

Online Supplement

Title: Physical Activity and Peripheral Artery Disease: Two Prospective Cohort Studies and a Systematic Review

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Systematic search terms

Pubmed search terms

("exercise"[MeSH Terms] OR "exercise"[All Fields] OR ("physical"[All Fields] AND "activity"[All Fields]) OR "physical activity"[All Fields]) AND ("peripheral arterial disease"[MeSH Terms] OR ("peripheral"[All Fields] AND "arterial"[All Fields] AND "disease"[All Fields]) OR "peripheral arterial disease"[All Fields] OR ("peripheral"[All Fields] AND "artery"[All Fields] AND "disease"[All Fields]) OR "peripheral artery disease"[All Fields])
Limit: research in humans

EMBASE search terms

physical activity (MeSH term) OR physical activity (key word)
ORExercise (MeSH term) OR exercise (key word)
AND
peripheral artery occlusive disease (MeSH term) OR peripheral artery disease (key word)
Limit: Humans

CINAHL Plus search terms

physical activity (MeSH term) OR physical activity (key word)
OR
exercise (MeSH term) OR exercise (key word)
AND
peripheral artery occlusive disease (MeSH term) OR peripheral artery disease (key word)
Limit: Humans

Table S1. International Classification of Diseases (ICD) versions 8, 9 and 10 codes to identify lower limb peripheral arterial disease (PAD)

Diagnostic Code	Description
ICD-10	
I702	Atherosclerosis of arteries of extremities (including atherosclerotic gangrene)
I731	Thromboangitis obliterans
I738	Other specified peripheral vascular disease
I739	Peripheral vascular disease, unspecified (including intermittent claudication)
I743	Embolism and thrombosis of arteries of lower extremities
I744	Embolism and thrombosis of arteries of extremities, unspecified
I745	Embolism and thrombosis of iliac artery
E105	Diabetes with peripheral circulatory complications
E115	
E145	
ICD-9	
2507	Diabetes with peripheral circulatory disorders
4402	Atherosclerosis of native arteries of the extremities
4404	Chronic total occlusion of artery of the extremities (including complete occlusion of artery of the extremities, total occlusion of artery of the extremities)
4431	Thromboangitis obliterans
4438	Other specified peripheral vascular disease
4439	Peripheral vascular disease, unspecified
4442	Arterial embolism or thrombosis of extremities
44481	Arterial embolism or thrombosis of iliac artery
ICD-8	
4402	Arteriosclerosis of arteries of the extremities
4438	Other peripheral vascular disease, other
4444	Embolism and thrombosis of arteries of the extremities

NOS: not otherwise specified

Table S2. Office of Population Censuses and Surveys Classification of Surgical Operations and Procedures (OPCS) version 4 codes to identify lower limb PAD

Procedure code¹	Description²
Bypass	
L501	Emergency bypass of common iliac artery by anastomosis of aorta to common iliac artery NEC
L502	Emergency bypass of iliac artery by anastomosis of aorta to external iliac artery NEC
L503	Emergency bypass of artery of leg by anastomosis of aorta to common femoral artery NEC
L504	Emergency bypass of artery of leg by anastomosis of aorta to deep femoral artery NEC
L505	Emergency bypass of iliac artery by anastomosis of iliac artery to iliac artery NEC
L506	Emergency bypass of artery of leg by anastomosis of iliac artery to femoral artery NEC
L508	Other specified emergency bypass of iliac artery
L509	Unspecified other emergency bypass of iliac artery
L511	Bypass of common iliac artery by anastomosis of aorta to common iliac artery NEC
L512	Bypass of iliac artery by anastomosis of aorta to external iliac artery NEC
L513	Bypass of artery of leg by anastomosis of aorta to common femoral artery NEC
L514	Bypass of artery of leg by anastomosis of aorta to deep femoral artery NEC
L515	Bypass of iliac artery by anastomosis of iliac artery to iliac artery NEC
L516	Bypass of artery of leg by anastomosis of iliac artery to femoral artery NEC
L518	Other specified other bypass of iliac artery
L519	Unspecified other bypass of iliac artery
L581	Emergency bypass of femoral artery by anastomosis of femoral artery to femoral artery NEC
L582	Emergency bypass of femoral artery by anastomosis of femoral artery to popliteal artery using prosthesis NEC
L583	Emergency bypass of femoral artery by anastomosis of femoral artery to popliteal artery using vein graft NEC
L584	Emergency bypass of femoral artery by anastomosis of femoral artery to tibial artery using prosthesis NEC
L585	Emergency bypass of femoral artery by anastomosis of femoral artery to tibial artery using vein graft NEC
L586	Emergency bypass of femoral artery by anastomosis of femoral artery to peroneal artery using prosthesis NEC
L587	Emergency bypass of femoral artery by anastomosis of femoral artery to peroneal artery using vein graft NEC
L588	Other specified other emergency bypass of femoral artery

