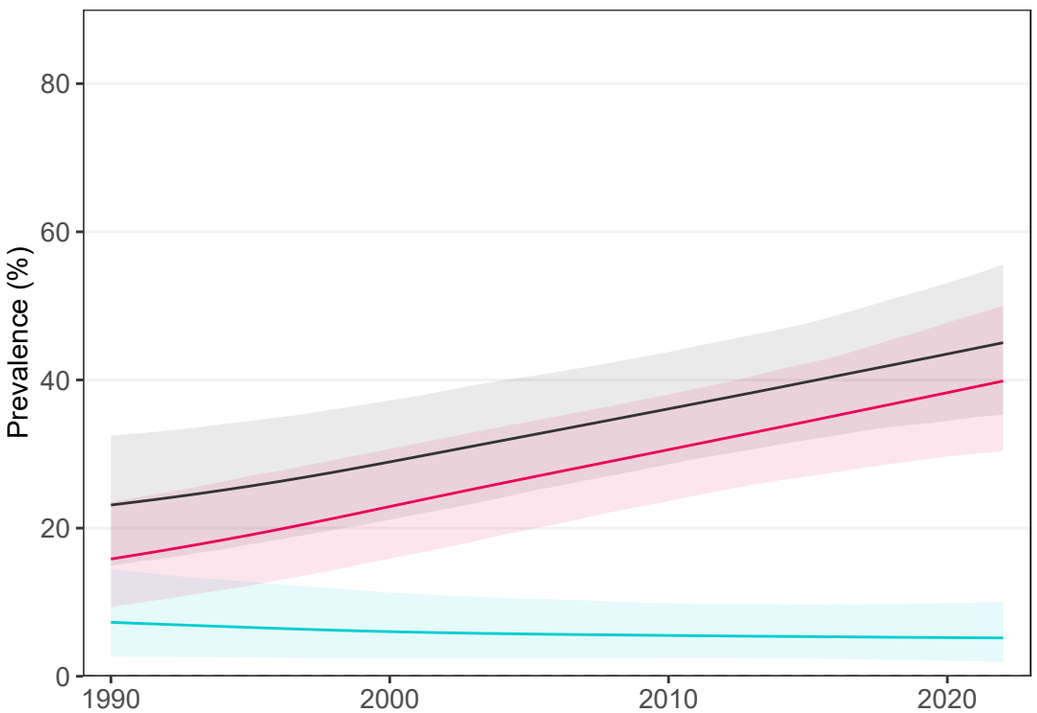




Adults

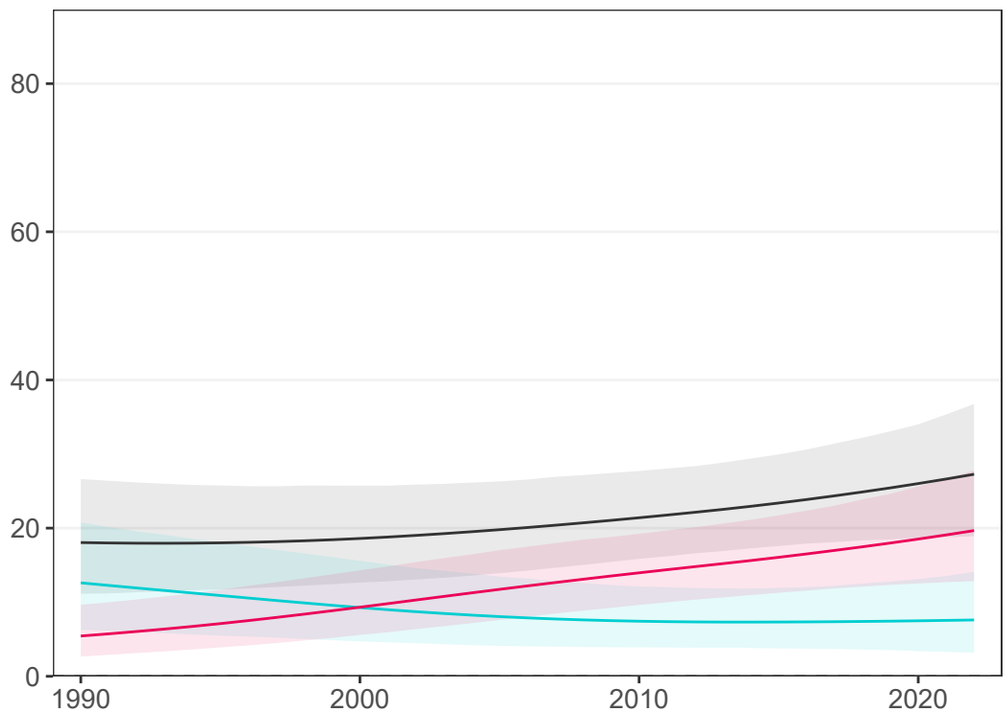
Women

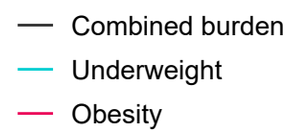
1 study (0 national)



Men

1 study (0 national)



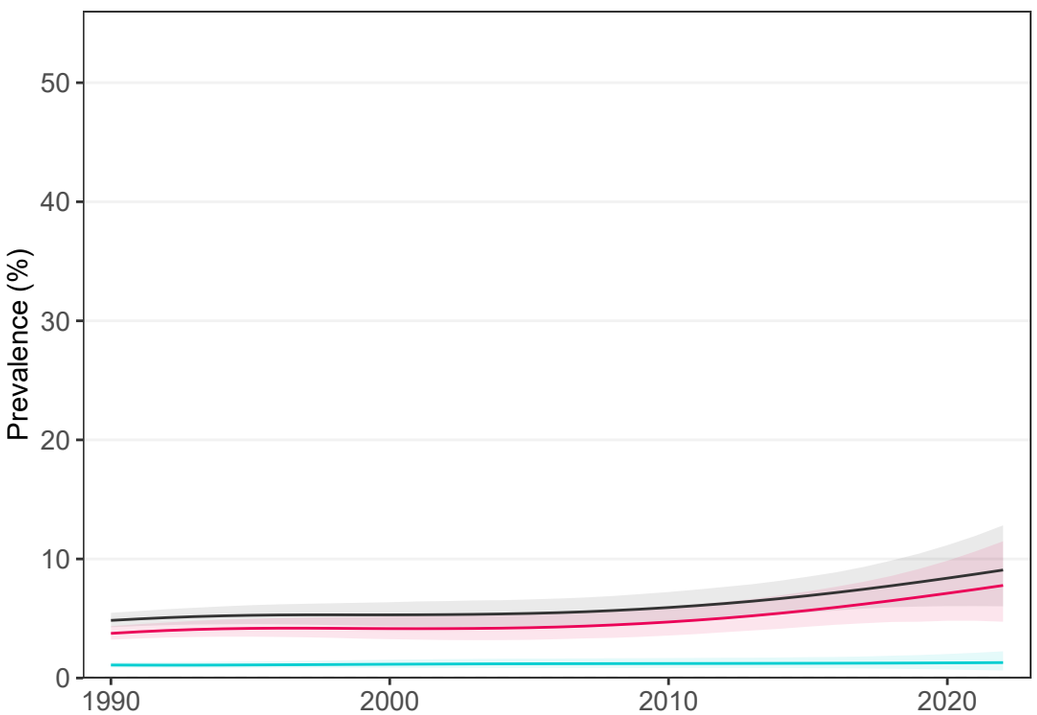


Sweden

School-aged children and adolescents

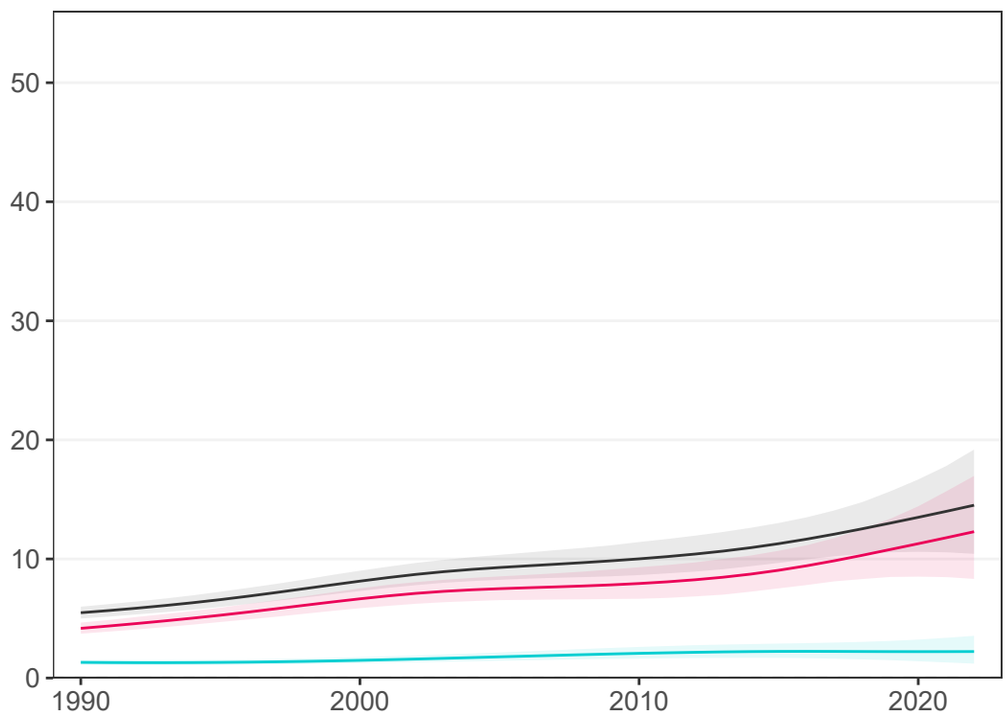
Girls

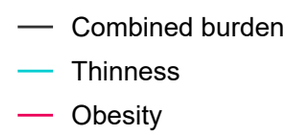
35 studies (30 national)



Boys

90 studies (59 national)

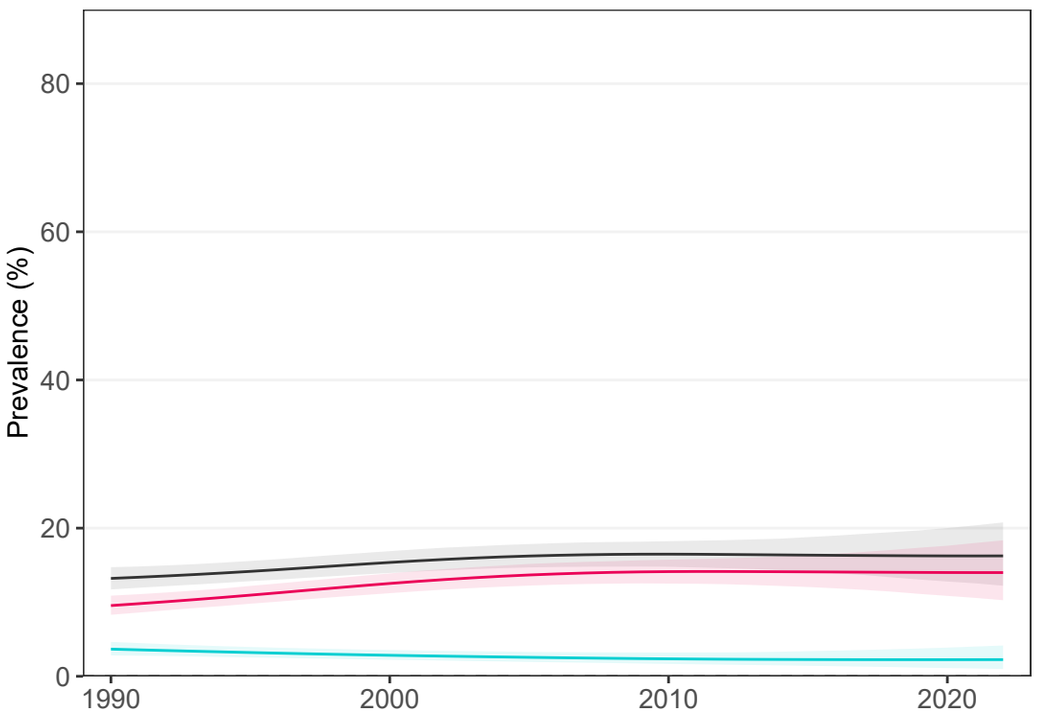




Adults

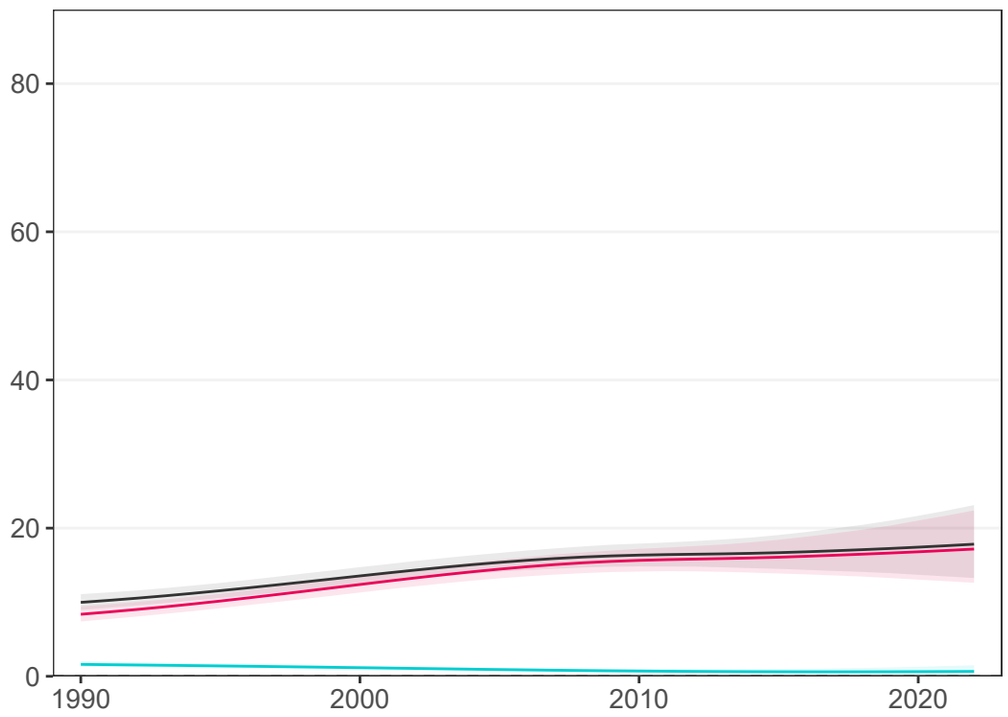
Women

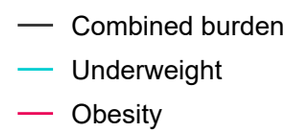
36 studies (3 national)



Men

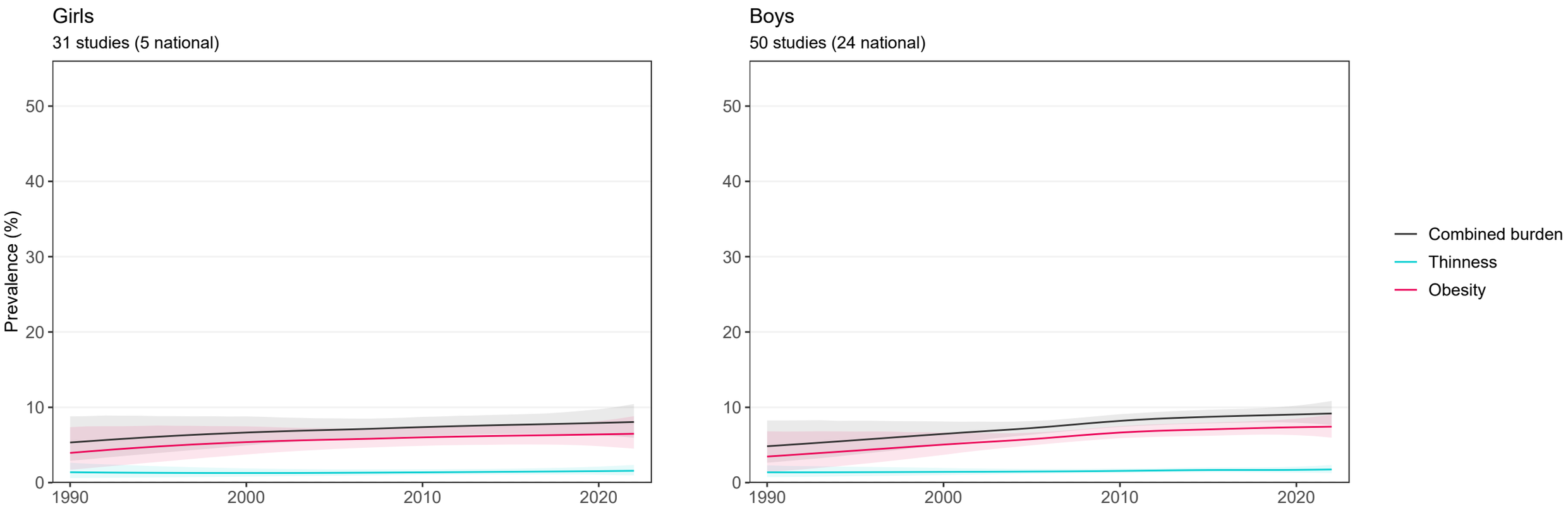
70 studies (32 national)



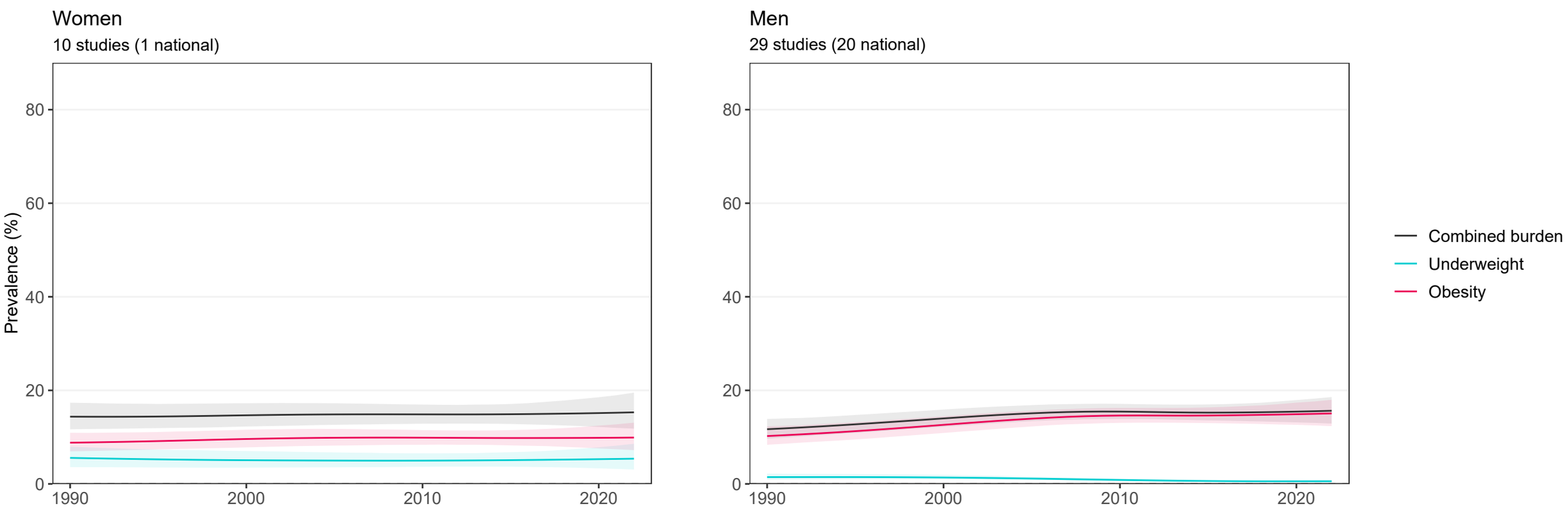


Switzerland

School-aged children and adolescents



Adults

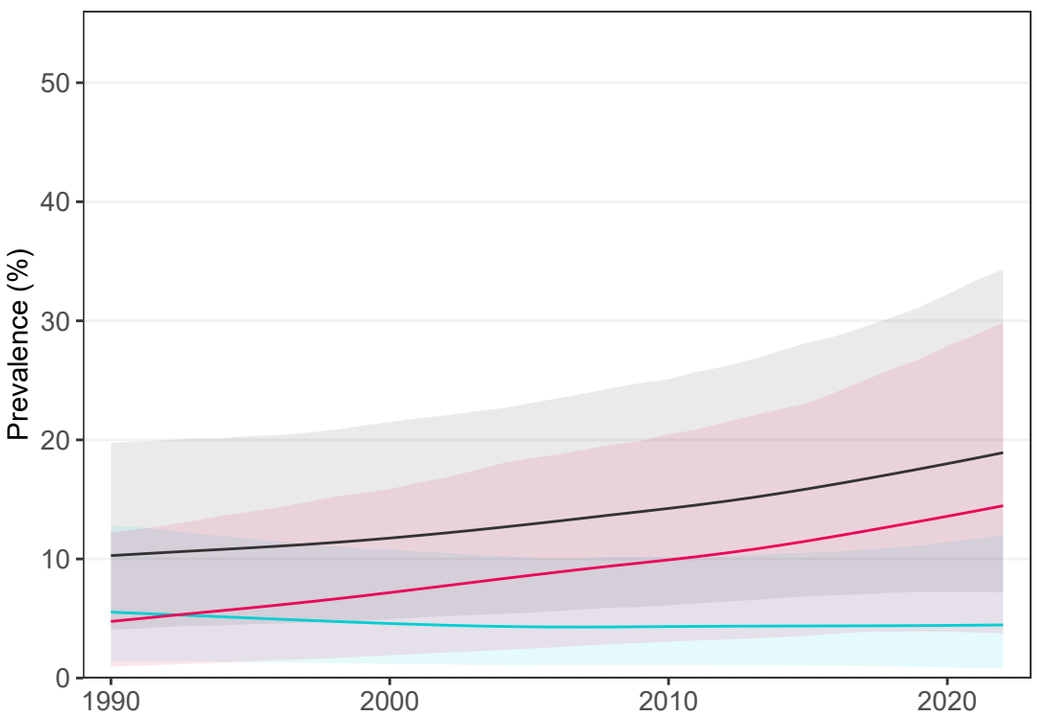


Syrian Arab Republic

School-aged children and adolescents

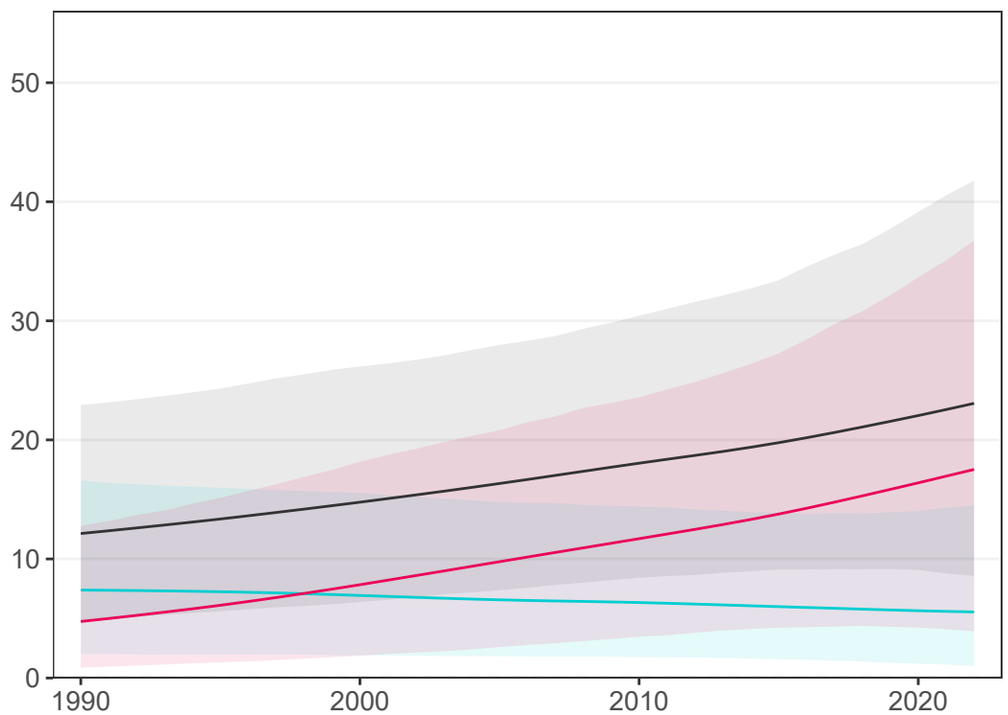
Girls

No studies



Boys

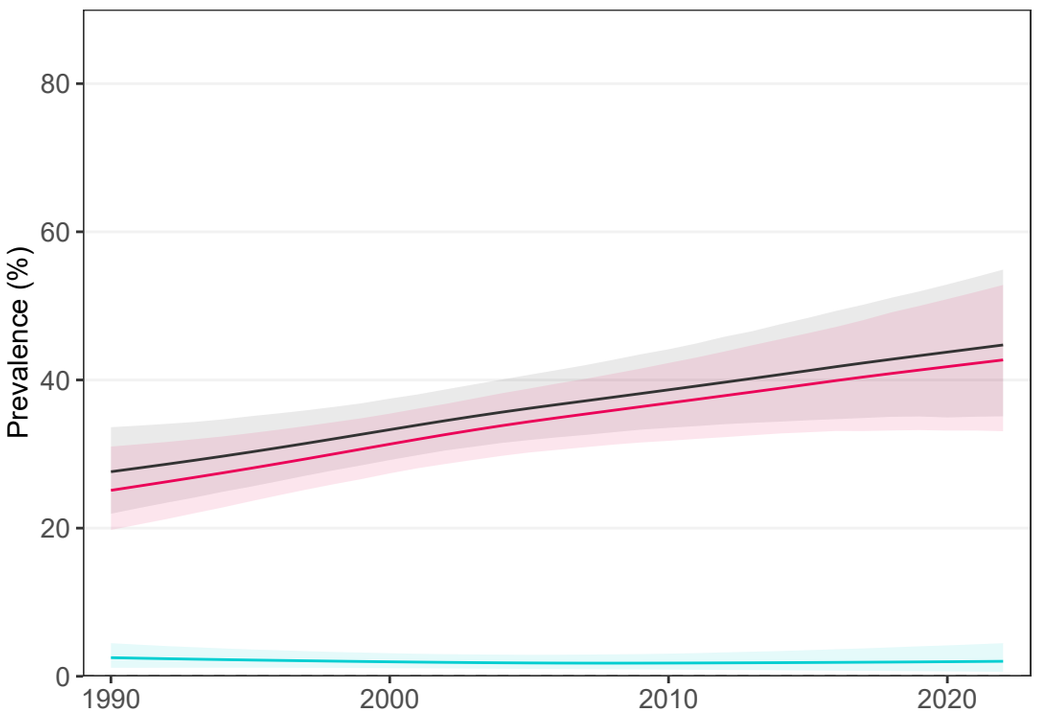
No studies



Adults

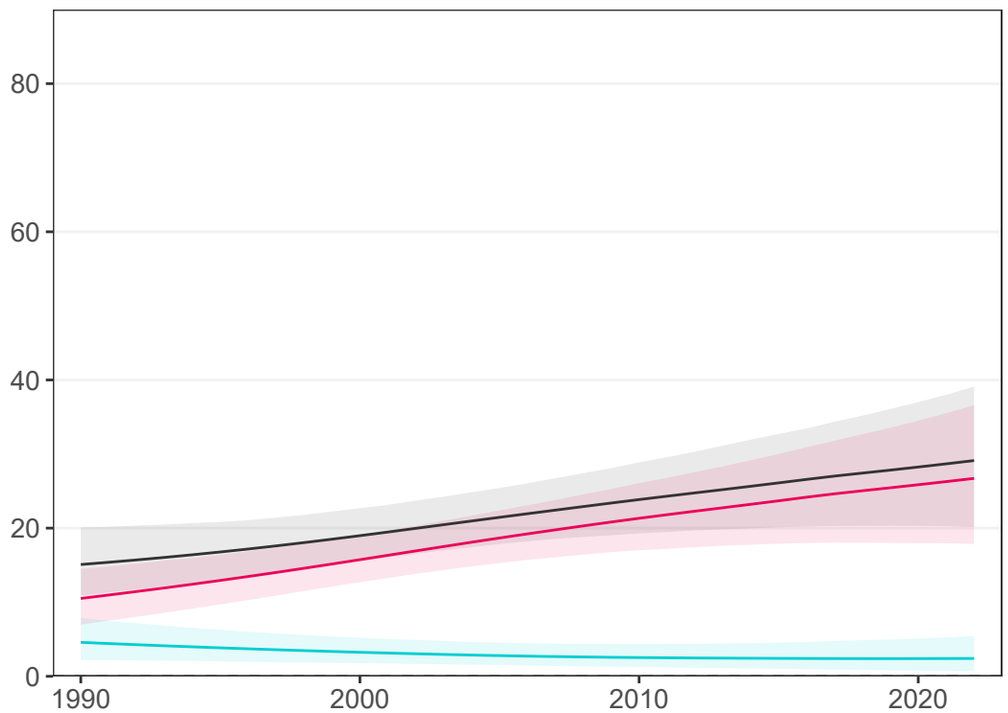
Women

1 study (1 national)



Men

1 study (1 national)

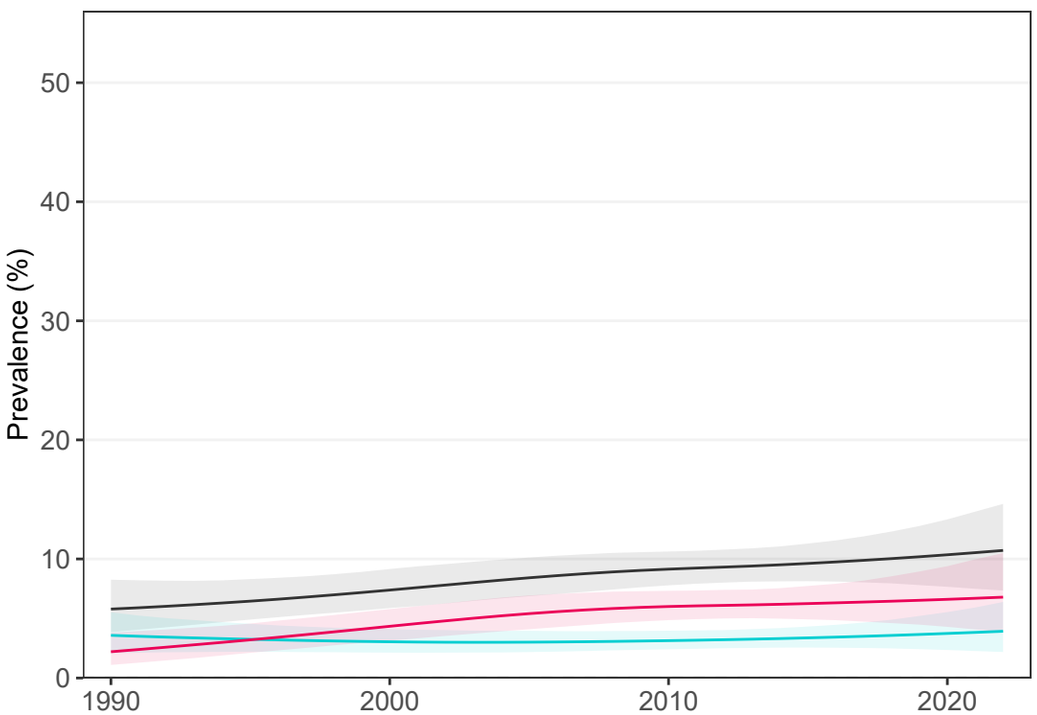


Taiwan

School-aged children and adolescents

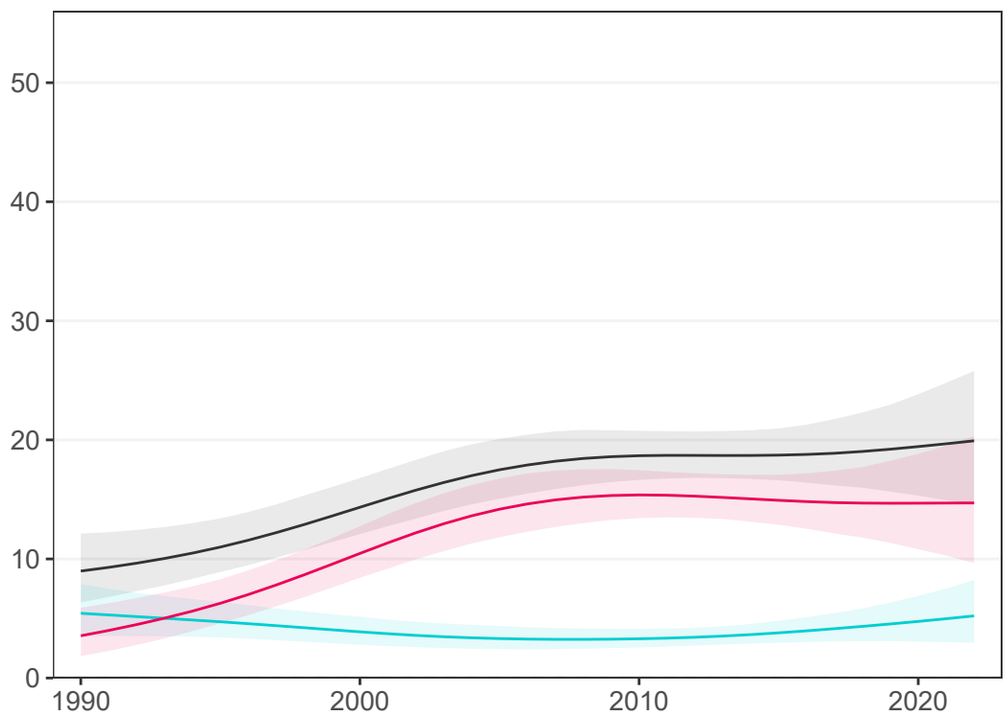
Girls

9 studies (9 national)



