SUPPLEMENTAL MATERIAL

Table S1. Associations (Mixed-Models Analyses) Between Healthy Lifestyle Score at Baseline and Heart Rate over 10 years (n=2, 374).

	Heart rate			
	β (95% CI) for Cross-sectional Associations		β (95% CI) for Longitudinal Associations	
	Model 1	Model 2	Model 1	Model 2
Healthy Lifestyle Score				
0	reference	reference	reference	reference
1	-1.01 (-3.96 to 1.94)	-0.72 (-3.57 to 2.14)	1.13 (-2.33 to 4.60)	0.52 (-2.70 to 3.74)
2	-1.55 (-4.45 to 1.36)	-1.30 (-4.11 to 1.50)	1.57 (-1.84 to 4.97)	0.76 (-2.41 to 3.92)
3	-4.47 (-7.41 to -1.53)*	-4.29 (-7.13 to -1.45)*	2.49 (-0.96 to 5.95)	1.49 (-1.72 to 4.70)
4	-6.84 (-10.17 to -3.50)**	-6.65 (-9.88 to -3.42)**	3.04 (-0.84 to 6.92)	2.32 (-1.29 to 5.92)
$p_{overall}$	≤ 0.001	≤ 0.001	0.169	0.313

The cross-sectional association is represented by main effects for healthy lifestyle adjusting for time, age and other covariates. The longitudinal association is represented by the term for the interaction between healthy lifestyle and time.

Model 1: adjusted for age, sex, ethnicity and employment grade

Model 2: adjusted for age, sex, ethnicity, employment grade, presence of any cardiometabolic condition and betablocker use

** $p \leq 0.001$; * $p \leq 0.05$

Table S2. Habitual Healthy Lifestyle over 10 years and Heart Rate at follow-up (n=3333).

	Heart rate	
Habitual Healthy Lifestyle over 10 years†	**Model 1** **β (95% CI)**	**Model 2** **β (95% CI)**
Hardly ever (n=570)	reference	reference
Occasionally (n=1,963)	-1.77 (-2.71 to -0.83)**	-1.90 (-2.81 to -0.10)**
Always (n=800)	-4.61 (-5.76 to -3.45)**	-4.97 (-6.09 to -3.85)**
$p_{overall}$	≤0.001	≤0.001

Model 1: adjusted for age, sex, ethnicity and employment grade

Model 2: adjusted for age, sex, ethnicity, employment grade, presence of any cardiometabolic condition and betablockers use

†Habitual Lifestyle over 10 years; „hardly ever", „occasionally" and „always" includes those participants who reported 0-4, 5-8 and 9-12 healthy lifestyle

behavior (not currently smoking, physically active, moderate alcohol consumption and healthy BMI) respectively at the three time points (phases 5, 7 and 9)

**p ≤ 0.001

Table S3. Change in Lifestyle from Phase 5 to 7 and Heart Rate at phase 9 (n=2059).

	Heart rate	
Change[†] in healthy lifestyle score	**Model 1 β (95% CI)**	**Model 2 β (95% CI)**
Deterioration (n=123)	reference	reference
Stable unhealthy (n=484)	-4.28 (-7.28 to -1.29)[*]	-4.73 (-7.62 to -1.84)[*]
Stable healthy (n=1,349)	-2.07 (-4.20 to 0.07)	-2.165 (-4.72 to -0.59)[*]
Improvement (n=103)	-7.43 (-10.81 to -4.06)[**]	-8.59 (-11.85 to -5.33)[**]
$p_{overall}$	≤0.001	≤0.001

[*] $p \leq 0.05$

[**] $p \leq 0.001$

Model 1: adjusted for age, sex, ethnicity, employment grade and healthy lifestyle score at phase 5

Model 2: adjusted for age, sex, ethnicity, employment grade, healthy lifestyle score at phase 5, presence of any cardiometabolic condition and beta-blockers use at phase 9

[†]A deterioration and improvement represents a change of at least 2 points in the healthy lifestyle score over 5 years. „Stable unhealthy" category includes those participants who reported 0 or 1 healthy lifetyle beheaviour at phase 5 and 7. „Stable healthy" category includes those participants who reported 2, 3 or 4 healthy lifetyle behaviors at phase 5 and 7.