Table S2, continued. Office of Population Censuses and Surveys Classification of Surgical Operations and Procedures (OPCS) version 4 codes to identify lower limb PAD

Procedure code¹	Description²
L589	Unspecified other emergency bypass of femoral artery
L591	Bypass of femoral artery by anastomosis of femoral artery to femoral artery NEC
L592	Bypass of femoral artery by anastomosis of femoral artery to popliteal artery using prosthesis NEC
L593	Bypass of femoral artery by anastomosis of femoral artery to popliteal artery using vein graft NEC
L594	Bypass of femoral artery by anastomosis of femoral artery to tibial artery using prosthesis NEC
L595	Bypass of femoral artery by anastomosis of femoral artery to tibial artery using vein graft NEC
L596	Bypass of femoral artery by anastomosis of femoral artery to peroneal artery using prosthesis NEC
L597	Bypass of femoral artery by anastomosis of femoral artery to peroneal artery using vein graft NEC
L598	Other specified other bypass of femoral artery
L599	Unspecified other bypass of femoral artery
Open revascularisation	
L521	Endarterectomy of iliac artery and patch repair of iliac artery
L522	Endarterectomy of iliac artery NEC
L528	Other specified reconstruction of iliac artery
L529	Unspecified reconstruction of iliac artery
L531	Repair of iliac artery NEC
L532	Open embolectomy of iliac artery
L538	Other specified other open operations on iliac artery
L539	Unspecified other open operations on iliac artery
L601	Endarterectomy of femoral artery and patch repair of femoral artery
L602	Endarterectomy of femoral artery NEC
L603	Profundaplasty of femoral artery and patch repair of deep femoral artery
L604	Profundaplasty of femoral artery NEC
L608	Other specified reconstruction of femoral artery
L609	Unspecified reconstruction of femoral artery
L621	Repair of femoral artery NEC
L622	Open embolectomy of femoral artery
L628	Other specified other open operations on femoral artery
L629	Unspecified other open operations on femoral artery

Table S2, continued. Office of Population Censuses and Surveys Classification of Surgical Operations and Procedures (OPCS) version 4 codes to identify lower limb PAD

Procedure code ¹	Description ²
Endovascular revascularisation	
L541	Percutaneous transluminal angioplasty of iliac artery
L542	Percutaneous transluminal embolectomy of iliac artery
L543	Arteriography of iliac artery
L544	Percutaneous transluminal insertion of stent into iliac artery
L548	Other specified transluminal operations on iliac artery
L549	Unspecified transluminal operations on iliac artery
L631	Percutaneous transluminal angioplasty of femoral artery
L632	Percutaneous transluminal embolectomy of femoral artery
L635	Percutaneous transluminal insertion of stent into femoral artery
L638	Other specified transluminal operations on femoral artery
L639	Unspecified transluminal operations on femoral artery
Revision procedures	
L652	Revision of reconstruction involving iliac artery
L653	Revision of reconstruction involving femoral artery
Lower limb amputation	
X093	Amputation of leg above knee
X094	Amputation of leg through knee
X095	Amputation of leg below knee
X098	Other specified amputation of leg
X099	Unspecified amputation of leg
X101	Amputation of foot through ankle
X104	Amputation through metatarsal bones
X108	Other specified amputation of foot
X109	Unspecified amputation of foot
X111	Amputation of great toe
X112	Amputation of phalanx of toe
X118	Other specified amputation of toe
X119	Unspecified amputation of toe

NEC: not elsewhere classified

¹ Primary and secondary diagnostic codes were used.

² These codes were taken to indicate the presence of PAD if the primary diagnostic code associated with the procedure was not trauma, injury, neoplasm or congenital malformation.

