Supplementary tables

Supplementary Table 1. Crude and age-standardized (95% CI) prevalence of cardiovascular disease risk factors by migration status.

Risk factor	Crude Prevalences			Age-standardized Prevalences (95% CI)*		
	Rural n (%)	Migrant n (%)	Urban n (%)	Rural (%)	Migrant (%)	Urban (%)
	n = 201	n = 589	n = 199	n = 201	n = 589	n = 199
Current smoker	11 (5.5 %)	59 (10 %)	40 (20.1 %)	4.8% (2.6%; 6.9%)	9.2% (7%; 11.5%)	19.6% (14.8%; 24.4%)
Low physical activity	4 (2%)	173 (29.7%)	78 (39.4%)	2.2% (0.6%; 3.7%)	32.2% (28.6%; 35.9%)	38.5% (32.4%; 44.7%)
Obesity	6 (3%)	124 (21.1%)	68 (34.2%)	2.9% (0.7%; 5.1%)	19.5% (16.5%; 22.5%)	32.7% (26.9%; 38.5%)
Overweight and obese	39 (19.4%)	395 (67.3%)	141 (70.9%)	18.2% (13.6%; 22.8%)	66.9% (63.2%; 70.6%)	68.3% (62.6%; 74%)
Hypertension	24 (11.9%)	77 (13.1%)	59 (29.7%)	10.7% (7.5%; 13.9%)	15.5% (13.2%; 17.7%)	28.9% (23.9%; 33.8%)
Diabetes	1 (0.5%)	13 (2.2%)	10 (5%)	0.8% (0%; 1.6%)	2.8% (1.6%; 4%)	6.3% (3.5%; 9.1%)
IFG and diabetes	3 (1.5%)	23 (3.9%)	16 (8%)	2.9% (1.4%; 4.3%)	6.9% (5.1%; 8.7%)	19.5% (15.5%; 23.6%)
Hypercholerolemia	15 (7.5%)	220 (37.4%)	71 (35.7%)	8.7% (5.4%; 11.9%)	34.6% (31%; 38.2%)	35.1% (28.7%; 41.5%)
Metabolic Syndrome	23 (11.4%)	193 (32.8%)	89 (44.7%)	12.1% (8.0%; 16.2%)	31.8% (28.3%; 35.2%)	43.1% (37.2%; 48.9%)

* Age-standardized to WHO world population 2000-2025.

Supplementary Table 2. Within groups SD and SMD (95% CI) in cardiovascular disease risk factors in migrant and urban population compared to rural population.

