

**SUPPLEMENTARY DATA**

**Table 1 of the supplementary data.** Number and percentage of participants by number of metrics of the cardiovascular health score in participants older than 55 years from the SUN project

Number of metrics	Overall		Men		Women	
	No.	%	No.	%	No.	%
0	0	0	0	0	0	0
1	0	0	0	0	0	0
2	1	0.11	1	0.16	0	0
3	1	0.11	1	0.16	0	0
4	2	0.23	1	0.16	1	0.41
5	7	0.79	6	0.93	1	0.41
6	25	2.82	24	3.72	1	0.41
7	68	7.67	60	9.30	8	3.32
8	105	11.85	86	13.33	19	7.88
9	169	19.07	133	20.62	36	14.94
10	197	22.23	140	21.71	57	23.65
11	171	19.30	120	18.60	51	21.16
12	100	11.29	55	8.53	45	18.67
13	35	3.95	16	2.48	19	7.88
14	5	0.56	2	0.21	3	1.24
Total	886	100	645	100	241	100

SUN, Seguimiento Universidad de Navarra.

**Table 2 of the supplementary data.** Number and percentage of participants for each Ideal Cardiovascular Health metric in participants older than 55 years from the SUN project

CVH items	Overall		Men		Women	
	No.	%	No.	%	No.	%
Smoking	294	33.18	159	24.65	135	56.02
Physical activity, min/wk	773	87.25	565	87.60	208	86.31
Diet (AHEI-2010)	74	8.35	37	5.74	37	15.35
Body mass index, kg/m <sup>2</sup>	345	38.94	202	31.32	143	59.34
Systolic blood pressure, mmHg	273	30.81	174	26.98	99	41.08
Diastolic blood pressure, mmHg	569	64.22	397	61.55	172	71.37
Fasting blood glucose, mg/dL	572	64.56	386	59.84	186	77.18
Total cholesterol, mg/dL	455	51.35	371	57.52	84	34.85

AHEI, Alternative Healthy Eating Index; SUN, *Seguimiento Universidad de Navarra*.

**Table 3 of the supplementary data.** Risk for shorter telomeres (TL ≤ 20th percentile) according to 8 metrics of the cardiovascular health score in 886 participants older than 55 years from the SUN project

OR (95%CI)				
<i>Metrics of CVH score</i>	Intermediate	Ideal	<i>P for trend</i>	
<b>Overall (n=886)</b>				
Smoking	0.76 (0.48-1.23)	0.60 (0.35-1.02)	.132	
Physical activity, min/wk	0.66 (0.14-3.06)	0.54 (0.12-2.30)	.298	
Diet (AHEI-2010)	0.69 (0.47-1.02)	0.70 (0.35-1.41)	.102	
Body mass index, kg/m <sup>2</sup>	0.85 (0.48-1.48)	0.86 (0.48-1.55)	.689	
Systolic blood pressure, mmHg	1.04 (0.67-1.62)	1.28 (0.78-2.09)	.291	
Diastolic blood pressure, mmHg	1.22 (0.61-2.47)	1.26 (0.65-2.42)	.590	
Fasting blood glucose, mg/dL	0.84 (0.44-1.57)	0.85 (0.46-1.54)	.635	
Total cholesterol, mg/dL	0.81 (0.47-1.40)	0.85 (0.50-1.44)	.736	
<b>Men (n=645)</b>				<i>P for interaction</i>
Smoking	0.77 (0.46-1.28)	0.58 (0.31-1.07)	.171	.982
Physical activity, min/week	0.44 (0.08-2.38)	0.43 (0.09-2.10)	.517	.340
Diet (AHEI-2010)	0.58 (0.38-0.89)	0.52 (0.20-1.32)	.015	.158
Body mass index, kg/m <sup>2</sup>	0.88 (0.48-1.61)	0.95 (0.49-1.82)	.952	.792
Systolic blood pressure, mmHg	1.11 (0.68-1.80)	1.12 (0.64-1.98)	.695	.498
Diastolic blood pressure, mmHg	1.50 (0.68-3.33)	1.43 (0.67-3.03)	.632	.523
Fasting blood glucose, mg/dL	0.74 (0.38-1.45)	0.78 (0.41-1.48)	.528	.386
Total cholesterol, mg/dL	0.83 (0.43-1.63)	0.70 (0.37-1.33)	.238	.096
<b>Women (n=241)</b>				
Smoking	0.77 (0.21-2.80)	0.52 (0.15-1.88)	.356	
Physical activity, min/wk	*	*	-	
Diet (AHEI-2010)	1.33 (0.41-4.31)	1.59 (0.39-6.50)	.524	
Body mass index, kg/m <sup>2</sup>	0.66 (0.15-2.98)	0.66 (0.175-2.91)	.683	
Systolic blood pressure, mmHg	0.77 (0.25-2.40)	1.75 (0.59-5.21)	.130	