Boys

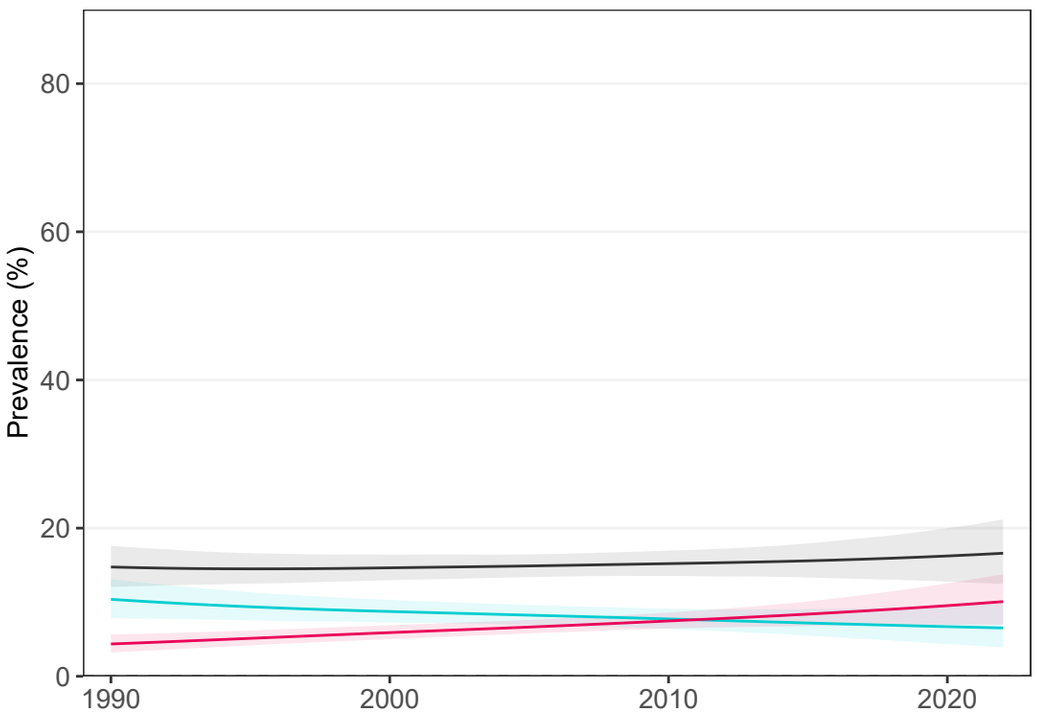
9 studies (9 national)



Adults

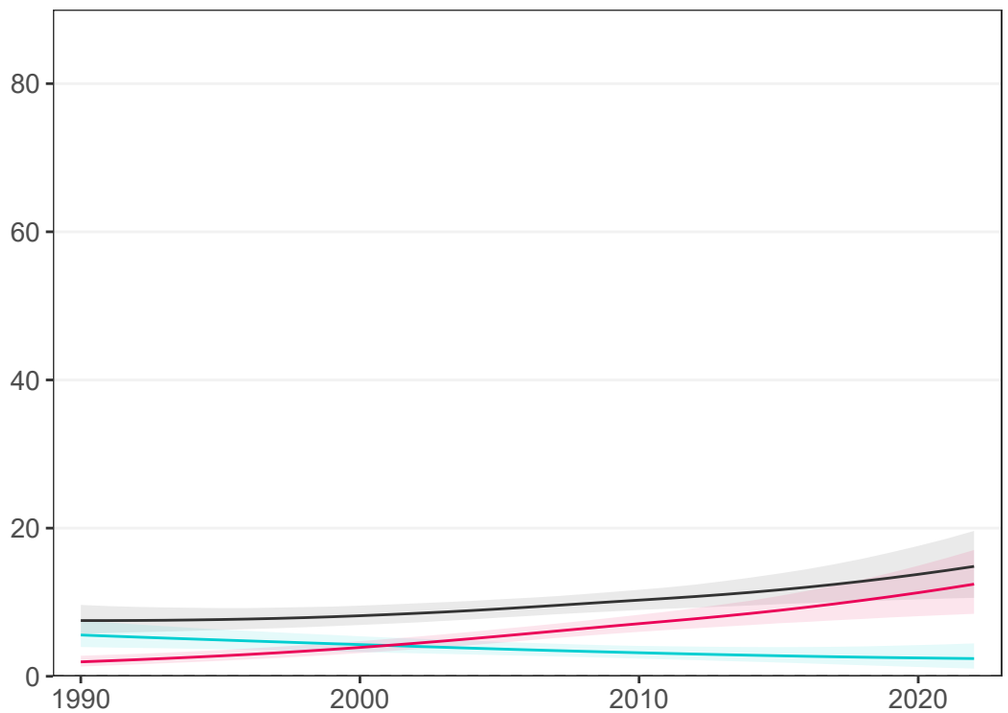
Women

12 studies (8 national)



Men

12 studies (8 national)

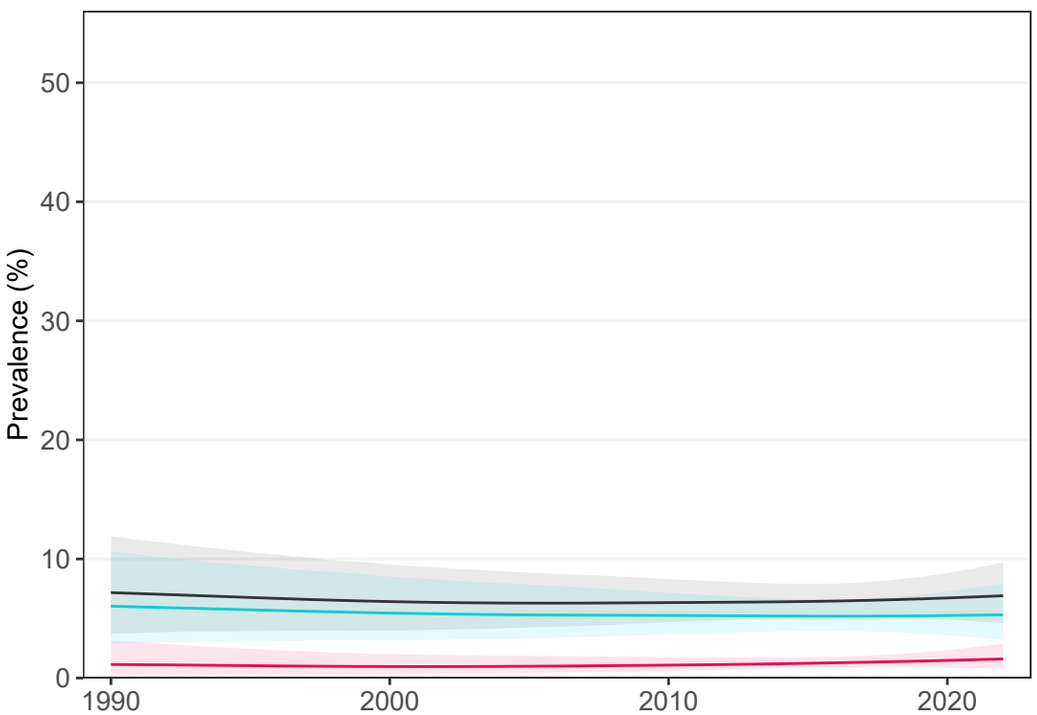


Tajikistan

School-aged children and adolescents

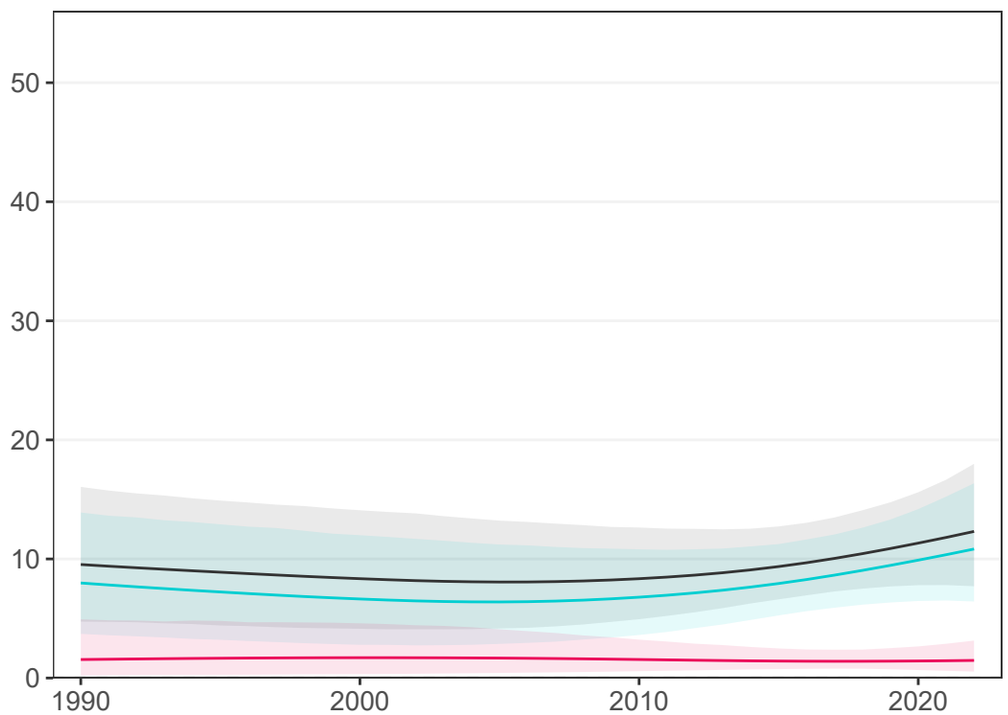
Girls

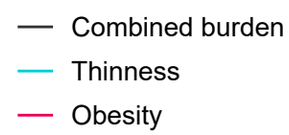
6 studies (6 national)



Boys

3 studies (3 national)

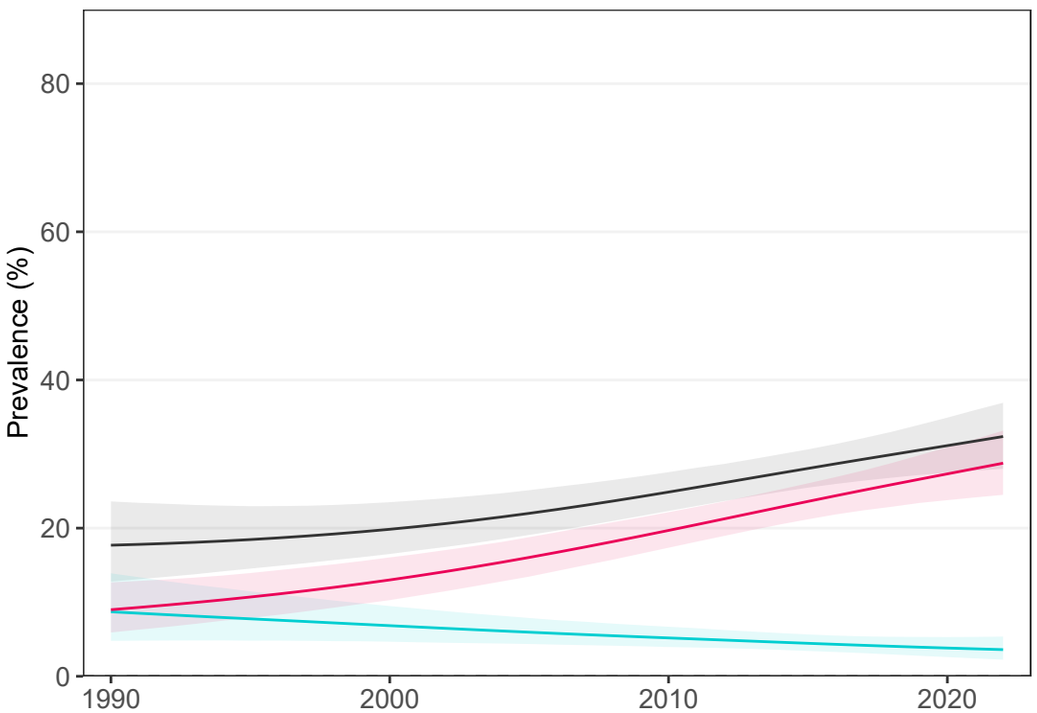




Adults

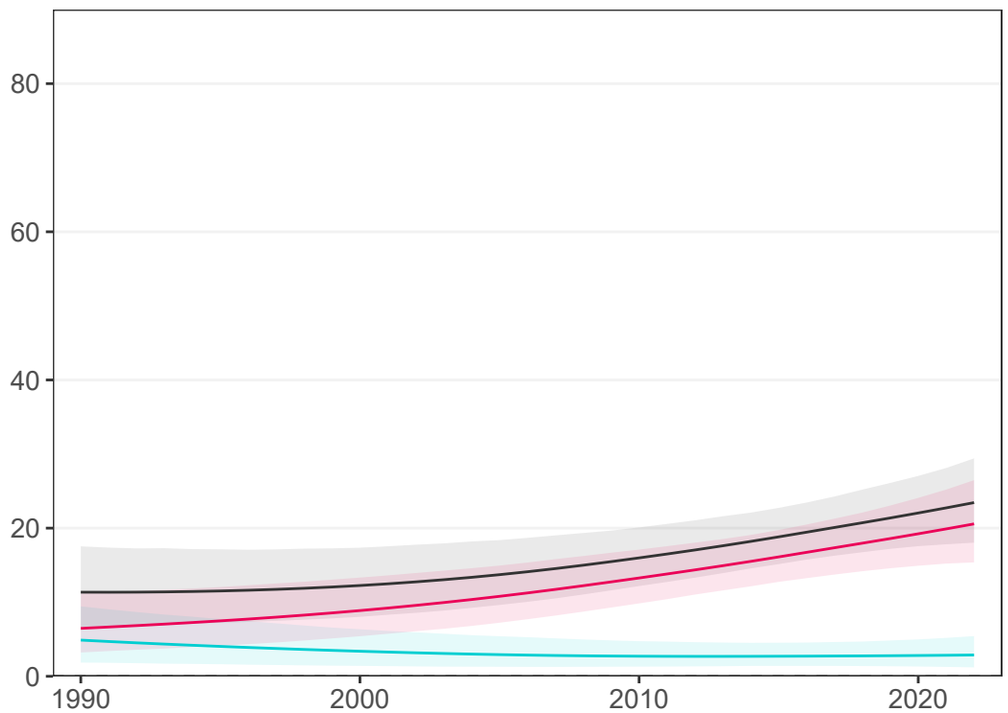
Women

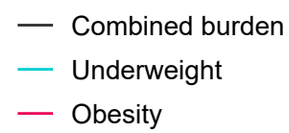
4 studies (4 national)



Men

1 study (1 national)



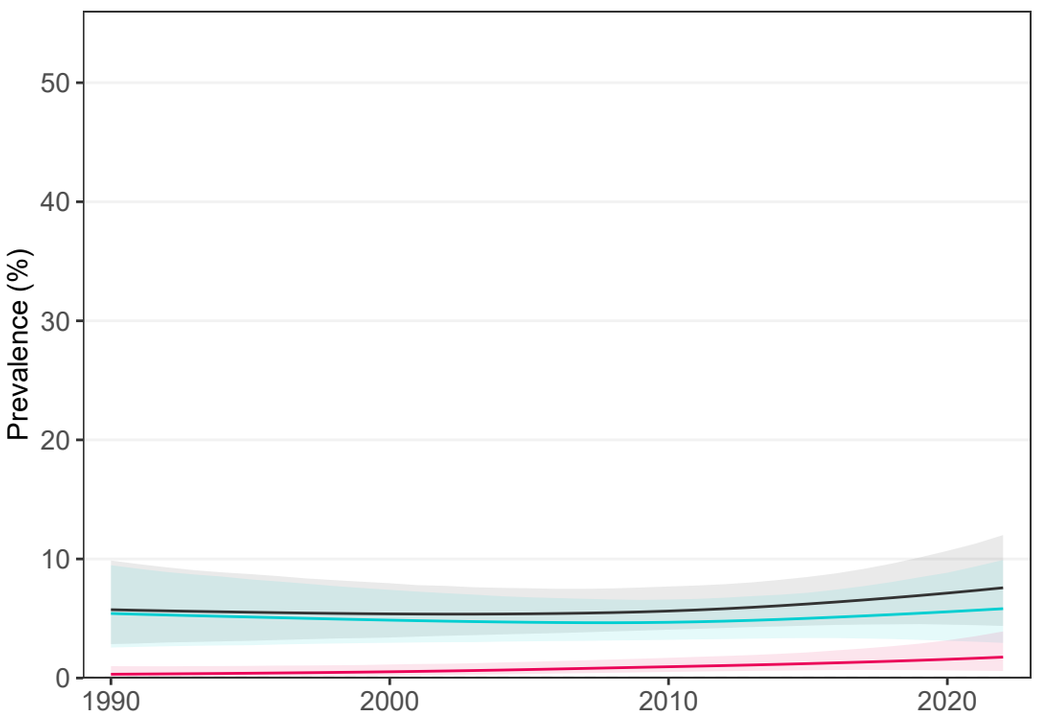


Tanzania

School-aged children and adolescents

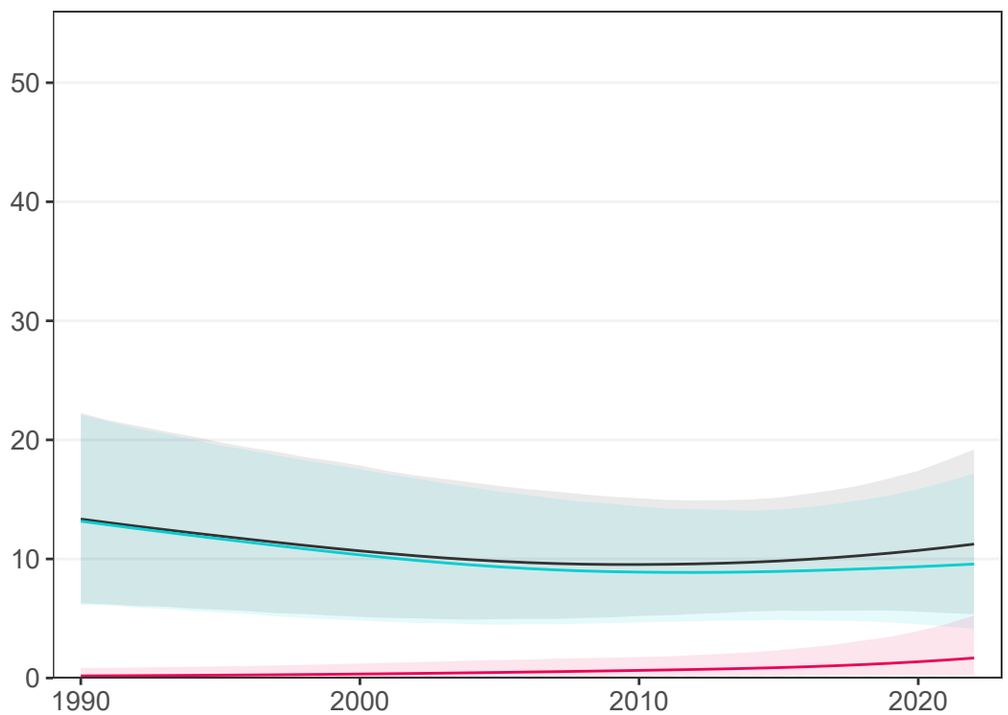
Girls

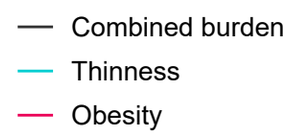
5 studies (3 national)



Boys

2 studies (0 national)

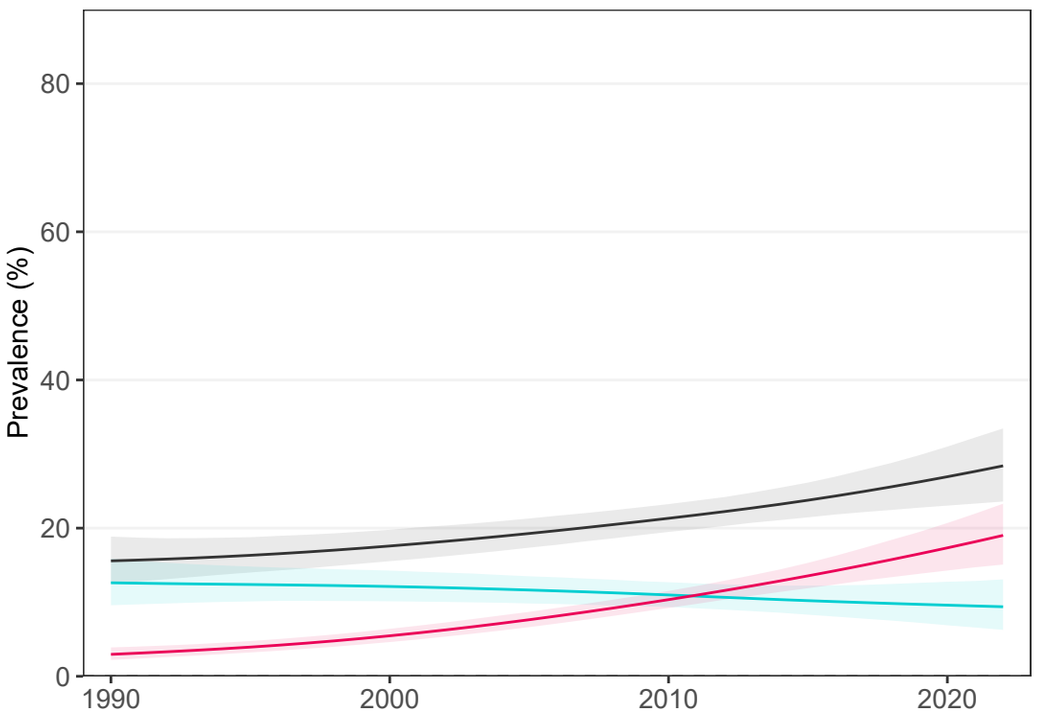




Adults

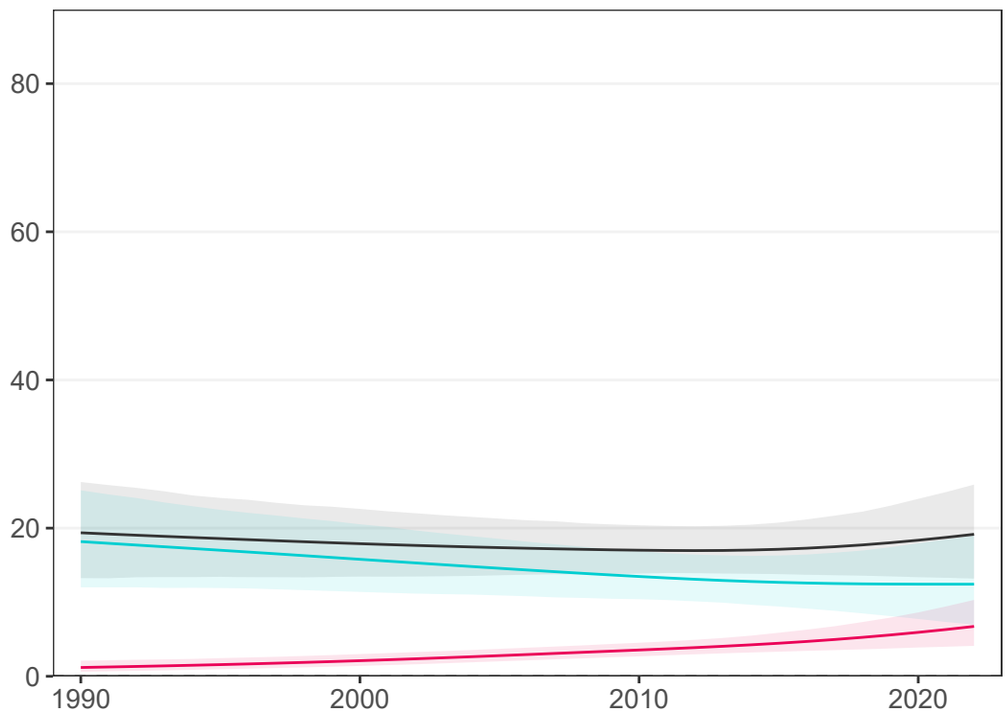
Women

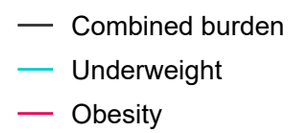
12 studies (6 national)



Men

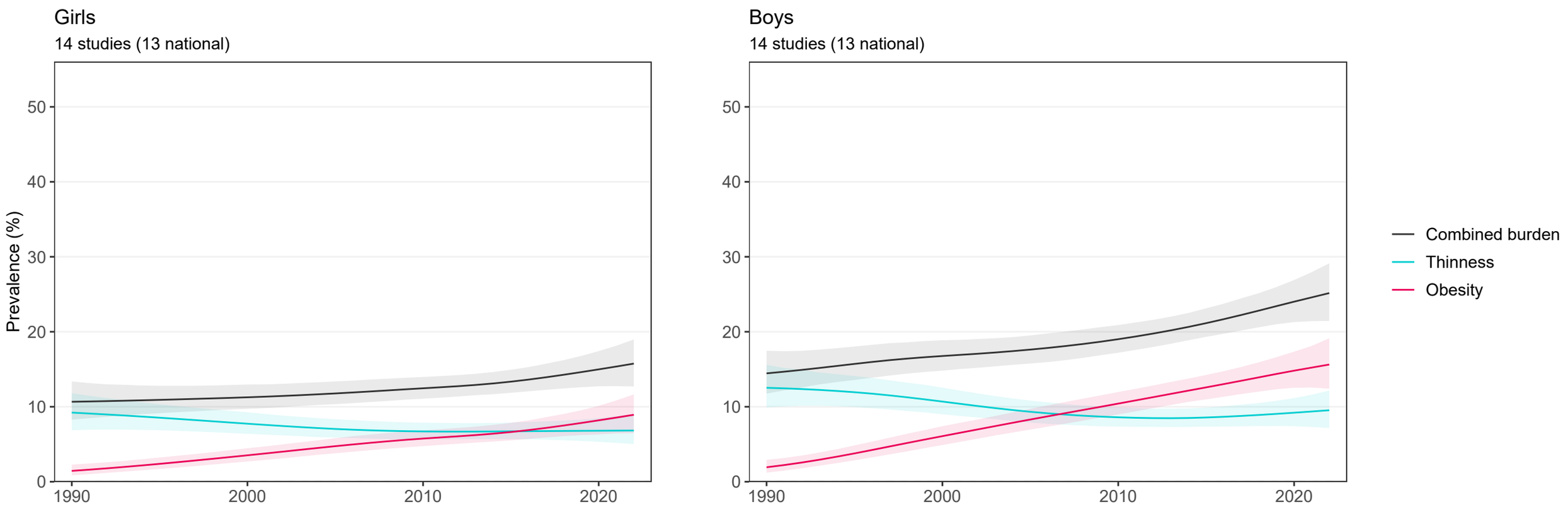
7 studies (1 national)



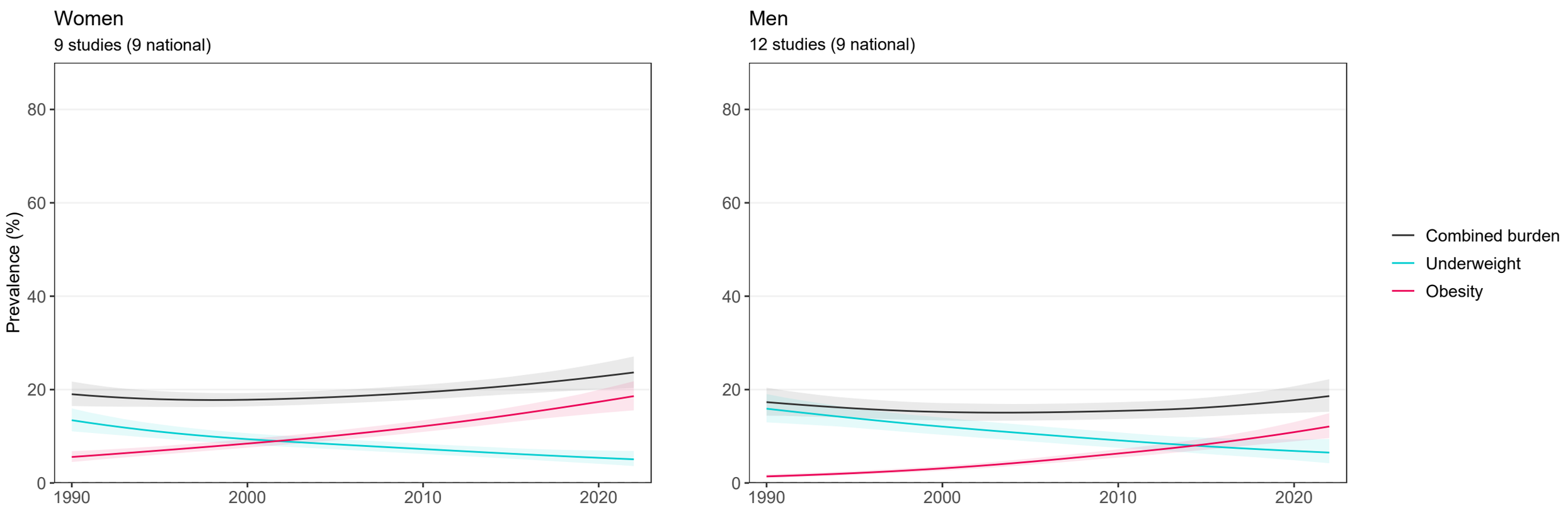


Thailand

School-aged children and adolescents



Adults

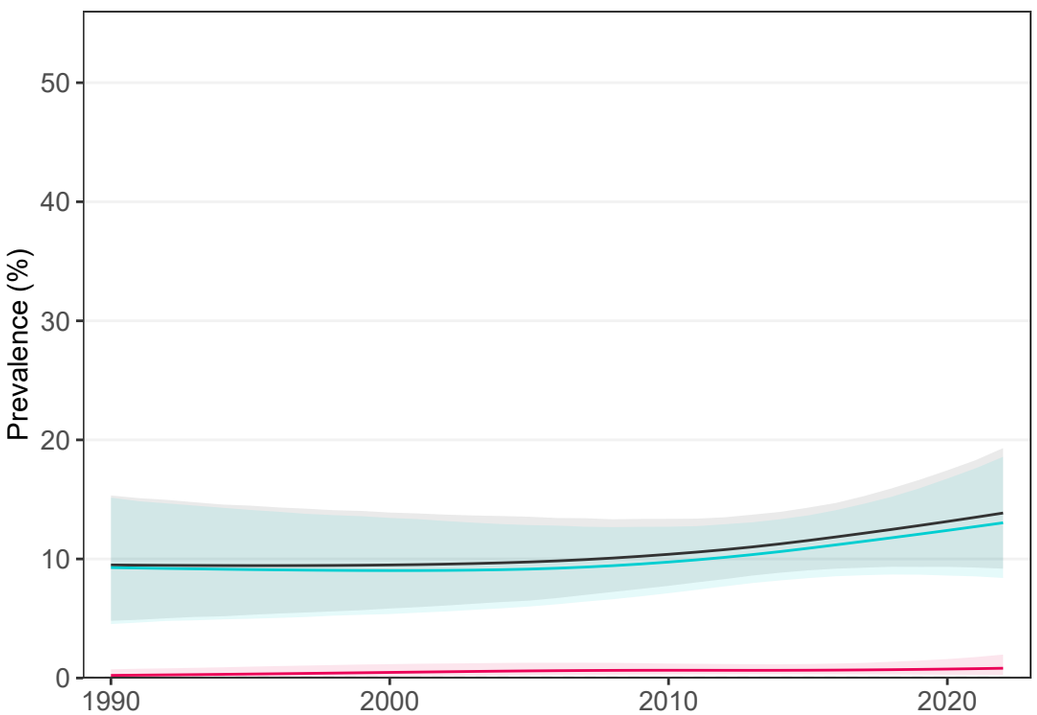


Timor-Leste

School-aged children and adolescents

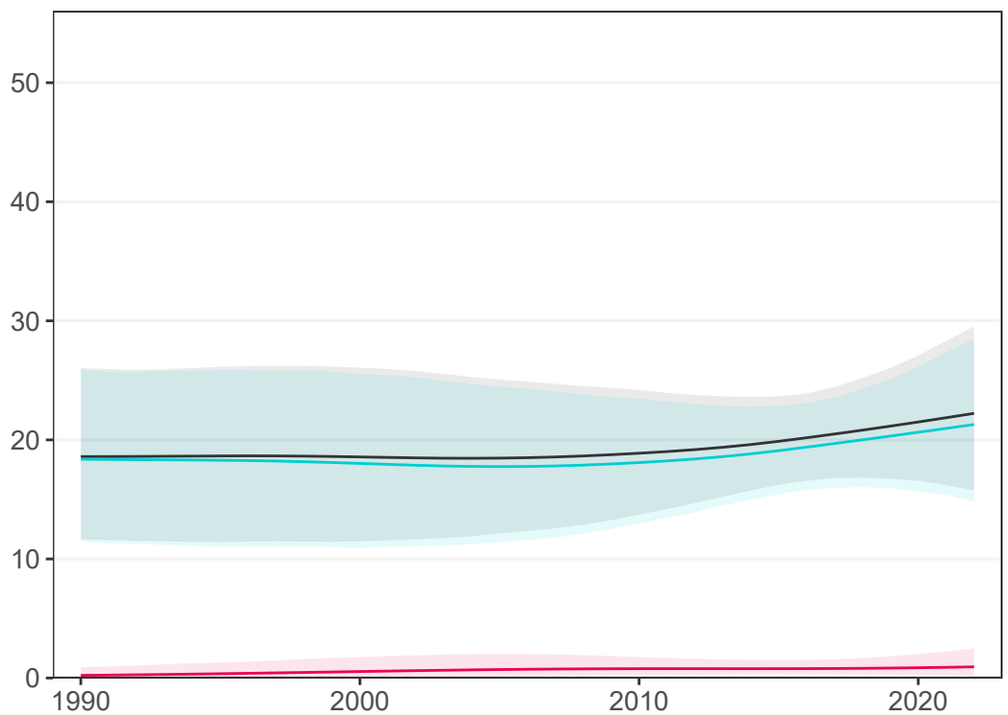
Girls

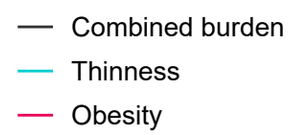
6 studies (3 national)



