

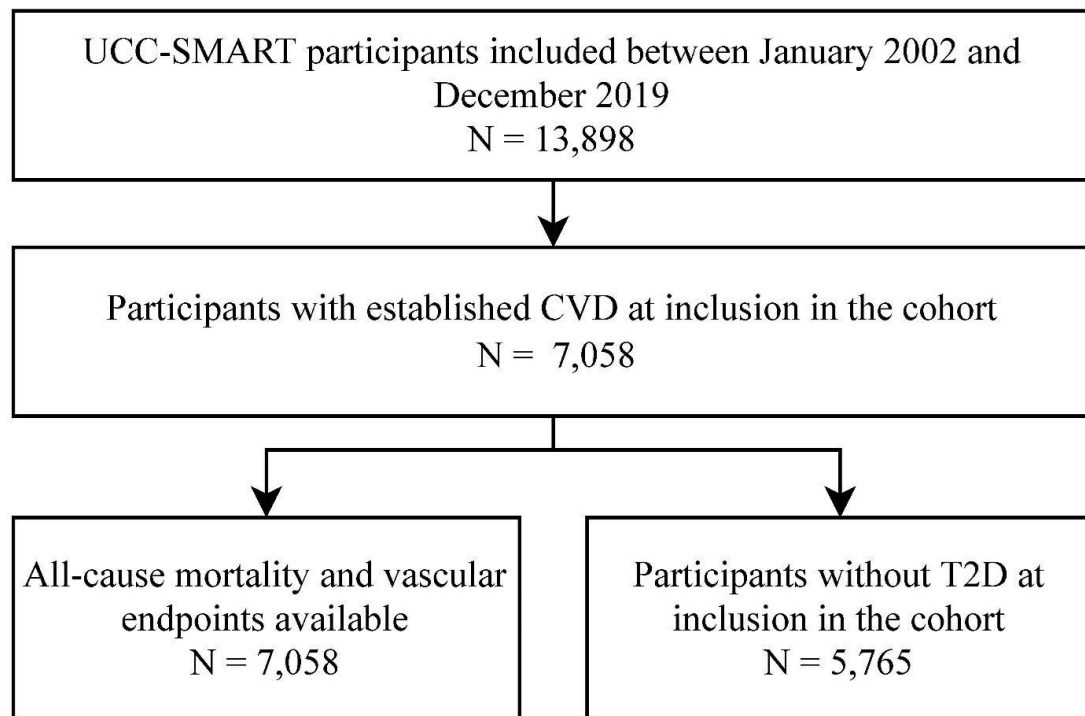
Supplemental material to**Leisure-time and occupational physical activity and health
outcomes in cardiovascular disease**

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Figure S1 – Flowchart UCC-SMART participants selection

Legend: Flowchart describing the criteria used to create the datasets used in the analyses of the association between physical activity levels and different outcomes. All datasets were limited to participants included from January 2002 onwards, because a new questionnaire for physical activity level was introduced then. All datasets were limited to participants with established cardiovascular disease at baseline.

Data on all-cause mortality, cause-specific mortality and recurrent cardiovascular events was available for all participants.. The analysis for incident type 2 diabetes was limited to participants without diabetes at baseline.

