

Table 1. Clinical characteristics of the 4902 participants by healthy lifestyle score

Characteristics ¹	Total (N=4902)	Healthy lifestyle score						P for trend
		0 (N=6 [0.1%])	1 (N=118 [2.4%])	2 (N=498 [10.2%])	3 (N=1405 [28.7%])	4 (N=2239 [45.7%])	5 (N=636 [13.0%])	
Age years	66.7 (8.4)	64.8 (6.1)	58.1 (8.9)	62.6 (9.5)	65.7 (8.7)	67.8 (8.0)	68.4 (7.0)	<0.0001
Males, <i>n</i> (%)	2015 (41.1)	6 (100.0)	98 (83.1)	345 (69.3)	636 (45.3)	727 (32.5)	203 (31.9)	<0.0001
Current smoker, <i>n</i> (%)	619 (12.6)	6 (100.0)	97 (82.2)	233 (46.8)	224 (15.9)	59 (2.6)	0 (0.0)	<0.0001
Body mass index, kg m ⁻²	23.0 (3.1)	27.5 (1.4)	24.9 (3.1)	24.8 (3.5)	24.2 (3.3)	22.2 (2.5)	21.8 (2.0)	<0.0001
Alcohol > 20 g/day, <i>n</i> (%)	635 (13.0)	6 (100.0)	95 (80.5)	221 (44.4)	234 (16.7)	79 (3.5)	0 (0.0)	<0.0001
Regular exercise								
Exercise to sweat lightly, <i>n</i> (%)	1438 (29.3)	0 (0.0)	6 (5.1)	42 (8.4)	185 (13.2)	569 (25.4)	636 (100.0)	<0.0001
Walking > 1 hour/day, <i>n</i> (%)	3467 (70.7)	2 (33.3)	76 (64.4)	301 (60.4)	935 (66.5)	1517 (67.8)	636 (100.0)	<0.0001
Eating pattern								
Snacks after supper, <i>n</i> (%)	708 (14.4)	3 (50.0)	40 (33.9)	208 (41.8)	345 (24.6)	112 (5.0)	0 (0.0)	<0.0001
Skipping breakfast, <i>n</i> (%)	329 (6.7)	5 (83.3)	59 (50.0)	99 (19.9)	123 (8.8)	43 (1.9)	0 (0.0)	<0.0001
Systolic pressure, mmHg	127 (17)	137 (19)	134 (17)	131 (17)	128 (17)	126 (16)	126 (15)	<0.0001
Diastolic pressure, mmHg	74 (10)	84 (13)	81 (11)	78 (11)	75 (10)	73 (10)	73 (10)	<0.0001
Antihypertensive medication, <i>n</i> (%)	1505 (30.7)	2 (33.3)	38 (32.2)	158 (31.7)	479 (34.1)	643 (28.7)	185 (29.1)	0.01
Hemoglobin A _{1c} , %	5.4 (0.6)	5.1 (0.2)	5.3 (0.7)	5.4 (0.7)	5.4 (0.6)	5.4 (0.5)	5.4 (0.6)	0.48
Antidiabetic medication, <i>n</i> (%)	220 (4.5)	0 (0.0)	1 (0.8)	31 (6.2)	78 (5.6)	79 (3.5)	31 (4.9)	0.24
LDL cholesterol, mg per 100 ml	128 (31)	117 (32)	126 (31)	125 (36)	128 (31)	128 (31)	129 (30)	0.03
Cholesterol-lowering medication, <i>n</i> (%)	697 (14.2)	0 (0.0)	11 (9.3)	49 (9.8)	198 (14.1)	335 (15.0)	104 (16.4)	<0.0001
Triglycerides, mg per 100 ml	111 (78, 156)	96 (81, 261)	134 (93, 212)	131 (90, 195)	116 (83, 165)	105 (75, 146)	103 (74, 144)	<0.0001
HDL cholesterol, mg per 100 ml	57 (14)	47 (10)	58 (16)	55 (14)	56 (14)	57 (14)	58 (14)	<0.0001
Creatinine, mg per 100 ml	0.67 (0.13)	0.80 (0.11)	0.73 (0.12)	0.71 (0.13)	0.67 (0.13)	0.65 (0.12)	0.65 (0.12)	<0.0001
eGFR, ml min ⁻¹ per 1.73 m ²	79 (13)	78 (8)	84 (15)	81 (13)	79 (13)	78 (14)	79 (13)	<0.0001
Outcome data								
Development of proteinuria, <i>n</i> (%)	110 (2.2)	0 (0.0)	4 (3.4)	19 (3.8)	41 (2.9)	39 (1.7)	7 (1.1)	<0.0001

Abbreviations: LDL, low-density lipoprotein; HDL, high-density lipoprotein. The definitions of the clinical characteristics are described in the text.

¹ Numbers in the table shown are means (standard deviation) for continuous variables except triglycerides (median and interquartile range) or numbers (percentages) for categorical variables.