Boys

5 studies (2 national)

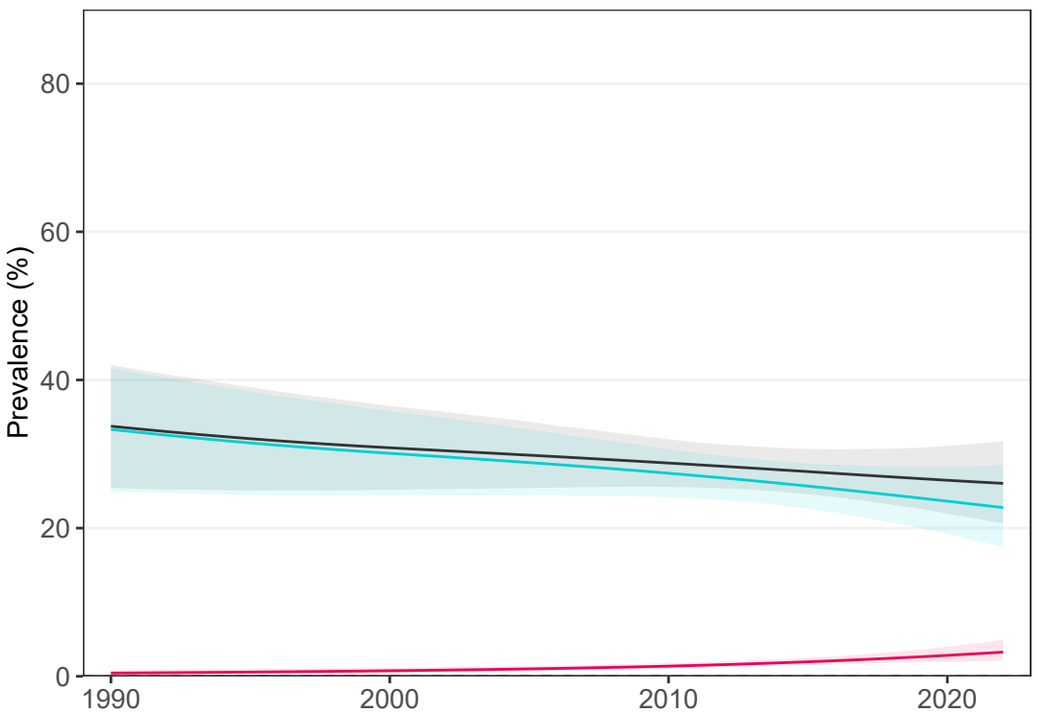




Adults

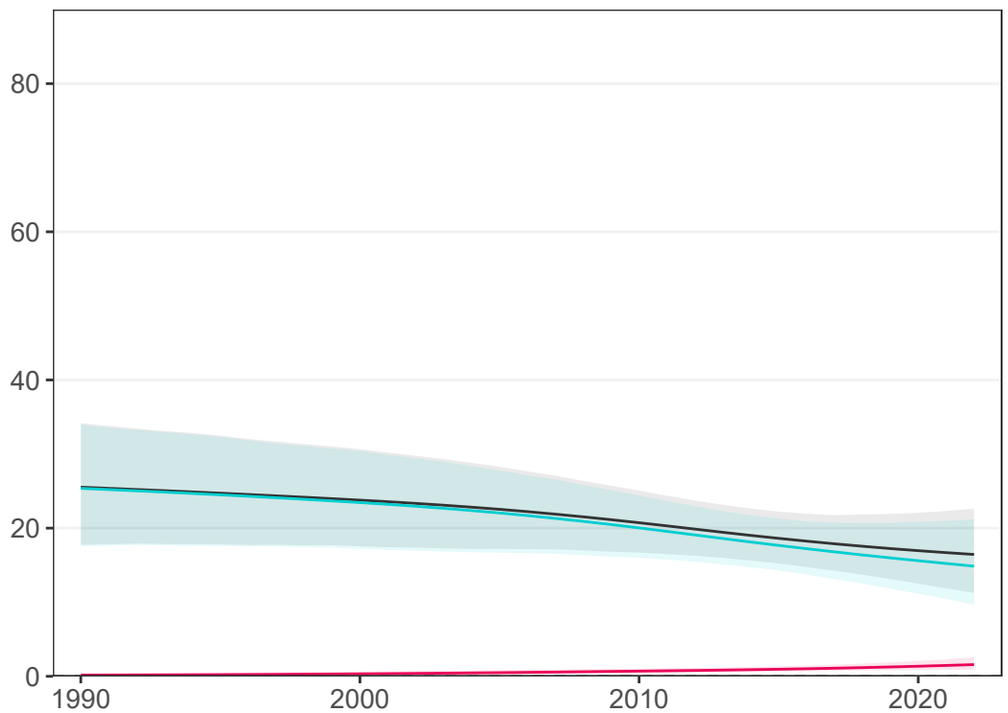
Women

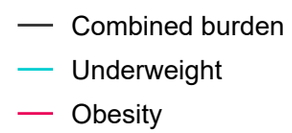
7 studies (3 national)



Men

5 studies (2 national)



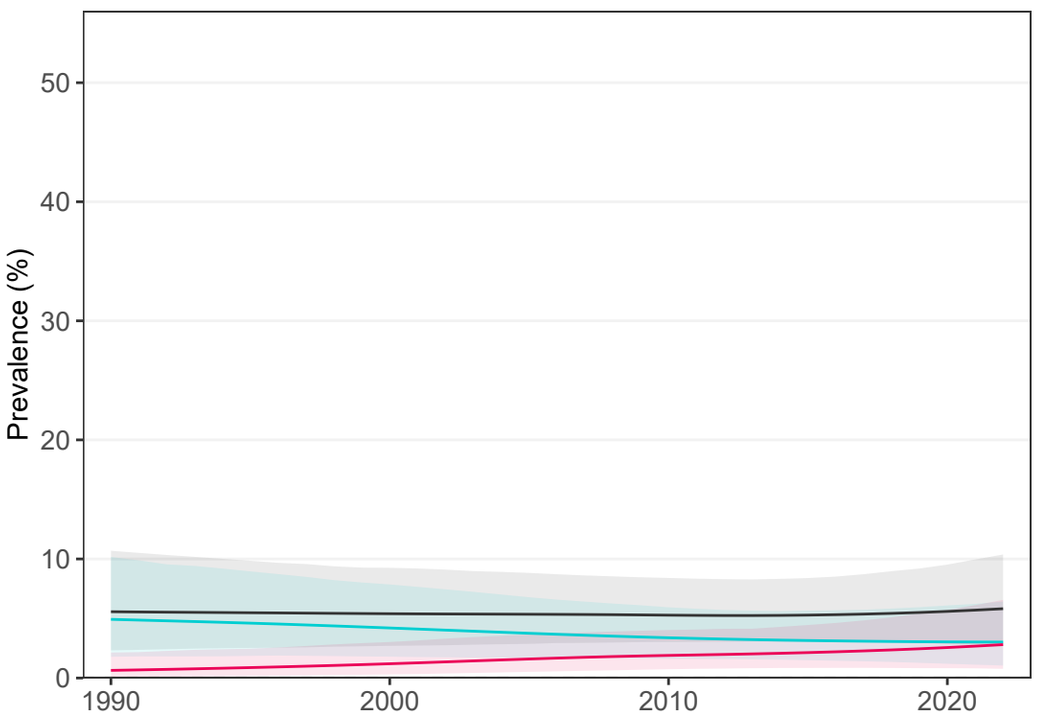


Togo

School-aged children and adolescents

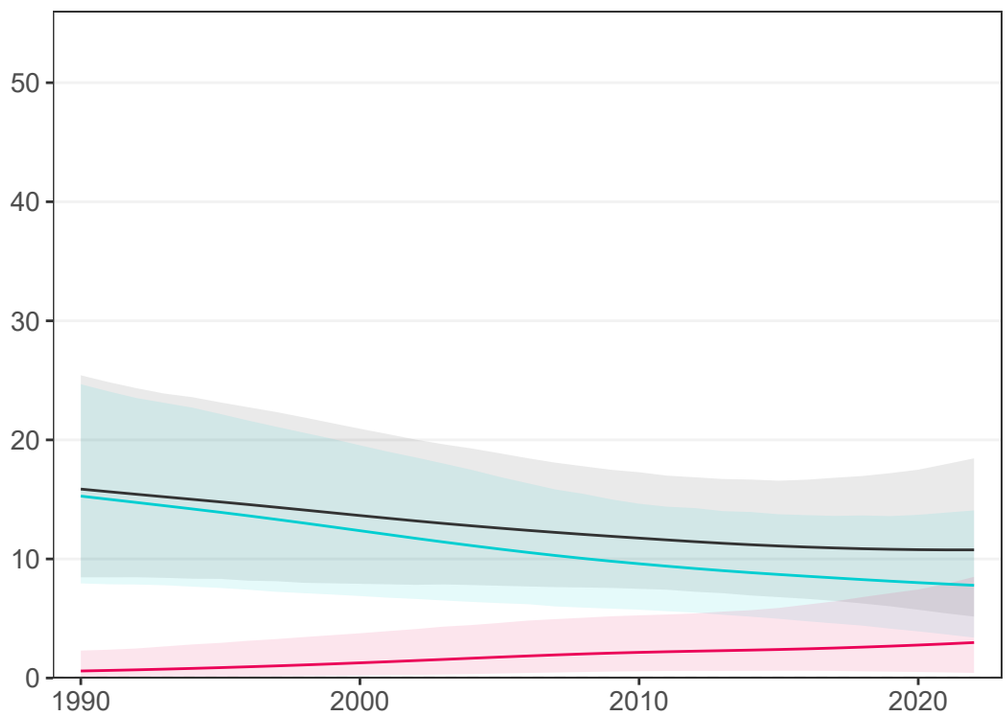
Girls

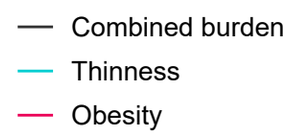
3 studies (3 national)



Boys

2 studies (2 national)

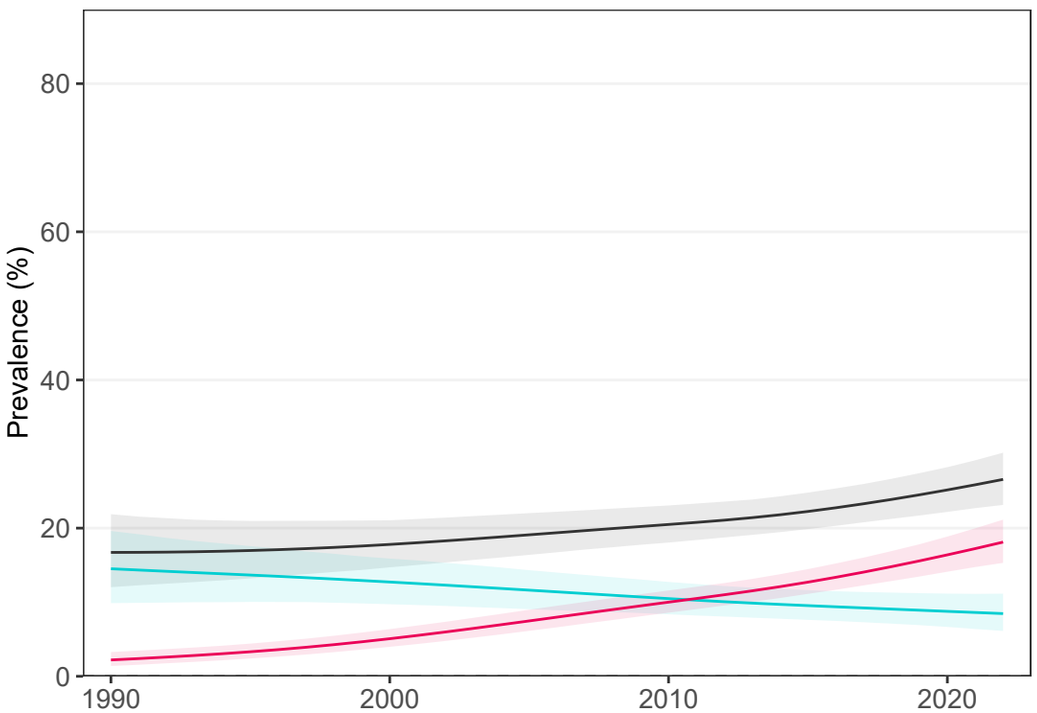




Adults

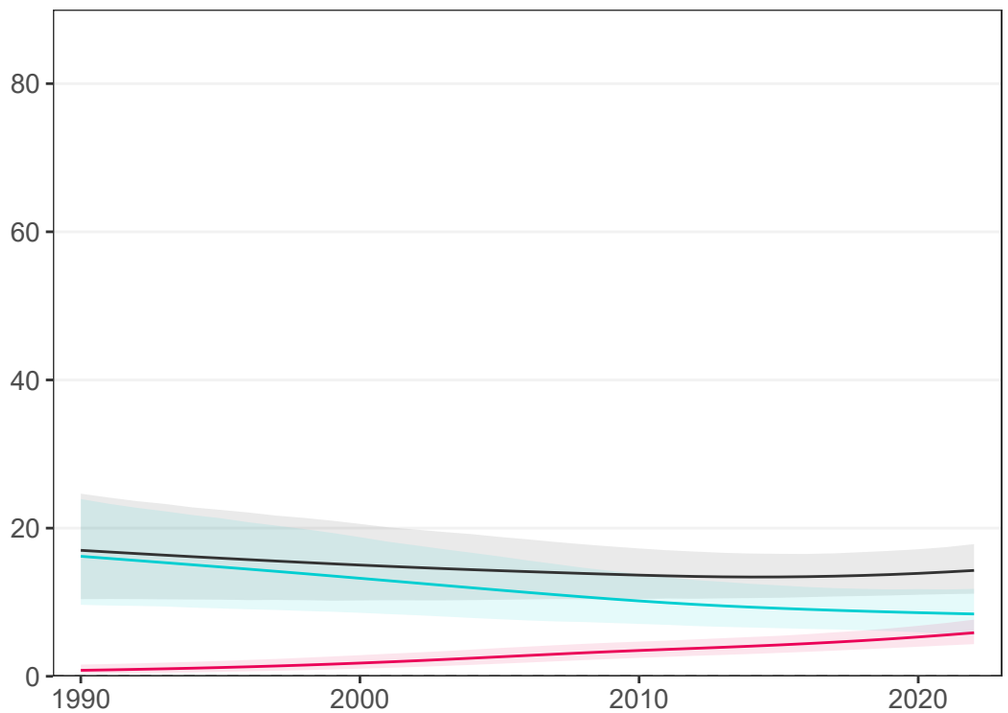
Women

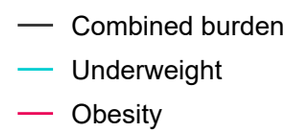
5 studies (4 national)



Men

2 studies (2 national)



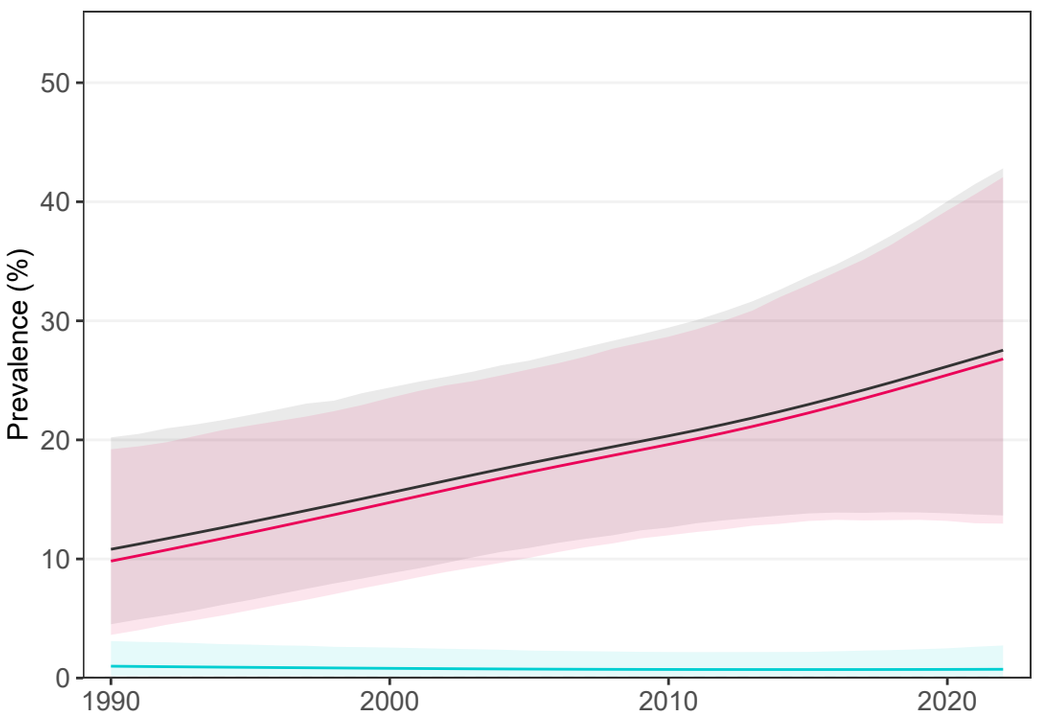


Tokelau

School-aged children and adolescents

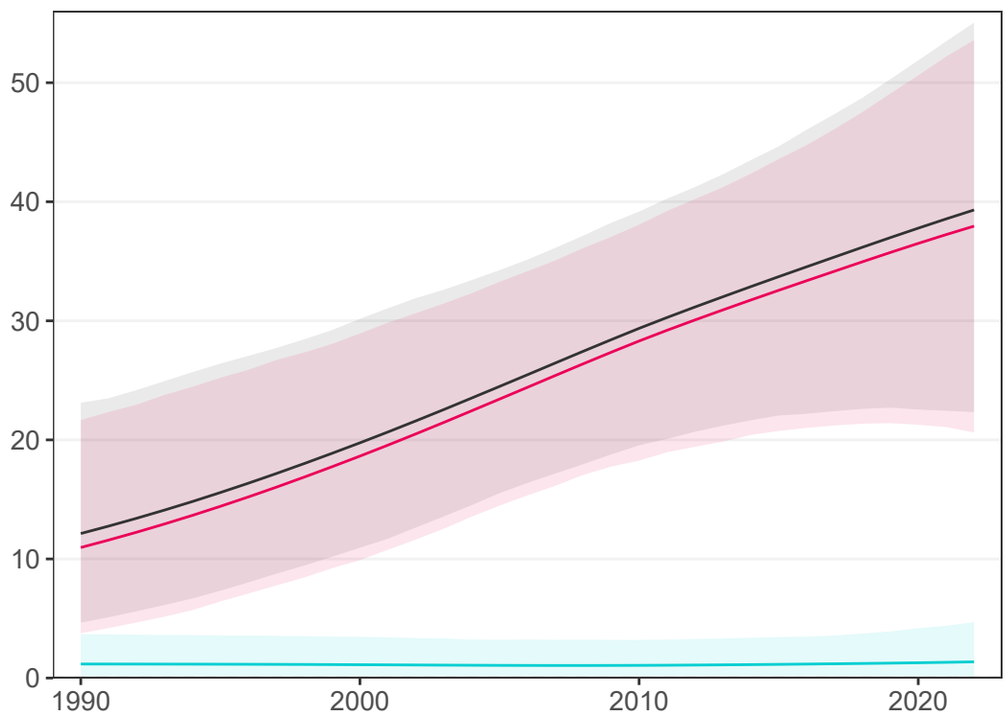
Girls

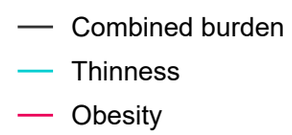
2 studies (2 national)



Boys

2 studies (2 national)

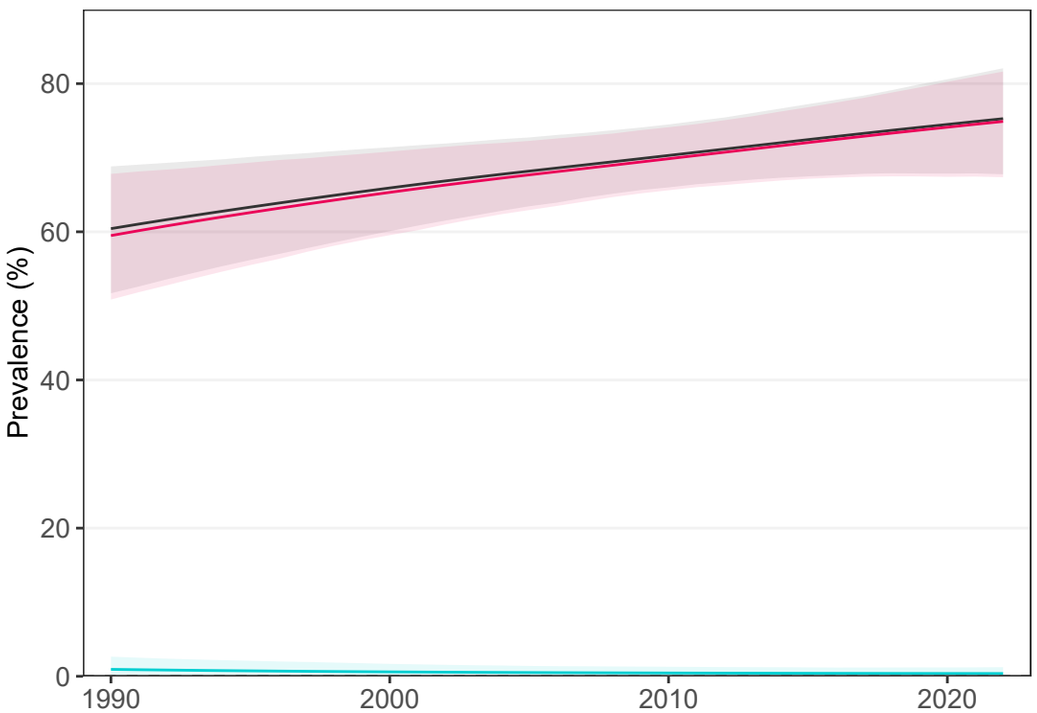




Adults

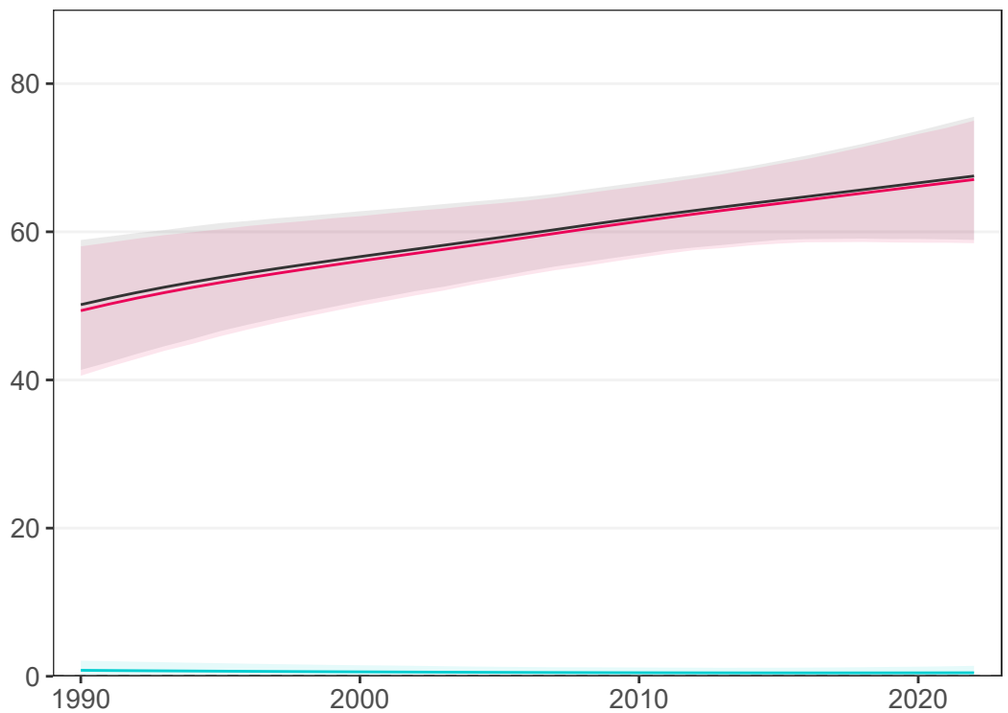
Women

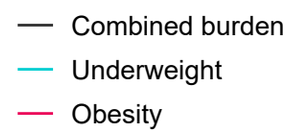
2 studies (2 national)



Men

2 studies (2 national)



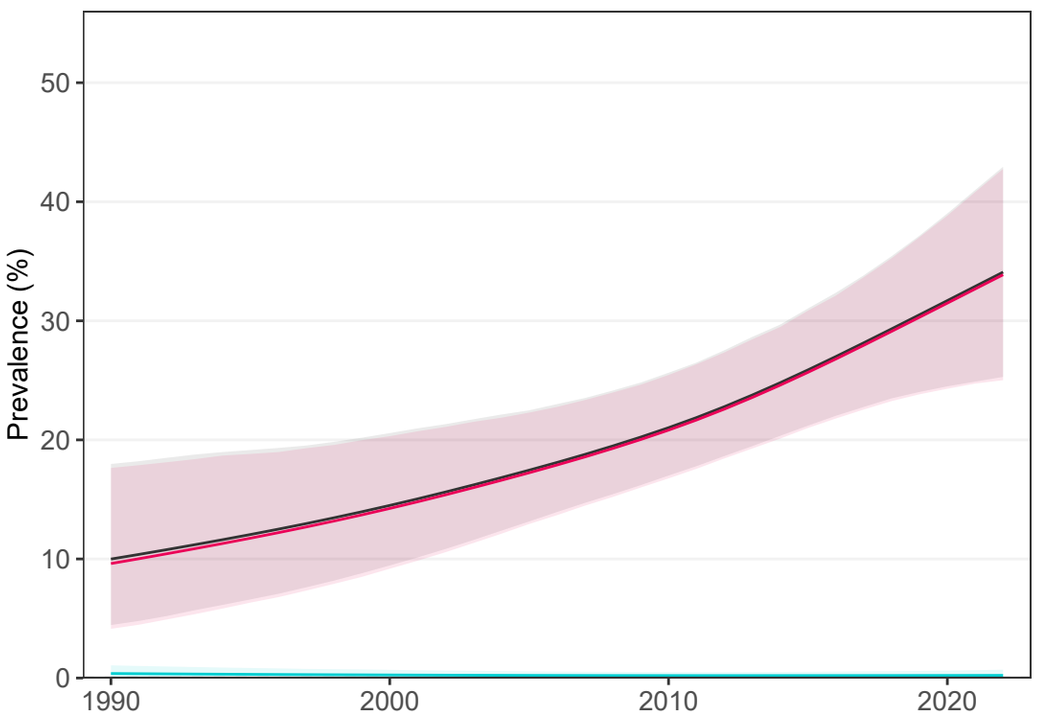


Tonga

School-aged children and adolescents

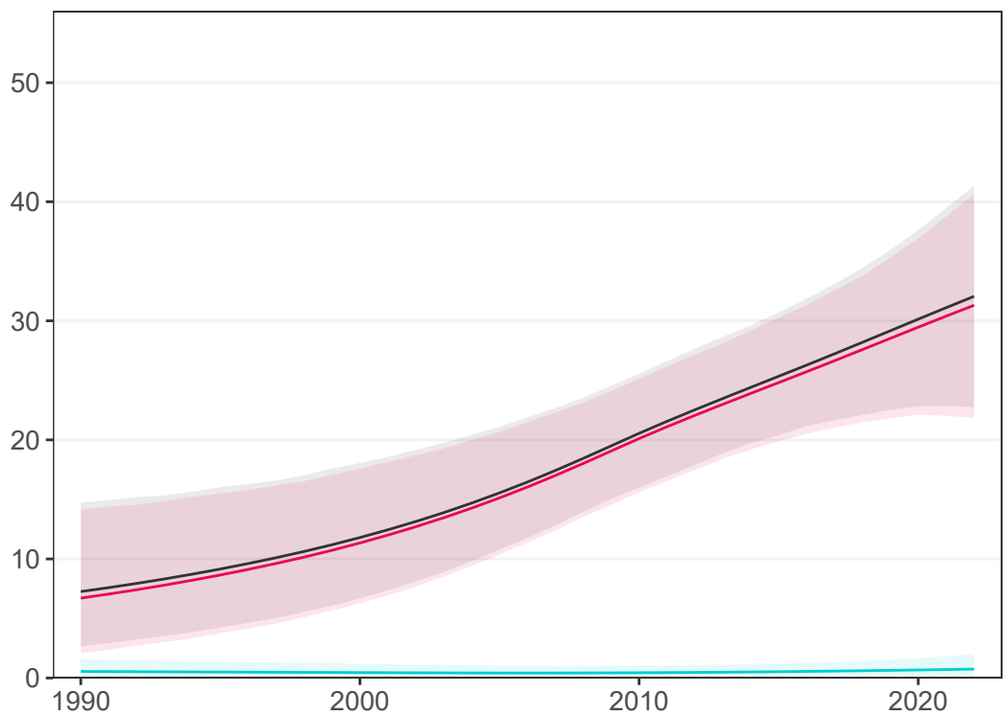
Girls

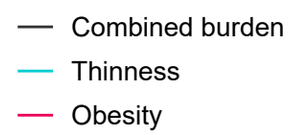
6 studies (4 national)



Boys

6 studies (4 national)

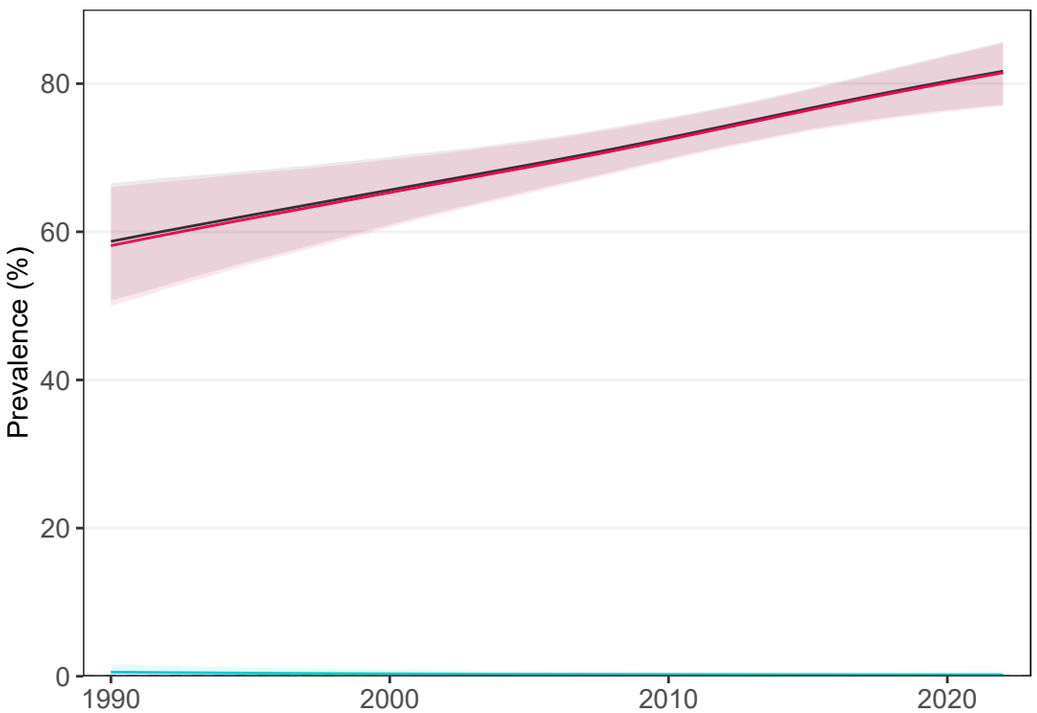




Adults

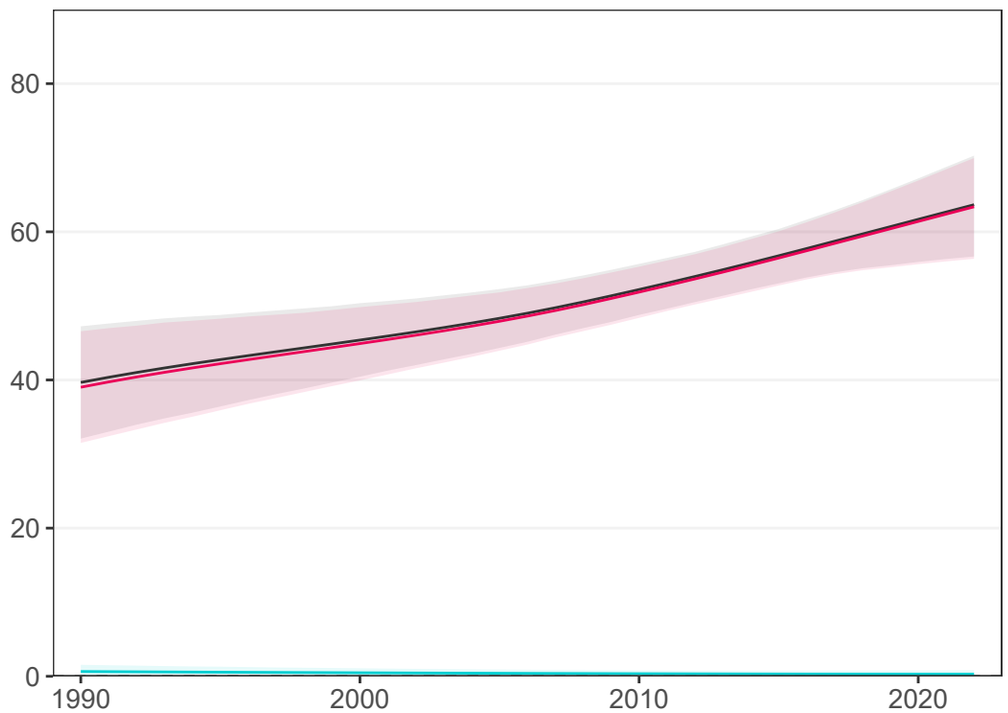
Women

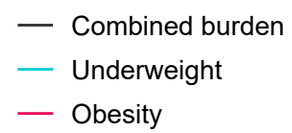
5 studies (3 national)