| | Rural* | Model 1 | | Model 2 | | Model 3 | |
| | | Migrant | Urban | Migrant | Urban | Migrant | Urban |
	Within groups SD	SMD (95% CI)	SMD (95% CI)	SMD (95% CI)	SMD (95% CI)	SMD (95% CI)	SMD (95% CI)
BMI	4.2	0.8 (0.6; 1)	1 (0.8; 1.3)	--	--	0.8 (0.6; 1)	1 (0.8; 1.3)
WHR	0.06	1 (0.8; 1.2)	0.7 (0.5; 1)	0.5 (0.4; 0.7)	0.2 (-0.1; 0.4)	0.6 (0.4; 0.8)	0.2 (0; 0.4)
Waist circumference	10	1 (0.8; 1.2)	1.3 (1; 1.5)	0.3 (0.2; 0.4)	0.4 (0.3; 0.5)	0.3 (0.2; 0.4)	0.4 (0.2; 0.5)
All skinfolds	25.3	1.4 (1.2; 1.6)	1.8 (1.6; 2.1)	0.8 (0.7; 1)	1.1 (0.9; 1.3)	0.8 (0.6; 0.9)	1 (0.8; 1.2)
SBP	16.1	0 (-0.2; 0.2)	0.5 (0.3; 0.8)	-0.1 (-0.4; 0.1)	0.3 (0.1; 0.6)	-0.1 (-0.4; 0.1)	0.3 (0; 0.6)
DBP	9.4	-0.4 (-0.6; -0.2)	0.1 (-0.1; 0.4)	-0.6 (-0.8; -0.4)	-0.2 (-0.5; 0)	-0.6 (-0.8; -0.4)	-0.2 (-0.5; 0)
Total cholesterol	37.9	0.9 (0.7; 1.1)	1 (0.7; 1.2)	0.8 (0.6; 1)	0.8 (0.5; 1)	0.7 (0.5; 0.9)	0.7 (0.4; 1)
HDL	11.6	0 (-0.3; 0.2)	0 (-0.3; 0.3)	0.2 (0; 0.4)	0.3 (0; 0.5)	0.2 (0; 0.4)	0.3 (0; 0.5)
LDL	32	1 (0.8; 1.2)	1 (0.8; 1.3)	0.8 (0.6; 1.1)	0.9 (0.6; 1.1)	0.8 (0.5; 1)	0.8 (0.5; 1)
Triglycerides (log)	0.5	0.2 (0; 0.4)	0.2 (-0.1; 0.4)	0 (-0.2; 0.2)	-0.2 (-0.4; 0.1)	-0.1 (-0.3; 0.2)	-0.2 (-0.5; 0.1)
TC/HDL ratio	1.4	0.6 (0.4; 0.8)	0.7 (0.4; 0.9)	0.4 (0.2; 0.6)	0.3 (0.1; 0.6)	0.3 (0.1; 0.5)	0.2 (0; 0.5)
CRP (log)	1.4	0.8 (0.6; 1)	0.8 (0.6; 1.1)	0.6 (0.4; 0.8)	0.6 (0.3; 0.8)	0.6 (0.4; 0.8)	0.6 (0.3; 0.9)
Fibrinogen (log)	0.2	0.5 (0.3; 0.7)	0.5 (0.2; 0.7)	0.4 (0.2; 0.7)	0.4 (0.2; 0.7)	0.5 (0.3; 0.7)	0.5 (0.2; 0.8)
Glucose (log)	0.2	0.5 (0.3; 0.7)	0.9 (0.6; 1.1)	0.3 (0.1; 0.5)	0.6 (0.3; 0.8)	0.3 (0.1; 0.5)	0.6 (0.3; 0.9)
HbA$_{1c}$ (log)	0.1	0 (-0.2; 0.2)	0.4 (0.1; 0.6)	-0.1 (-0.3; 0.1)	0.2 (0; 0.5)	-0.1 (-0.3; 0.1)	0.3 (0; 0.5)
Insulin (log)	1.1	1 (0.8; 1.2)	1.2 (0.9; 1.5)	0.7 (0.5; 0.9)	0.8 (0.6; 1.1)	0.7 (0.4; 0.9)	0.7 (0.4; 1)
HOMA-IR (log)	0.8	1.4 (1.2; 1.7)	1.6 (1.3; 1.9)	1 (0.8; 1.2)	1.1 (0.9; 1.3)	1 (0.8; 1.2)	1 (0.8; 1.3)

Notes: Model 1: adjusted for age, sex, individual's socioeconomic deprivation and parental education; Model 2: as Model 1 plus BMI; Model 3: as Model 2 plus physical activity in 3 MET score categories (except only for BMI estimates where BMI was not included). * Rural SD values were derived from Model 1 adjusting for age, sex, individual socioeconomic deprivation and highest parental education.

Supplementary Table 3. Association (OR and 95% CI) between cardiovascular risk factors and migration status.