Table S3. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
No specific study title, France, 2002-2007 Berard ¹	All: 305 Women: 68 (55%) PAD: 64	5/10	Mean (SD): PAD : 41 (6.9) Controls: 33.1 (6)	OR (95% CI) for PAD: No physical activity (ref. cat.) Some physical activity: 2.7 (1.4 to 5.4) No adjustment for potential confounders.
Chronic Renal Insufficiency Cohort (CRIC), United States, 2003 – 2008 Chen ²	All: 3 758 Women: 45.6% PAD: 754	5/10	Mean: PAD: 62.2 PAD-free: 57.2	OR (95% CI) for PAD, per 1 SD change in METs/week (146 METs): 0.87 (0.78 to 0.97) Adjusted for age, sex, race, smoking, diabetes, hypertension, HDL, pulse pressure and GFR.
Jackson Heart Study (JHS), United States, 2000 – 2004 Collins ³	All: 4 403 Women: 2 789 (63.3%) PAD: 113	6/10	Mean (SD): 56.3 (11.3)	Physical activity categories: Poor: no physical activity Intermediate : 1-149 mins/week of moderate activity or 1-74 mins/week of vigorous activity, or 1-149 mins/week of moderate +vigorous activity Ideal: >=150mins/week of moderate activity or >=75 mins/week of vigorous activity or >=150mins/week of moderate + vigorous activity OR (95% CI) for PAD: Poor: 1.35 (1.00 to 1.82) Intermediate: 0.98 (0.69 to 1.38) Ideal: ref. cat. Adjusted for age.

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Men Born in 1914, Sweden, 1968 Engström ⁴	All: 363 Women: 0 PAD: 48	5/10	All participants were 68 years old.	Mean (SD) ABI: Inactive: 0.89 (0.21) Light activity >=4hrs/week: 1.01 (0.13) Moderate/heavy activity >=2-3 hrs/week or competitive sport several times a week: 1.05 (0.11)
National Health and Nutrition Examination Survey (NHANES), United States, 2003 – 2004 Kulinski ⁵	All: 1 443 Women: 715 (49.5%) PAD: 332	7/10	Mean (SD): 61.0 (13.0)	OR (95% CI) for PAD, per 1 SD (13 min) increase in daily exercise time: 0.71 (0.57 to 0.89) Adjusted for age, sex, race, BMI, height, smoking, diabetes, hypertension, hyperlipidaemia, CVD, accelerometer wear time and sedentary time.
Health in Men Study (HIMS), Western Australia, 1996 – 1999 Lakshmanan ⁶	All: 11 970 Women: 0 PAD: 638	5/10	Range: 65 - 84	OR (95% CI) for PAD: Exercise <3 hrs/week: ref. cat. Exercise >=3 hrs/week: 0.78 (0.66 to 0.93) Adjusted for age, diabetes, smoking, hypertension, eating fish >=3times/week, dyslipidaemia, aortic diameter, CVD and aspirin use.
National Health and Nutrition Examination Survey (NHANES), United States, 2003 – 2004 Loprinzi 2016 ⁷	All: 134 Women: 33.2% PAD: not reported	6/10	Mean: 65.8	OR (95% CI) for PAD, per 60 min/day increase in physical activity: 0.81 (0.67 to 0.99) Adjusted for age, sex, race, BMI, CRP, cotinine, medications and number of comorbidities.

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
National Health and Nutrition Examination Survey (NHANES), United States, 2005 – 2005 Loprinzi 2014 ⁸	All: 254 Women with normal ABI: 42.2% Women with abnormal ABI: 53.8% PAD: 178	7/10	Mean: Normal ABI: 60.2 Abnormal ABI: 60.7	OR for PAD, per minute of moderate/vigorous physical activity (activity count >=2020/min): 0.77 (0.62 to 0.96) Adjusted for age, sex, BMI, race, comorbidity index, cotinine, HgbA1C, CRP, GFR, homocysteine, microalbuminuria, physical functioning, peripheral neuropathy and medication use.
Aging in the Chianti Area (InCHIANTI), Italy, 1998- 2000 Maggio ⁹	All: 921 Women: 502 (54.5%) PAD: 62	5/10	Range: 65-102	N (%) by physical activity category: Men with PAD: Sedentary or light intensity activity <1h/week: 34 (9.0) Light activity 2-4h/week: 308 (81.5) Light activity >=5h/week or moderate activity 1-2h/week: 36 (9.5) PAD-free men: Sedentary or light intensity activity <1h/week: 17 (41.5) Light activity 2-4h/week: 22 (53.7) Light activity >=5h/week or moderate activity 1-2h/week: 2 (4.8) p: not reported