Men

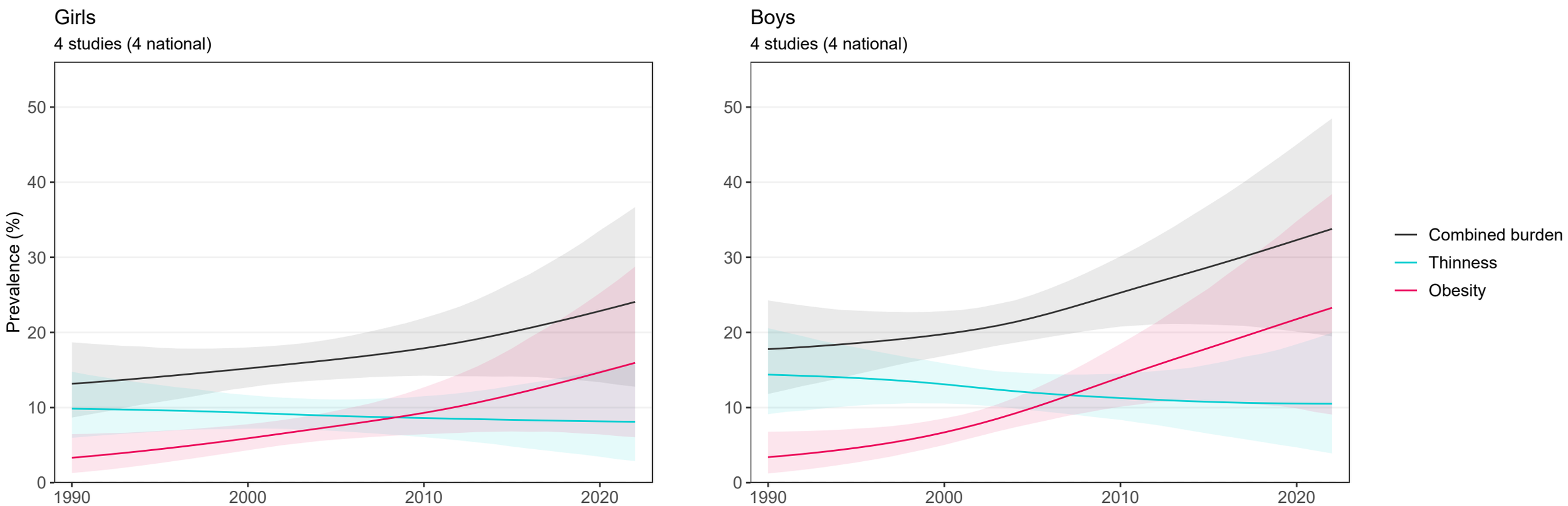
5 studies (3 national)



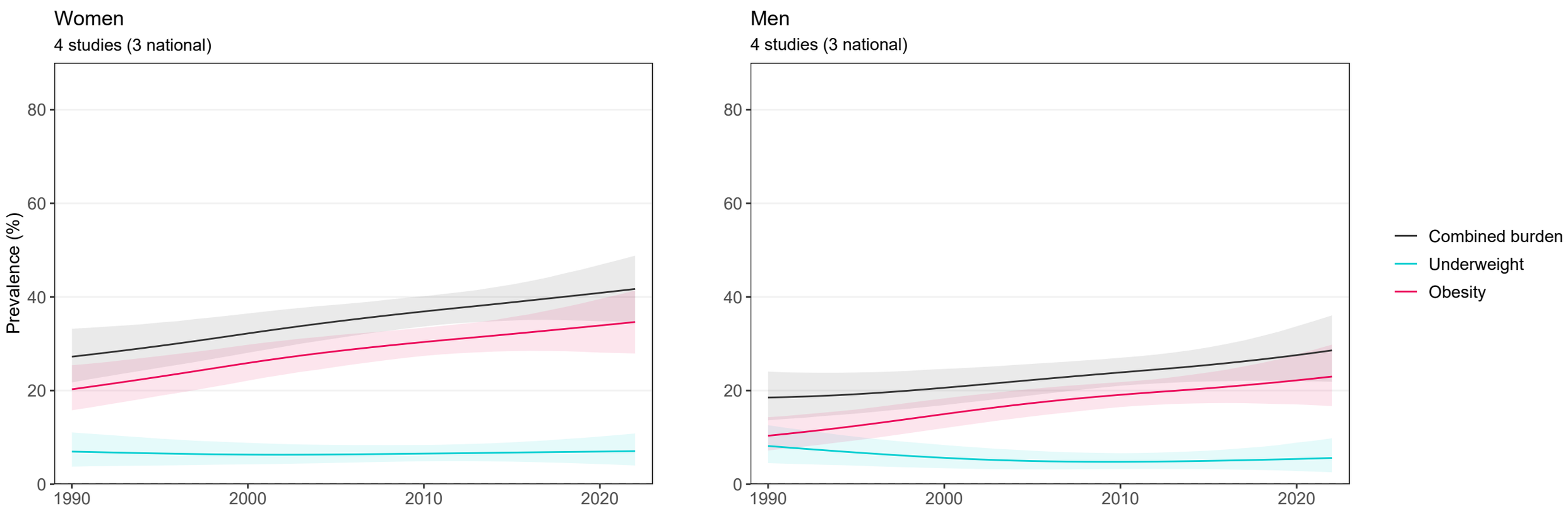


Trinidad & Tobago

School-aged children and adolescents



Adults

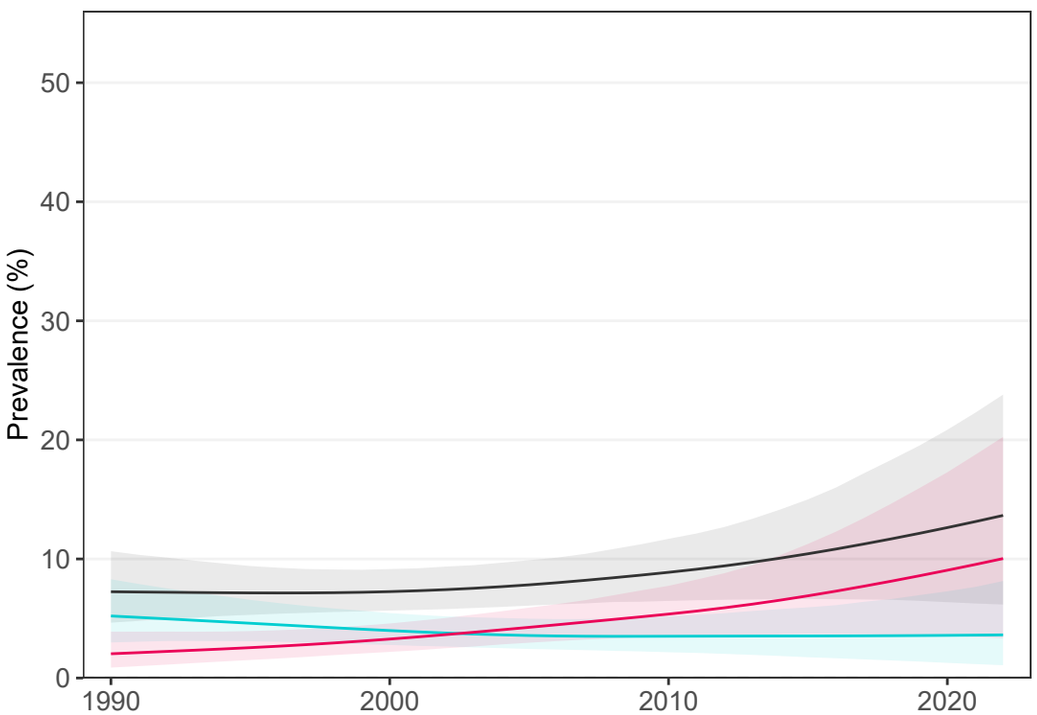


Tunisia

School-aged children and adolescents

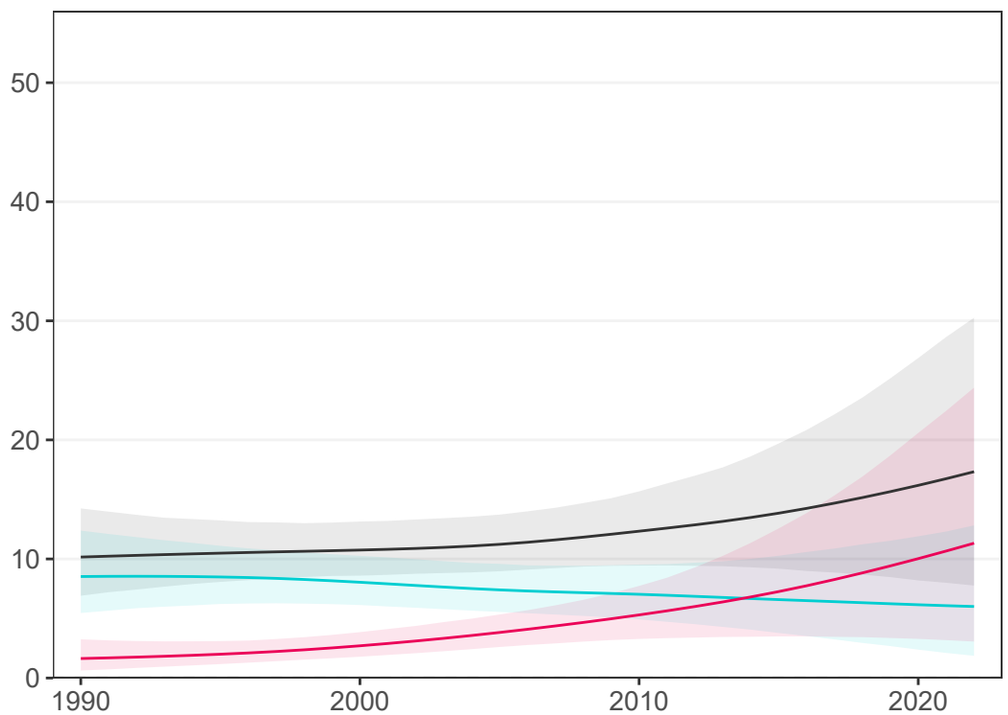
Girls

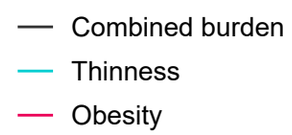
3 studies (2 national)



Boys

3 studies (2 national)

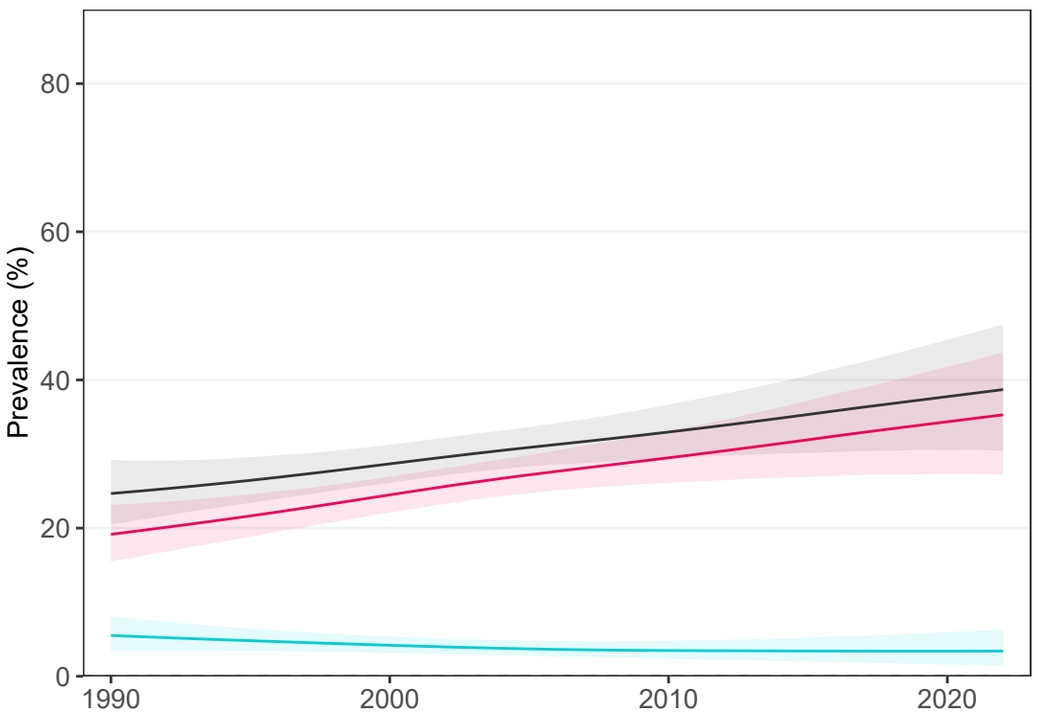




Adults

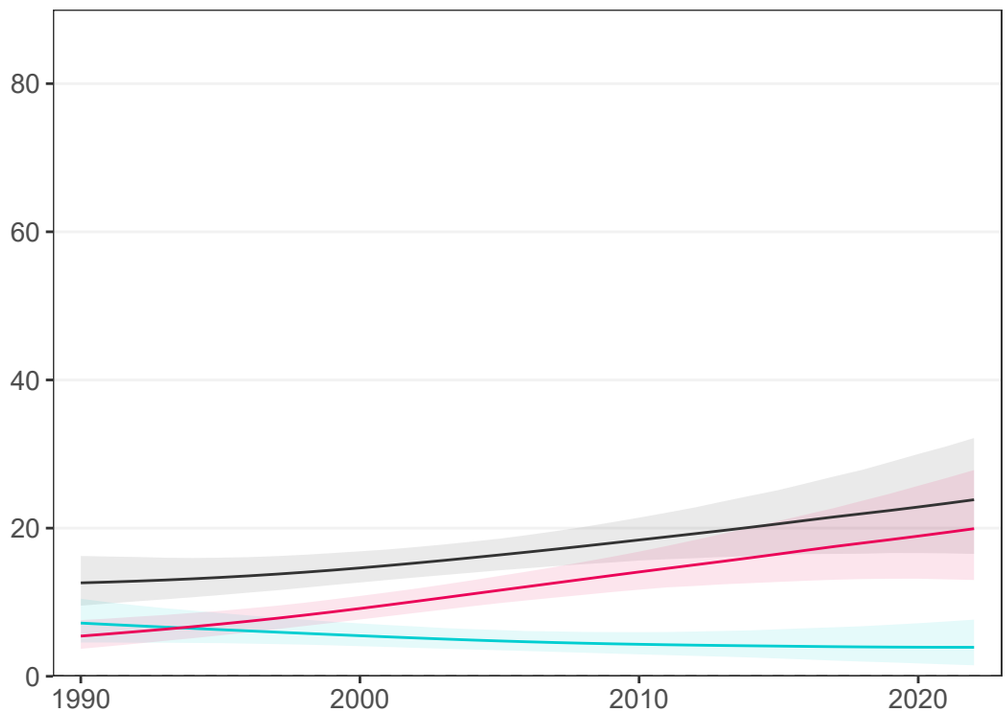
Women

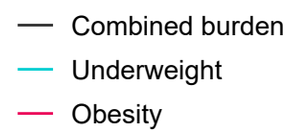
5 studies (3 national)



Men

5 studies (3 national)



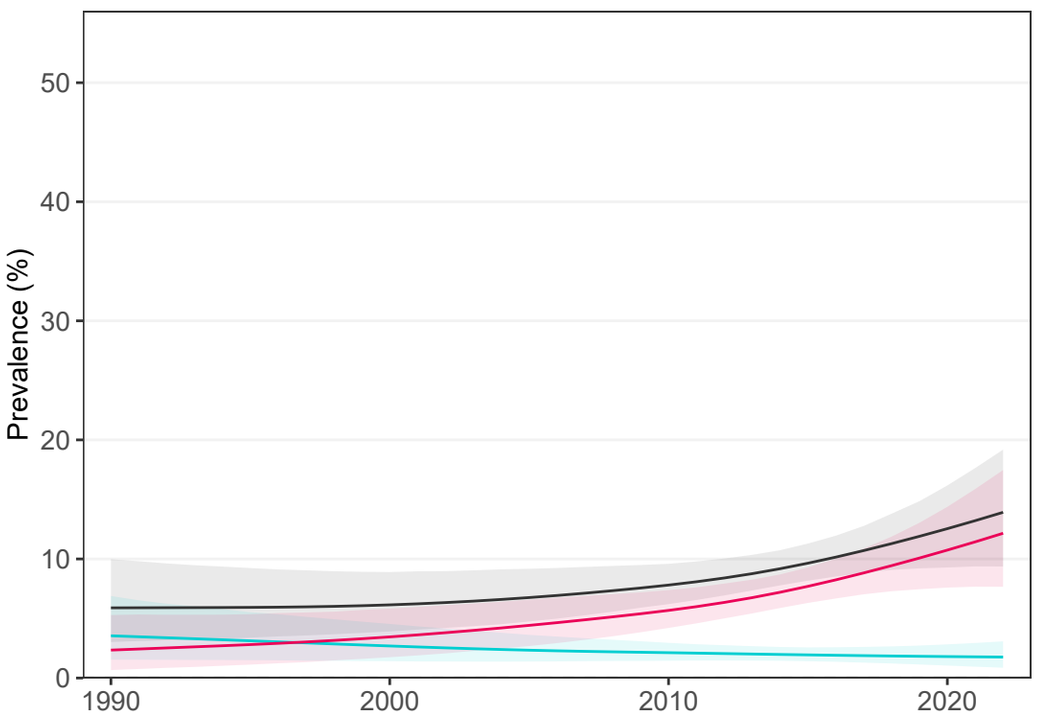


Turkiye

School-aged children and adolescents

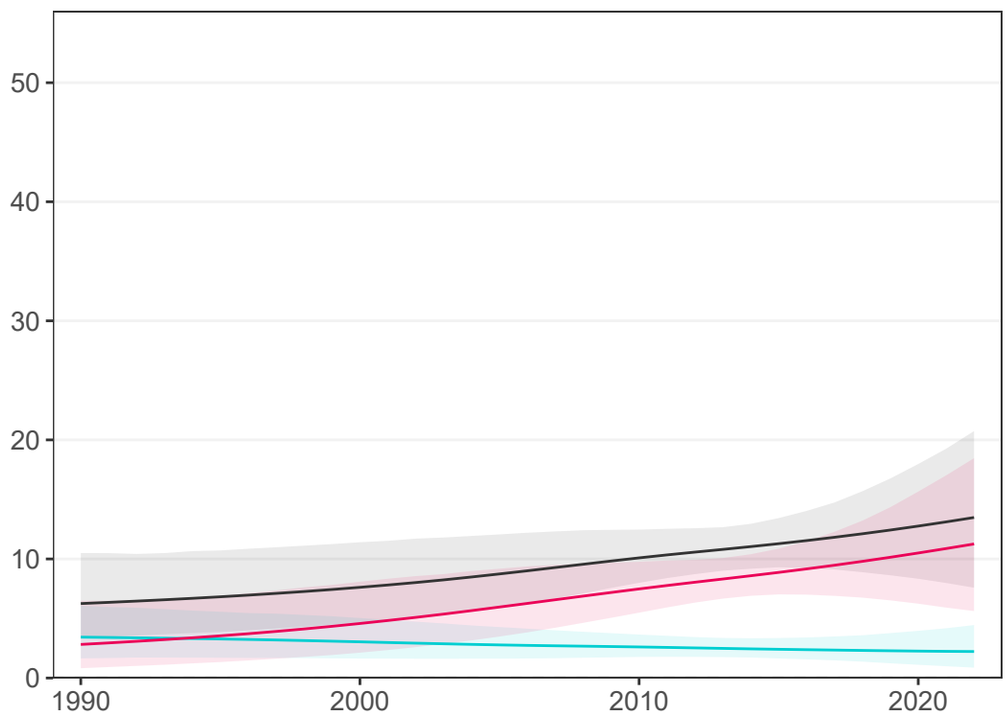
Girls

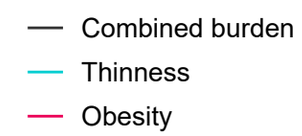
9 studies (7 national)



Boys

7 studies (5 national)

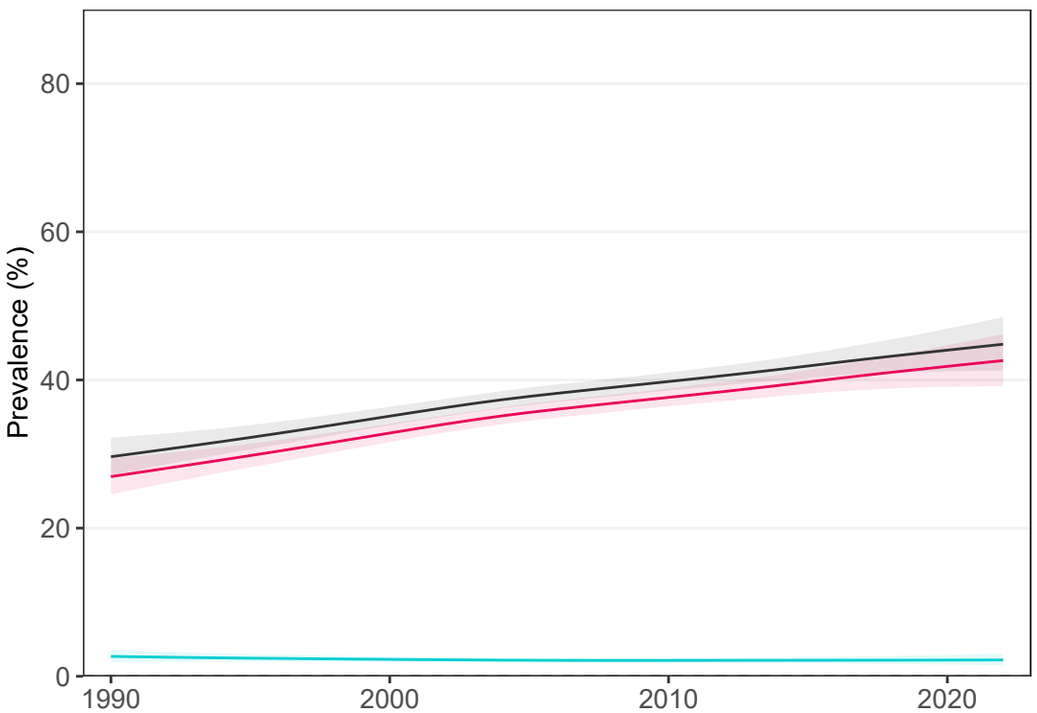




Adults

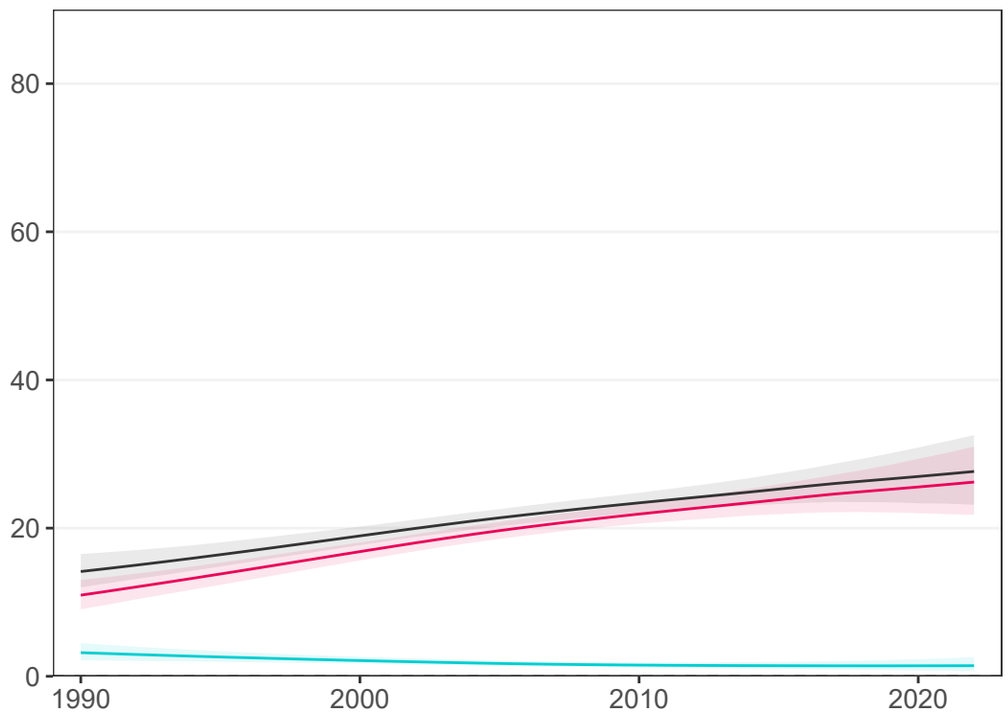
Women

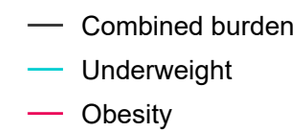
30 studies (23 national)



Men

23 studies (17 national)



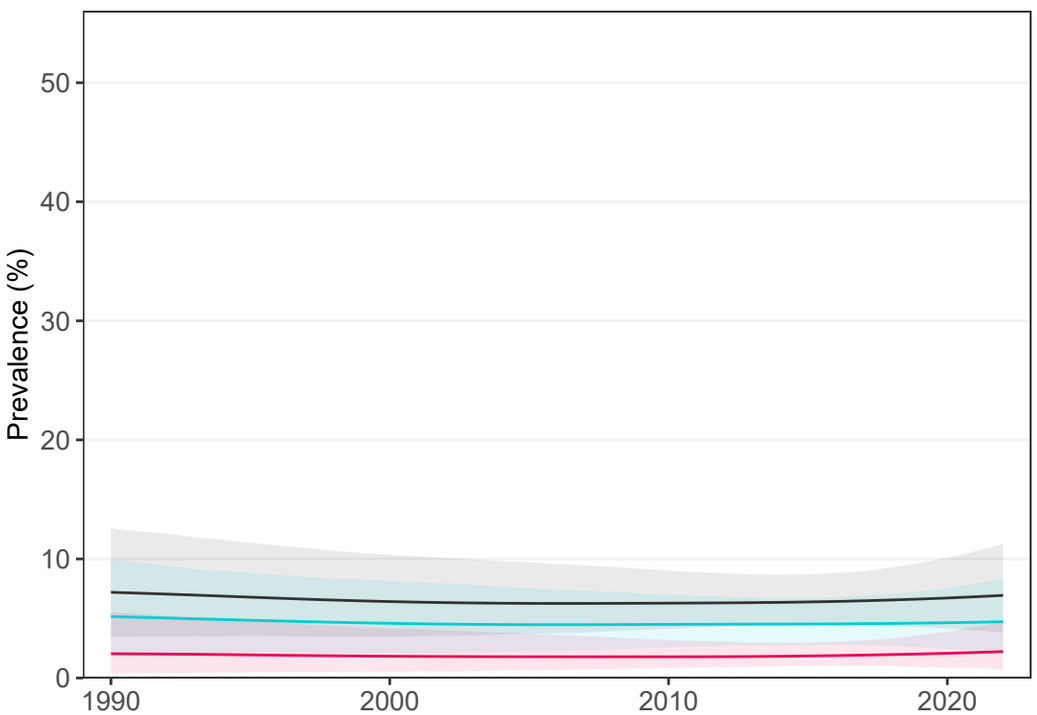


Turkmenistan

School-aged children and adolescents

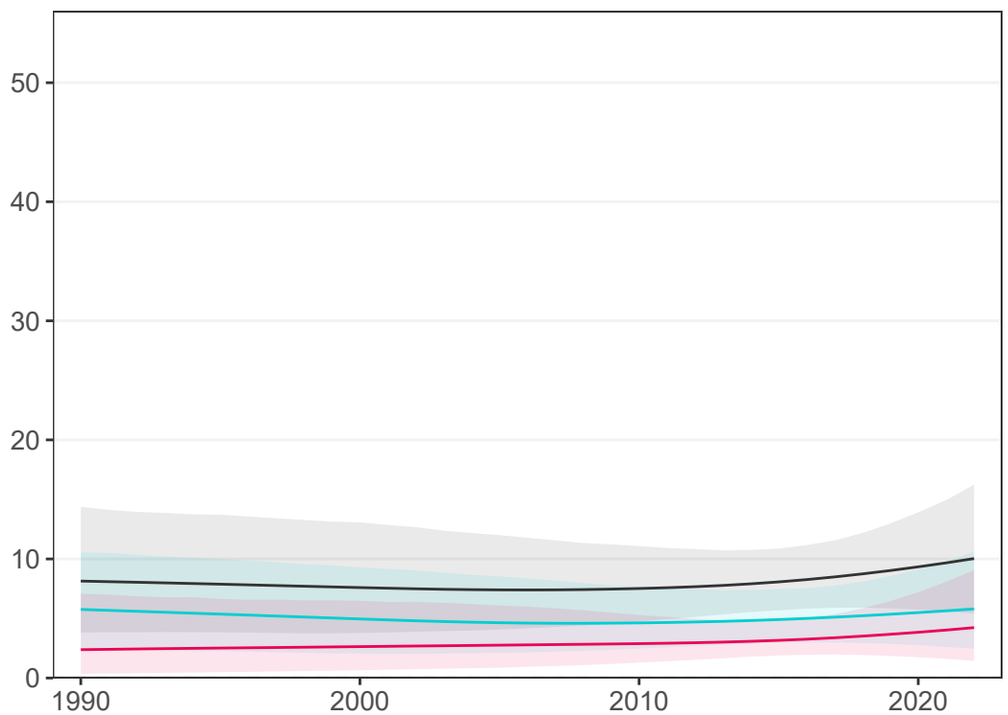
Girls

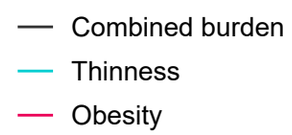
3 studies (3 national)



Boys

3 studies (3 national)

