Supplementary material

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Table S1. Characteristics of the Jordanian samples generated by the mathematical model, used to derive the diabetes risk score at three time points: 2020, 2030, and 2050.

		2020	2030	2050
		N (%)	N (%)	N (%)
Age group (years)	20-24	862 (17.2)	769 (15.4)	632 (12.6)
	25-29	716 (14.3)	700 (14.0)	619 (12.4)
	30-34	652 (13.0)	648 (13.0)	559 (11.2)
	35-39	613 (12.3)	544 (10.9)	516 (10.3)
	40-44	485 (9.7)	536 (10.7)	507 (10.1)
	45-49	429 (8.6)	423 (8.5)	450 (9.0)
	50-54	368 (7.4)	360 (7.2)	409 (8.2)
	55-59	308 (6.2)	357 (7.1)	359 (7.2)
	60-64	233 (4.7)	238 (4.8)	293 (5.9)
	65-69	171 (3.4)	196 (3.9)	273 (5.5)
	70-74	101 (2.0)	143 (2.9)	215 (4.3)
	75-79	62 (1.2)	86 (1.7)	168 (3.4)
Type 2 diabetes mellitus	No	4,194 (83.9)	4,088 (81.8)	4,013 (80.3)
	Yes	806 (16.1)	912 (18.2)	987 (19.7)
Sex	Women	2,471 (49.4)	2,391 (47.8)	2,411 (48.2)
	Men	2,529 (50.6)	2,609 (52.2)	2,589 (51.8)
Obesity[a]	No	3,073 (61.5)	3,033 (60.7)	2,912 (58.2)
	Yes	1,927 (38.5)	1,967 (39.3)	2,088 (41.8)
Smoking[b]	No	3,671 (73.4)	3,736 (74.7)	3,734 (74.7)
	Yes	1,329 (26.6)	1,264 (25.3)	1,266 (25.3)
Physical inactivity[c]	No	4,114 (82.3)	4,025 (80.5)	3,925 (78.5)
	Yes	886 (17.7)	975 (19.5)	1,075 (21.5)
Total sample size		**5,000**	**5,000**	**5,000**

[a] Defined as a body mass index ≥30 kg/m^2.[1]
[b] Defined as current daily tobacco use.[2]
[c] Defined as <150 minutes of moderate-intensity activity, or <75 minutes of vigorous-intensity activity, or <600 metabolic equivalent-minutes per week.[3, 4]

Table S2. Univariable and multivariable logistic regression analysis of risk factors for type 2 diabetes mellitus using the 2017 survey data[5] to derive the 2017 survey-based Jordan diabetes risk score.

		OR (95% CI)	aOR[a] (95% CI)	β[b]	Risk score[c]
Age group (years)	20-24	1.00	-	-	0
	25-29	1.05 (0.30-3.67)	1.23 (0.33-4.63)	0.21	2
	30-34	2.31 (0.82-6.49)	2.59 (0.84-7.96)	0.95	10
	35-39	6.07 (2.37-15.54)	6.34 (2.24-17.97)	1.85	18
	40-44	9.42 (3.76-23.59)	9.61 (3.46-26.67)	2.26	23
	45-49	19.34 (7.82-47.82)	18.93 (6.90-51.94)	2.94	29
	50-54	35.24 (14.29-86.87)	34.07 (12.45-93.28)	3.53	35
	55-59	40.85 (16.46-101.39)	36.61 (13.28-100.89)	3.60	36
	60-64	71.85 (28.70-179.86)	66.73 (24.04-185.28)	4.20	42
	65-69	62.73 (24.47-160.79)	55.12 (19.40-156.60)	4.01	40
	70-74	65.92 (25.10-173.16)	56.40 (19.41-163.90)	4.03	40
	75-79	43.09 (15.48-119.94)	38.74 (12.63-118.80)	3.66	37
Sex	Women	1.00	-	-	0
	Men	2.23 (1.91-2.61)	2.03 (1.68-2.45)	0.71	7
Obesity[d]	Non-obese	1.00	-	-	0
	Obese	2.02 (1.74-2.35)	1.60 (1.34-1.91)	0.48	5
Smoking[e]	Non-smoker	1.00	-	-	0
	Smoker	1.17 (0.95-1.43)	0.89 (0.70-1.14)	-0.11	-1
Physical inactivity[f]	Physically active	1.00	-	-	0
	Physically inactive	1.94 (1.60-2.36)	1.25 (1.00-1.56)	0.22	2