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Continued: Aging in the Chianti Area (InCHIANTI), Italy, 1998- 2000 Maggio ⁹				<p>Women with PAD: Sedentary or light intensity activity <1h/week: 112 (23.3) Light activity 2-4h/week: 73 (73.6) Light activity >=5h/week or moderate activity 1-2h/week: 15 (3.1)</p> <p>PAD-free women: Sedentary or light intensity activity <1h/week: 13 (62.0) Light activity 2-4h/week: 8 (38.0) Women: Light activity >=5h/week or moderate activity 1-2h/week: 0 (0.0) p PAD vs. PAD-free: 0.005</p> <p>No adjustment for potential confounders.</p>
No specific study title, United States, 1997 – 1999 McGrae McDermott ¹⁰	All: 346 Women: 144 (41.6%) PAD: 225	5/10	Mean (SD): 71.2 (8.3)	<p>Mean (SD) activity units: ABI <0.9: 783.8 (426.2) ABI 0.9-1-5: 1109 (640.1) p<0.001</p> <p>No adjustment for potential confounders.</p>

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
The British Regional Heart Study, United Kingdom, 2010 – 2012 Parsons ¹¹	All: 945 Women: 0 PAD: 76	7/10	Mean (SD): Low ABI: 78.8 (4.2) Normal ABI: 78.2 (4.5)	OR for ABI < 0.9 (95% CI): per 10 000 vertical counts/day: 0.92 (0.88 to 0.96) per 1000 steps/day: 0.74 (0.65 to 0.86) per 30min LPA/day: 0.85 (0.74 to 0.97) per 10min MVPA/day: 0.79 (0.70 to 0.90) Adjusted for average daily accelerometer wear time, season of wear, region of residence, social class, living alone, tobacco, alcohol consumption, SBP and BMI
ARTPER, Spain, 2006 – 2008 Ruiz Comellas ¹²	All: 2 840 Women: 1 478 (52.0%) PAD: 180	7/10	Mean (SD): 64.7 (8.68)	OR (95% CI) for PAD: Walking, <0.5 hrs/day: ref. cat. Walking, 0.5-1 hr/day: 0.78 (0.49 to 1.25) Walking, >1hr/day: 0.55 (0.35 to 0.84) MET LTPA in 14 days: Q1 (<3060 MET min/14d): ref. cat. Q2 (3060-5000 MET min/14 d): 0.49 (0.30 to 0.79) Q3 (5001-7550 MET min/14d): 0.82 (0.51 to 1.29) Q4 (>7550 MET min/14d): 0.56 (0.34 to 0.94) Adjustment for age, sex, level of education, work, BMI, smoking, hypertension, hypercholesterolemia, diabetes, and antiplatelet or anticoagulant medication.

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
No specific study title, United States, data collection year not reported Sieminski ¹³	All: 144 Women: 18 (12.6%) PAD: 85	6/10	Mean (SD): PAD: 67.3 (8.1) PAD-free: 63.6 (9.1)	<p>Mean (SD) kcal/day, measured by Caltrac accelerometer: PAD: 384 (212) No PAD: 563 (363) p<0.001 Adjusted for weight, age and smoking</p> <p>Mean (SD) steps/day, measured by pedometer: PAD: 5163 (3273) No PAD: 9123 (5162) p<0.001 Adjusted for age</p> <p>Mean (SD) kcal/day, measured by Minnesota LTPA: PAD: 149 (161) No PAD: 226 (251) p<0.001 Adjusted for age, resting heart rate, smoking, resting brachial SBP.</p> <p>Mean (SD) activity code, measured by JCS PAS: PAD: 1.5 (1.0) No PAD: 2.7 (1.9) p<0.001 Adjusted for WHR, smoking, resting brachial SBP.</p>

