

Supplement 1. Regression coefficients of sedentary behavior, moderate-to-vigorous physical activity and cardiorespiratory fitness for clustered cardio-metabolic health and cardio-metabolic markers

Change in	Model	Change in SB		Change in MVPA		Change in CRF	
			95% CI		95% CI		95% CI
CMRS	1	0.01 ^c	0.01 , 0.02	-0.02 ^c	-0.03 , -0.01	-0.03 ^c	-0.04 , -0.02
	2	0.01 ^c	0.01 , 0.02	-0.02 ^c	-0.03 , -0.01		
$\text{CMRS}_{no\text{-}adip}$	1	0.01 ^c	0.01 , 0.02	-0.02 ^c	-0.03 , -0.01	-0.03 ^c	-0.04 , -0.02
	2	0.01 ^c	0.01 , 0.02	-0.02 ^c	-0.03 , -0.01		
Waist Circumference (cm)	1	0.07 ^b	0.02 , 0.13	-0.12 ^a	-0.22 , -0.01	-0.34 ^c	-0.42 , -0.26
	2	0.08 ^a	0.02 , 0.13	-0.12 ^a	-0.23 , -0.01		
Fasting Glucose (mmol/L)	1	0.00	-0.01 , 0.01	-0.01 ^a	-0.02 , 0.00	-0.01 ^b	-0.02 , 0.00
	2	0.00	-0.01 , 0.01	-0.01 ^a	-0.02 , 0.00		
HDL-cholesterol (mmol/L)	1	-0.01 ^c	-0.01 , 0.00	0.01 ^b	0.00 , 0.01	0.01 ^c	0.01 , 0.02
	2	-0.01 ^c	-0.01 , 0.00	0.01 ^b	0.00 , 0.01		
Triglycerides (mmol/L)	1	0.01 ^c	0.01 , 0.02	-0.01	-0.02 , 0.00	-0.02 ^c	-0.03 , -0.01
	2	0.01 ^c	0.01 , 0.02	-0.01	-0.02 , 0.00		
Diastolic Blood Pressure (mmHg)	1	0.14 ^b	0.04 , 0.24	-0.17	-0.37 , 0.02	-0.35 ^c	-0.50 , -0.21
	2	0.14 ^b	0.03 , 0.24	-0.18	-0.37 , 0.01		
Systolic Blood Pressure (mmHg)	1	0.16	-0.01 , 0.32	0.02	-0.29 , 0.34	-0.35 ^b	-0.57 , -0.13
	2	0.15	-0.02 , 0.32	0.02	-0.30 , 0.33		

Legend Supplement 1

SB = Sedentary Behavior; MVPA = moderate-to-vigorous physical activity; CRF=Cardiorespiratory fitness

Model 1: adjusted for age, follow-up time, sex, original study population; baseline and changes in healthy eating, smoking, education level; baseline of the relevant exposure and outcome (SB & MVPA n=524; CRF n=399)

Model 2: adjusted for all covariates in model 1 adjusted for changes and baseline MVPA for SB and vice versa (n=524)

^a p<0.05; ^b p<0.01 ^c p<0.001