Table S1 – Baseline characteristics of UCC-SMART participants stratified for OPA

Characteristic	Not working				Working			
	Sedentary N = 1600	Standing N = 808	Manual N = 924	Heavy manual N = 248	Sedentary N = 1958	Standing N = 641	Manual N = 681	Heavy manual N = 198
Male sex	1282 (80)	532 (66)	417 (45)	227 (92)	1626 (83)	434 (68)	440 (65)	186 (94)
Age (years)	66 ±9	66 ±9	65 ±9	65 ±9	55 ±9	56 ±9	57 ±9	56 ±10
Leisure-time physical activity								
Quartile 1	405 (25)	206 (26)	247 (27)	72 (29)	509 (26)	139 (22)	147 (22)	40 (20)
Quartile 2	430 (27)	202 (25)	219 (24)	49 (20)	549 (28)	144 (23)	145 (21)	29 (15)
Quartile 3	405 (25)	192 (24)	229 (25)	52 (21)	535 (27)	164 (26)	148 (22)	38 (19)
Quartile 4	360 (23)	208 (26)	229 (25)	75 (30)	365 (19)	194 (30)	241 (35)	91 (46)
Education								
Low	434 (27)	271 (34)	362 (39)	115 (46)	338 (17)	170 (27)	183 (27)	54 (27)
Middle	548 (34)	334 (41)	485 (53)	119 (48)	702 (36)	280 (44)	412 (61)	128 (65)
High	618 (39)	203 (25)	77 (8)	14 (6)	918 (47)	191 (30)	86 (13)	16 (8)
History of CAD	1084 (68)	502 (62)	582 (63)	182 (73)	1253 (64)	402 (63)	400 (59)	146 (74)
History of CeVD	454 (28)	254 (31)	287 (31)	67 (27)	538 (28)	190 (30)	217 (32)	46 (23)
History of PAD	225 (14)	140 (17)	129 (14)	44 (18)	276 (14)	82 (13)	94 (14)	13 (7)
History of AAA	148 (9)	61 (8)	66 (7)	32 (13)	92 (5)	28 (4)	42 (6)	12 (6)
Multiple types of pre-existing CVD	275 (17)	130 (16)	123 (13)	66 (27)	189 (10)	54 (8)	67 (10)	19 (10)
Diabetes mellitus	351 (22)	159 (20)	202 (22)	55 (22)	243 (12)	97 (15)	84 (12)	19 (10)
Metabolic syndrome	835 (52)	404 (50)	547 (59)	155 (63)	920 (47)	320 (50)	335 (49)	108 (55)
Current smoking	333 (21)	193 (24)	240 (26)	78 (32)	543 (28)	217 (34)	245 (36)	72 (36)
Alcohol consumption	1236 (77)	547 (68)	547 (59)	152 (61)	1590 (81)	461 (72)	456 (67)	122 (62)
Body mass index (kg/m ²)	26.85 (4)	26.89 (4)	27.34 (4)	28.29 (4)	26.89 (4)	26.93 (4)	27.21 (4)	28.42 (5)
<25 kg/m ²	546 (34)	284 (35)	279 (30)	46 (19)	634 (32)	229 (36)	214 (31)	42 (21)
25-30 kg/m ²	754 (47)	347 (43)	432 (47)	129 (52)	962 (49)	279 (44)	312 (46)	98 (50)
>30 kg/m ²	300 (19)	177 (22)	213 (23)	73 (29)	362 (19)	133 (21)	155 (23)	58 (29)
Systolic blood pressure (mmHg)	139 ±20	142 ±21	143 ±22	140 ±21	134 ±19	136 ±20	138 ±20	135 ±19
LDL cholesterol (mmol/l)	2.4 [1.9-3.0]	2.5 [1.9-3.1]	2.4 [2.0-3.1]	2.5 [1.9-3.1]	2.4 [1.9-3.1]	2.5 [2.0-3.3]	2.6 [2.0-3.2]	2.5 [2.0-3.2]
Antihypertensive medication	1314 (82)	649 (80)	749 (81)	211 (85)	1448 (74)	473 (74)	487 (72)	164 (83)
Lipid-lowering treatment	1252 (78)	618 (77)	727 (79)	209 (84)	1543 (79)	497 (78)	497 (73)	158 (80)

Legend: Data are presented as number (%), mean \pm standard deviation or median [interquartile range] as appropriate. Abbreviations: METh/wk: Metabolic equivalent of task hours per week, CAD: coronary artery disease, CeVD: cerebrovascular disease, PAD: peripheral artery disease, AAA: abdominal aortic aneurysm, LDL: low density lipoprotein, HDL: high density lipoprotein.

Table S2 – Hazard ratios for non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality

Table S2a – Specific vascular outcomes and LTPA

	Leisure-time physical activity level			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Non-fatal myocardial infarction				
Events/N total	325/1,765	322/1,767	345/1,763	357/1,763
Follow-up (persyr)	13,030	13,196	13,013	12,832
Model 1	<i>Reference</i>	0.97 (0.83-1.13)	1.03 (0.89-1.20)	1.06 (0.91-1.23)
Model 2	<i>Reference</i>	1.00 (0.86-1.17)	1.07 (0.92-1.25)	1.06 (0.91-1.24)
Model 3	<i>Reference</i>	1.03 (0.88-1.21)	1.12 (0.96-1.30)	1.12 (0.96-1.30)
Non-fatal stroke				
Events/N total	96/1,765	87/1,767	57/1,763	82/1,763
Follow-up (persyr)	14,592	14,992	14,946	14,912
Model 1	<i>Reference</i>	0.87 (0.65-1.16)	0.57 (0.41-0.79)	0.81 (0.60-1.09)
Model 2	<i>Reference</i>	0.93 (0.69-1.24)	0.62 (0.44-0.86)	0.87 (0.64-1.17)
Model 3	<i>Reference</i>	0.92 (0.69-1.23)	0.61 (0.44-0.86)	0.86 (0.64-1.16)
Cardiovascular mortality				
Events/N total	187/1,765	133/1,767	103/1,763	101/1,763
Follow-up (persyr)	15,007	15,392	15,218	15,214
Model 1	<i>Reference</i>	0.68 (0.54-0.84)	0.52 (0.41-0.66)	0.49 (0.38-0.62)
Model 2	<i>Reference</i>	0.73 (0.59-0.92)	0.57 (0.45-0.72)	0.54 (0.42-0.69)
Model 3	<i>Reference</i>	0.76 (0.61-0.96)	0.61 (0.48-0.78)	0.58 (0.45-0.74)

Legend: Hazard ratios and corresponding 95% confidence intervals for non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, packyears, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