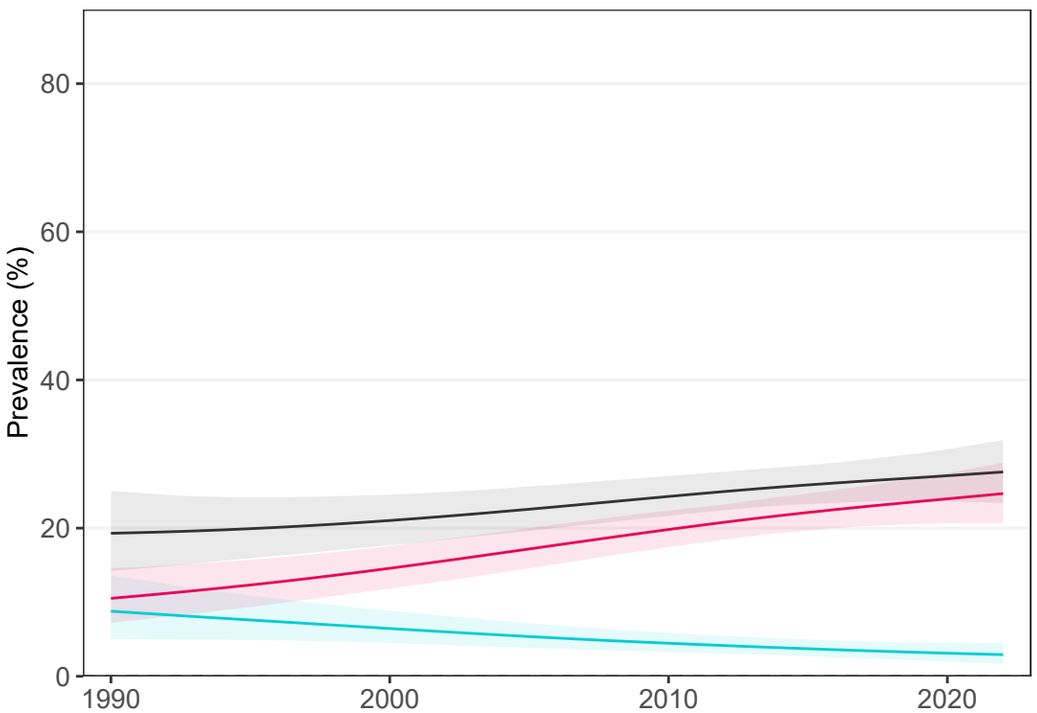




Adults

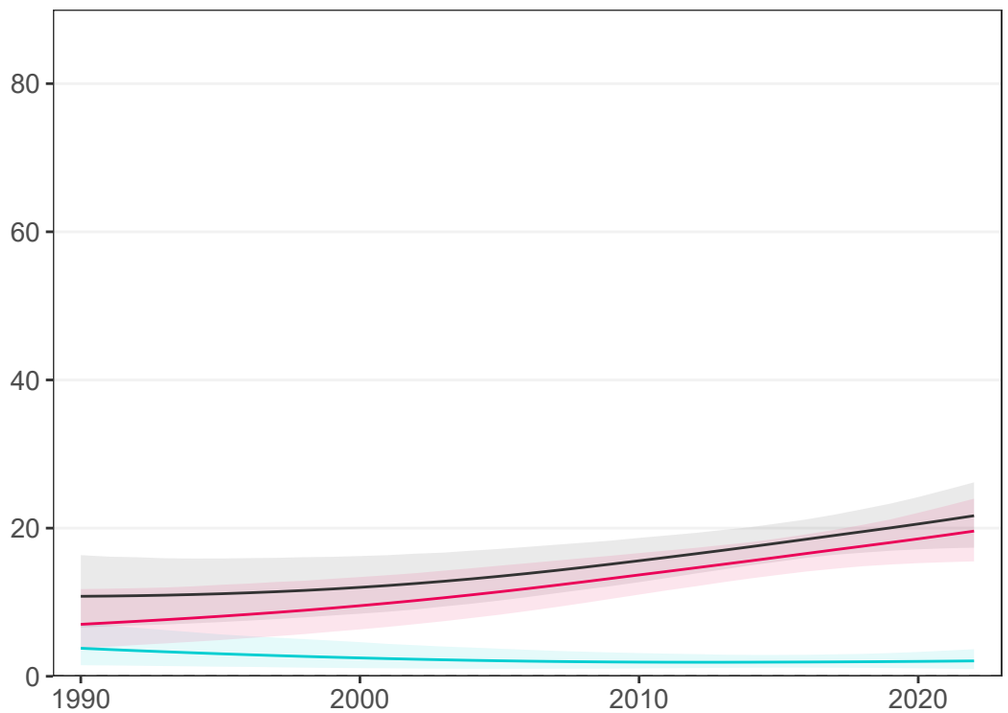
Women

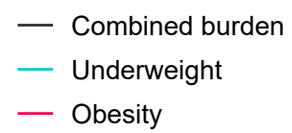
3 studies (3 national)



Men

2 studies (2 national)



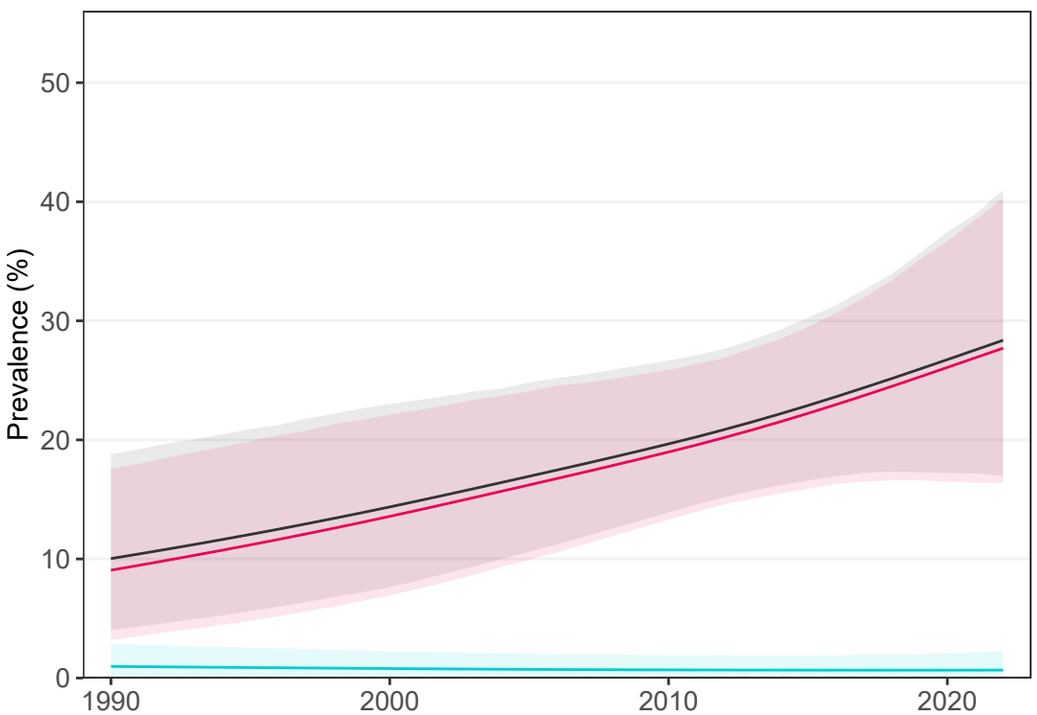


Tuvalu

School-aged children and adolescents

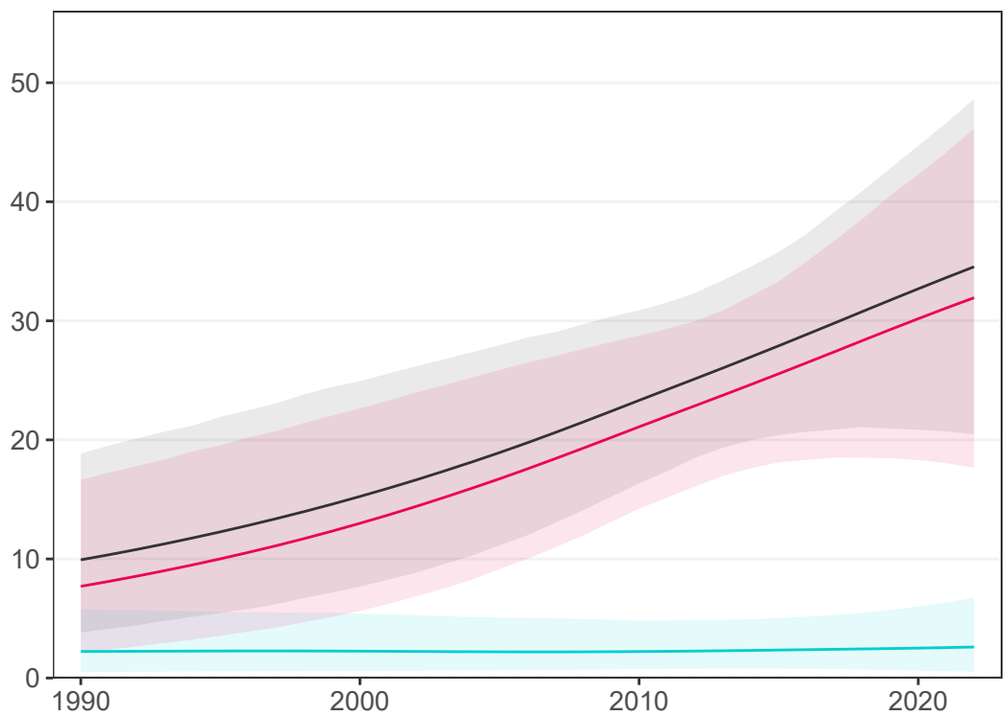
Girls

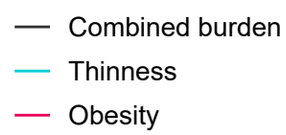
2 studies (2 national)



Boys

2 studies (2 national)

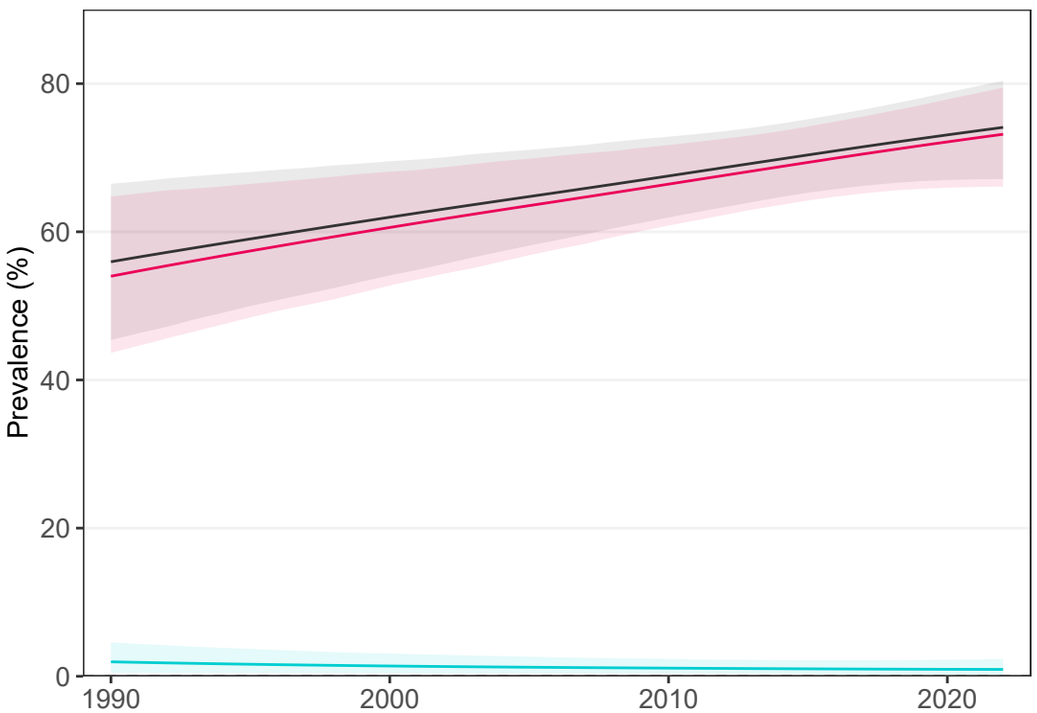




Adults

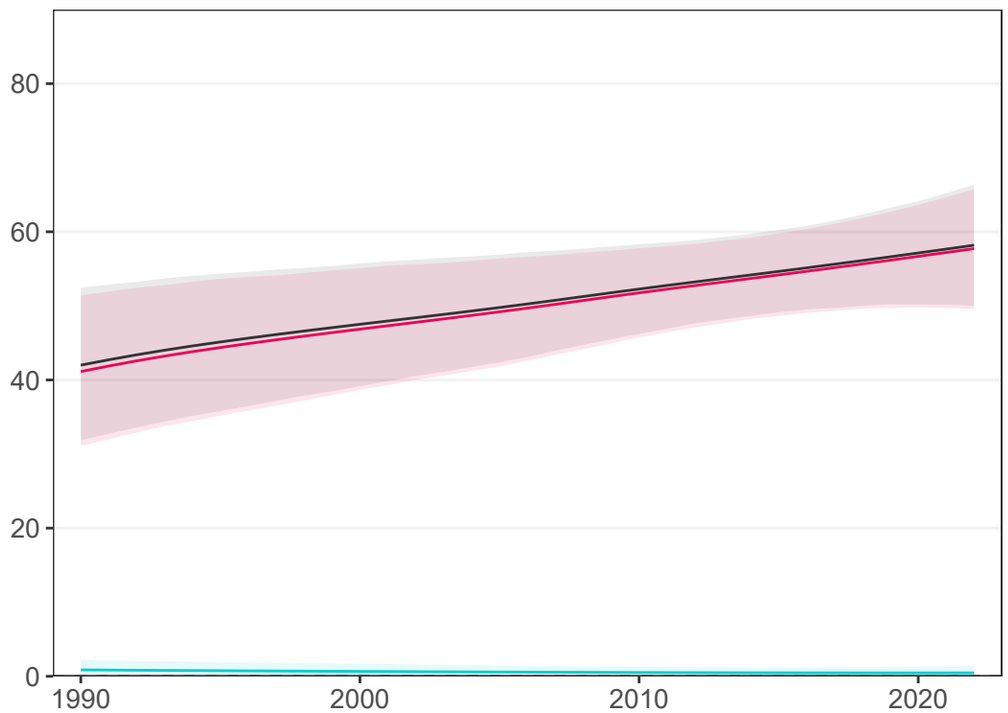
Women

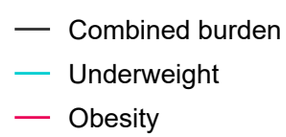
1 study (1 national)



Men

1 study (1 national)



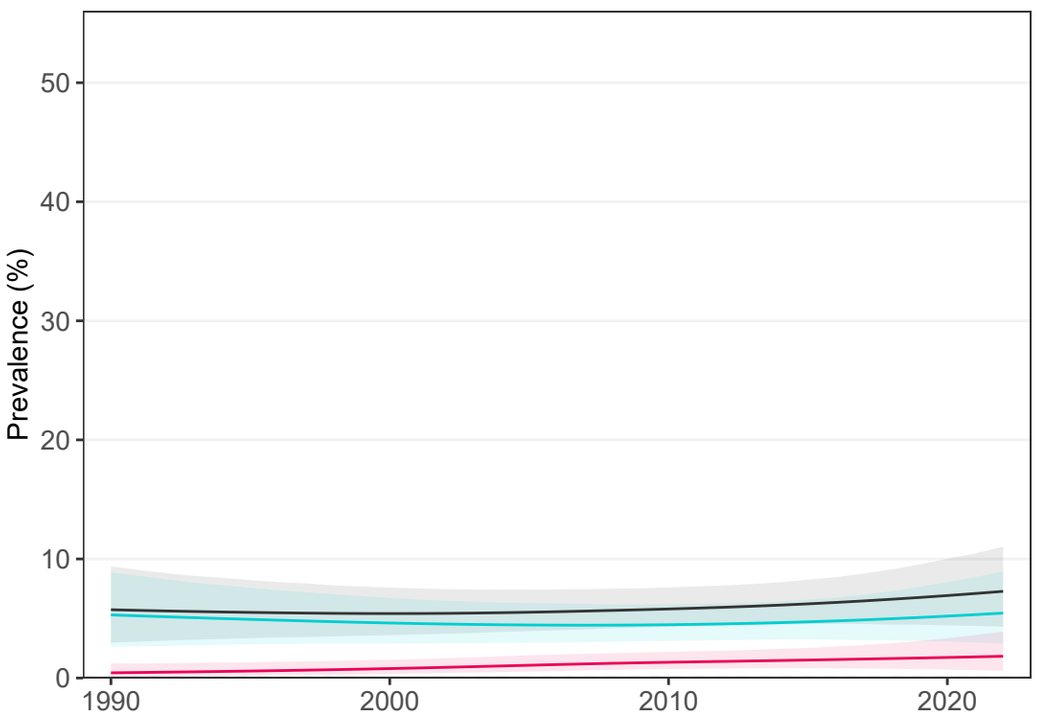


Uganda

School-aged children and adolescents

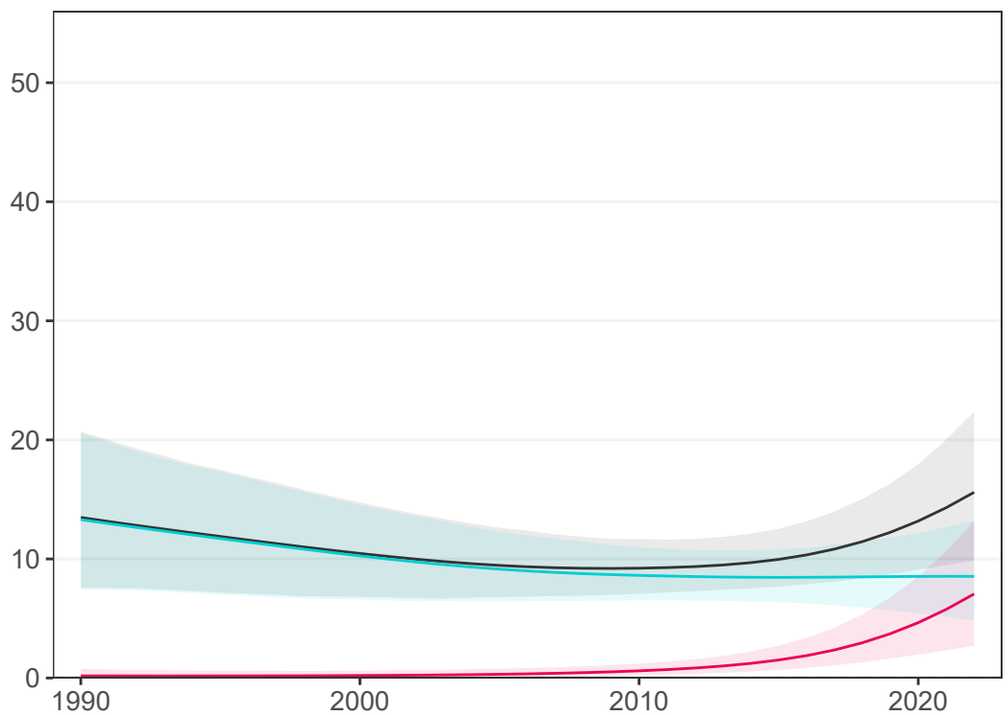
Girls

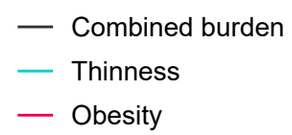
9 studies (6 national)



Boys

8 studies (5 national)

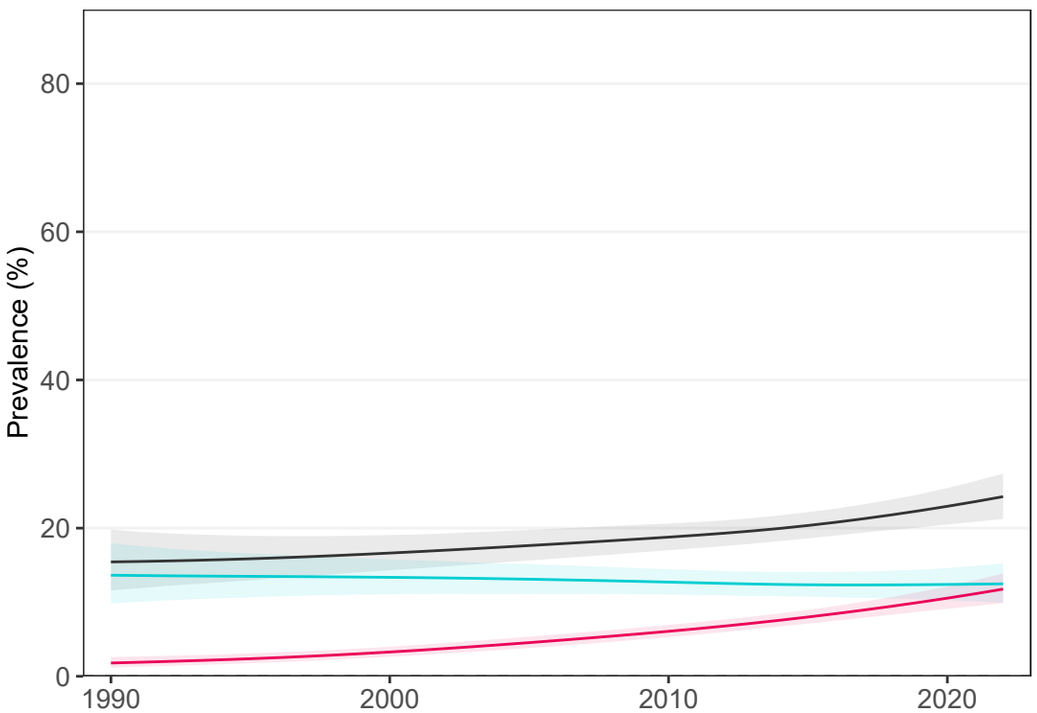




Adults

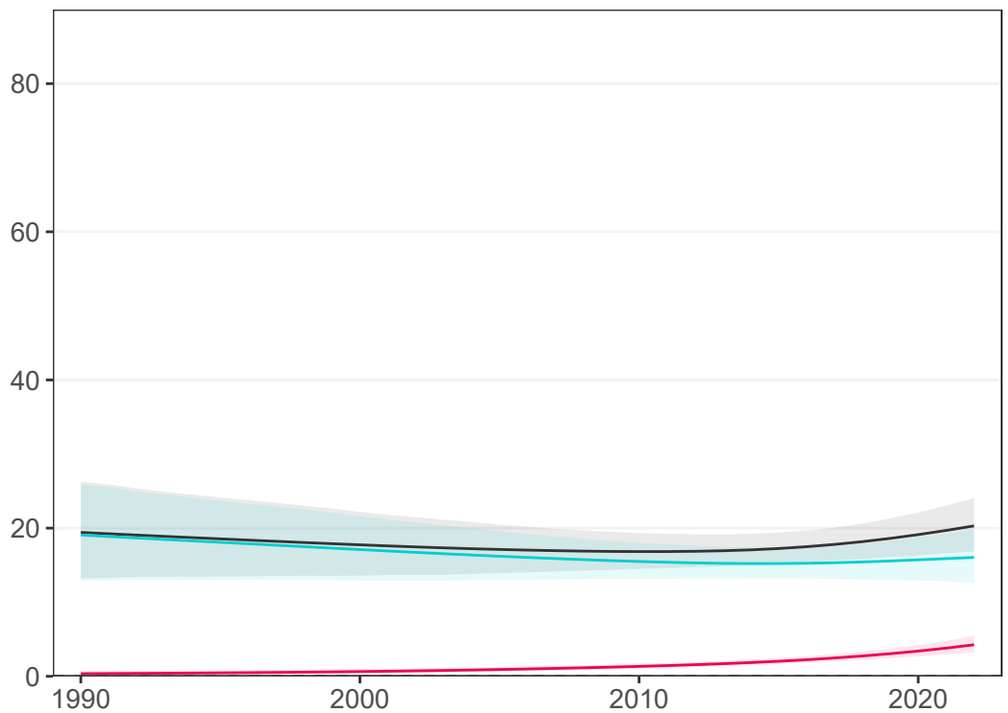
Women

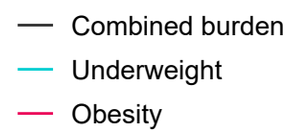
12 studies (7 national)



Men

10 studies (5 national)



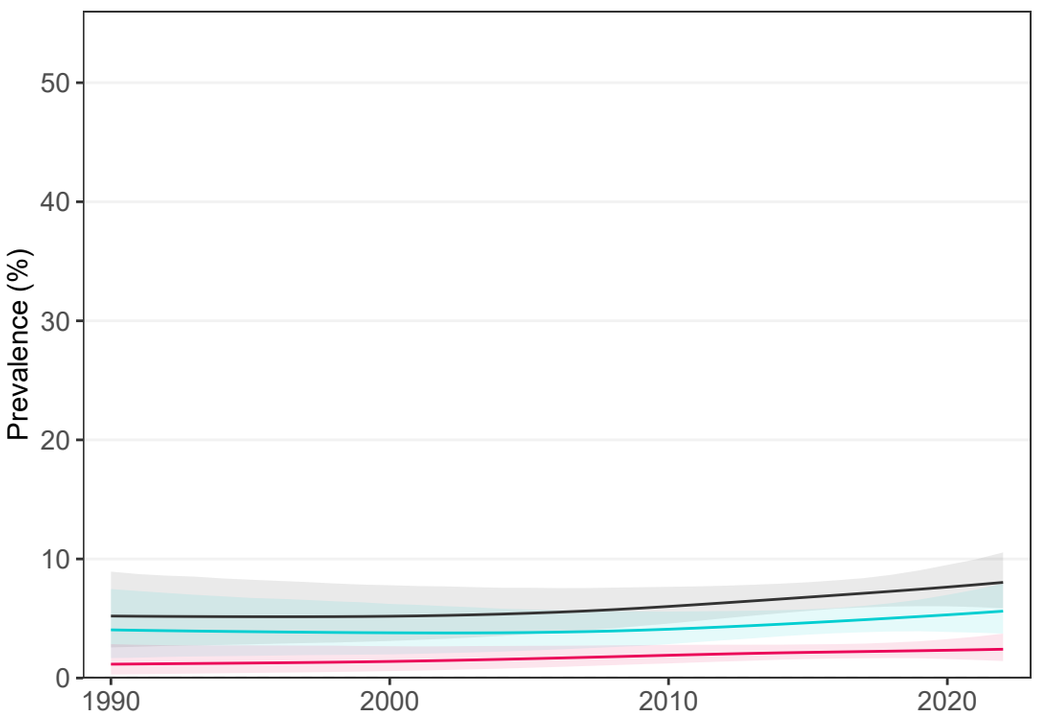


Ukraine

School-aged children and adolescents

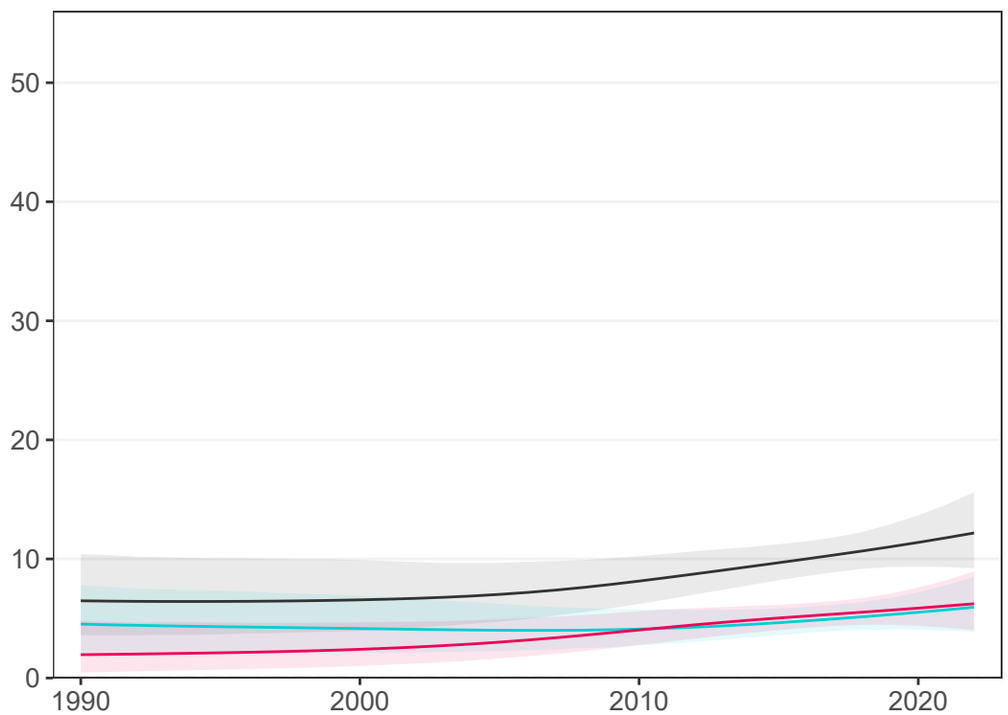
Girls

8 studies (4 national)



Boys

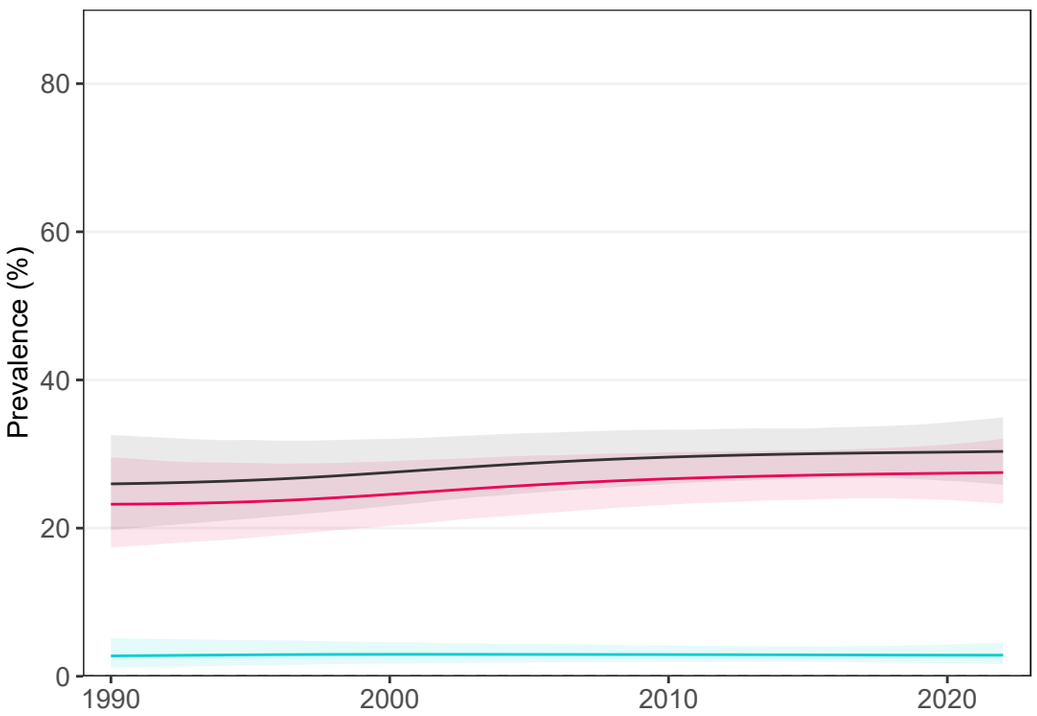
8 studies (4 national)



Adults

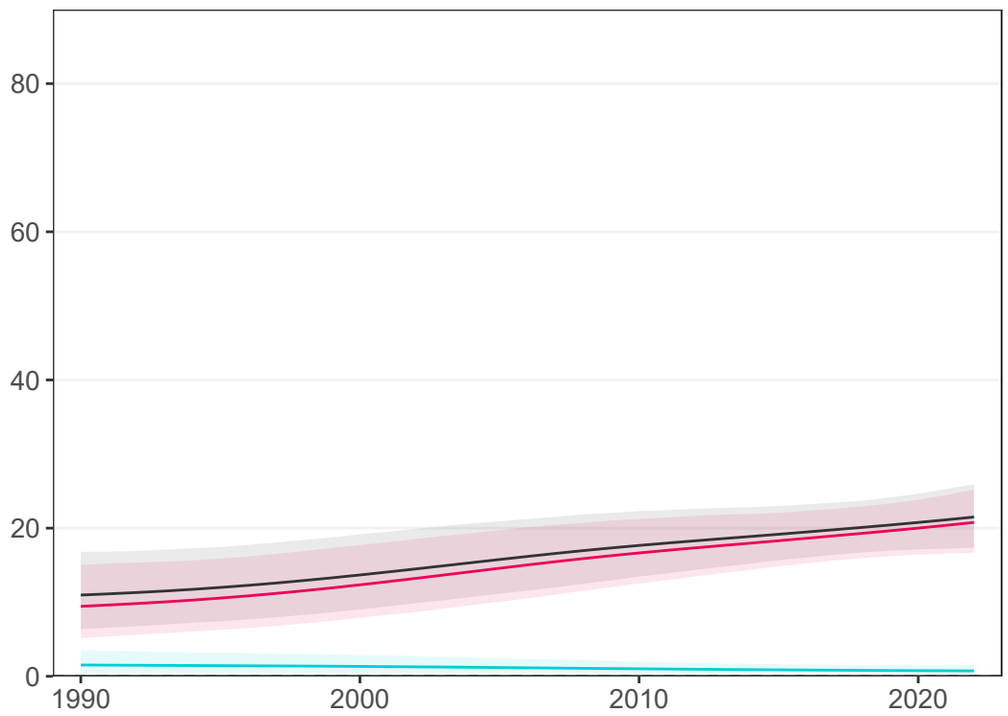
Women

3 studies (3 national)



Men

2 studies (2 national)