Diastolic blood pressure, mmHg	0.52 (0.10-2.62)	0.84 (0.20-3.54)	.655	
Fasting blood glucose, mg/dL	3.04 (0.30-30.97)	2.65 (0.28-24.79)	.540	
Total cholesterol, mg/dL	0.52 (0.18-1.46)	1.54 (0.57-4.14)	.153	

Adjusted logistic regression models. Values are ORs (95%CI). Model adjusted for age at inclusion; age at saliva collection; sex; educational level (years at university, continuous); marital status (single, married, widower, divorced); family history of hypertension, diabetes, obesity, and cardiovascular disease (dichotomous); and prevalence of cancer and depression (dichotomous). The *P* for interaction was calculated using the likelihood ratio test for sex with each metric. AHEI, Alternative Healthy Eating Index; SUN, *Seguimiento Universidad de Navarra*. \*As the reference tertile (poor) had only 1 participant, we gathered 0 (poor) and 1 (intermediate) tertiles and considered them as the reference category. OR adjusted ideal physical activity for women was 0.71; 95%CI, 0.27-1.86 (*P* trend = .487).

**Table 4 of the supplementary data.** Multivariable linear regression analysis for telomere length with cardiovascular health score in participants older than 55 years from the SUN project

CVH score	$\beta$ coefficient	95% Confidence Interval	P	P for trend	
<b>Overall (n=886)</b>					
<sup>a</sup> Age- and sex-adjusted				.528	
Poor	0 (ref)				
Intermediate	-0.000	-0.029-0.028	.977		
Ideal	0.016	-0.024, 0.055	.434		
<sup>b</sup> Multivariable adjusted model				.359	
Poor	0 (ref)				
Intermediate	0.003	-0.025-0.032	.814		
Ideal	0.021	-0.019-0.060	.307		
<b>Men (n=645)</b>					<b>P for interaction</b>
<sup>a</sup> Age-adjusted				.164	.0701
Poor	0 (ref)				
Intermediate	-0.006	-0.036-0.023	.679		
Ideal	0.049	0.003-0.094	.036		
<sup>b</sup> Multivariable adjusted model				.141	.0634
Poor	0 (ref)				
Intermediate	-0.007	-0.036-0.023	.659		
Ideal	0.052	0.006-0.098	.026		
<b>Women (n=241)</b>					
<sup>a</sup> Age-adjusted				.559	
Poor	0 (ref)				
Intermediate	0.012	-0.062-0.086	.751		
Ideal	-0.024	-0.106-0.058	.568		
<sup>b</sup> Multivariable adjusted model				.696	
Poor	0 (ref)				
Intermediate	0.024	-0.049-0.097	.516		
Ideal	-0.015	-0.096-0.067	.723		

SUN, Seguimiento Universidad de Navarra.

<sup>a</sup>Age at saliva collection.