Abbreviations: persyr: person year

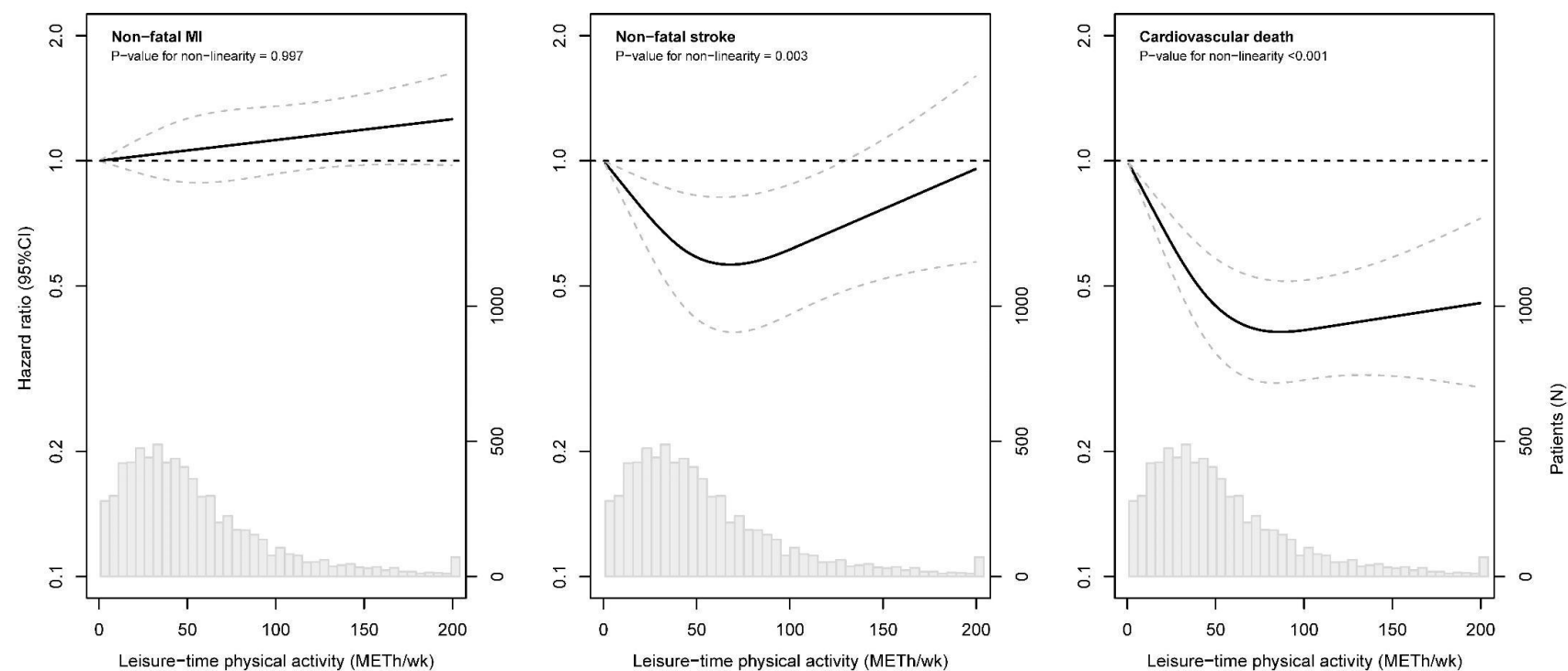
Table S2b – Specific vascular outcomes and OPA

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
Non-fatal myocardial infarction				
Events/N total	662/3,558	258/1,449	321/1,605	108/446
Follow-up (persyr)	25,331	10,994	12,578	3,170
Model 1	<i>Reference</i>	0.97 (0.84-1.13)	1.16 (1.01-1.33)	1.22 (0.99-1.49)
Model 2	<i>Reference</i>	0.92 (0.80-1.07)	1.06 (0.92-1.22)	1.07 (0.87-1.32)
Model 3	<i>Reference</i>	0.92 (0.79-1.06)	1.05 (0.91-1.21)	1.05 (0.85-1.29)
Non-fatal stroke				
Events/N total	127/3,558	74/1,449	91/1,605	30/446
Follow-up (persyr)	28,934	12,415	14,394	3,699
Model 1	<i>Reference</i>	1.31 (0.98-1.75)	1.40 (1.05-1.85)	1.77 (1.19-2.64)
Model 2	<i>Reference</i>	1.27 (0.95-1.70)	1.35 (1.01-1.81)	1.66 (1.10-2.50)
Model 3	<i>Reference</i>	1.25 (0.93-1.68)	1.34 (1.00-1.79)	1.74 (1.15-2.63)
Cardiovascular mortality				
Events/N total	233/3,558	131/1,449	125/1,605	35/446
Follow-up (persyr)	29,482	12,713	14,804	3,831
Model 1	<i>Reference</i>	1.22 (0.98-1.51)	1.04 (0.83-1.31)	1.03 (0.72-1.46)
Model 2	<i>Reference</i>	1.14 (0.92-1.42)	0.93 (0.74-1.17)	0.90 (0.62-1.29)
Model 3	<i>Reference</i>	1.12 (0.90-1.39)	0.91 (0.72-1.15)	0.89 (0.62-1.28)

Legend: Hazard ratios and corresponding 95% confidence intervals for non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, packyears, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