Abbreviations: aOR = Adjusted odds ratio, CI = Confidence interval, OR = Odds ratio.
[a] Odds ratios are adjusted for age, sex, obesity, smoking, and physical inactivity. The McFadden's pseudo R^2 for the multivariable logistic regression model was 20.1%.
[b] β-coefficients are based on the multivariable analysis.
[c] The maximum risk score for any individual is 56.
[d] Defined as a body mass index ≥30 kg/m^2.[1]
[e] Defined as current daily tobacco use.[2]
[f] Defined as <150 minutes of moderate-intensity activity, or <75 minutes of vigorous-intensity activity, or <600 metabolic equivalent-minutes per week.[3, 4]

Table S3. Univariable and multivariable logistic regression analysis of risk factors for type 2 diabetes mellitus using the 2017 survey data[5] to derive the 2017 model-based Jordan diabetes risk score.

		OR (95% CI)	aOR[a] (95% CI)	β[b]	Risk score[c]
Age group (years)	20-24	1.00	-	-	0
	25-29	2.05 (1.24-3.37)	1.90 (1.15-3.14)	0.64	6
	30-34	3.24 (2.00-5.24)	2.65 (1.63-4.32)	0.98	10
	35-39	4.68 (2.94-7.43)	3.99 (2.50-6.38)	1.38	14
	40-44	5.36 (3.35-8.58)	4.40 (2.73-7.10)	1.48	15
	45-49	7.62 (4.80-12.09)	6.10 (3.81-9.76)	1.81	18
	50-54	10.77 (6.76-17.16)	8.27 (5.14-13.29)	2.11	21
	55-59	13.62 (8.53-21.73)	10.86 (6.74-17.52)	2.39	24
	60-64	19.49 (11.99-31.69)	15.03 (9.13-24.73)	2.71	27
	65-69	21.79 (13.01-36.48)	18.34 (10.80-31.13)	2.91	29
	70-74	23.16 (13.25-40.48)	20.02 (11.27-35.58)	3.00	30
	75-79	20.38 (11.05-37.57)	17.28 (9.20-32.47)	2.85	28
Sex	Women	1.00	-	-	0
	Men	1.40 (1.20-1.64)	1.71 (1.42-2.05)	0.53	5
Obesity[d]	Non-obese	1.00	-	-	0
	Obese	2.99 (2.55-3.50)	2.44 (2.04-2.91)	0.89	9
Smoking[e]	Non-smoker	1.00	-	-	0
	Smoker	1.19 (1.00-1.41)	1.42 (1.17-1.73)	0.35	3
Physical inactivity[f]	Physically active	1.00	-	-	0
	Physically inactive	1.49 (1.23-1.81)	1.18 (0.95-1.46)	0.17	2

Abbreviations: aOR = Adjusted odds ratio, CI = Confidence interval, OR = Odds ratio.
[a] Odds ratios are adjusted for age, sex, obesity, smoking, and physical inactivity. The McFadden's pseudo R^2 for the multivariable logistic regression model was 14.5%.
[b] β-coefficients are based on the multivariable analysis.
[c] The maximum risk score for any individual is 49.
[d] Defined as a body mass index ≥30 kg/m^2.[1]
[e] Defined as current daily tobacco use.[2]
[f] Defined as <150 minutes of moderate-intensity activity, or <75 minutes of vigorous-intensity activity, or <600 metabolic equivalent-minutes per week.[3, 4]

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