Table 2. Multivariate analysis of the relationships between the components of the healthy lifestyle score and the incidence of proteinuria (N=4902)

Variable	Model 1 odds ratios ¹ (95%CI)	Model 2 odds ratios ² (95%CI)
Categories		
Current smoker		
Yes (ref)	1.00	1.00
No	0.67 (0.40-1.12)	0.66 (0.40-1.10)
Body mass index		
≥25 kg m ⁻² (ref)	1.00	1.00
<25 kg m ⁻²	0.54 (0.37-0.81)**	0.62 (0.41-0.93)*
Alcohol consumption		
≥20 g/day (ref)	1.00	1.00
<20 g /day	0.89 (0.53-1.49)	0.97 (0.57-1.65)
Regular exercise		
No (ref)	1.00	1.00
Yes	0.90 (0.58-1.42)	0.89 (0.57-1.40)
Eating pattern		
Less healthy (ref)	1.00	1.00
healthy	0.88 (0.55-1.40)	0.87 (0.55-1.39)
Sex		
Male (ref)	1.00	1.00
Female	0.52 (0.34-0.81)**	0.58 (0.37-0.90)*
Age		
40-49 (ref)	1.00	1.00
50-59	0.42 (0.17-1.03)	0.37 (0.15-0.92)*
60-69	0.60 (0.29-1.23)	0.50 (0.24-1.04)
70-79	0.74 (0.36-1.51)	0.56 (0.27-1.17)
Hypertension		
Yes (ref)		1.00
No		0.58 (0.38-0.87)**
Diabetes mellitus		
Yes (ref)		1.00

No	0.53 (0.31-0.90)*
Hypercholesterolemia	
Yes (ref)	1.00
No	1.12 (0.75-1.69)

Abbreviation: CI, confidence interval.

¹ Adjusted for age, sex, and the other components of the healthy lifestyle score

² Adjusted for the variables in model 1 plus hypertension, diabetes, and hypercholesterolemia. The definitions of these factors are described in the text.

* $P < 0.05$, ** $P < 0.01$

Table 3. Multivariate analysis of the relationship between the healthy lifestyle score and the incidence of proteinuria (N=4902)

Variable	Age- and sex- adjusted odds ratio (95%CI)	Multivariate odds ratio ¹ (95%CI)
Healthy lifestyle score		
0 – 2 (ref)	1.00	1.00
3	0.89 (0.52-1.52)	0.94 (0.55-1.61)
4	0.56 (0.32-0.98)*	0.63 (0.36-1.10)
5	0.35 (0.15-0.85)*	0.39 (0.16-0.94)*
Sex		
Male (ref)	1.00	1.00
Female	0.52 (0.35-0.78)**	0.58 (0.38-0.87)**
Age		
40-49 (ref)	1.00	1.00
50-59	0.41 (0.17-1.00)	0.36 (0.15-0.89)*
60-69	0.59 (0.29-1.21)	0.49 (0.24-1.00)
70-79	0.72 (0.35-1.46)	0.54 (0.26-1.12)
Hypertension		
Yes (ref)		1.00
No		0.57 (0.38-0.85)**
Diabetes mellitus		
Yes (ref)		1.00
No		0.52 (0.30-0.87)*
Hypercholesterolemia		
Yes (ref)		1.00
No		1.09 (0.73-1.63)

Abbreviation: CI, confidence interval.

¹ Adjusted for age (years), sex, hypertension, diabetes, and hypercholesterolemia. The definitions of these factors are described in the text.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

Table 4. Subgroup analyses of the relationship between the healthy lifestyle score and the incidence of proteinuria

Healthy lifestyle score	Age- and sex- adjusted odds ratio (95%CI)	Multivariate odds ratio ¹ (95%CI)
Non-obese individuals (N=3724)		
1 – 3 (ref)	1.00	1.00
4	0.55 (0.32-0.93)*	0.56 (0.33-0.95)*
5	0.40 (0.17-0.94)*	0.40 (0.17-0.92)*
Obese individuals (N=1178)		
0 – 2 (ref)	1.00	1.00
3	0.92 (0.43-1.97)	0.97 (0.45-2.06)
4	1.60 (0.64-3.98)	1.71 (0.69-4.27)
Males (N=2015)		
0 – 2 (ref)	1.00	1.00
3	0.87 (0.46-1.63)	0.88 (0.47-1.66)
4	0.67 (0.34-1.29)	0.71 (0.36-1.38)
5	0.49 (0.16-1.42)	0.47 (0.15-1.43)
Females (N=2887)		
0 – 2 (ref)	1.00	1.00
3	0.92 (0.30-2.775)	1.07 (0.35-3.25)
4	0.46 (0.15-1.40)	0.55 (0.18-1.69)
5	0.25 (0.05-1.14)	0.31 (0.07-1.41)
Participants on antihypertensive medications (N=1505)		
0 – 2 (ref)	1.00	1.00
3	0.82 (0.39-1.73)	0.81 (0.38 -1.71)
4	0.38 (0.17-0.90)*	0.32 (0.17 -0.90)*
5	0.19 (0.04-0.87)*	0.13 (0.04 -0.88)*

Abbreviation: CI, confidence interval.

¹ Adjusted for age (years), sex, hypertension, diabetes, and hypercholesterolemia. The definitions of these factors are described in the text.

* $P < 0.05$, ** $P < 0.01$