Risk factor	Rural (Reference)	Model 1 Migrant OR (95% CI)	Model 1 Urban OR (95% CI)	Model 2 Migrant OR (95% CI)	Model 2 Urban OR (95% CI)	Model 3 Migrant OR (95% CI)	Model 3 Urban OR (95% CI)
Current smoker	1	1.09 (0.45; 2.65)	2.54 (0.96; 6.72)	1.02 (0.41; 2.51)	2.32 (0.86; 6.22)	0.82 (0.32; 2.12)	1.83 (0.65; 5.17)
Low physical activity	1	22.5 (7.85; 64.48)	33.11 (10.99; 99.73)	22.18 (7.69; 63.99)	32.78 (10.76; 99.83)	–	–
Obesity	1	9.41 (3.8; 23.25)	20.07 (7.57; 53.22)	–	–	9.15 (3.58; 23.41)	19.01 (6.94; 52.09)
Overweight and obese	1	5.89 (3.67; 9.45)	5.74 (3.21; 10.24)	–	–	6.06 (3.62; 10.14)	5.7 (3.07; 10.59)
Hypertension	1	1.53 (0.81; 2.89)	4.96 (2.32; 10.6)	1.09 (0.56; 2.11)	3.29 (1.5; 7.19)	1.12 (0.55; 2.27)	3.32 (1.44; 7.64)
Diabetes	1	6 (0.7; 51.86)	15.93 (1.6; 159.19)	4.3 (0.49; 38.16)	10.03 (0.95; 106.42)	5.58 (0.6; 52.29)	13.14 (1.17; 148.09)
IFG or diabetes	1	3.52 (0.92; 13.42)	8.86 (2.01; 39.08)	2.16 (0.55; 8.52)	4.61 (0.98; 21.7)	2 (0.47; 8.49)	4.23 (0.83; 21.6)
Hypercholesterolemia	1	7.46 (3.99; 13.94)	5.67 (2.79; 11.5)	5.74 (3.04; 10.86)	3.88 (1.88; 8.03)	5.28 (2.7; 10.31)	3.52 (1.65; 7.53)
Metabolic syndrome	1	4.92 (2.82; 8.58)	7.81 (4.1; 14.89)	2.06 (1.11; 3.83)	2.8 (1.37; 5.74)	2.12 (1.09; 4.1)	2.93 (1.37; 6.26)

Notes: Model 1: adjusted for age, sex, individual's socioeconomic deprivation and parental education; Model 2: as Model 1 plus BMI; Model 3: as Model 2 plus physical activity in 3 MET score categories, with the exception of obesity / overweight where BMI was not considered.

Supplementary Table 4. β coefficients (95% CI), geometric mean ratios (95% CI), and odds ratios (95% CI) of cardiovascular risk factors in migrants by age at first migration.

		Model 1	Model 2	Model 3
Migration Status	**≤ 12 years old**	**> 12 years old**	**> 12 years old**	**> 12 years old**
Continuous normally distributed variables	**Reference**	**β coefficient (95% CI)**	**β coefficient (95% CI)**	**β coefficient (95% CI)**
BMI	--	0.7 (0; 1.4)	--	0.6 (-0.1; 1.3)
Waist-to-hip ratio	--	0.01 (0; 0.02)	0.01 (0; 0.01)	0.01 (0; 0.01)
All skinfolds	--	3.2 (-1.2; 7.6)	0.3 (-2.8; 3.4)	0.5 (-2.6; 3.6)
Systolic blood pressure*	--	-0.7 (-3.2; 1.7)	-1.3 (-3.7; 1.1)	-1.2 (-3.6; 1.2)
Diastolic blood pressure*	--	-0.4 (-1.9; 1.2)	-0.9 (-2.4; 0.5)	-0.7 (-2.2; 0.7)
Total cholesterol	--	6 (-0.7; 12.7)	4.8 (-1.8; 11.4)	5.7 (-0.9; 12.3)
HDL	--	0.5 (-1.4; 2.4)	1 (-0.9; 2.8)	1.1 (-0.8; 3)
LDL	--	4.1 (-1.5; 9.7)	3.2 (-2.3; 8.8)	3.8 (-1.8; 9.4)
TC/HDL ratio	--	0.1 (-0.1; 0.4)	0 (-0.2; 0.3)	0.1 (-0.2; 0.3)
Continuous non-normally distributed variables	**Reference**	**Ratio (95% CI)**	**Ratio (95% CI)**	**Ratio (95% CI)**
Triglycerides (mg/dL)	--	1.04 (0.95; 1.14)	1.01 (0.93; 1.1)	1.02 (0.93; 1.11)
Glucose (mg/dL)	--	1.04 (1.01; 1.07)	1.03 (1.01; 1.06)	1.03 (1; 1.06)
HbA_{1c} (%)	--	1.02 (1; 1.05)	1.02 (1; 1.04)	1.02 (1; 1.04)
Insulin (µIU/mL)	--	0.95 (0.78; 1.16)	0.89 (0.74; 1.07)	0.9 (0.75; 1.09)
HOMA-IR	--	0.99 (0.88; 1.12)	0.94 (0.85; 1.03)	0.94 (0.86; 1.04)
CRP (mg/L)	--	1.05 (0.84; 1.31)	1 (0.8; 1.24)	1 (0.8; 1.24)
Fibrinogen (mg/dL)	--	0.98 (0.94; 1.02)	0.98 (0.94; 1.02)	0.98 (0.94; 1.02)
Categorical variables	**Reference**	**OR (95% CI)**	**OR (95% CI)**	**OR (95% CI)**
Current smoker	1	0.7 (0.39; 1.25)	0.72 (0.4; 1.28)	0.74 (0.41; 1.34)
Low physical activity	1	0.97 (0.67; 1.42)	0.97 (0.66; 1.41)	--
Obesity	1	1.37 (0.87; 2.14)	--	1.34 (0.85; 2.1)
Overweight and obese	1	1.4 (0.97; 2.02)	--	1.37 (0.95; 1.98)
Hypertension	1	0.73 (0.42; 1.27)	0.69 (0.4; 1.21)	0.7 (0.4; 1.22)
Diabetes	1	7.45 (0.95; 58.72)	7.21 (0.92; 56.84)	7.05 (0.9; 55.48)
IFG or diabetes	1	6.36 (1.46; 27.77)	6.3 (1.43; 27.82)	6.07 (1.36; 27.06)
Hypercholesterolemia	1	1.18 (0.82; 1.69)	1.12 (0.78; 1.62)	1.16 (0.8; 1.68)
Metabolic syndrome	1	1.71 (1.16; 2.53)	1.65 (1.07; 2.55)	1.66 (1.08; 2.57)