Table S3, continued. Summary of cross-sectional and case-control studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Cardiovascular Health Study, United States, 1989 – 1990 Siscovick ¹⁴	All: 2 274 Women: 1 252 (55.1%) PAD: 136	4/10	Range of means: 70.7 - 74.6	N (%) with PAD, by physical activity category: Men: Low intensity: 13 (18.3) Medium intensity: 42 (5.5) High intensity, MET>6 :7 (3.7) p=0.01 Women : Low intensity: 19 (10.0) Medium intensity: 50 (5.7) High intensity, MET>6: 5 (2.8) p=0.02 No adjustment for potential confounders.
No specific study title, United States, 2004 – 2008 Wilson ¹⁵	All: 1 381 Women, by 5 th of LRA: No LRA: 51.8% LRA Q2: 39.4% LRA Q3: 25.7% LRA Q4: 27.8% LRA Q5: 20.3% PAD: 258	5/10	Mean (SD): 65 (11)	Mean (SD) ABI: No LRA: 0.94 (0.21) LRA Q2: 1.02 (0.18) LRA Q3: 1.03 (0.18) LRA Q4: 1.02 (0.18) LRA Q5: 1.02 (0.17) p<0.001 No adjustment for potential confounders.

Notes to Table S3: N-O: Newcastle-Ottawa; ABI: ankle-brachial index; OR: odds ratio; CI: confidence interval; HDL: high density lipoprotein cholesterol; GFR: glomerular filtration rate; BMI: body mass index; CRP: C-reactive protein; HgbA1C: glycated haemoglobin; CVD: cardiovascular disease; LPA: light physical activity; MVPA: moderate/vigorous physical activity; LTPA: leisure-time physical activity; kcal: kilocalories; MET: metabolic equivalent; SBP: systolic blood pressure; WHR: waist:hip ratio; LRA: lifetime recreational activity; Q: quantile

Table S4. Summary of longitudinal studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Follow-up	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Multi-Ethnic Study of Atherosclerosis (MESA), United States, 2000 – 2002 Delaney ¹⁶	Up to 7 years	All: 5 656 Women: 52.6% PAD: 161	8/9	Mean (SD): 61.3 (9.9)	<p>Mean (SD) MET minutes/week:</p> <p>Vigorous activity: Progress to low ABI: 626 (2495) No ABI change: 982 (2855)</p> <p>Moderate activity: Progress to low ABI: 4120 (3800) No ABI change: 4938 (4517)</p> <p>No/low activity: Progress to low ABI: 5471 (2717) No ABI change: 6096 (2931)</p> <p>OR (95% CI) for PAD, by activity category: No/low activity: ref. cat. Moderate/vigorous: 0.94 (0.86 to 1.04) Vigorous: 0.98 (0.86 to 1.04)</p> <p>Adjusted for age, sex, ethnicity, alcohol, smoking, education, income, health insurance.</p>
Men Born in 1914, Sweden, 1968 Engström ⁴	13 years	All: 363 Women: 0 PAD: 48	6/9	All participants were 68 years old.	<p>N (%) PAD at age 68, by physical activity categories at age 55: Inactive: 10 (10%) Light activity, >=4hrs/week: 34 (16.2%) Moderate/heavy activity, >=2-3 hrs/week or competitive sport several times a week: 4 (7.4%) No adjustment for potential confounders.</p>

Table S4, continued. Summary of longitudinal studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Follow-up	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Health in Men Study (HIMS), Western Australia, 1996 – 1999 Lakshmanan ⁶	Median: 5.7 years, IQR: 5.04 to 6.40 years	All: 3 994 Women: 0 PAD: 193	5/9	Range: 65 - 84	Authors report that no association between physical activity and PAD was found, but no results are provided to support this statement.
Epidemiological Study of Insulin Resistance Syndrome (DESIR), France, 1994 – 1996 Tapp ¹⁷	6 years	All: 3 805 Women: 1 930 (50.7%) PAD: 173	8/9	Mean (SD): Men: PAD: 50 (10) PAD-free: 47 (10) Women: PAD: 48 (10) PAD-free: 47 (10)	OR (95% CI) for PAD, by freq. of active sport: >2 times/week: ref. cat. 1-2 times/week: 1.35 (0.66 to 2.76) <1 time/week: 1.44 (0.69 to 3.02) Never: 1.74 (0.90 to 3.39) Adjusted for age, sex, waist circumference, baseline smoking, SBP, triglycerides and glucose metabolism.
PREvencion con Dieta MEDiterranea (PREDIMED), Spain, 2009 – 2011 Lopez Laguna ¹⁸	Median: 4.8 years	All: 7 122 Women: 4 095 (57.5%) Men: 3 027 (42.5%) Incident PAD: 87	8/9	Range: Men: 55–80 Women: 60–80	HR (95% CI) for PAD, by LTPA categories: LTPA <500 MET minutes/week: ref. cat. LTPA ≥500 MET minutes/week: 0.45 (0.27 to 0.76) Adjusted for age, sex, education, hypertension, hypercholesterolemia, prevalent diabetes, and height, waist circumference, total energy intake, family history of premature CHD, HRT, statins, antiplatelet therapy, angiotensin-converting enzyme inhibitors, b-blockers, diuretics, insulin, other hypoglycaemic agents, total vitamin D intake, and vitamin B12 intake.