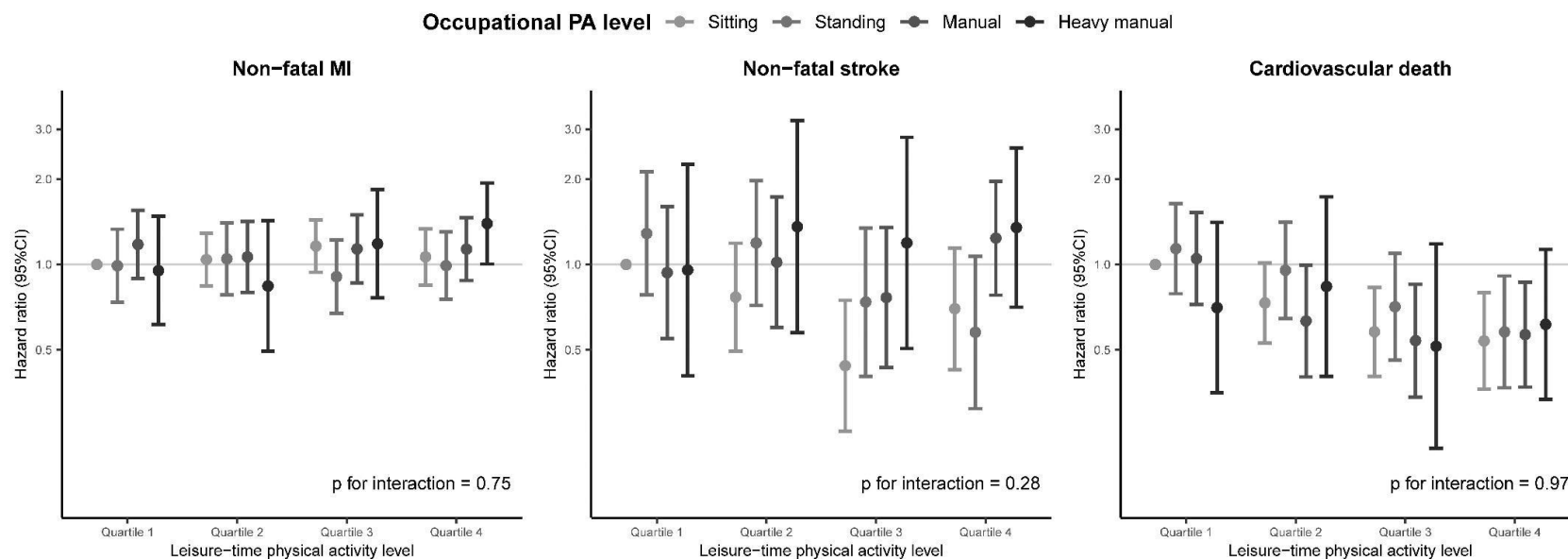
Abbreviations: persyr: person year.

Figure S2 - Continuous association between leisure-time physical activity and non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality



Legend: Hazard ratios are adjusted for age, sex, smoking status, pack years, alcohol consumption, education and current employment (model 3). The histograms inside the figures represent the number of study participants that achieved a certain leisure-time physical activity level.

Abbreviations: METh/wk: Metabolic equivalent of task hours per week. 95%CI: 95% confidence interval

Figure S3 – Interaction between LTPA and OPA on the risk of all-cause mortality recurrent vascular events, and incident T2D.

Legend: Hazard ratios assessing the interaction between LTPA and OPA level in the association with the individual components of the combined vascular endpoint: non-fatal myocardial infarction, non-fatal stroke and cardiovascular death. These figures show the hazard ratios for each combination of leisure-time and OPA level with the least active (quartile 1 leisure-time and sedentary OPA) as reference category. Models were adjusted for age, sex, smoking, packyears, alcohol consumption, education and current employment.

Abbreviations: 95%CI: 95% confidence interval, Mi: myocardial infarction.

Table S3 – Hazard ratios for interplay between LTPA and OPA

Table S3a - All-cause mortality

		Leisure-time physical activity, HR (95%CI)			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
Oc cu pa tio nal PA	Sedentary	<i>Reference</i>	0.74 (0.59-0.92)	0.64 (0.51-0.81)	0.67 (0.53-0.86)
	Standing	1.21 (0.95-1.54)	0.89 (0.68-1.17)	0.77 (0.58-1.02)	0.70 (0.53-0.94)
	Manual	1.07 (0.84-1.37)	0.76 (0.57-1.01)	0.63 (0.47-0.84)	0.64 (0.49-0.85)
	Heavy manual	1.10 (0.75-1.62)	0.87 (0.53-1.44)	0.73 (0.45-1.18)	0.72 (0.48-1.07)