<sup>b</sup>Multivariable linear regression models additionally adjusted for age at inclusion; educational level (years at university, continuous); marital status (single, married, widowed, divorced); family history of

hypertension, diabetes, obesity and cardiovascular disease (dichotomous); and prevalence of cancer and depression (dichotomous). The *P* for interaction was calculated using the likelihood ratio test for sex with each model of cardiovascular health score.

**Table 5 of the supplementary data.** Multivariable linear regression for telomere length with cardiovascular health score in participants older than 55 years from the SUN project

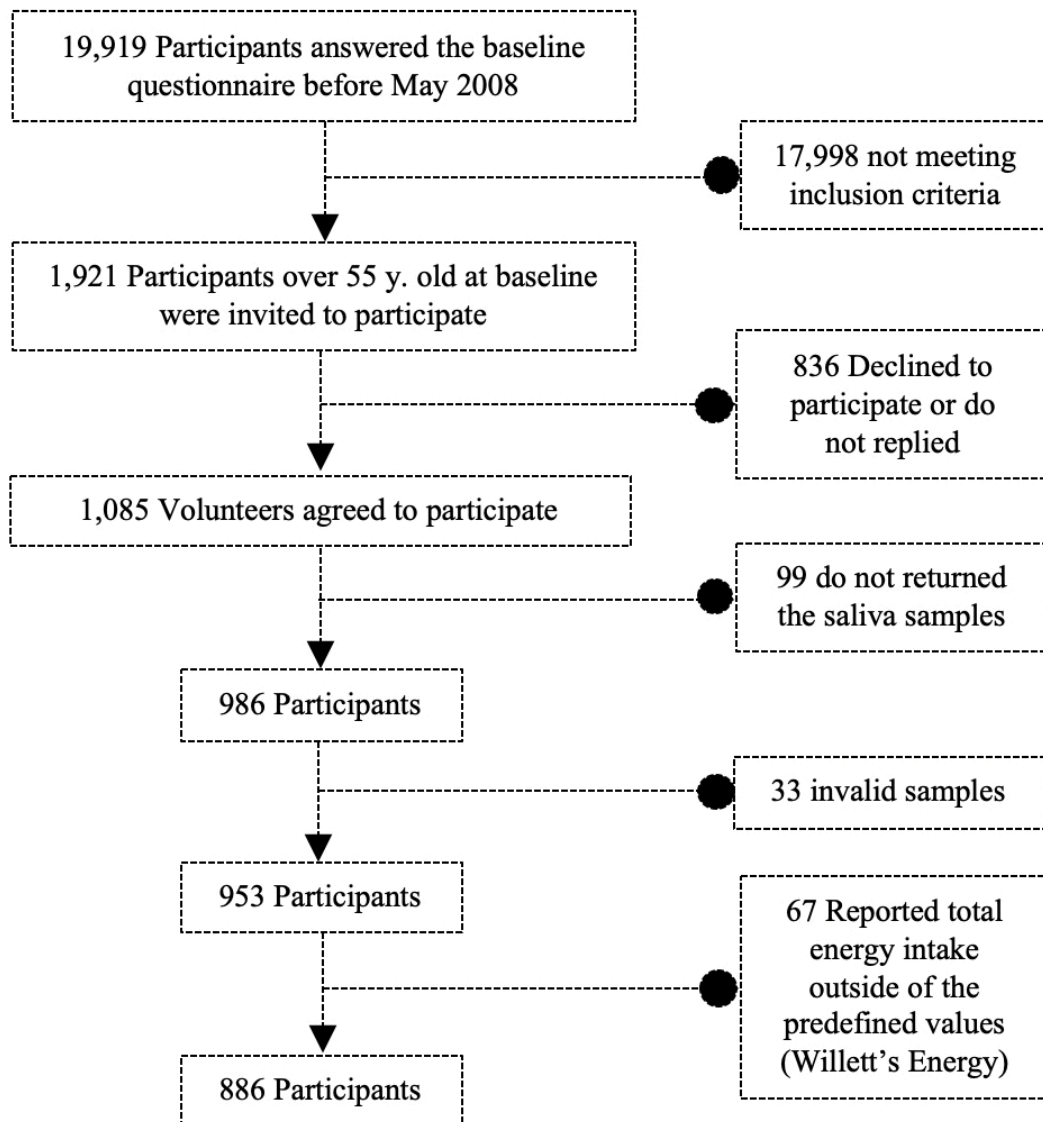
	$\beta$ coefficient	Standard error	95% confidence interval	P
Overall				
Crude model	0.005	0.004	-0.003-0.012	.208
<sup>a</sup> Age-and sex-adjusted model	0.002	0.004	-0.006-0.009	.682
*Multivariable-adjusted model	0.002	0.004	-0.005-0.010	.527
Men				
Crude model	0.005	0.004	-0.003-0.013	.210
Age-adjusted model	0.004	0.004	-0.003-0.012	.274
*Multivariable-adjusted model	0.005	0.004	-0.003-0.013	.240
Women				
Crude model	-0.009	0.009	-0.028-0.009	.305
<sup>a</sup> Age-adjusted model	-0.006	0.009	-0.025-0.012	.484
<sup>b</sup> Multivariable-adjusted model	-0.006	0.009	-0.024-0.013	.555