Table S4, continued. Summary of longitudinal studies of physical activity and peripheral artery disease (PAD)

Study, country, year Author	Follow-up	Number of participants N/% women N with PAD	N-O score	Baseline age	Main findings
Previously unpublished Whitehall II, United Kingdom, 1985-1989	Up to 24 years	All: 10 200 Women: 3 372 (33.1%) PAD: 102	7/9	Mean (SD): 44.9 (6.0)	HR (95% CI) for PAD: Sedentary: 1 (ref. cat.) 0<2.5hrs moderate or 0<1.25hrs vigorous activity/week: 0.92 (0.53 to 1.59) >=2.5hrs moderate or >=1.25hrs vigorous activity/week: 0.90 (0.54 to 1.51) Adjusted for baseline age, sex, education as a proxy for socioeconomic position and smoking.
Previously unpublished Finnish Public Sector Study, Finland, 2000 or 2004	Up to 11.6 years	All: 63 924 Women: 51 047 (79.9%) PAD: 106 (0.2%)	8/9	Mean (SD): 43.7 (9.7)	HR (95% CI) for PAD: Low (<14 MET-hours/week): 1 (ref. cat.) Moderate (14<30 MET-hours/week): 0.67 (0.42 to 1.06 High (30+ MET-hours/week): 0.53 (0.32 to 0.87) Adjusted for baseline age, sex, socioeconomic position and smoking.

Notes to Table S4: N-O: Newcastle-Ottawa; ABI: ankle-brachial index; OR: odds ratio; CI: confidence interval; SD: standard deviation; MET: metabolic equivalent; SBP: systolic blood pressure; CHD: coronary heart disease; HRT: hormone replacement therapy.

Description of Finnish Public Sector study and Whitehall II

The Finnish Public Sector study is a prospective cohort study comprising the entire public sector personnel of 10 towns or municipalities, and 21 hospitals in the same geographical areas. Participants were recruited from the employers' records in 2000-2002 and 2004 ¹⁹. In all, 66,430 individuals aged 17 to 65 responded to the baseline questionnaire. Ethical approval was obtained from the Helsinki and Uusimaa hospital district ethics committee.

Whitehall II is a prospective cohort study set up to investigate socioeconomic determinants of health. At study baseline in 1985-1988, 10,308 civil service employees aged 35-55 and working in 20 civil service departments in London were invited to participate in the study ²⁰. The Whitehall II study protocol was approved by the University College London Medical School committee on the ethics of human research. Written informed consent was obtained at each data collection wave.

Table S5. Characteristics of the analytical samples in the Finnish Public Sector study and Whitehall II

Participant characteristics	Finnish Public Sector study (n=63,924)	Whitehall II (n=10,200)
Outcome		
Peripheral artery disease (n, %)	106 (0.2%)	102 (1.0)
Baseline covariates		
Age (mean, SD)	43.7 (9.7)	44.9 (6.0)
Sex (n, % women)	51,047 (79.9%)	3,372 (33.1)
Physical activity (n, %)	Low (<14 MET-hours/wk): 21,919 (34.3) Moderate (14<30 MET-hrs/k): 18,590 (29.1) High (30+ MET-hrs/wk): 23,415 (36.6)	Sedentary: 1,761 (17.3) 0<2.5hrs moderate or 0<1.25hrs vigorous activity/wk: 3,659 (35.9) >=2.5hrs moderate or >=1.25hrs vigorous activity/wk: 4,780 (46.9)
Socioeconomic position (n, %)	Low: 11,634 (18.4) Middle: 33,301 (52.5) High: 18,460 (29.1)	Low: 2,649 (26.0) Middle: 1,870 (18.3) High: 3,122 (30.6) Other: 2,559 (25.1)
Smoking (n, %)	Never: 39,426 (63.4) Ex: 11,354 (18.3) Current: 11,431 (18.4)	Never: 5,050 (49.5) Ex: 3,273 (32.1) Current: 1,877 (18.4)

Note to Table S5: SD: standard deviation

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