Notes: Model 1: adjusted for age, sex, individual's socioeconomic deprivation and parental education; Model 2: as Model 1 plus BMI; Model 3: as Model 2 plus physical activity in 3 MET score categories, with the exception of BMI and obesity / overweight where BMI was not considered.

* SBP and DBP estimates derived from censored regression analyses.

Supplementary Table 5. β coefficients (95% CI), geometric mean ratios (95% CI), and odds ratios (95% CI) of cardiovascular risk factors in migrants by length of residency (in years) in urban area.

Migration Status	<20 years in urban area	Model 1			Model 2			Model 3		
		20-29 years in urban area	30-39 years in urban area	≥40 years in urban area	20-29 years in urban area	30-39 years in urban area	≥40 years in urban area	20-29 years in urban area	30-39 years in urban area	≥40 years in urban area
Continuous normally distributed variables	Reference	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)
BMI	--	1.2 (-0.1; 2.5)	2 (0.7; 3.4)	1.2 (-0.3; 2.7)	--	--	--	1.3 (0.1; 2.6)	2.2 (0.8; 3.5)	1.4 (-0.2; 2.9)
Waist-to-hip ratio	--	0.01 (0; 0.03)	0.03 (0.01; 0.05)	0.03 (0.01; 0.05)	0.01 (-0.01; 0.02)	0.02 (0; 0.03)	0.02 (0; 0.04)	0.01 (-0.01; 0.02)	0.02 (0; 0.03)	0.02 (0; 0.04)
All skinfolds	--	6.3 (-1.5; 14.1)	11.8 (3.4; 20.1)	9.3 (-0.1; 18.7)	0.8 (-4.7; 6.3)	2.4 (-3.5; 8.3)	3.8 (-2.9; 10.4)	1 (-4.6; 6.5)	2.6 (-3.4; 8.5)	4.1 (-2.6; 10.8)
Systolic blood pressure*	--	-0.8 (-5.1; 3.5)	-0.4 (-4.9; 4.2)	-1.9 (-7.1; 3.3)	-1.8 (-5.9; 2.4)	-2 (-6.4; 2.5)	-2.8 (-7.9; 2.3)	-1.8 (-6; 2.4)	-2 (-6.5; 2.5)	-2.9 (-8; 2.2)
Diastolic blood pressure*	--	1.3 (-1.5; 4.1)	2.8 (-0.2; 5.7)	1.8 (-1.6; 5.2)	0.4 (-2.2; 2.9)	1.2 (-1.6; 4)	0.9 (-2.3; 4)	0.4 (-2.2; 3)	1 (-1.7; 3.8)	0.7 (-2.4; 3.9)
Total cholesterol	--	13.5 (1.7; 25.4)	16.9 (4.3; 29.5)	16.4 (2.1; 30.8)	11.1 (-0.5; 22.7)	12.7 (0.2; 25.2)	14.1 (0.1; 28.2)	10.9 (-0.8; 22.5)	11.8 (-0.7; 24.4)	12.9 (-1.2; 27.1)