Table S3b - Recurrent vascular events

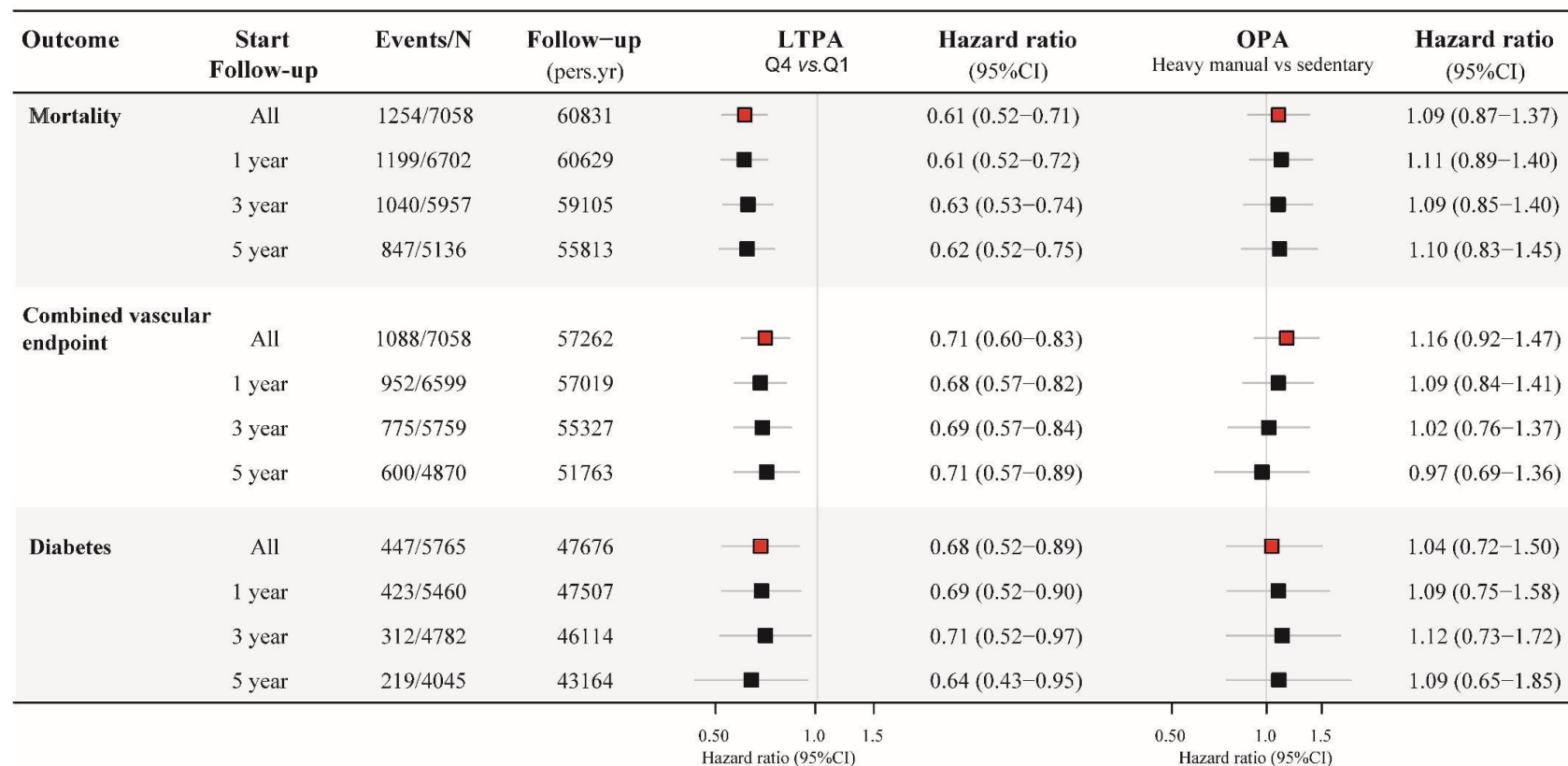
		Leisure-time physical activity, HR (95%CI)			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
Oc cu pa tio nal PA	Sedentary	<i>Reference</i>	0.86 (0.69-1.08)	0.59 (0.46-0.76)	0.63 (0.48-0.82)
	Standing	1.07 (0.81-1.42)	0.88 (0.66-1.19)	0.73 (0.53-1.00)	0.58 (0.42-0.8)
	Manual	1.00 (0.76-1.32)	0.87 (0.65-1.16)	0.76 (0.56-1.02)	0.84 (0.64-1.1)
	Heavy manual	0.94 (0.61-1.47)	0.65 (0.36-1.16)	0.78 (0.47-1.31)	1.08 (0.75-1.55)

Table S3c - Incident type 2 diabetes

		Leisure-time physical activity, HR (95%CI)			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
Oc cu pa tio nal PA	Sedentary	<i>Reference</i>	0.79 (0.55-1.13)	0.83 (0.58-1.20)	0.74 (0.49-1.11)
	Standing	1.02 (0.64-1.61)	0.86 (0.54-1.38)	0.84 (0.52-1.36)	0.54 (0.32-0.92)
	Manual	0.86 (0.56-1.33)	0.90 (0.57-1.42)	0.87 (0.55-1.38)	0.77 (0.50-1.18)
	Heavy manual	1.15 (0.62-2.13)	1.04 (0.48-2.28)	0.80 (0.35-1.84)	0.71 (0.36-1.38)

Legend: Hazard ratios assessing the interaction between LTPA and OPA level in the association with all-cause mortality, recurrent vascular events and incident type 2 diabetes. All presented hazard ratios are relative to people with sedentary OPA and LTPA quarter 1. Models were adjusted for age, sex, smoking, pack years, alcohol consumption, education and current employment.

Abbreviations: 95%CI: 95% confidence interval, HR: hazard ratio

Figure S4 – Associations with start of follow-up after 1, 3 and 5 years after inclusion.