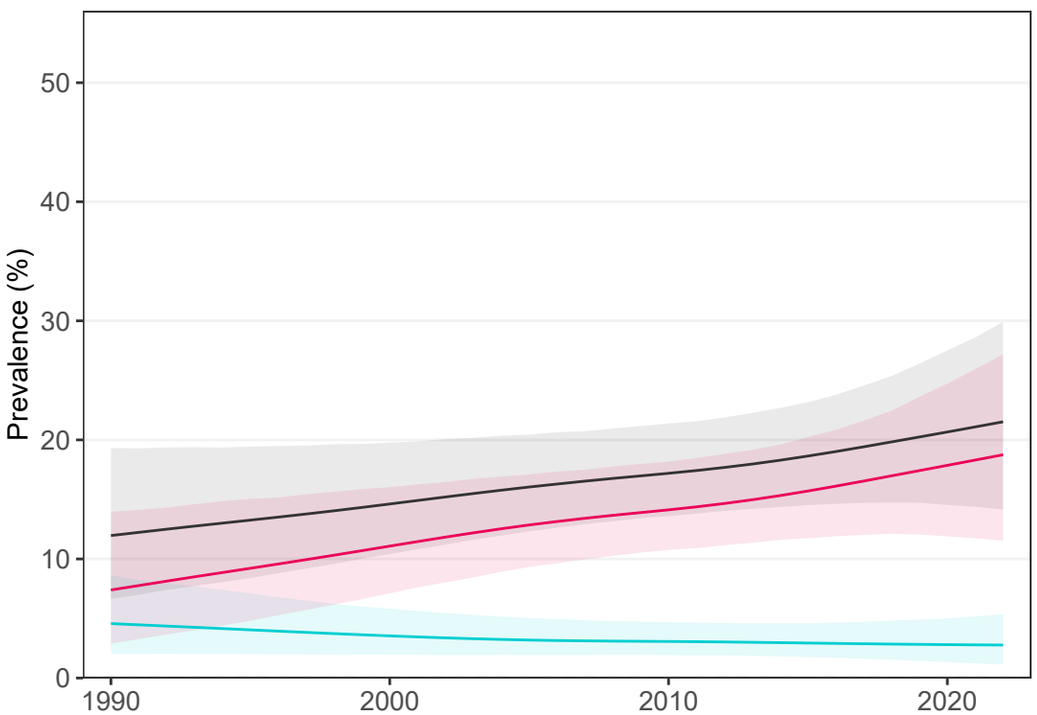


United Arab Emirates

School-aged children and adolescents

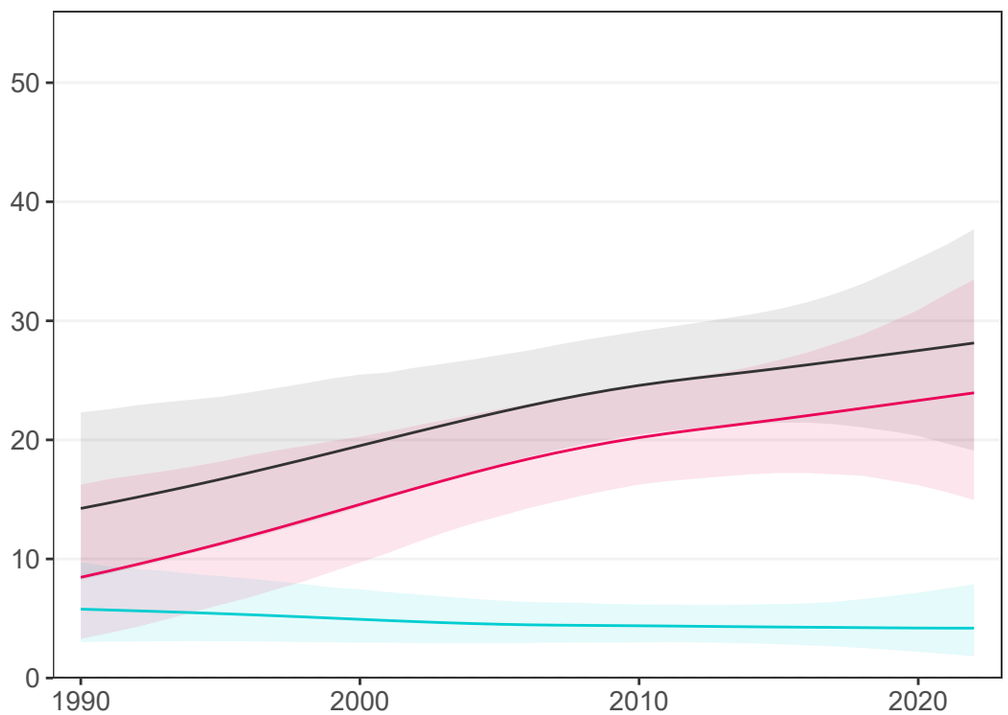
Girls

5 studies (5 national)



Boys

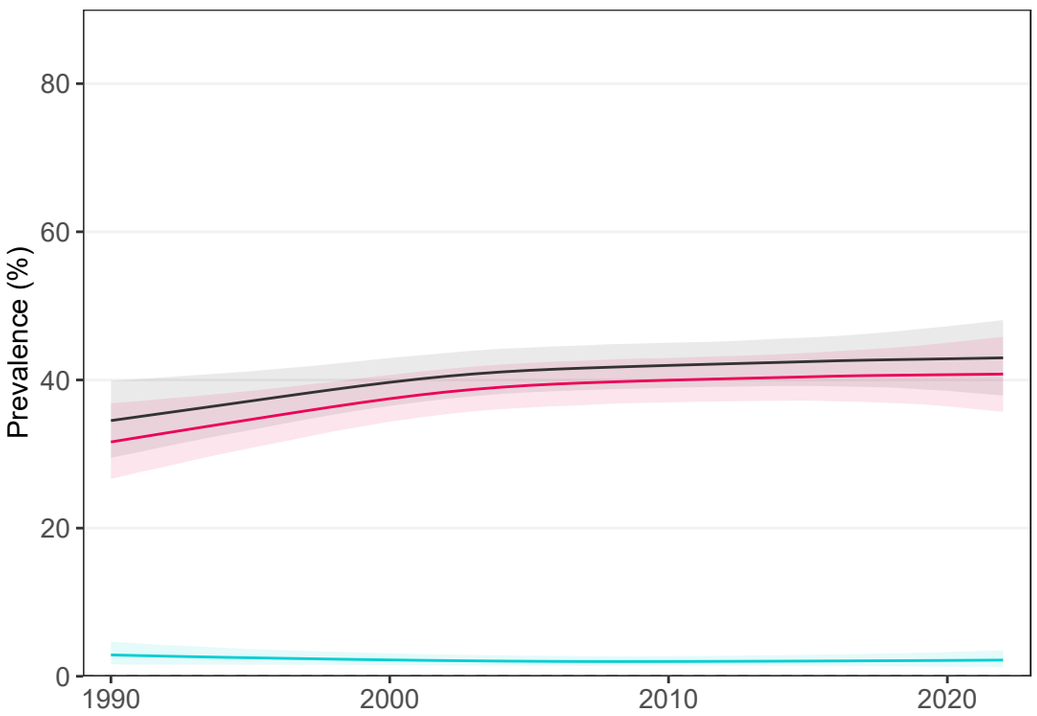
5 studies (5 national)



Adults

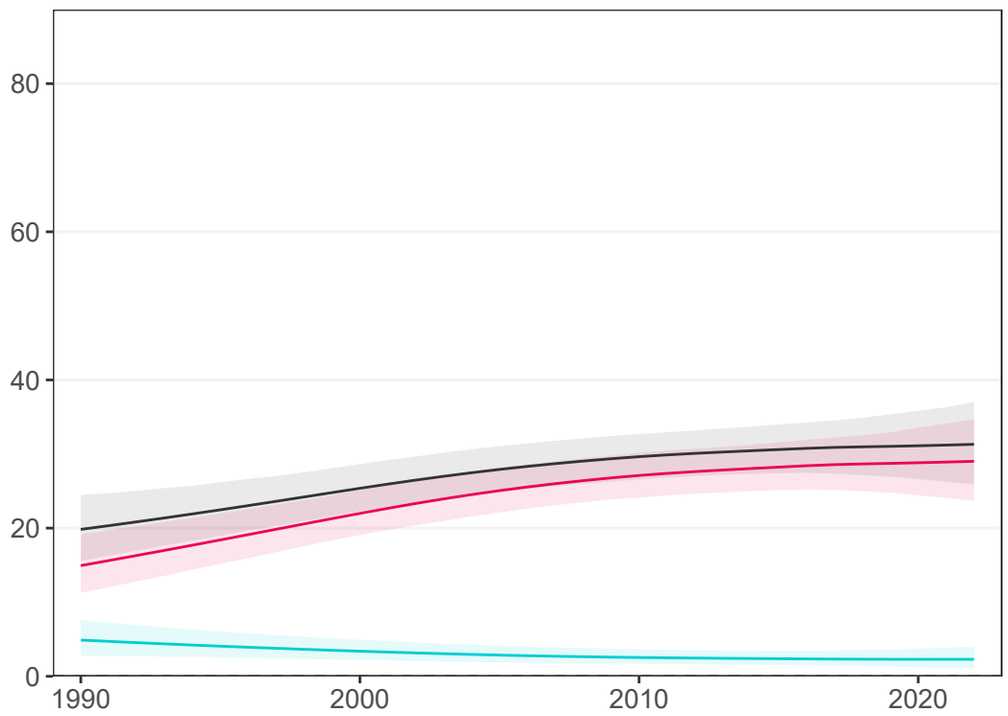
Women

5 studies (3 national)



Men

4 studies (3 national)

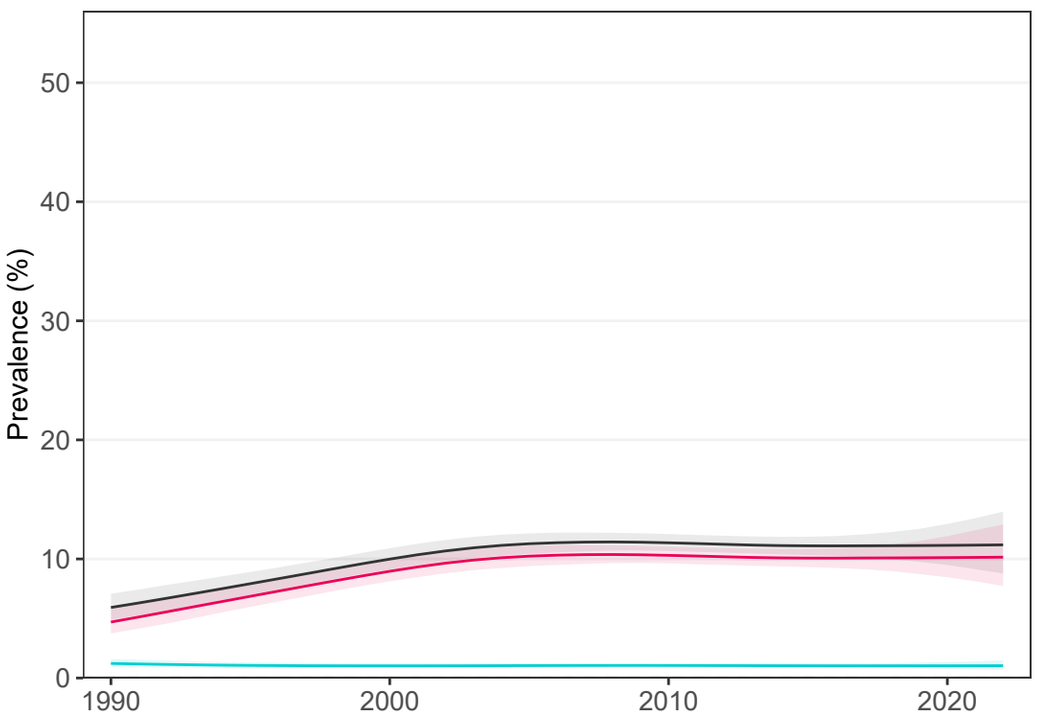


United Kingdom

School-aged children and adolescents

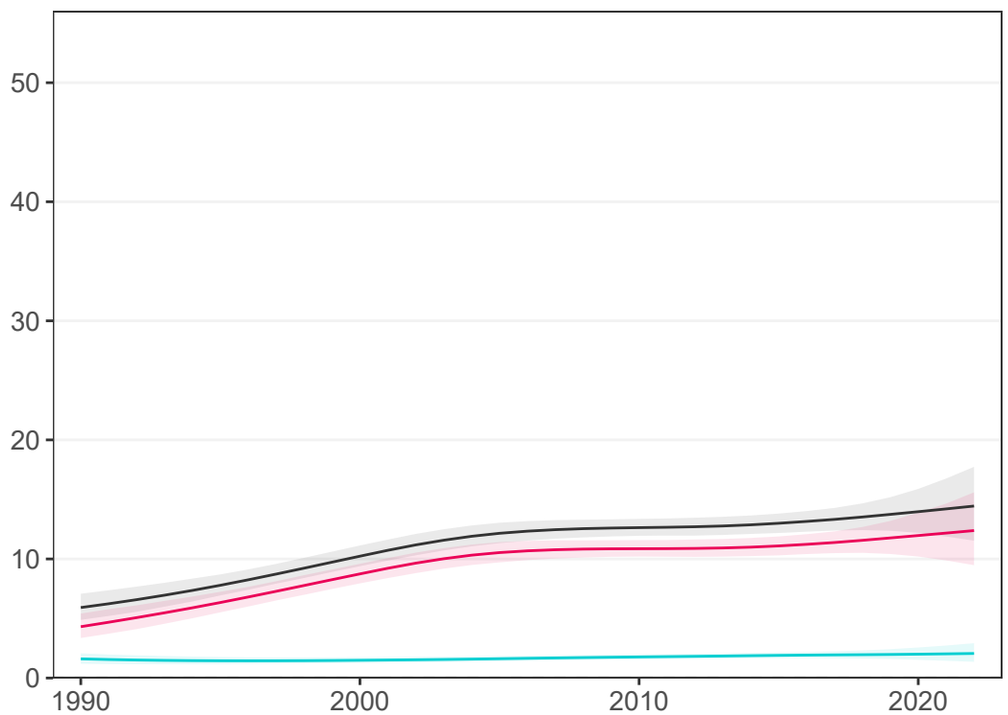
Girls

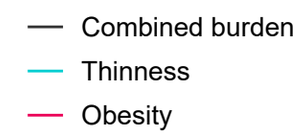
104 studies (56 national)



Boys

104 studies (56 national)

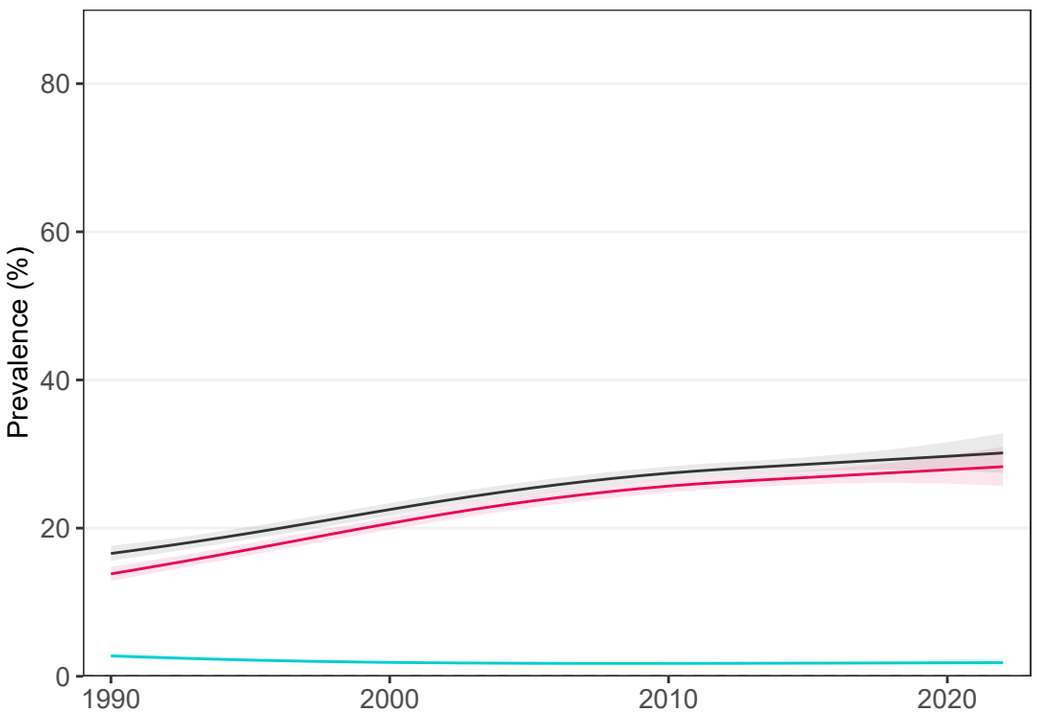




Adults

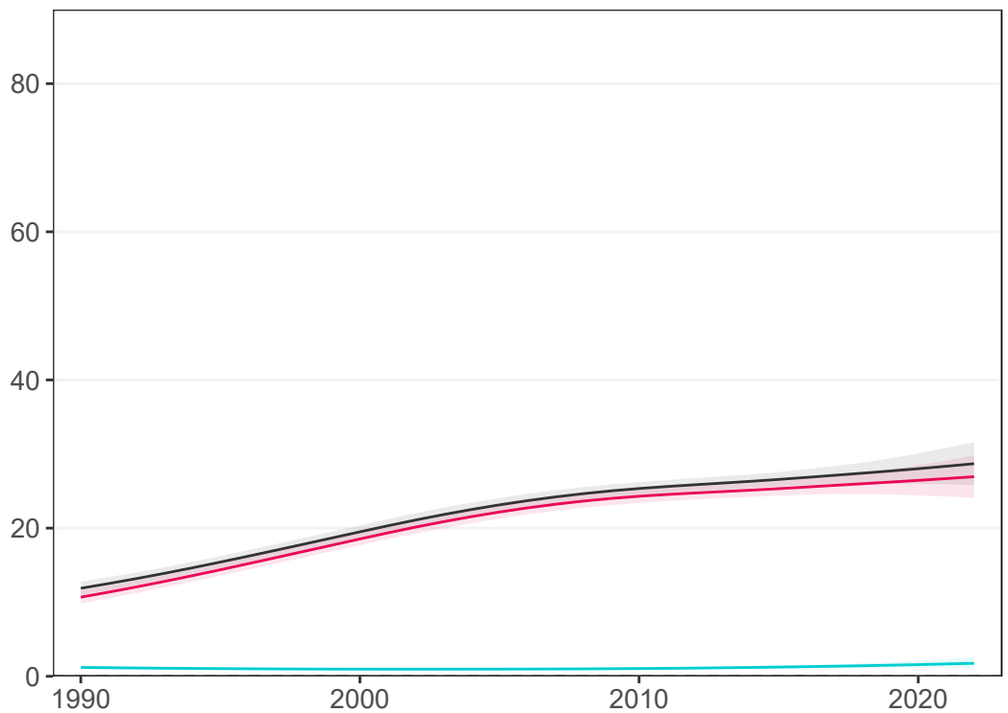
Women

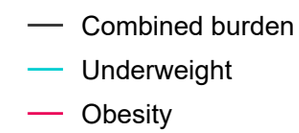
85 studies (50 national)



Men

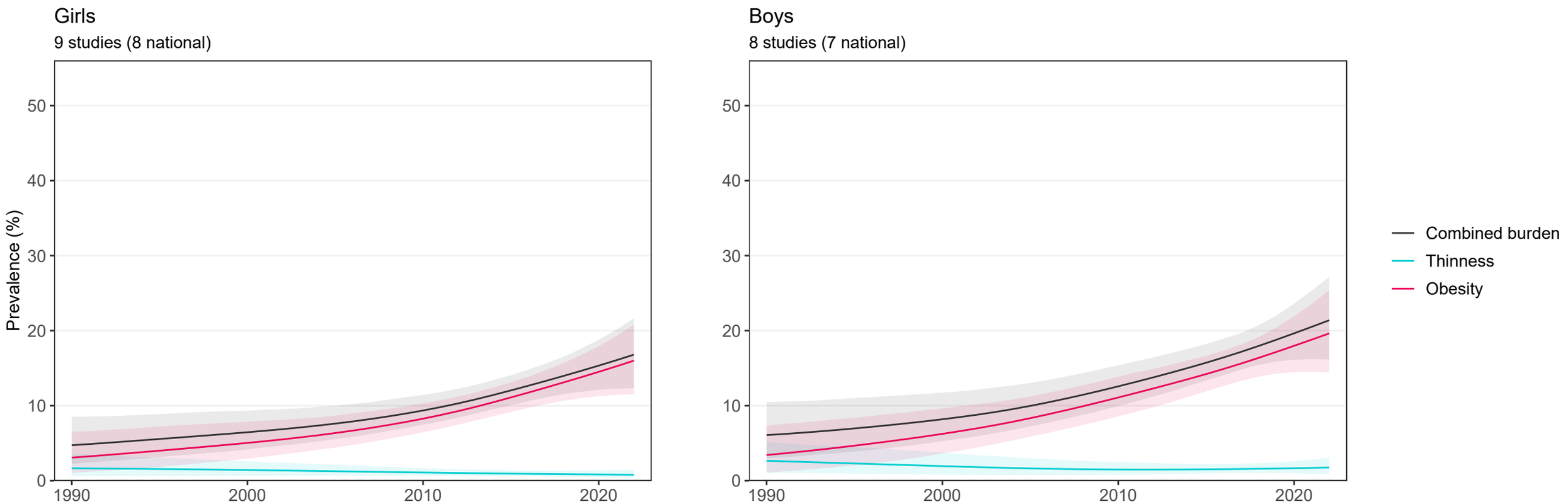
88 studies (51 national)



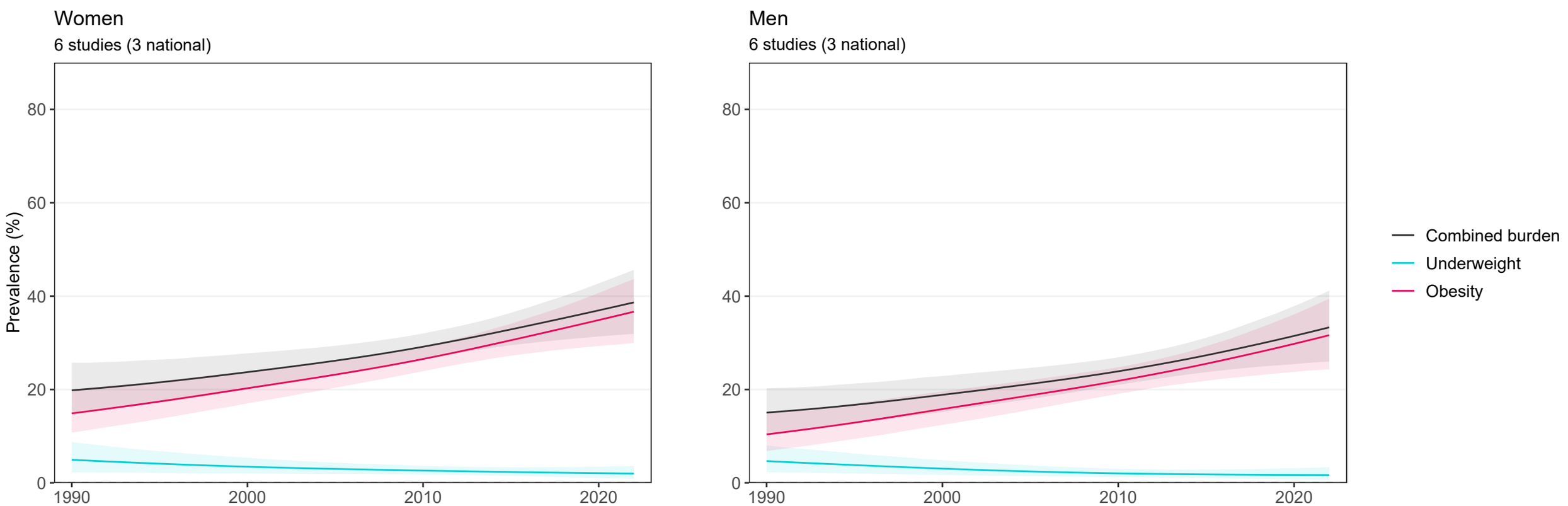


Uruguay

School-aged children and adolescents



Adults

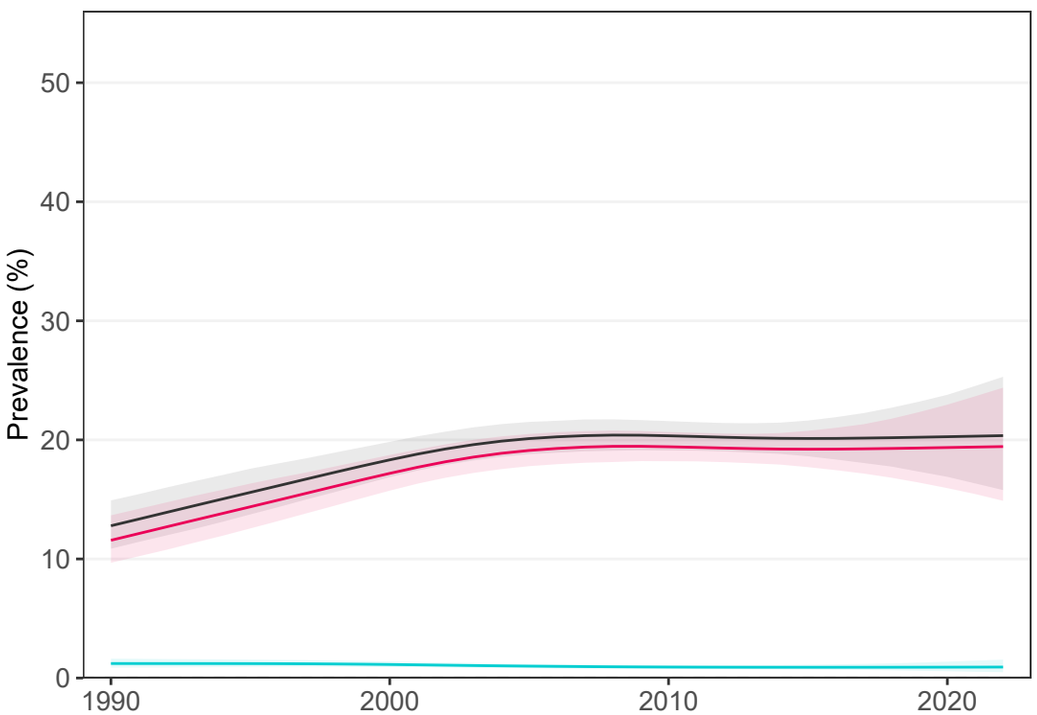


USA

School-aged children and adolescents

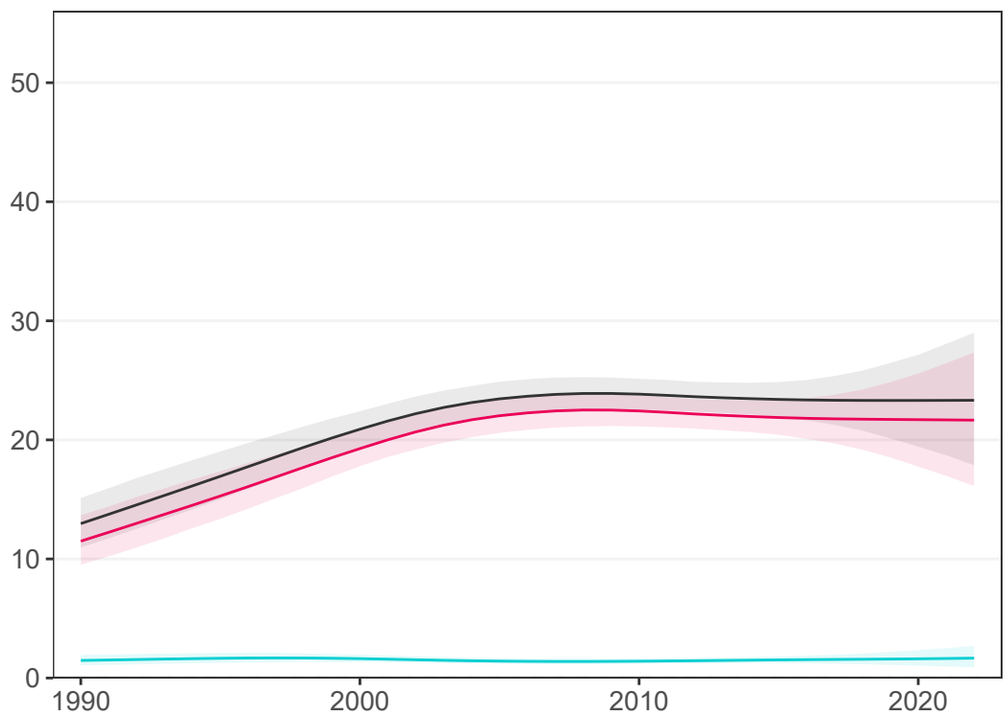
Girls

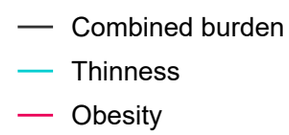
61 studies (28 national)



Boys

61 studies (28 national)

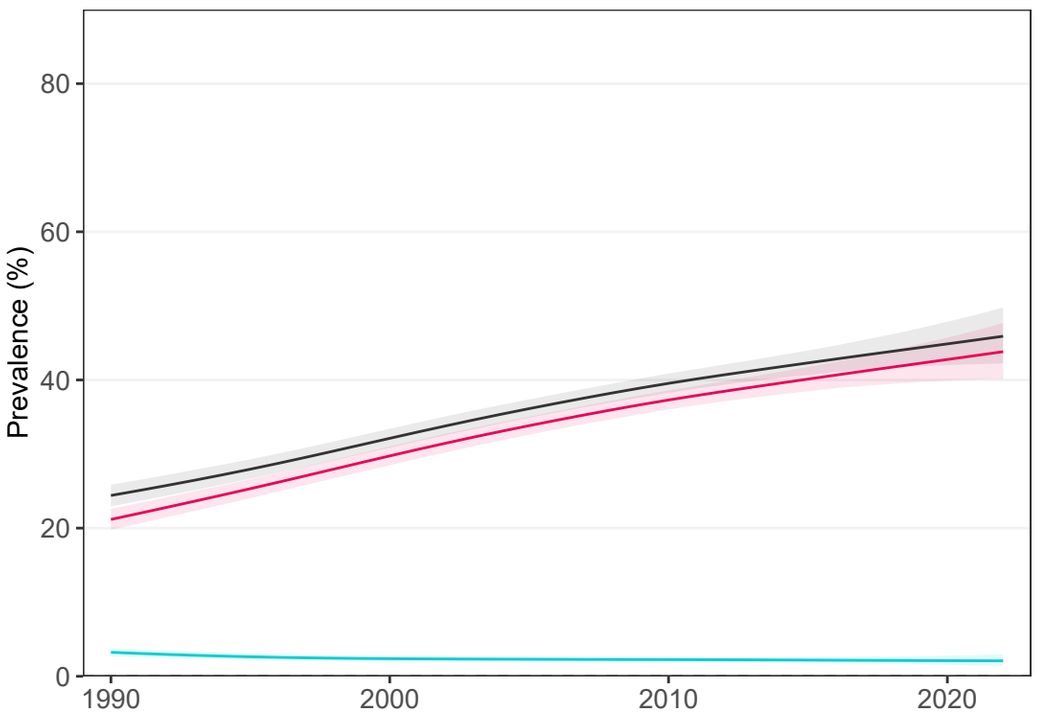




Adults

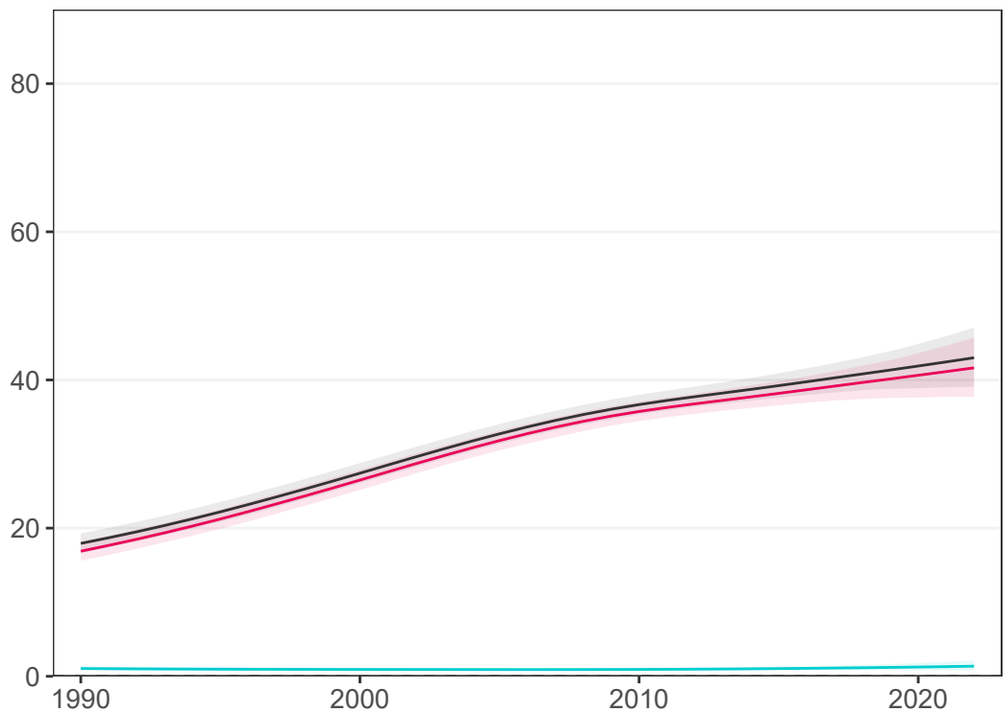
Women

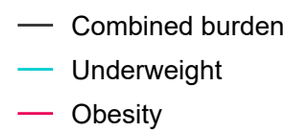
70 studies (26 national)



Men

64 studies (25 national)



