

Table 1. Characteristics of the study population at the beginning of the follow-up by baseline activity levels. Finnish Public Sector study 1997–2013.

	Baseline activity level			
	All n (%)	Low n (%)	Moderate n (%)	High n (%)
N	15,634	3693 (24)	5817 (37)	6124 (39)
Mean (SD) age	50.5 (8.7)	51.3 (8.5)	51.0 (8.6)	49.6 (8.9)
Mean (SD) baseline physical activity (MET-hours/week)	29.7 (21.7)	8.8 (3.6)	21.6 (4.4)	49.9 (20.9)
Mean (SD) physical activity at Time 3 (MET-hours/week)	28.2 (22.9)	15.4 (13.6)	24.1 (16.9)	39.8 (26.7)
Sex				
Women	13,243 (85)	3155 (85)	5048 (87)	5040 (82)
Men	2391 (15)	538 (15)	769 (13)	1084 (18)
Education				
High	9549 (61)	2153 (58)	3616 (62)	3780 (62)
Intermediate	4911 (31)	1182 (32)	1787 (31)	1942 (32)
Low	1174 (8)	358 (10)	414 (7)	402 (7)
High alcohol intake				
No	14,245 (91)	3388 (92)	5287 (91)	5570 (91)
Yes	1358 (9)	298 (8)	520 (9)	540 (9)
Current smoking				
No	13,667 (89)	3134 (87)	5073 (89)	5460 (90)
Yes	1702 (11)	488(13)	635(11)	579 (10)
Medical conditions				
No	12,307 (79)	2782 (75)	4561 (78)	4964 (81)
Yes	3327 (21)	911 (25)	1256 (22)	1160 (19)

Baseline activity level is defined by the mean of physical activity at Time 1 and 2

Low <14 MET-h/week; Moderate ≥14-30 MET-h/week; High ≥30 MET-h/week

Medical conditions includes depression, cancer, asthma and/or rheumatic disorder

Table 2. The association between change in physical activity over eight years and the accumulation of cardiometabolic risk factors over the next four years. Finnish Public Sector study 1997–2013.

Change in physical activity level	n (%)	Mean (SD) change (MET-h/week)	cOR (95% CI) for accumulation of cardiometabolic risk factors*
Low-to-low	2150 (58)	-1.03 (4.64)	1.00 (Ref)
Low-to-moderate	1048 (28)	10.58 (5.14)	0.73 (0.59 to 0.90)
Low-to-high	495 (13)	31.66 (16.21)	0.67 (0.49 to 0.89)
Total	3693 (100)		
P for trend			0.0007
Moderate-to-low	1739 (30)	-11.86 (5.51)	0.92 (0.77 to 1.11)
Moderate-to-moderate	2257 (39)	-0.64 (5.60)	1.00 (Ref)
Moderate-to-high	1821 (31)	20.16 (17.21)	0.83 (0.69 to 0.99)
Total	5817 (100)		
P for trend			0.29
High-to-low	781 (13)	-35.01 (17.21)	1.60 (1.27 to 2.01)
High-to-moderate	1656 (27)	-23.20 (17.13)	1.04 (0.85 to 1.27)
High-to-high	3687 (60)	1.03 (26.36)	1.00 (Ref)
Total	6124 (100)		
P for trend			0.0007

cOR=cumulative odds ratio, CI=confidence interval

*incident hypertension, dyslipidemia, obesity, and diabetes

Low <14 MET-h/week; Moderate ≥14-30 MET-h/week; High ≥30 MET-h/week

Model adjusted for age, sex, education, smoking, alcohol consumption, and medical conditions at Time 3.

Table 3. The association between change in physical activity over eight years and subsequent 4-year incidence of hypertension, dyslipidemia, obesity, and diabetes. Finnish Public Sector study 1997–2013.

Change in physical activity level	n	Hypertension (n of cases 1070)		Dyslipidemia (n of cases 311)		Obesity (n of cases 768)		Diabetes (n of cases 76)	
		Incidence (%)	OR (95% CI)	Incidence (%)	OR (95% CI)	Incidence (%)	OR (95% CI)	Incidence (%)	OR (95%)
Low-to-low	2150	8.8	1.00 (Ref)	2.9	1.00 (Ref)	7.4	1.00 (Ref)	1.4	1.00 (Ref)
Low-to-moderate	1048	7.3	0.78 (0.59 to 1.04)	2.4	0.86 (0.53 to 1.39)	5.3	0.69 (0.50 to 0.95)	0.6	0.45 (0.19 to 1.10)
Low-to-high	495	5.9	0.70 (0.47 to 1.05)	2.2	0.87 (0.45 to 1.67)	5.1	0.67 (0.43 to 1.04)	0.2	0.17 (0.02 to 1.25)
P for trend			0.03		0.62		0.02		0.01
Moderate-to-low	1739	7.9	0.99 (0.78 to 1.26)	1.8	0.77 (0.49 to 1.21)	5.1	1.00 (0.75 to 1.34)	0.4	0.73 (0.28 to 1.90)
Moderate-to-moderate	2257	7.6	1.00 (Ref)	2.1	1.00 (Ref)	5.0	1.00 (Ref)	0.5	1.00 (Ref)
Moderate-to-high	1821	7.3	0.94 (0.74 to 1.20)	1.9	0.85 (0.54 to 1.34)	4.1	0.80 (0.59 to 1.09)	0.4	0.80 (0.31 to 2.07)
P for trend			0.70		0.66		0.17		0.83
High-to-low	781	7.7	1.41 (1.03 to 1.92)	2.7	1.71 (1.00 to 2.90)	6.4	1.67 (1.19 to 2.34)	0.5	4.27 (1.06 to 17.16)
High-to-moderate	1656	5.1	0.97 (0.74 to 1.27)	1.6	1.20 (0.74 to 1.92)	3.9	1.03 (0.76 to 1.40)	0.4	3.90 (1.14 to 13.35)
High-to-high	3687	5.2	1.00 (Ref)	1.4	1.00 (Ref)	3.7	1.00 (Ref)	0.1	1.00 (Ref)
P for trend			0.10		0.03		0.01		0.04

OR=odds ratio, CI=confidence interval

Low <14 MET-h/week; Moderate ≥14-30 MET-h/week; High ≥30 MET-h/week

Model adjusted for age, sex, education, smoking, alcohol consumption, and medical conditions at Time 3.