Legend: Hazard ratios for all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes with the full dataset and with datasets that exclude participants with an event in the first 1, 3 or 5 years after inclusion. The presented estimates were adjusted for the covariates included in model 3. These figures show the hazard ratio for the highest quartile vs. these lowest quartile of leisure-time physical activity and the highest level of occupational physical activity (heavy manual work) vs. sedentary.

Abbreviations: FU: follow-up, pers.yr: person year, 95%CI: 95% confidence interval, LTPA: leisure-time physical activity, OPA: Occupational physical activity.

Table S4 – Hazard ratios for LTPA and OPA in patients that never smoked

Table S4a: Hazard ratios for different levels of LTPA in never-smokers.

	Leisure-time physical activity level			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
All-cause mortality				
Events/N total	64/374	50/426	33/441	44/447
Follow-up (persyr)	2910	3620	3675	3783
Model 1	<i>Reference</i>	0.66 (0.45-0.96)	0.48 (0.31-0.74)	0.55 (0.37-0.81)
Model 2	<i>Reference</i>	0.66 (0.45-0.96)	0.50 (0.33-0.77)	0.56 (0.38-0.83)
Model 3	<i>Reference</i>	0.72 (0.49-1.05)	0.55 (0.36-0.85)	0.66 (0.44-0.98)
Combined vascular endpoint				
Events/N total	57/374	50/426	29/441	50/447
Follow-up (persyr)	2722	3453	3550	3596
Model 1	<i>Reference</i>	0.71 (0.49-1.04)	0.42 (0.27-0.66)	0.68 (0.46-0.99)
Model 2	<i>Reference</i>	0.74 (0.50-1.08)	0.45 (0.29-0.71)	0.45 (0.29-0.71)
Model 3	<i>Reference</i>	0.77 (0.52-1.13)	0.47 (0.30-0.75)	0.46 (0.28-0.73)
Type 2 diabetes				
Events/N total	24/363	15/408	21/434	19/442
Follow-up (persyr)	2428	2847	2969	3084
Model 1	<i>Reference</i>	0.54 (0.28-1.04)	0.73 (0.40-1.31)	0.62 (0.34-1.14)
Model 2	<i>Reference</i>	0.62 (0.32-1.19)	0.83 (0.46-1.52)	0.67 (0.36-1.23)
Model 3	<i>Reference</i>	0.66 (0.34-1.29)	0.94 (0.51-1.72)	0.80 (0.43-1.48)

Legend: Sensitivity analysis limited to SMART participants that reported they had never smoked (N = 1688). This table shows hazard ratios and corresponding 95% confidence intervals all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, packyears, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

* The combined vascular endpoints was a composite of non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality.

Abbreviations: persyr: person year.

Table S4b: Hazard ratios for different levels of OPA in never-smokers.

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
All-cause mortality				
Events/N total	73/869	40/329	63/393	15/97
Follow-up (persyr)	6661	2942	3486	898
Model 1	<i>Reference</i>	0.98 (0.66-1.45)	1.24 (0.84-1.82)	1.01 (0.58-1.76)
Model 2	<i>Reference</i>	0.97 (0.65-1.44)	1.27 (0.85-1.89)	1.04 (0.58-1.86)
Model 3	<i>Reference</i>	0.93 (0.62-1.38)	1.26 (0.84-1.87)	1.03 (0.58-1.86)
Combined vascular endpoint				
Events/N total	73/869	39/329	58/393	16/97
Follow-up (persyr)	6408	2789	3279	845
Model 1	<i>Reference</i>	1.10 (0.74-1.64)	1.31 (0.89-1.93)	1.44 (0.83-2.47)
Model 2	<i>Reference</i>	1.02 (0.68-1.52)	1.20 (0.81-1.79)	1.20 (0.81-1.79)
Model 3	<i>Reference</i>	0.99 (0.66-1.48)	1.18 (0.79-1.77)	1.26 (0.72-2.21)
Type 2 diabetes				
Events/N total	32/752	11/271	30/306	6/84
Follow-up (persyr)	5603	2400	2579	744
Model 1	<i>Reference</i>	0.77 (0.38-1.55)	1.94 (1.11-3.37)	1.29 (0.53-3.09)
Model 2	<i>Reference</i>	0.76 (0.37-1.54)	1.87 (1.04-3.37)	1.17 (0.47-2.92)
Model 3	<i>Reference</i>	0.74 (0.36-1.50)	1.85 (1.01-3.36)	1.04 (0.41-2.58)

Legend: Sensitivity analysis limited to SMART participants that reported they had never smoked (N = 1688). This table shows hazard ratios and corresponding 95% confidence intervals all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

* The combined vascular endpoints was a composite of non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality.

Abbreviations: persyr: person year.