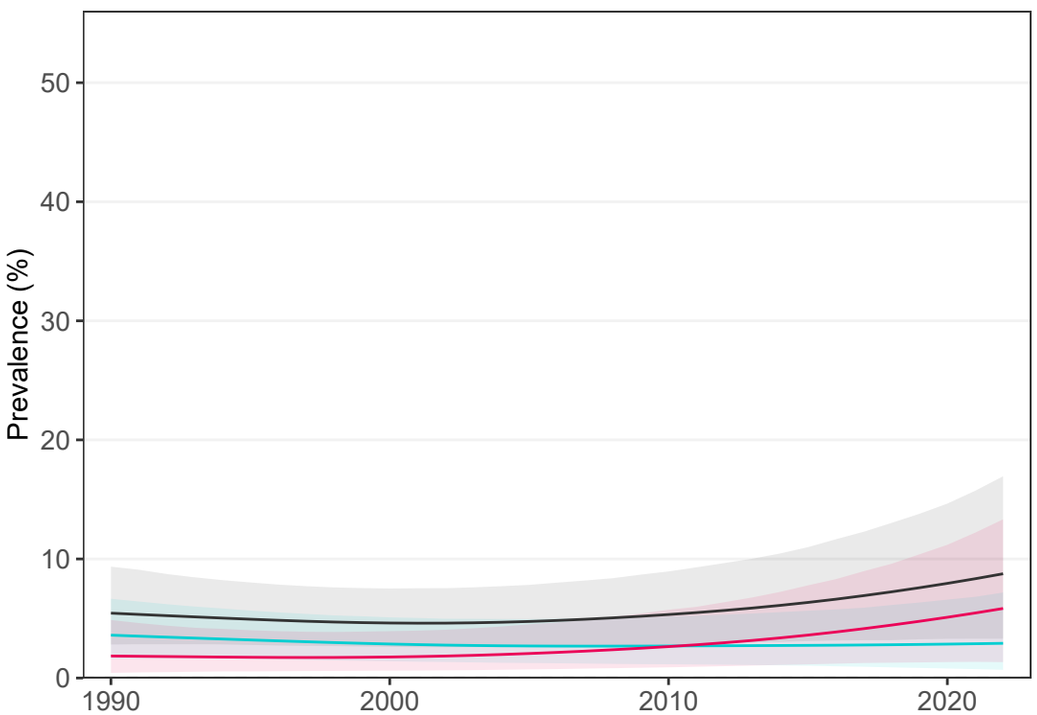


Uzbekistan

School-aged children and adolescents

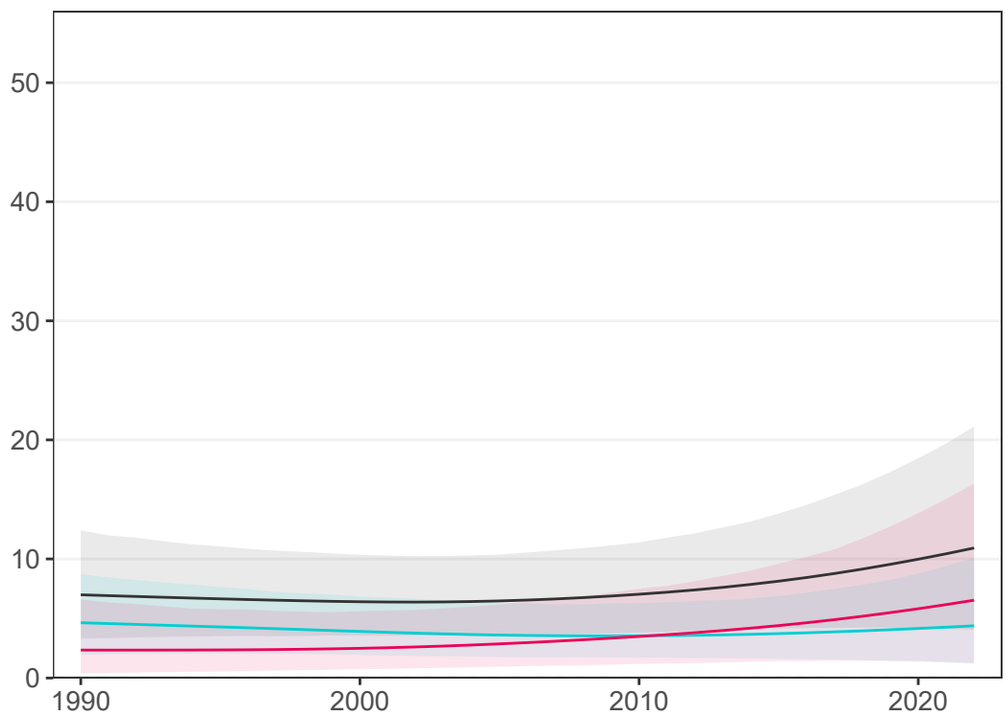
Girls

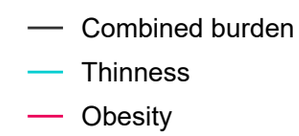
4 studies (4 national)



Boys

3 studies (3 national)

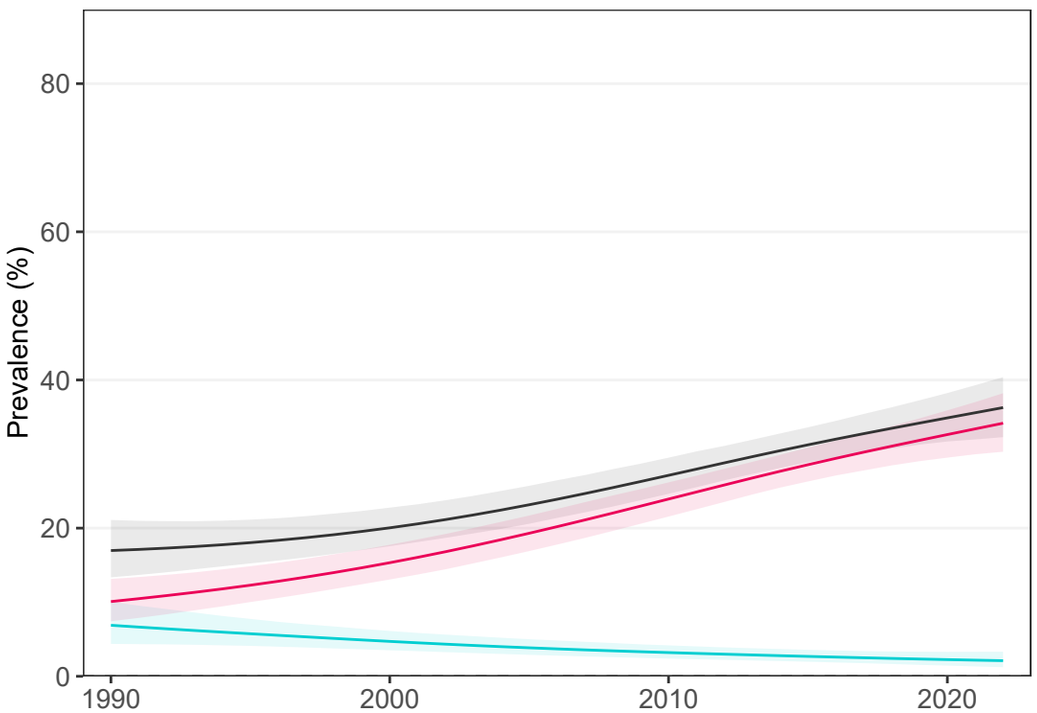




Adults

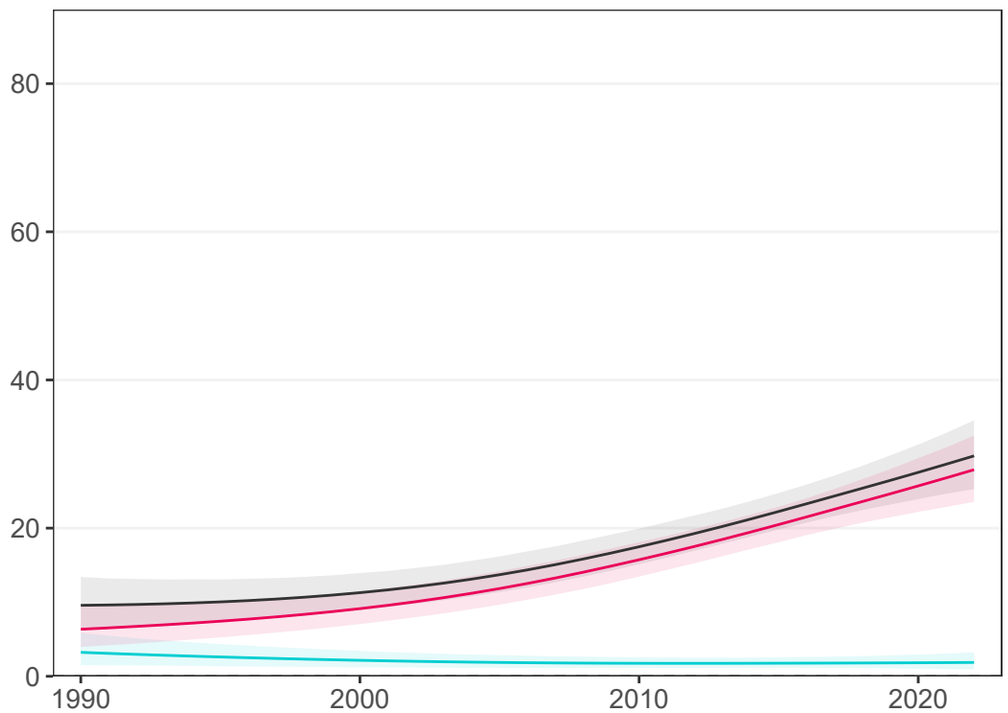
Women

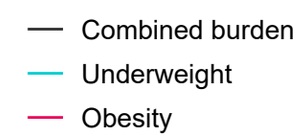
5 studies (4 national)



Men

4 studies (3 national)



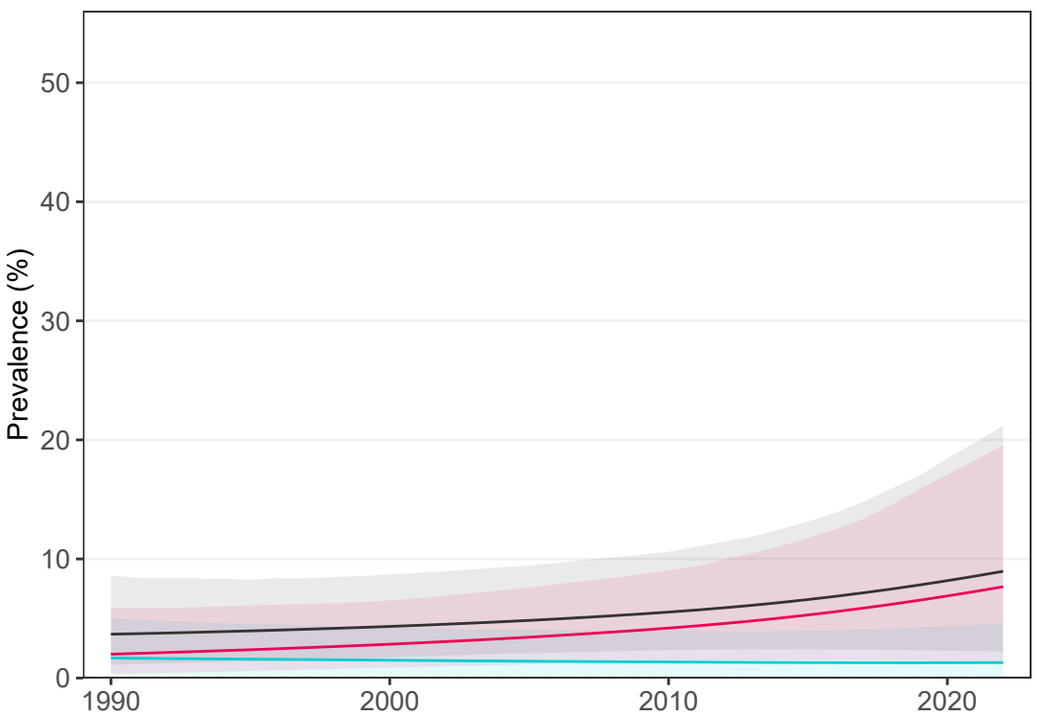


Vanuatu

School-aged children and adolescents

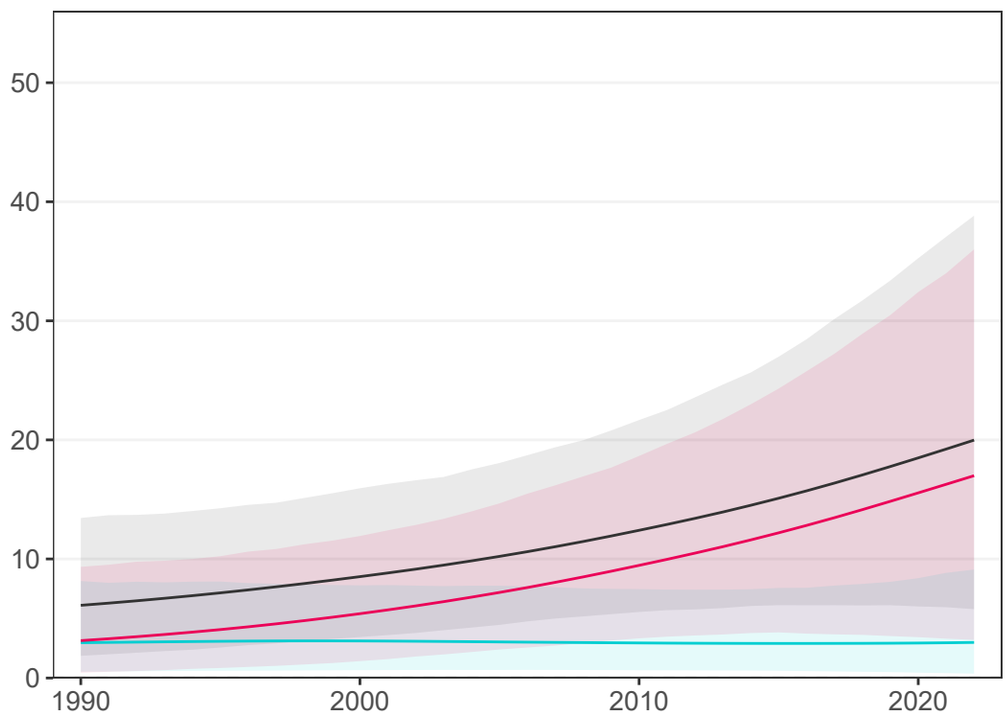
Girls

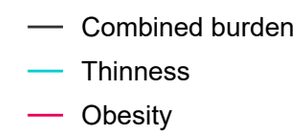
1 study (0 national)



Boys

1 study (0 national)

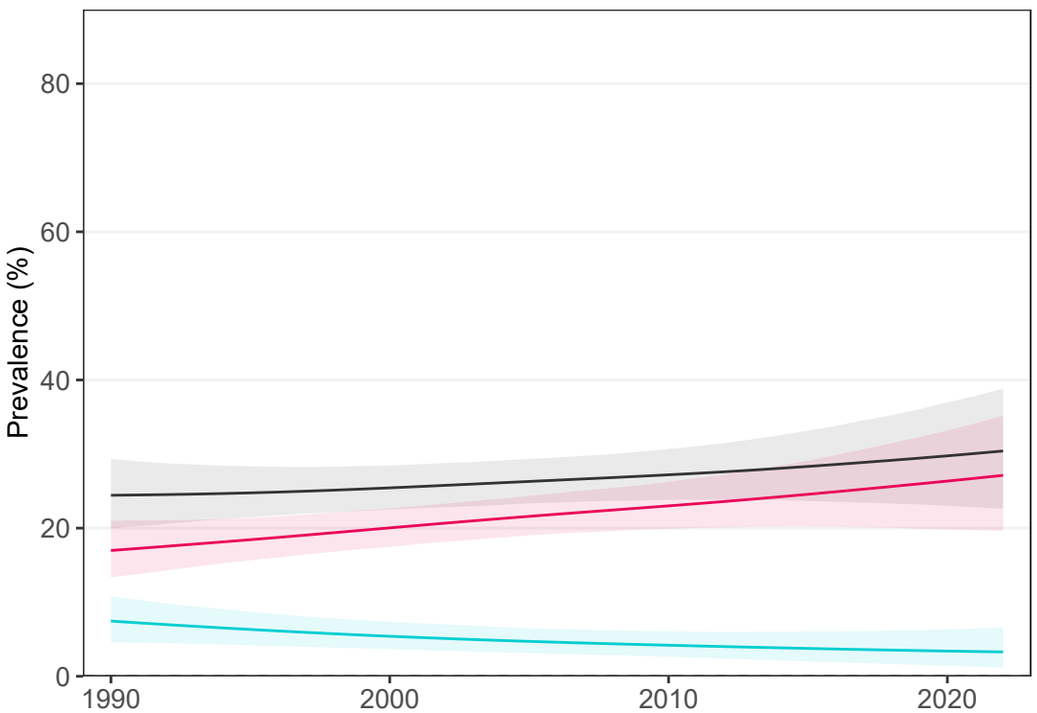




Adults

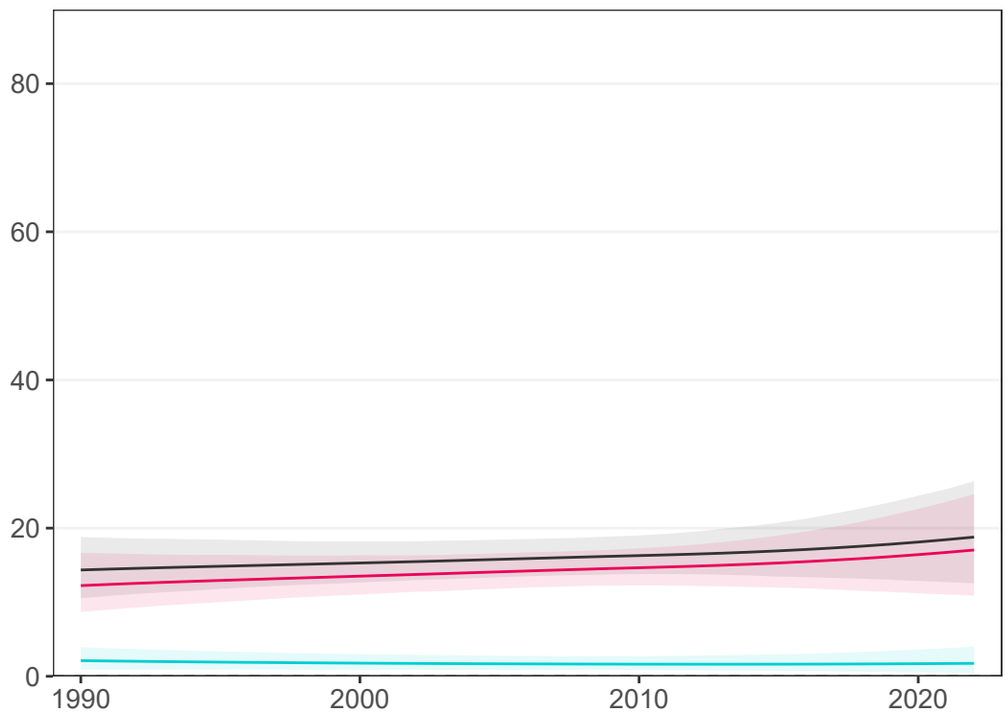
Women

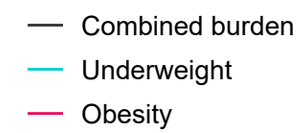
4 studies (3 national)



Men

3 studies (2 national)



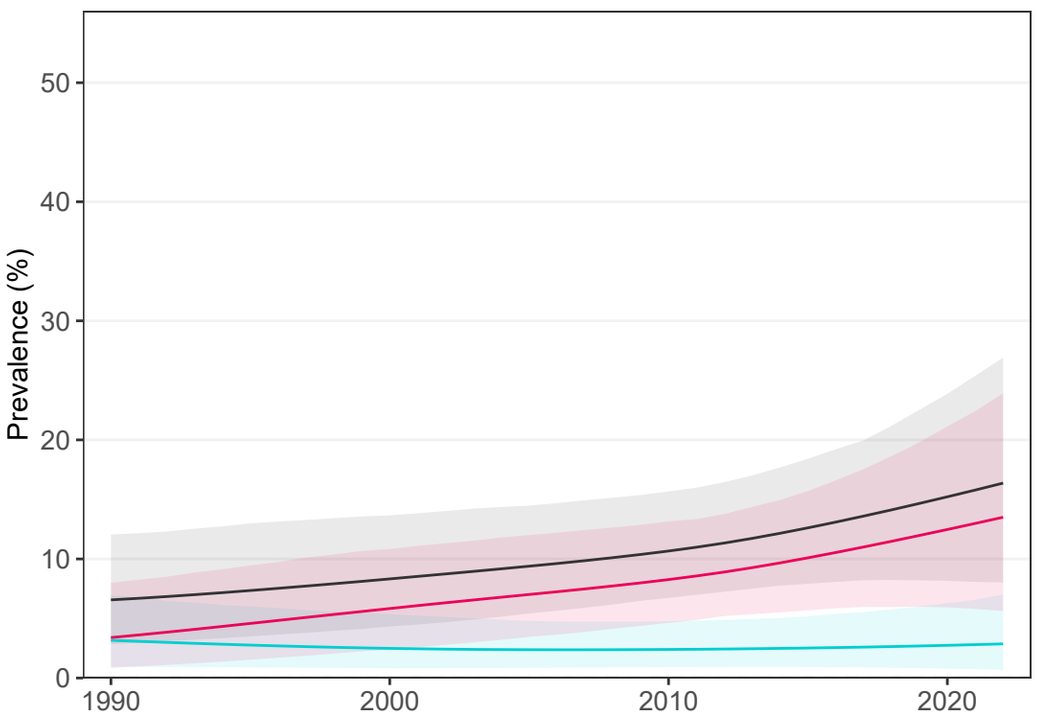


Venezuela

School-aged children and adolescents

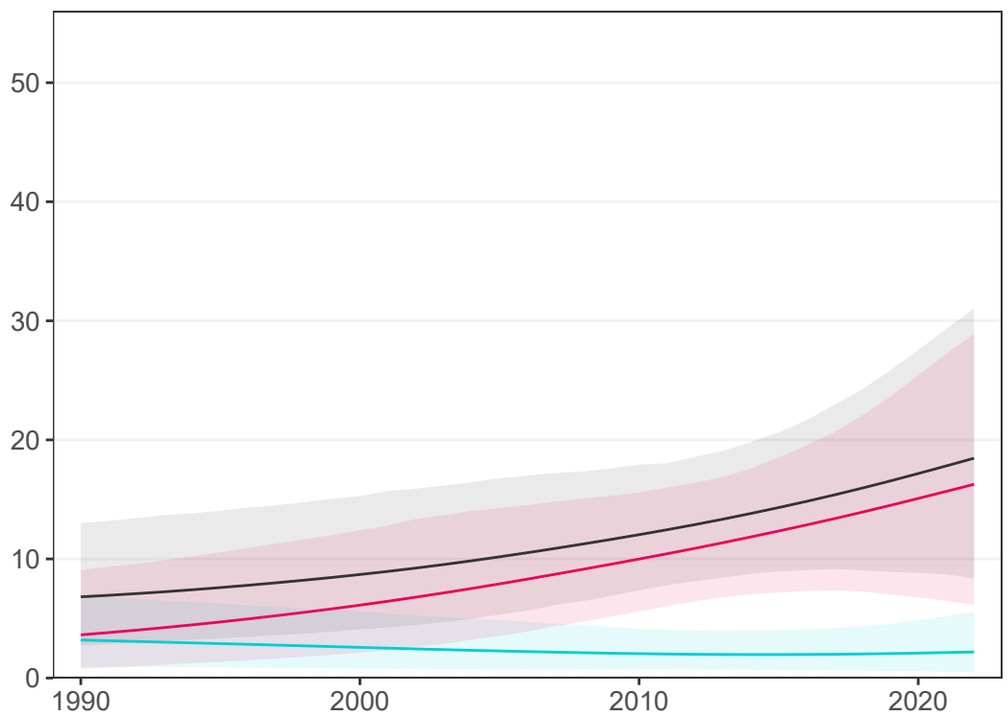
Girls

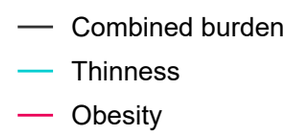
2 studies (1 national)



Boys

2 studies (1 national)

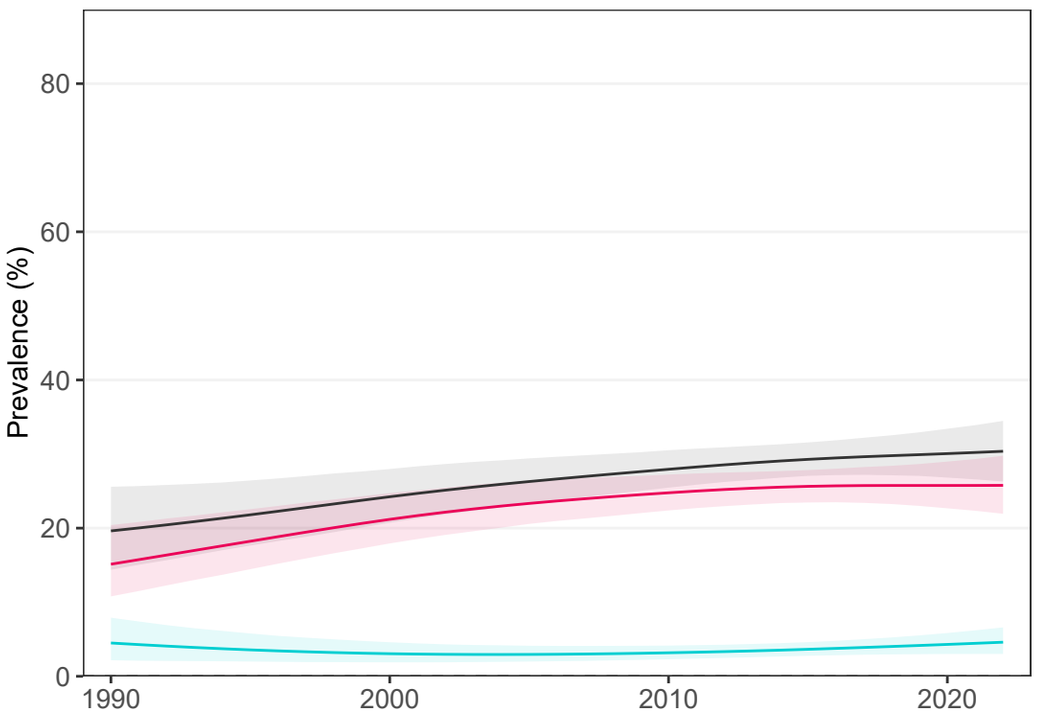




Adults

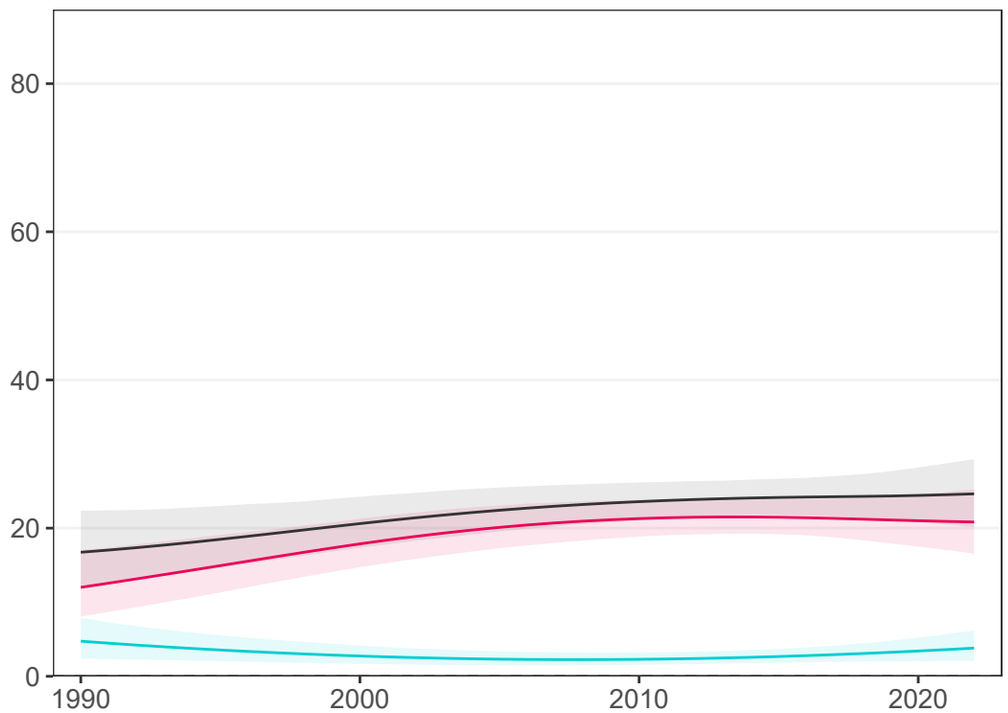
Women

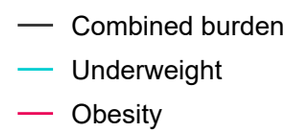
13 studies (3 national)



Men

13 studies (3 national)



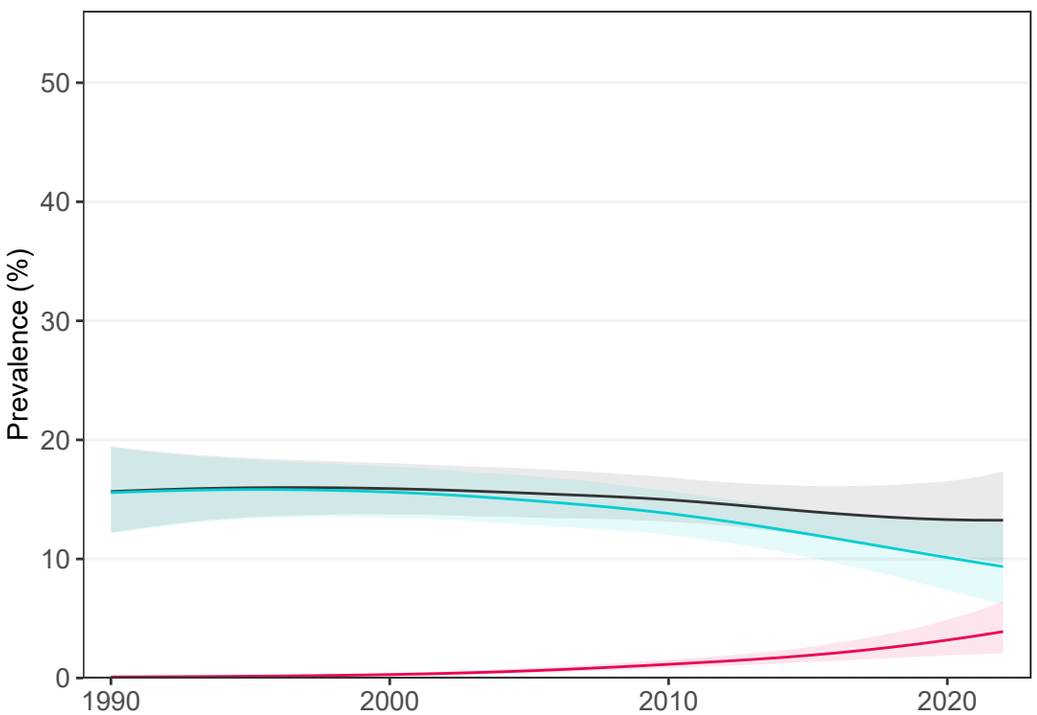


Viet Nam

School-aged children and adolescents

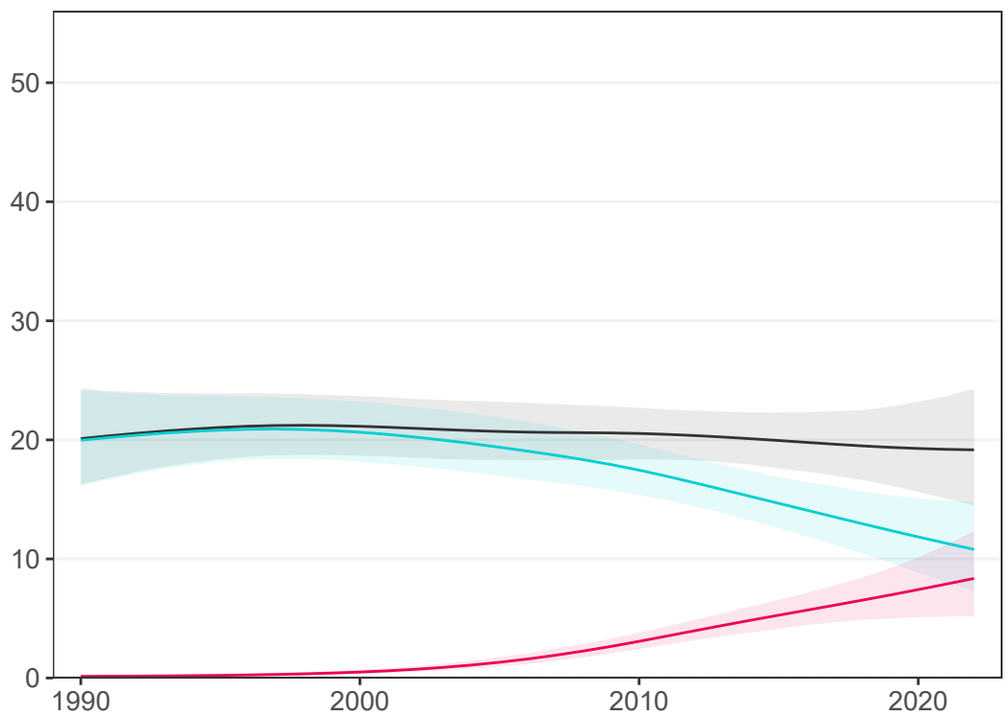
Girls

11 studies (9 national)



Boys

11 studies (9 national)