HDL	--	1.7 (-1.7; 5.1)	-1.7 (-5.3; 1.9)	-0.3 (-4.4; 3.8)	2.6 (-0.8; 5.9)	-0.3 (-3.8; 3.3)	0.4 (-3.5; 4.4)	2.3 (-1; 5.6)	-0.4 (-4; 3.1)	0.2 (-3.8; 4.1)
LDL	--	10 (0.1; 19.8)	11.7 (1.2; 22.3)	13.3 (1.4; 25.3)	8.1 (-1.6; 17.9)	8.6 (-1.9; 19.1)	11.6 (-0.1; 23.4)	8.3 (-1.5; 18.1)	8 (-2.5; 18.5)	10.8 (-1.1; 22.7)
TC/HDL ratio	--	0.3 (-0.2; 0.7)	0.6 (0.2; 1.1)	0.5 (0; 1)	0.1 (-0.3; 0.5)	0.4 (0; 0.8)	0.4 (-0.1; 0.9)	0.1 (-0.3; 0.5)	0.4 (0; 0.8)	0.4 (-0.1; 0.9)
Continuous non-normally distributed variables	Reference	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)
Triglycerides (mg/dL)	--	1.02 (0.87; 1.2)	1.23 (1.03; 1.46)	1.12 (0.92; 1.36)	0.97 (0.83; 1.13)	1.13 (0.95; 1.33)	1.06 (0.88; 1.28)	0.96 (0.82; 1.12)	1.12 (0.95; 1.32)	1.06 (0.88; 1.28)
Glucose (mg/dL)	--	1.03 (0.98; 1.08)	1.06 (1; 1.12)	1.05 (0.99; 1.12)	1.02 (0.97; 1.07)	1.04 (0.98; 1.1)	1.04 (0.98; 1.11)	1.01 (0.96; 1.07)	1.04 (0.98; 1.1)	1.04 (0.98; 1.11)
HbA$_{1c}$ (%)	--	1 (0.96; 1.03)	1.03 (0.99; 1.08)	1.02 (0.97; 1.06)	0.99 (0.96; 1.03)	1.03 (0.99; 1.07)	1.01 (0.97; 1.06)	0.99 (0.95; 1.03)	1.03 (0.99; 1.07)	1.01 (0.97; 1.06)
Insulin (μIU/mL)	--	1.05 (0.73;	1.23 (0.85;	1.01 (0.66;	0.93 (0.66;	1 (0.7; 1.44)	0.9 (0.6; 1.34)	0.92 (0.66;	1.01 (0.71;	0.92 (0.61;

	Reference									
		1.49)	1.8)	1.55)	1.29)			1.29)	1.45)	1.38)
HOMA-IR	--	1.08 (0.87; 1.32)	1.27 (1.02; 1.58)	1.28 (0.99; 1.65)	0.95 (0.8; 1.13)	1.04 (0.86; 1.25)	1.12 (0.91; 1.38)	0.95 (0.8; 1.13)	1.05 (0.87; 1.27)	1.15 (0.93; 1.42)
CRP (mg/L)	--	0.83 (0.55; 1.24)	0.91 (0.59; 1.4)	0.96 (0.59; 1.57)	0.75 (0.5; 1.1)	0.76 (0.5; 1.16)	0.88 (0.55; 1.41)	0.76 (0.51; 1.13)	0.75 (0.49; 1.14)	0.85 (0.53; 1.38)
Fibrinogen (mg/dL)	--	0.98 (0.92; 1.05)	1.02 (0.95; 1.1)	1.06 (0.98; 1.15)	0.98 (0.92; 1.05)	1.02 (0.95; 1.1)	1.06 (0.97; 1.15)	0.99 (0.92; 1.06)	1.03 (0.95; 1.11)	1.07 (0.98; 1.16)

