

Supplementary information

Supplemental table 1: statin classification regarding generation and potency.

Statin	ATC code	Generation	Potency
lovastatin	C10AA02	First	Low
pravastatin	C10AA03	First	Low
fluvastatin	C10AA04	First	Low
simvastatin	C10AA01	Second	Intermediate
pitavastatin	C10AA08	Second	Intermediate
atorvastatin	C10AA05	Second	High
rosuvastatin	C10AA07	Third	High

Statins were ordered according to their potency. Adapted from {Maji, 2013 #86;Stone, 2014 #85}.

Supplementary table 2: thresholds to define dyslipidemia according to the SCORE equation recalibrated for Switzerland.

Risk (%)	Dyslipidemia	Control
≥10, or very high risk	≥1.8	<1.8
≥5 to <10, or high-risk	≥2.6	<2.6
≥1 to <5	≥4.0	<4.0
<1	≥5.0	<5.0

Values are for LDL-cholesterol and in mmol/L. Adapted from {Catapano, 2016 #60}.

Supplementary table 3: comparison between included and excluded participants, Bus Santé study, Geneva, Switzerland.

	Included	Excluded	P-value
N	11,295	1820	
Woman (%)	5847 (51.8)	919 (50.5)	0.314
Age (years)	50.7 ± 11.9	37.1 ± 30.1	<0.001
Educational level (%)			<0.001
Primary	940 (8.3)	103 (6.2)	
Secondary	4919 (43.6)	802 (48.1)	
Tertiary	5436 (48.1)	762 (45.7)	
Swiss nationality (%)	7470 (66.1)	1289 (70.5)	<0.001
Marital status (%)			<0.001
Single	1376 (12.2)	875 (48.0)	
Married/couple	7717 (68.3)	775 (42.5)	
Divorced	1620 (14.3)	128 (7.0)	
Widowed	582 (5.2)	44 (2.4)	
Smoking categories (%)			<0.001
Never	5414 (47.9)	955 (54.2)	
Former	3516 (31.1)	348 (19.8)	
Current	2365 (20.9)	459 (26.1)	
Body mass index (kg/m ²)	25.2 ± 4.5	23.9 ± 4.3	<0.001
Body mass index categories (%)			<0.001
Normal	6018 (53.3)	1058 (68.4)	
Overweight	3760 (33.3)	352 (22.8)	
Obese	1517 (13.4)	136 (8.8)	
Hypertension (%)	2669 (23.6)	204 (11.2)	<0.001
Diabetes (%)	828 (7.3)	63 (3.5)	<0.001
History of CVD (%)	501 (4.4)	47 (2.6)	<0.001

Results are expressed as number of participants (column %) for categorical variables and as average ± standard deviation for continuous variables. Between-groups comparisons performed using chi-square for categorical variables and student's t-test for continuous variables.

Supplementary table 4: trends in total, HDL and LDL cholesterol before and after the issuing of the ESC dyslipidemia guidelines of 2011 and 2016 and of the AHA guidelines of 2013, Bus Santé study, Geneva, Switzerland.

	Total cholesterol	HDL cholesterol	LDL cholesterol
ESC 2011 guidelines			
Before	-0.032 (-0.051 ; -0.014)	0.006 (0 ; 0.012)	-0.011 (-0.028 ; 0.005)
After	-0.053 (-0.063 ; -0.043)	0.025 (0.021 ; 0.029)	-0.082 (-0.091 ; -0.073)
Test for interaction	0.040	<0.001	<0.001
AHA 2013 guidelines			
Before	-0.009 (-0.021 ; 0.004)	0.005 (0.001 ; 0.010)	-0.001 (-0.012 ; 0.010)
After	-0.067 (-0.082 ; -0.053)	0.009 (0.003 ; 0.015)	-0.08 (-0.094 ; -0.067)
Test for interaction	<0.001	0.231	<0.001
ESC 2016 guidelines			
Before	-0.008 (-0.016 ; -0.001)	0.025 (0.022 ; 0.028)	-0.028 (-0.035 ; -0.022)
After	-0.086 (-0.127 ; -0.046)	-0.006 (-0.023 ; 0.011)	-0.070 (-0.107 ; -0.033)
Test for interaction	<0.001	<0.001	0.027

Results are expressed as slope and (95% confidence interval) for a one-year increase obtained using linear regression stratified on period and adjusting for age (continuous), gender (man, woman), nationality (Swiss/non-Swiss), marital status (4 categories), smoking categories (never, former, current), BMI categories (normal, overweight, obese), hypertension (yes/no), diabetes (yes/no) and personal history of CVD (yes/no). Interaction assessed using ANOVA adjusting for the same covariates.