Table S5 – Hazard ratios for OPA stratified for employment status at inclusion in the UCC-SMART cohort

Table S5a: Hazard ratios for OPA among actively employed UCC-SMART participants

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
All-cause mortality				
Events/N total	166/1958	77/641	84/681	23/198
Follow-up (persyr)	16696	5811	6425	1744
Model 1	<i>Reference</i>	1.22 (0.93-1.61)	1.09 (0.83-1.43)	1.13 (0.73-1.74)
Model 2	<i>Reference</i>	1.13 (0.86-1.49)	0.95 (0.72-1.26)	1.04 (0.66-1.62)
Model 3	<i>Reference</i>	1.11 (0.84-1.46)	0.98 (0.74-1.29)	1.13 (0.72-1.77)
Combined vascular endpoint				
Events/N total	198/1958	73/641	106/681	36/198
Follow-up (persyr)	15987	5563	6021	1588
Model 1	<i>Reference</i>	1.12 (0.85-1.47)	1.50 (1.18-1.90)	1.65 (1.15-2.35)
Model 2	<i>Reference</i>	1.03 (0.79-1.36)	1.30 (1.01-1.67)	1.30 (1.01-1.67)
Model 3	<i>Reference</i>	1.01 (0.77-1.33)	1.29 (1.01-1.66)	1.54 (1.06-2.23)
Type 2 diabetes				
Events/N total	127/1704	43/539	45/591	18/174
Follow-up (persyr)	13861	4620	5396	1445
Model 1	<i>Reference</i>	1.09 (0.77-1.55)	0.97 (0.69-1.37)	1.26 (0.77-2.07)
Model 2	<i>Reference</i>	0.99 (0.70-1.41)	0.81 (0.57-1.16)	1.13 (0.68-1.89)
Model 3	<i>Reference</i>	0.98 (0.69-1.40)	0.84 (0.59-1.21)	1.01 (0.61-1.69)

Legend: Sensitivity analysis limited to SMART participants that reported they had active employment at the moment of inclusion in the cohort (n = 3,478). This table shows hazard ratios and corresponding 95% confidence intervals all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, pack years, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

* The combined vascular endpoints was a composite of non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality.

Abbreviations: persyr: person year

Table S5b: Hazard ratios for OPA among UCC-SMART participants without active employment

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
All-cause mortality				
Events/N total	374/1600	230/808	229/924	71/248
Follow-up (persyr)	12786	6902	8380	2087
Model 1	<i>Reference</i>	1.17 (0.99-1.38)	1.04 (0.87-1.24)	1.19 (0.92-1.53)
Model 2	<i>Reference</i>	1.14 (0.96-1.34)	0.98 (0.82-1.17)	1.07 (0.83-1.39)
Model 3	<i>Reference</i>	1.13 (0.95-1.33)	0.97 (0.81-1.15)	1.07 (0.83-1.39)
Combined vascular endpoint				
Events/N total	288/1600	158/808	178/924	51/248
Follow-up (persyr)	11993	6405	7786	1918
Model 1	<i>Reference</i>	1.05 (0.87-1.28)	1.03 (0.85-1.26)	1.13 (0.84-1.53)
Model 2	<i>Reference</i>	1.01 (0.83-1.22)	0.96 (0.78-1.18)	0.96 (0.78-1.18)
Model 3	<i>Reference</i>	1.00 (0.82-1.22)	0.95 (0.78-1.17)	0.98 (0.72-1.34)
Type 2 diabetes				
Events/N total	87/1244	44/624	66/696	17/193
Follow-up (persyr)	9653	5127	6015	1559
Model 1	<i>Reference</i>	0.96 (0.67-1.39)	1.24 (0.88-1.73)	1.20 (0.71-2.01)
Model 2	<i>Reference</i>	0.91 (0.63-1.31)	1.11 (0.79-1.56)	1.00 (0.59-1.69)
Model 3	<i>Reference</i>	0.88 (0.61-1.28)	1.06 (0.75-1.50)	0.85 (0.50-1.45)

Legend: Sensitivity analysis limited to SMART participants that reported they were not actively employed at the moment of inclusion in the cohort (n = 3,580). This table shows hazard ratios and corresponding 95% confidence intervals all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, pack years, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

* The combined vascular endpoints was a composite of non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality.

Abbreviations: persyr: person year

Table S6 – Hazard ratios for LTPA and OPA stratified for sex

Table S6a: Hazard ratios for LTPA in female UCC-SMART participants

	Leisure-time physical activity level			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
All-cause mortality				
Model 1	<i>Reference</i>	0.56 (0.42-0.75)	0.49 (0.36-0.67)	0.48 (0.34-0.67)
Model 2	<i>Reference</i>	0.59 (0.44-0.79)	0.51 (0.37-0.70)	0.54 (0.39-0.75)
Model 3	<i>Reference</i>	0.61 (0.45-0.82)	0.55 (0.40-0.75)	0.57 (0.41-0.80)
Combined vascular endpoint				
Model 1	<i>Reference</i>	0.67 (0.48-0.93)	0.57 (0.40-0.81)	0.54 (0.37-0.78)
Model 2	<i>Reference</i>	0.68 (0.49-0.94)	0.60 (0.42-0.86)	0.58 (0.40-0.84)
Model 3	<i>Reference</i>	0.73 (0.53-1.02)	0.68 (0.47-0.97)	0.64 (0.44-0.93)
Type 2 diabetes				
Model 1	<i>Reference</i>	0.74 (0.44-1.26)	1.06 (0.65-1.72)	0.82 (0.47-1.42)
Model 2	<i>Reference</i>	0.76 (0.45-1.28)	1.08 (0.66-1.77)	0.83 (0.48-1.43)
Model 3	<i>Reference</i>	0.83 (0.49-1.41)	1.18 (0.72-1.92)	0.91 (0.52-1.58)