Categorical variables	Reference	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Current smoker	1	0.74 (0.27; 2.07)	0.82 (0.27; 2.45)	0.89 (0.24; 3.27)	0.76 (0.27; 2.13)	0.85 (0.28; 2.54)	0.93 (0.26; 3.38)	0.71 (0.25; 2.02)	0.88 (0.29; 2.66)	1.04 (0.28; 3.81)
Low physical activity	1	1.13 (0.58; 2.18)	0.64 (0.31; 1.3)	0.36 (0.16; 0.82)	1.1 (0.56; 2.13)	0.61 (0.3; 1.25)	0.35 (0.16; 0.8)	--	--	--
Obesity	1	3.69 (1.24; 11)	4.19 (1.36; 12.9)	2.68 (0.8; 8.99)	--	--	--	3.81 (1.28; 11.39)	4.43 (1.44; 13.66)	2.92 (0.87; 9.83)
Overweight and obese	1	1.84 (0.98; 3.45)	1.81 (0.92; 3.56)	1.31 (0.61; 2.83)	--	--	--	1.96 (1.04; 3.69)	1.88 (0.95; 3.72)	1.36 (0.63; 2.96)
Hypertension	1	1.04 (0.3; 3.64)	1.05 (0.31; 3.61)	1.06 (0.31; 3.67)	0.85 (0.24; 2.98)	0.82 (0.24; 2.82)	0.86 (0.25; 2.97)	0.87 (0.25; 3.07)	0.85 (0.24; 2.93)	0.9 (0.26; 3.17)
Diabetes	1	0.55 (0.05; 6.28)	2.37 (0.26; 21.5)	1.05 (0.08; 13.33)	0.51 (0.04; 5.89)	2.06 (0.22; 19.52)	0.96 (0.07; 12.61)	0.56 (0.05; 6.66)	2.09 (0.21; 21.14)	0.86 (0.06; 12.46)
IFG or diabetes	1	0.77 (0.15; 4.02)	1.31 (0.26; 6.59)	0.86 (0.15; 5.1)	0.59 (0.11; 3.13)	0.86 (0.16; 4.51)	0.63 (0.1; 3.94)	0.5 (0.09; 2.83)	0.82 (0.15; 4.51)	0.6 (0.09; 4.05)
Hypercholesterolemia	1	1.97 (0.94; 4.13)	2.1 (0.98; 4.52)	2.21 (0.96; 5.09)	1.75 (0.83; 3.69)	1.72 (0.79; 3.75)	1.98 (0.85; 4.61)	1.76 (0.83; 3.73)	1.71 (0.78; 3.74)	1.93 (0.82; 4.51)
Metabolic syndrome	1	1.47 (0.66; 3.25)	2.25 (1; 5.04)	1.33 (0.55; 3.19)	1.02 (0.44; 2.38)	1.38 (0.58; 3.27)	0.89 (0.35; 2.29)	1.04 (0.45; 2.42)	1.39 (0.59; 3.3)	0.9 (0.35; 2.31)

Notes: Model 1: adjusted for age, sex, individual's socioeconomic deprivation and parental education; Model 2: as Model 1 plus BMI; Model 3: as Model 2 plus physical activity in 3 MET score categories, with the exception of BMI and obesity / overweight where BMI was not considered.

* SBP and DBP estimates derived from censored regression analyses.

Supplementary Table 6. β coefficients (95% CI), geometric mean ratios (95% CI), and odds ratios (95% CI) of cardiovascular risk factors in migrants by lifetime exposure to urban area.

