

Table S4 Cross-sectional linear regression analysis of association of physical activity and sedentary time with clustered metabolic risk

Metabolic risk	Physical activity (per-SD) †				Sedentary time (per-SD) †
	Total	Occupational	Commuting	Leisure-time	
zMS‡					
Model 1	-0.087(-0.120, -0.054)***	-0.067(-0.100,-0.033)***	-0.054(-0.088,-0.021)**	-0.058(-0.091,-0.025)**	0.131(0.097, 0.164)***
Model 2	-0.050(-0.079, -0.021)***	-0.033(-0.063,-0.004)*	-0.019(-0.048, 0.010)	-0.038(-0.067,-0.010)*	0.085(0.056, 0.113)***
Model 3	-0.050(-0.079, -0.021)***	-0.026(-0.055, 0.003)	-0.018(-0.047, 0.011)	-0.037(-0.066,-0.008)*	0.082(0.053, 0.110)***
Model 4	-0.043(-0.072, -0.014)***	-0.026(-0.056, 0.003)	-0.018(-0.047, 0.011)	-0.036 (-0.065,-0.007)*	0.078(0.049, 0.107)***

Regression results are presented as unstandardized coefficients (B) (95%CI)

† Per-SD of physical activity =13.8 MET-h/d, Per-SD of occupational physical activity =12.6 MET-h/d, per-SD of commuting physical activity =3.2 MET-h/d, per-SD of leisure-time physical activity=3.4 MET-h/d, per-SD sedentary time = 2.5 h/d

‡ Delete the waist circumference to calculate new clustered metabolic score.

All models (except model 1) are adjusted for age, sex, education, annual household income, smoking status, alcohol consumption and diabetes duration. All outcomes except zMS and waist Circumference are additionally adjusted for waist circumference. Fasting plasma glucose is additional adjusted for the use of diabetes medication (yes/no); Triacylglycerol and HDL-cholesterol are additionally adjusted for the diagnosis of dyslipidemia (yes/no) and the use of lipid-lowering medication (yes/no/unclear); Systolic blood pressure is additionally adjusted for the diagnosis of hypertension(yes/no) and the use of antihypertension medication (yes/no/unclear); and zMS is additional adjusted for the use of diabetes medication (yes/no), lipid-lowering drugs (yes/no/unclear) and antihypertension medication (yes/no/unclear), the diagnosis of dyslipidemia (yes/no) and the diagnosis of hypertension(yes/no).

Model 3 is adjusted for remaining physical activity and sedentary time as appropriate; Model 4 is additional adjusted for sleep duration.

*P < 0.05; **P < 0.01; ***P < 0.001