Table S6b: Hazard ratios for OPA in female UCC-SMART participants

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
All-cause mortality				
Model 1	<i>Reference</i>	1.35 (0.98-1.86)	1.54 (1.16-2.05)	1.11 (0.41-3.04)
Model 2	<i>Reference</i>	1.16 (0.84-1.61)	1.10 (0.82-1.47)	0.78 (0.28-2.14)
Model 3	<i>Reference</i>	1.11 (0.80-1.54)	1.03 (0.76-1.38)	0.71 (0.26-1.94)
Combined vascular endpoint				
Model 1	<i>Reference</i>	1.19 (0.83-1.71)	1.44 (1.05-1.96)	1.32 (0.48-3.63)
Model 2	<i>Reference</i>	1.07 (0.74-1.53)	1.07 (0.78-1.47)	1.01 (0.37-2.78)
Model 3	<i>Reference</i>	0.98 (0.69-1.41)	0.92 (0.66-1.27)	0.83 (0.30-2.29)
Type 2 diabetes				
Model 1	<i>Reference</i>	0.68 (0.38-1.20)	1.29 (0.84-1.97)	1.71 (0.53-5.57)
Model 2	<i>Reference</i>	0.65 (0.37-1.15)	1.17 (0.76-1.82)	1.58 (0.48-5.15)
Model 3	<i>Reference</i>	0.60 (0.34-1.06)	0.98 (0.63-1.53)	1.17 (0.36-3.86)

Table S6c: Hazard ratios for LTPA in male UCC-SMART participants

	Leisure-time physical activity level			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
All-cause mortality				
Model 1	<i>Reference</i>	0.72 (0.60-0.85)	0.60 (0.51-0.72)	0.62 (0.52-0.74)
Model 2	<i>Reference</i>	0.68 (0.58-0.81)	0.57 (0.47-0.68)	0.56 (0.47-0.66)
Model 3	<i>Reference</i>	0.70 (0.59-0.83)	0.58 (0.48-0.69)	0.56 (0.47-0.66)
Combined vascular endpoint				
Model 1	<i>Reference</i>	0.84 (0.70-1.00)	0.63 (0.52-0.77)	0.72 (0.60-0.87)
Model 2	<i>Reference</i>	0.82 (0.68-0.98)	0.61 (0.51-0.74)	0.69 (0.57-0.83)
Model 3	<i>Reference</i>	0.85 (0.71-1.01)	0.63 (0.52-0.77)	0.69 (0.58-0.83)
Type 2 diabetes				
Model 1	<i>Reference</i>	0.77 (0.58-1.02)	0.67 (0.50-0.90)	0.60 (0.45-0.81)
Model 2	<i>Reference</i>	0.77 (0.58-1.02)	0.67 (0.50-0.90)	0.60 (0.45-0.82)
Model 3	<i>Reference</i>	0.81 (0.61-1.08)	0.70 (0.52-0.95)	0.61 (0.45-0.82)

Table S6d: Hazard ratios for OPA in male UCC-SMART participants

	Occupational physical activity level			
	Sedentary	Standing	Manual	Heavy manual
All-cause mortality				
Model 1	<i>Reference</i>	1.37 (1.17-1.61)	1.04 (0.87-1.25)	1.29 (1.03-1.62)
Model 2	<i>Reference</i>	1.22 (1.04-1.43)	1.05 (0.87-1.25)	1.23 (0.98-1.54)
Model 3	<i>Reference</i>	1.17 (0.99-1.37)	0.97 (0.80-1.16)	1.11 (0.88-1.39)
Combined vascular endpoint				
Model 1	<i>Reference</i>	1.17 (0.98-1.40)	1.26 (1.05-1.50)	1.37 (1.09-1.74)
Model 2	<i>Reference</i>	1.01 (0.92-1.32)	1.25 (1.04-1.49)	1.36 (1.08-1.72)
Model 3	<i>Reference</i>	1.05 (0.88-1.26)	1.15 (0.96-1.39)	1.20 (0.94-1.53)
Type 2 diabetes				
Model 1	<i>Reference</i>	1.17 (0.89-1.54)	1.03 (0.77-1.38)	1.22 (0.84-1.78)
Model 2	<i>Reference</i>	1.18 (0.89-1.56)	1.03 (0.77-1.38)	1.22 (0.84-1.78)
Model 3	<i>Reference</i>	1.11 (0.84-1.47)	0.91 (0.67-1.23)	1.05 (0.71-1.55)

Legend: Sensitivity analyses stratified for sex. These tables shows hazard ratios and corresponding 95% confidence intervals all-cause mortality, recurrent cardiovascular events, and incident type 2 diabetes. In Model 1 adjustments were made for age and sex. In Model 2 adjustments were made for Model 1 + smoking status, pack years, alcohol consumption, and education. In Model 3 adjustments were made for Model 2 + diabetes mellitus, body mass index, systolic blood pressure and LDL-cholesterol levels.

* The combined vascular endpoints was a composite of non-fatal myocardial infarction, non-fatal stroke and cardiovascular mortality.