		Model 1			Model 2			Model 3		
Migration Status	Quartile 1, lowest	Quartile 2	Quartile 3	Quartile 4, highest	Quartile 2	Quartile 3	Quartile 4, highest	Quartile 2	Quartile 3	Quartile 4, highest
Continuous normally distributed variables	Reference	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)	β coefficient (95% CI)
BMI	--	1.6 (0.7; 2.6)	0.8 (-0.2; 1.7)	-0.1 (-1.1; 0.9)	--	--	--	1.8 (0.8; 2.8)	0.9 (-0.1; 1.9)	0 (-1; 1)
Waist-to-hip ratio	--	0.01 (0; 0.02)	0.01 (-0.01; 0.02)	-0.01 (-0.02; 0.01)	0 (-0.01; 0.01)	0 (-0.01; 0.01)	0 (-0.02; 0.01)	0 (-0.01; 0.01)	0 (-0.01; 0.01)	-0.01 (-0.02; 0.01)
All skinfolds	--	7.4 (1.3; 13.4)	5.9 (-0.2; 11.9)	0.8 (-5.3; 6.8)	0 (-4.3; 4.3)	2.4 (-1.9; 6.7)	1.1 (-3.2; 5.3)	0.7 (-3.7; 5)	2.7 (-1.7; 7)	1 (-3.3; 5.3)
Systolic blood pressure*	--	1.3 (-2; 4.6)	0.2 (-3.1; 3.5)	0.9 (-2.5; 4.2)	0 (-3.3; 3.2)	-0.4 (-3.6; 2.9)	1 (-2.3; 4.2)	0 (-3.3; 3.3)	-0.4 (-3.7; 2.9)	0.8 (-2.5; 4.1)
Diastolic blood pressure*	--	1.5 (-0.7; 3.6)	1.6 (-0.6; 3.8)	0.6 (-1.5; 2.8)	0.2 (-1.8; 2.2)	1 (-1; 3)	0.7 (-1.3; 2.7)	0.1 (-1.9; 2.2)	0.8 (-1.3; 2.8)	0.6 (-1.4; 2.7)
Total cholesterol	--	7.4 (-1.8; 16.6)	5.7 (-3.5; 15)	3.8 (-5.5; 13.1)	4 (-5; 13.1)	4.4 (-4.7; 13.4)	4.1 (-5; 13.1)	3.7 (-5.6; 12.9)	3.2 (-6.1; 12.4)	2.8 (-6.4; 12)
HDL	--	-0.4 (-3.1; 2.2)	-0.7 (-3.4; 1.9)	-0.9 (-3.6; 1.7)	0.7 (-1.9; 3.3)	-0.3 (-2.8; 2.3)	-1 (-3.6; 1.6)	0.3 (-2.3; 2.9)	-0.4 (-3; 2.2)	-1.1 (-3.7; 1.5)
LDL	--	4.5 (-3.1; 12.2)	4.5 (-3.2; 12.2)	3.4 (-4.3; 11.2)	2 (-5.6; 9.6)	3.5 (-4.1; 11.1)	3.6 (-4; 11.2)	2 (-5.7; 9.8)	2.5 (-5.2; 10.3)	2.6 (-5.1; 10.3)
TC/HDL ratio	--	0.3 (0; 0.6)	0.2 (-0.1; 0.5)	0.2 (-0.2; 0.5)	0.1 (-0.2; 0.4)	0.1 (-0.2; 0.4)	0.2 (-0.1; 0.5)	0.1 (-0.2; 0.5)	0.1 (-0.2; 0.4)	0.2 (-0.1; 0.5)
Continuous non-normally distributed variables	Reference	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)	Ratio (95% CI)
Triglycerides (mg/dL)	--	1.11 (0.97; 1.25)	1.04 (0.92; 1.18)	1.06 (0.93; 1.2)	1.03 (0.91; 1.16)	1.01 (0.9; 1.14)	1.06 (0.94; 1.2)	1.03 (0.91; 1.17)	1 (0.89; 1.14)	1.05 (0.93; 1.19)
Glucose (mg/dL)	--	1.04 (1; 1.08)	1.02 (0.98; 1.06)	1 (0.96; 1.04)	1.02 (0.98; 1.07)	1.01 (0.97; 1.05)	1 (0.96; 1.04)	1.03 (0.99; 1.07)	1.01 (0.97; 1.06)	1.01 (0.97; 1.05)
HbA_{1c} (%)	--	1.02 (0.99; 1.05)	1.02 (0.99; 1.05)	1 (0.97; 1.03)	1.01 (0.98; 1.04)	1.01 (0.98; 1.04)	1 (0.97; 1.03)	1.02 (0.99; 1.05)	1.01 (0.99; 1.05)	1 (0.97; 1.03)
Insulin (µIU/mL)	--	1.16 (0.88; 1.53)	1.03 (0.78; 1.36)	1.11 (0.84; 1.46)	0.98 (0.76; 1.27)	0.96 (0.74; 1.24)	1.12 (0.86; 1.45)	1 (0.77; 1.3)	0.97 (0.75; 1.27)	1.12 (0.86; 1.46)
HOMA-IR	--	1.17 (0.99; 1.37)	1.2 (1.02; 1.41)	1.13 (0.96; 1.33)	1 (0.88; 1.15)	1.11 (0.97; 1.27)	1.13 (0.99; 1.29)	1.02 (0.89; 1.17)	1.13 (0.99; 1.3)	1.14 (0.99; 1.3)
CRP (mg/L)	--	0.94 (0.69;	0.92 (0.67;	0.93 (0.67;	0.82 (0.61;	0.87 (0.64;	0.93 (0.69;	0.81 (0.6;	0.83 (0.61;	0.91 (0.67;