<sup>a</sup>Age at saliva collection.

<sup>b</sup>Multivariable linear regression models additionally adjusted for age at inclusion; sex; educational level (years at university, continuous); marital status (single, married, widowed, divorced); family history of hypertension, diabetes, obesity, and cardiovascular disease (dichotomous); and prevalence of cancer and depression (dichotomous). P for interaction multivariable adjusted model: 0.3058.

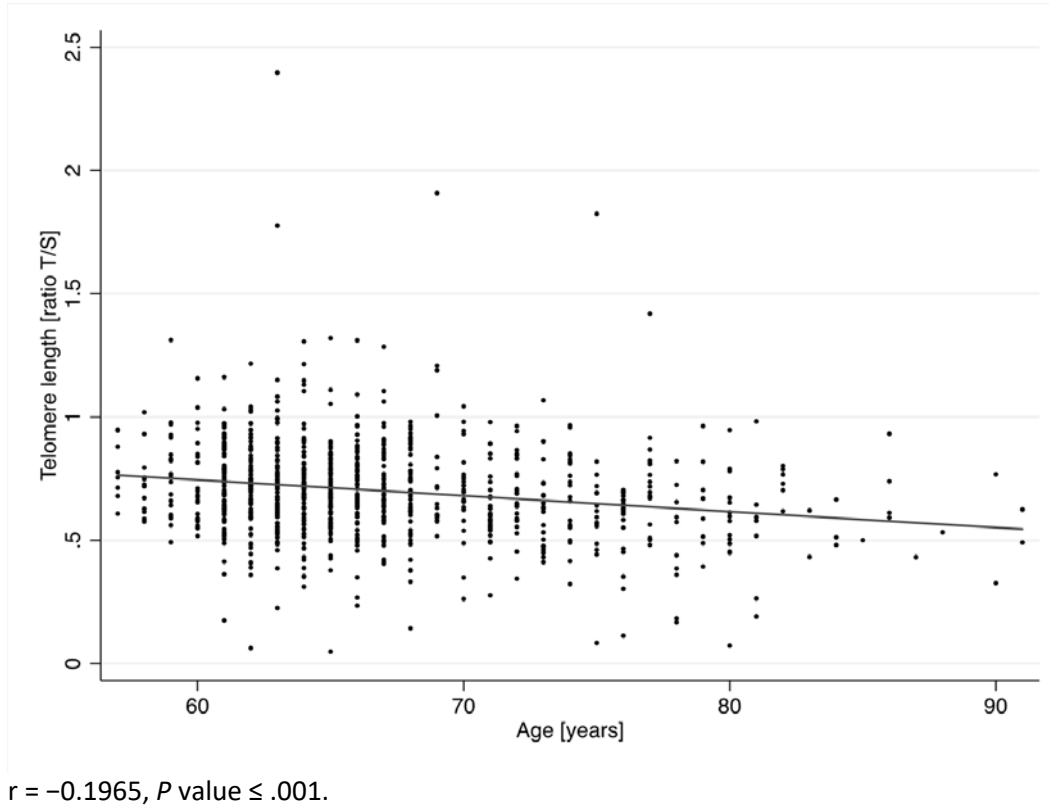
SUN, *Seguimiento Universidad de Navarra*.