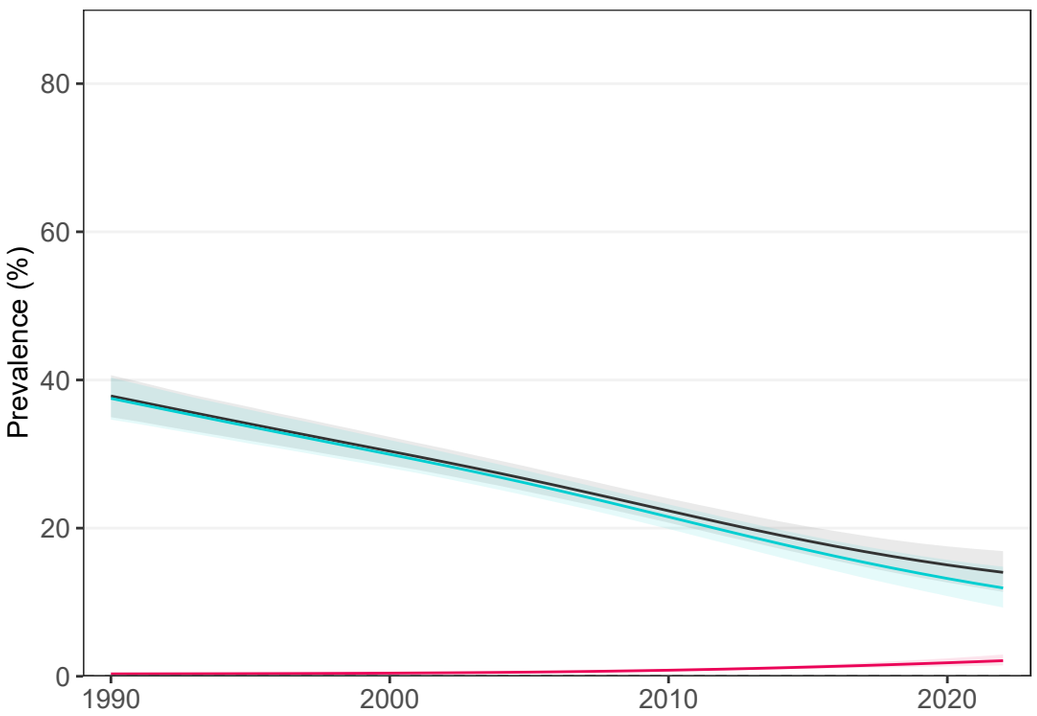


Combined burden
Thinness
Obesity

Adults

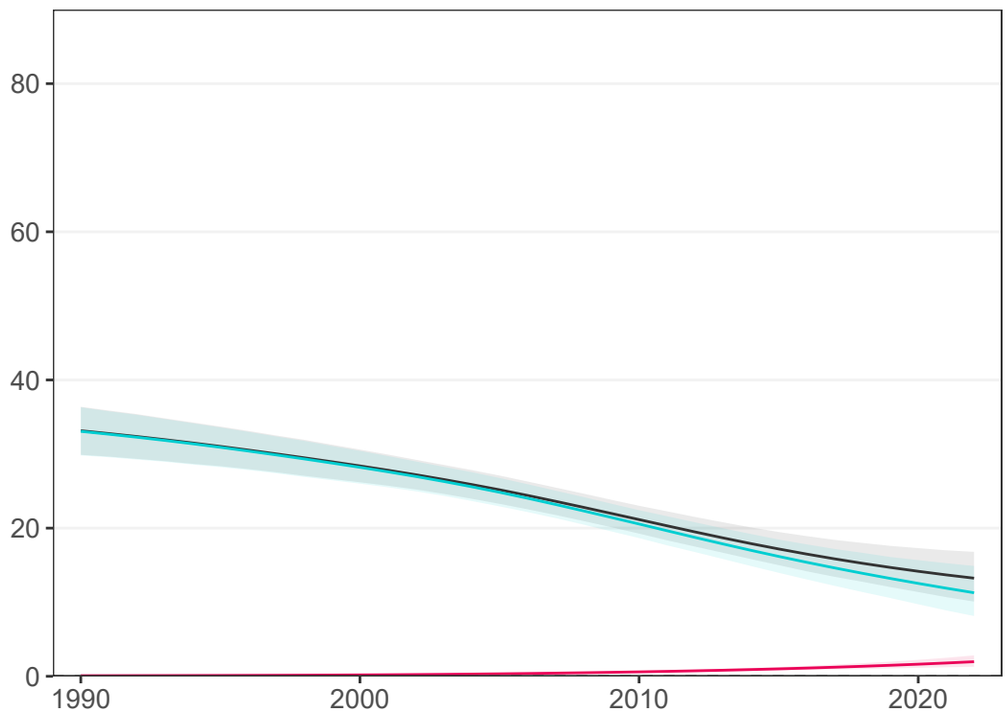
Women

25 studies (12 national)



Men

25 studies (12 national)



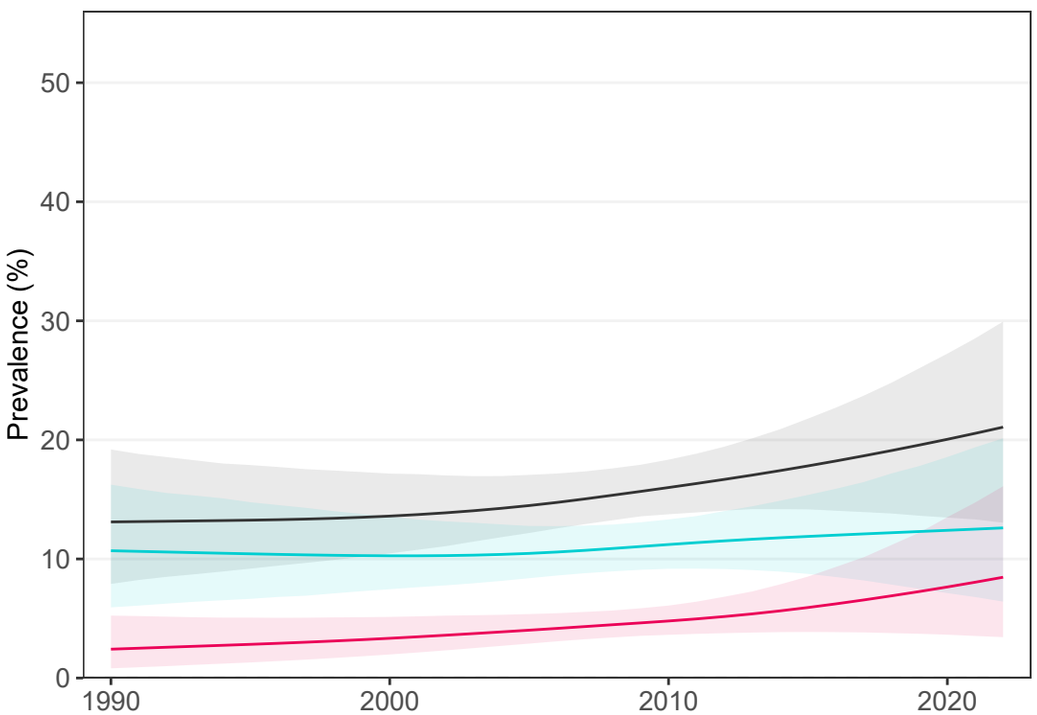
Combined burden
Underweight
Obesity

Yemen

School-aged children and adolescents

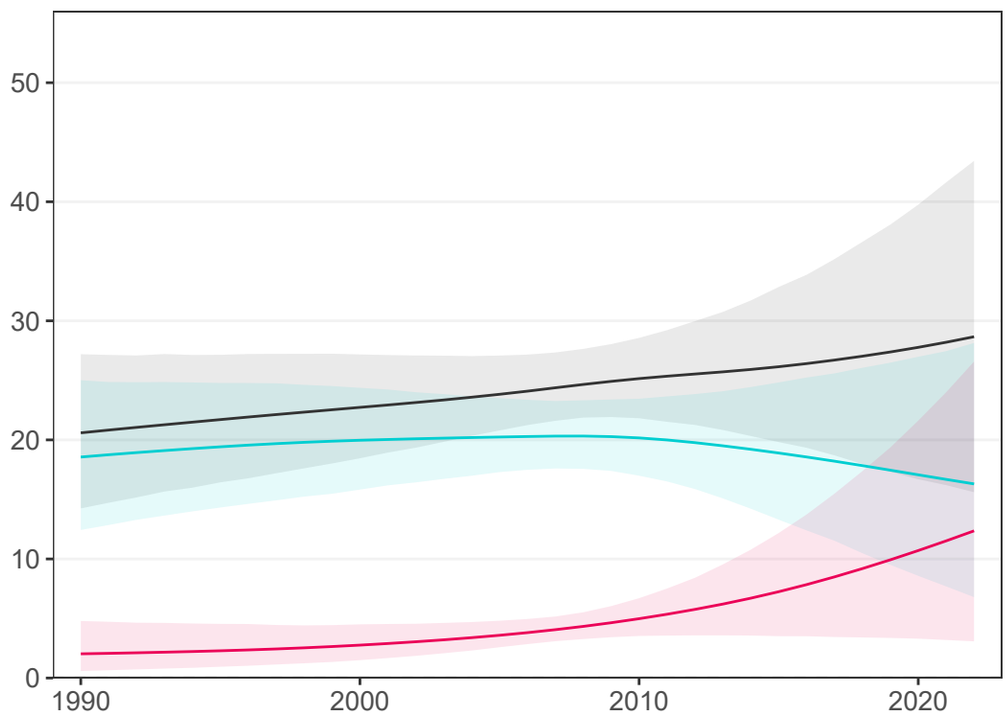
Girls

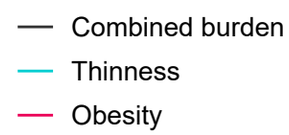
4 studies (4 national)



Boys

3 studies (3 national)

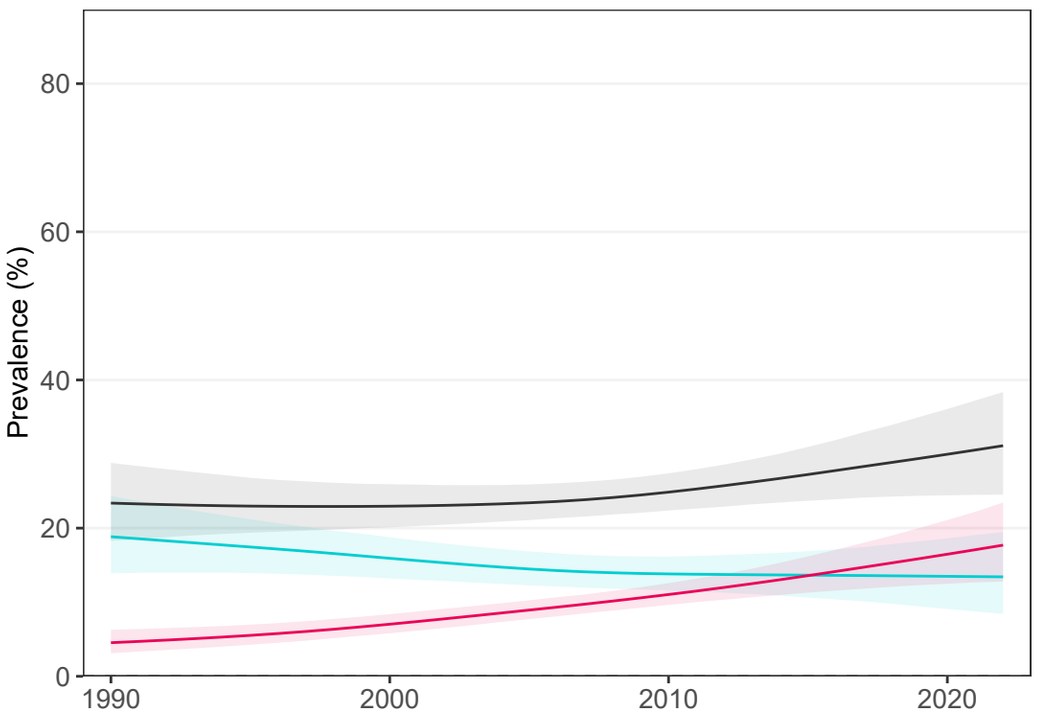




Adults

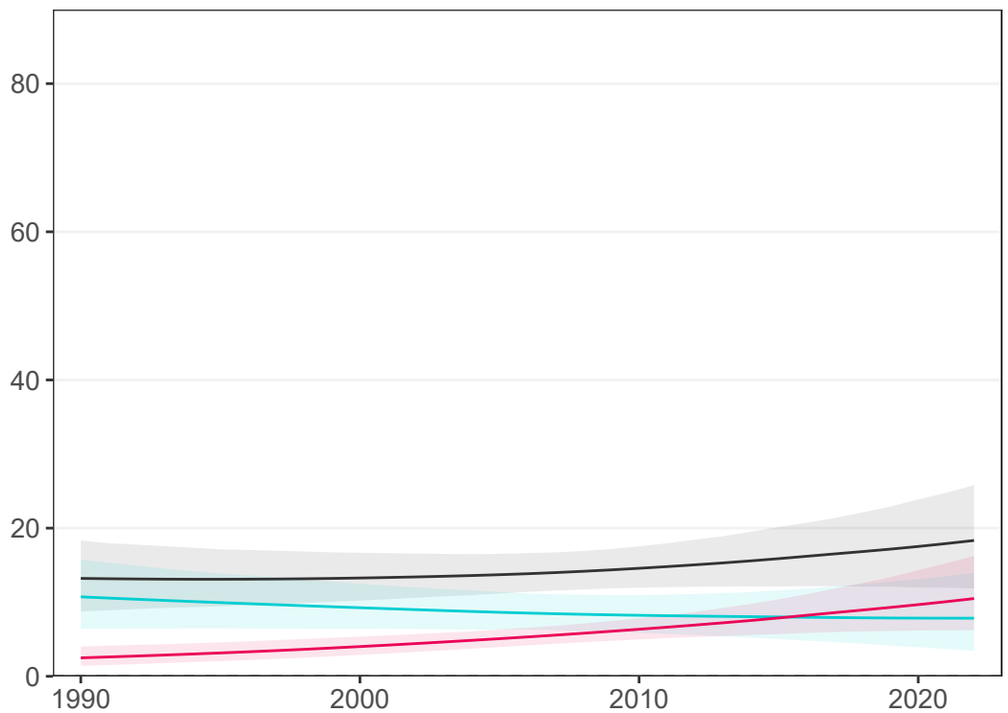
Women

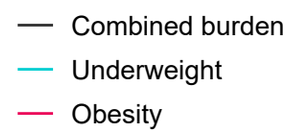
5 studies (5 national)



Men

3 studies (3 national)



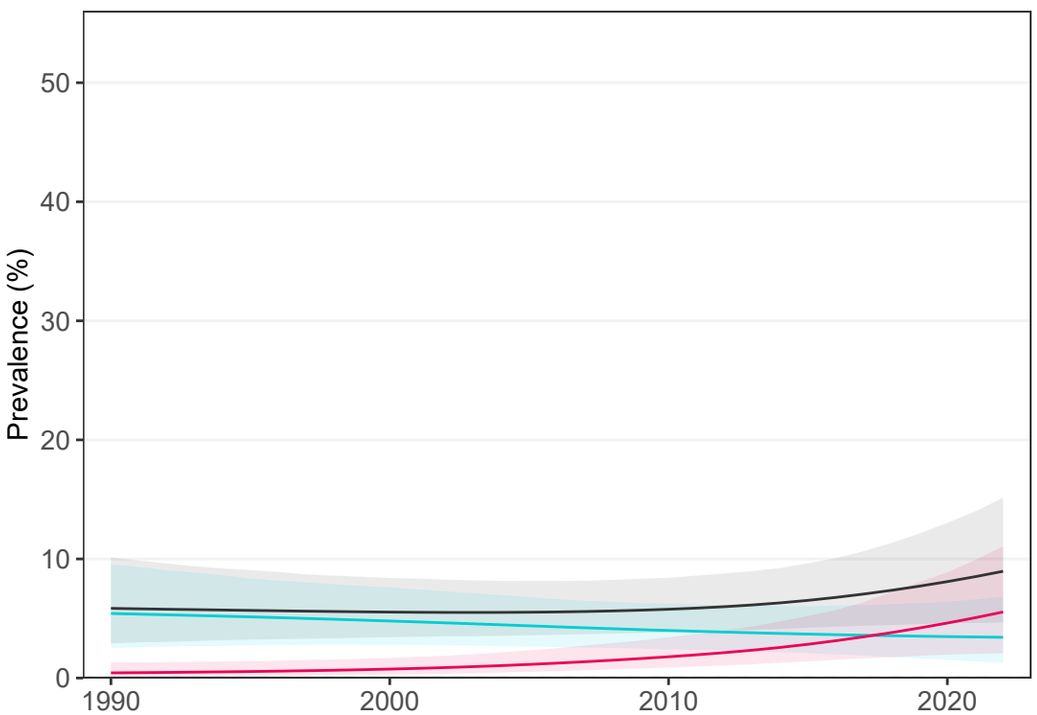


Zambia

School-aged children and adolescents

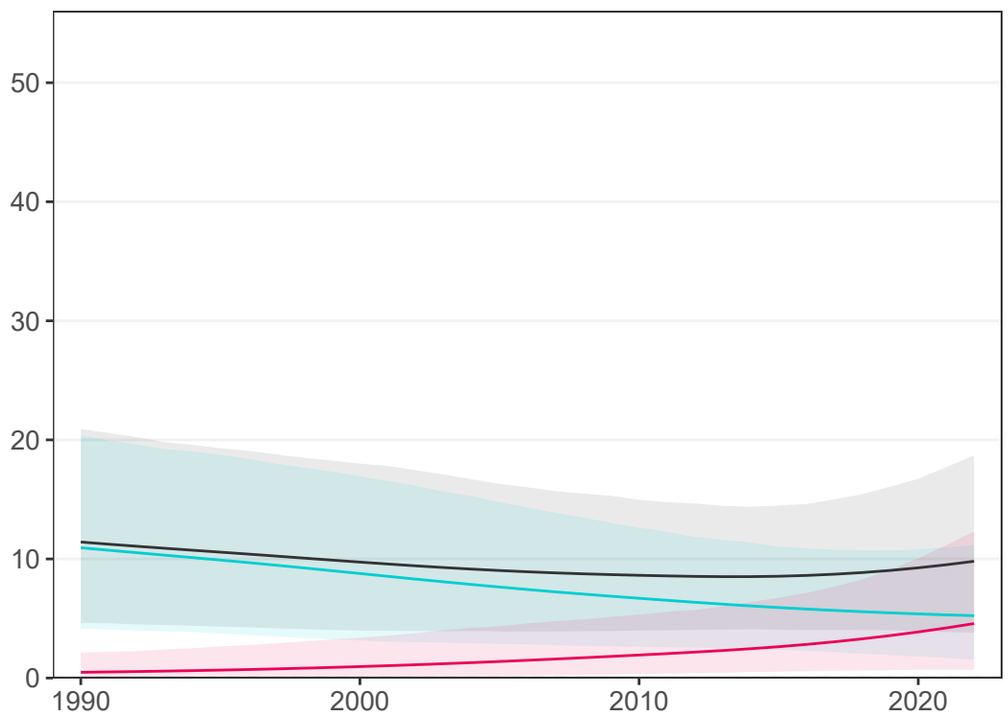
Girls

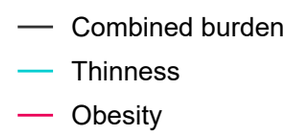
4 studies (4 national)



Boys

1 study (1 national)

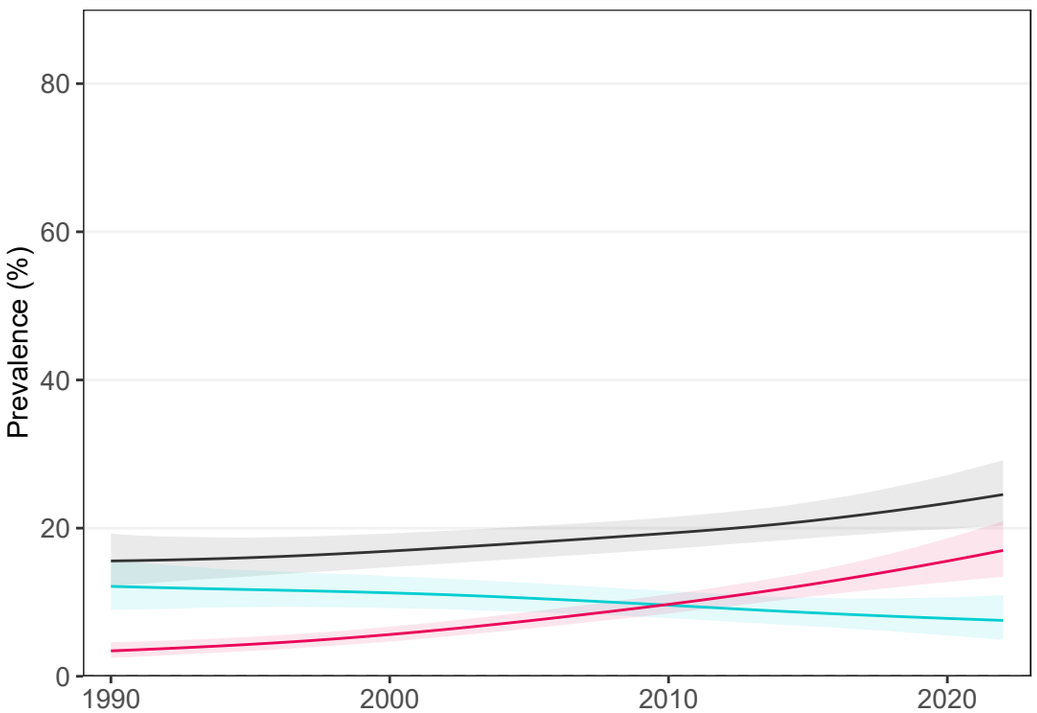




Adults

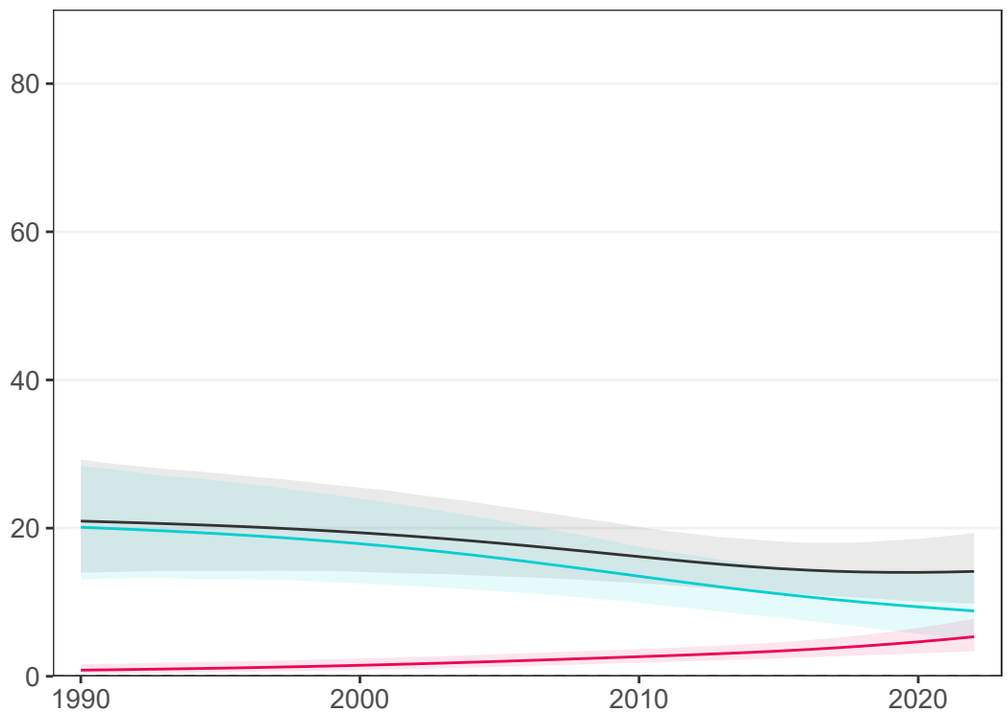
Women

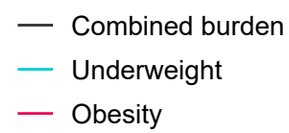
8 studies (6 national)



Men

3 studies (1 national)



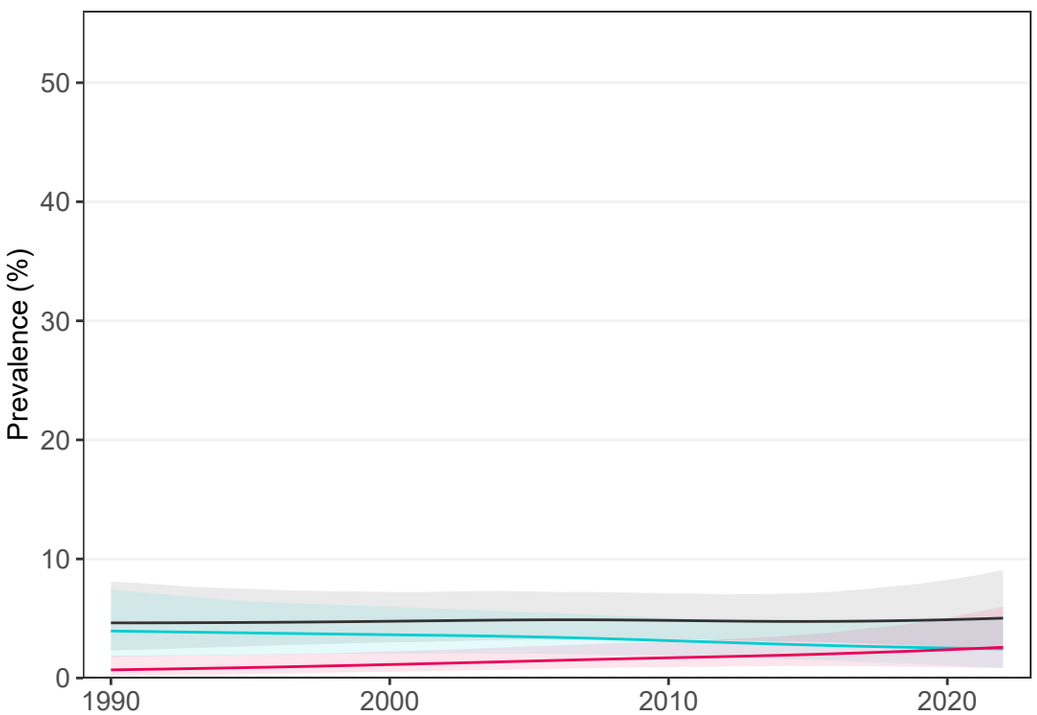


Zimbabwe

School-aged children and adolescents

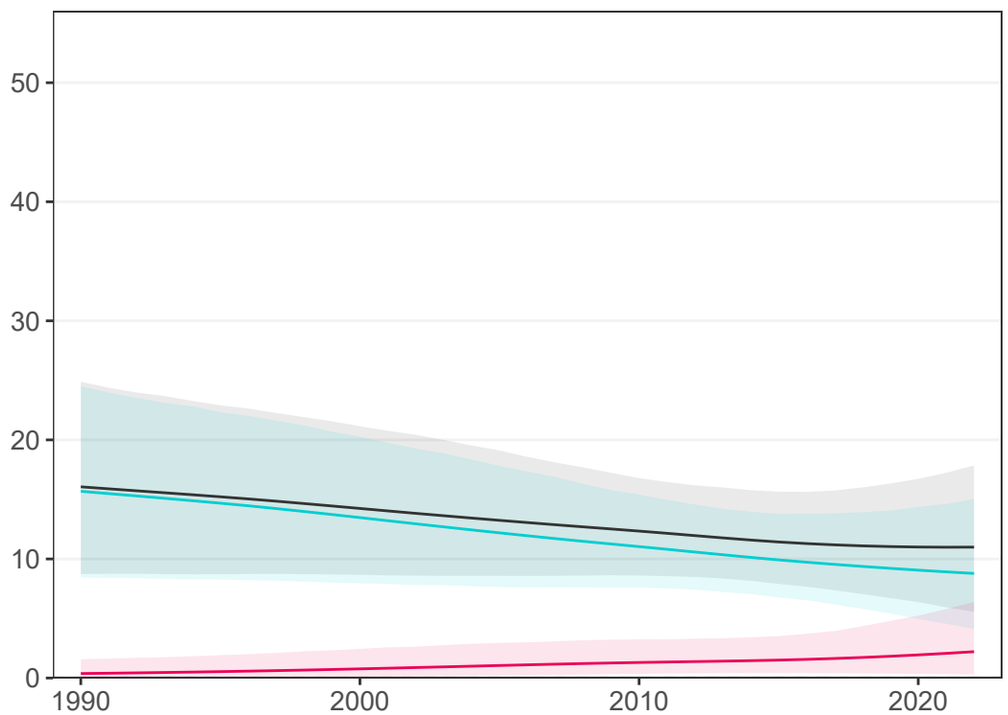
Girls

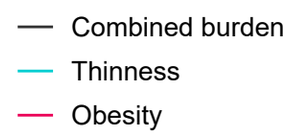
4 studies (4 national)



Boys

2 studies (2 national)

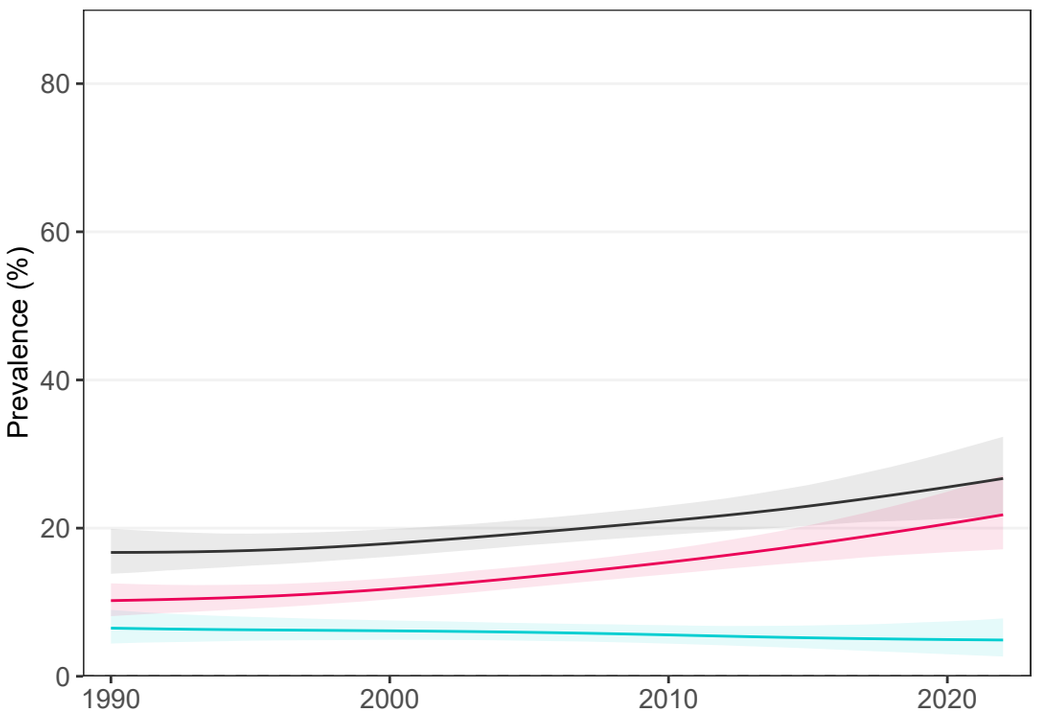




Adults

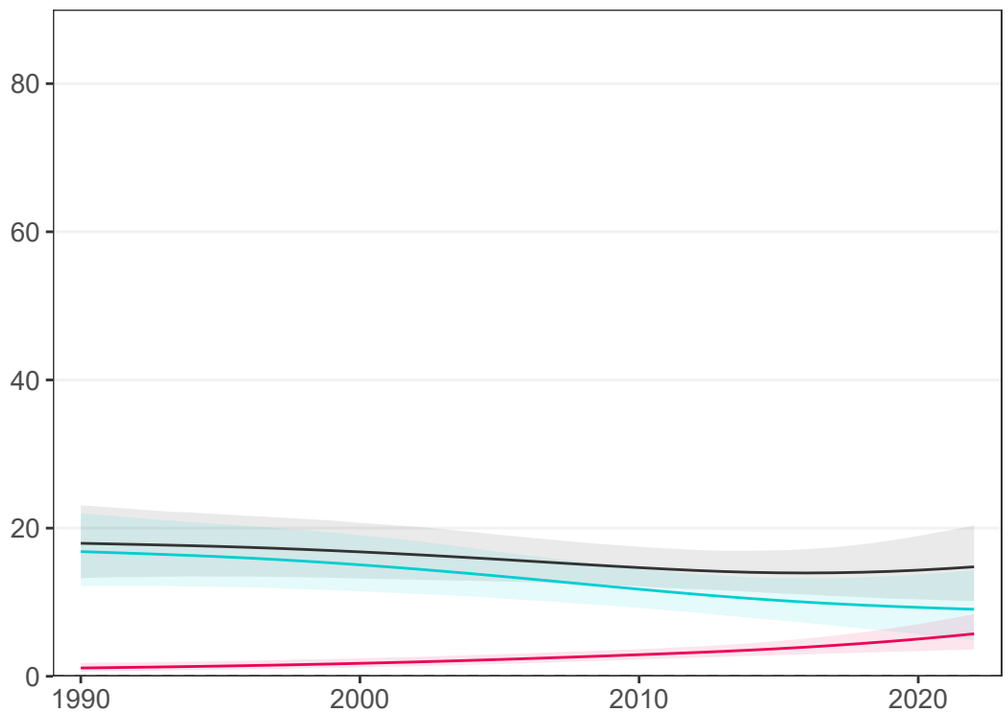
Women

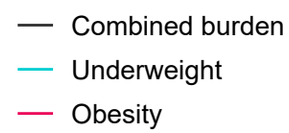
9 studies (6 national)



Men

6 studies (3 national)





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