		1.29)	1.25)	1.27)	1.11)	1.18)	1.27)	1.11)	1.14)	1.24)
Fibrinogen (mg/dL)	--	0.98 (0.93; 1.03)	1 (0.95; 1.06)	1.03 (0.98; 1.09)	0.97 (0.92; 1.03)	1 (0.95; 1.06)	1.03 (0.98; 1.09)	0.98 (0.93; 1.03)	1 (0.95; 1.06)	1.03 (0.98; 1.09)

Categorical variables	Reference	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Current smoker	1	0.96 (0.41; 2.29)	1.52 (0.67; 3.43)	1.2 (0.51; 2.82)	1.01 (0.42; 2.42)	1.56 (0.69; 3.51)	1.18 (0.5; 2.78)	0.98 (0.4; 2.42)	1.75 (0.76; 4)	1.27 (0.53; 3.01)
Low physical activity	1	0.58 (0.35; 0.96)	0.41 (0.24; 0.69)	0.61 (0.37; 1)	0.56 (0.33; 0.93)	0.4 (0.24; 0.68)	0.61 (0.36; 1)	--	--	--
Obesity	1	2.02 (1.11; 3.67)	1.35 (0.72; 2.52)	0.87 (0.45; 1.69)	--	--	--	2.22 (1.21; 4.09)	1.49 (0.79; 2.84)	0.93 (0.48; 1.82)
Overweight and obese	1	2.24 (1.3; 3.86)	0.89 (0.54; 1.47)	0.8 (0.49; 1.33)	--	--	--	2.39 (1.37; 4.17)	0.92 (0.55; 1.54)	0.82 (0.5; 1.37)
Hypertension	1	1.67 (0.73; 3.84)	0.96 (0.41; 2.28)	1.9 (0.86; 4.2)	1.43 (0.62; 3.32)	0.87 (0.37; 2.08)	1.86 (0.84; 4.13)	1.48 (0.63; 3.5)	0.91 (0.37; 2.23)	1.92 (0.85; 4.33)
Diabetes	1	3.46 (0.67; 17.85)	1.62 (0.26; 9.99)	1.08 (0.15; 7.87)	3.2 (0.61; 16.8)	1.54 (0.25; 9.59)	1.07 (0.15; 7.8)	3.08 (0.58; 16.33)	1.41 (0.22; 9.09)	1 (0.13; 7.45)
IFG or diabetes	1	1.47 (0.49; 4.46)	1.27 (0.41; 3.94)	0.36 (0.07; 1.81)	1.14 (0.36; 3.54)	1.07 (0.34; 3.4)	0.32 (0.06; 1.65)	1.33 (0.4; 4.49)	1.22 (0.35; 4.24)	0.35 (0.07; 1.94)
Hypercholesterolemia	1	1.37 (0.83; 2.26)	1.39 (0.84; 2.29)	1.14 (0.68; 1.9)	1.18 (0.71; 1.98)	1.31 (0.79; 2.19)	1.15 (0.68; 1.93)	1.19 (0.71; 2.01)	1.29 (0.77; 2.18)	1.09 (0.65; 1.84)
Metabolic syndrome	1	1.78 (1.06; 3)	0.93 (0.54; 1.6)	0.8 (0.46; 1.38)	1.31 (0.74; 2.32)	0.75 (0.42; 1.36)	0.74 (0.4; 1.36)	1.32 (0.74; 2.35)	0.74 (0.41; 1.36)	0.73 (0.4; 1.35)

Notes: Model 1: adjusted for age, sex, individual's socioeconomic deprivation and parental education; Model 2: as Model 1 plus BMI; Model 3: as Model 2 plus physical activity in 3 MET score categories, with the exception of BMI and obesity / overweight where BMI was not considered.

* SBP and DBP estimates derived from censored regression analyses.