Figure 1 of the supplementary data. Flowchart of study participants.

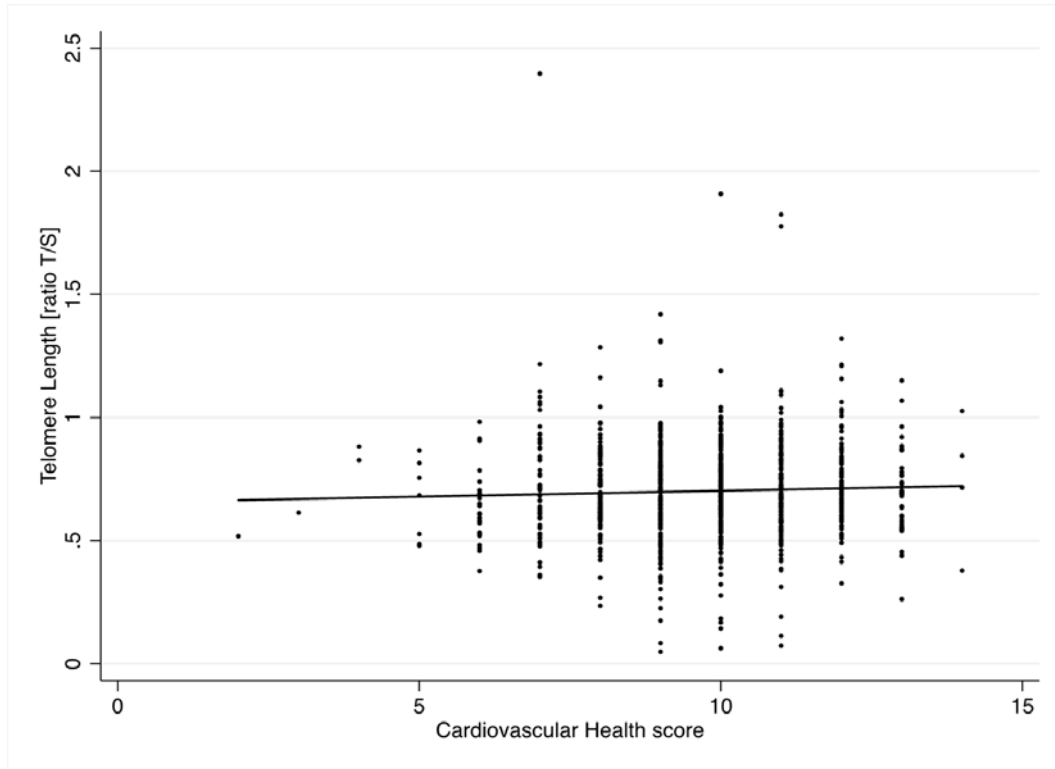




**Figure 2 of the supplementary data.** Correlation between telomere length and age.



**Figure 3 of the supplementary data.** Correlation between telomere length and cardiovascular health score.



$r = 0.024$ ,  $P$  value = .2076.

**Figure 4 of the supplementary data.** Predicted (gray line) and observed marginal probabilities of having short telomeres ( $\leq 20$  percentile) according to the number of metrics of the cardiovascular health score.

