

**Table S1.** Analysis of the activity of antioxidant enzymes and FRAP according to factors associated with dyslipidemia or antioxidant enzyme activity.

		Catalase				
Factor		PON1 Activity (U/ml)	SOD1 Activity (U/mg)	Activity (k/mg)	Milliequivalents of Trolox (µM)	Ceruloplasmin activity (U/ml)
		273.13 ± 114.89	10.71 ± 2.87	0.38 ± 0.20	960.36 ± 356.28	2.26 ± 0.36
Physical activity	Moderate	284.08 ± 144.66	10.87 ± 2.63	0.32 ± 0.17	992.15 ± 361.08	2.29 ± 0.31
	High	264.90 ± 130.43	11.26 ± 2.99	0.33 ± 0.18	1054.39 ± 405.82	2.29 ± 0.32
	p-value	0.245	0.156	0.064	0.070	0.774
Smoking habit	Nonsmoker	274.84 ± 135.41	11.10 ± 2.89	0.33 ± 0.18	980.96 ± 363.89	2.28 ± 0.32
	Current smoker	281.32 ± 134.29	11.13 ± 2.84	0.32 ± 0.17	1073.15 ± 446.22	2.31 ± 0.33
	Ex-smoker	260.87 ± 136.27	10.69 ± 2.63	0.32 ± 0.17	1094.86 ± 359.11	2.29 ± 0.33
	p-value	0.504	0.385	0.625	0.005	0.601
Gender	Women	268.98 ± 133.42	11.34 ± 3.03	0.32 ± 0.18	921.37 ± 326.65	2.28 ± 0.30
	Men	282.05 ± 138.26	10.53 ± 2.39	0.34 ± 0.17	1184.91 ± 416.27	2.30 ± 0.36
	p-value	0.244	0.001	0.028	<0.001	0.354
Alcohol consumer	Yes	271.05 ± 133.26	10.96 ± 2.91	0.32 ± 0.17	1030.68 ± 393.38	2.27 ± 0.30
	No	280.82 ± 140.39	11.25 ± 2.63	0.35 ± 0.18	987.79 ± 356.98	2.30 ± 0.33
	p-value	0.417	0.255	0.145	0.209	0.341
Age	Correlation	-0.32	0.040	0.034	-0.089	0.001
	p-value	0.430	0.315	0.393	0.025	0.970
Caloric intake	Correlation	0.081	-0.091	0.059	0.131	0.021
	p-value	0.042	0.022	0.138	0.001	0.597

Categorical variables with more than two categories were compared using one-way ANOVA or the Kruskal-Wallis test (according to the fulfillment of the correspondent assumptions), whereas those with two categories were compared by Student's *t*-test or the Mann-Whitney U-test (according to the fulfillment of the correspondent assumptions). For continuous variables a Pearson correlation test was used without adjustment for other covariates.

**Table S2.** Association between antioxidant enzyme activities and FRAP.

Parameter		PON1	SOD1	Catalase		
		Activity (U/ml)	Activity (U/mg)	Activity (k/mg)	Milliequivalents of Trolox (µM)	Ceruloplasmin activity (U/ml)
PON1 activity (U/ml)	Correlation	-	-.095	.058	-.192	-.080
	p-value	-	.018	.151	.000	.046
SOD1 activity (U/mg)	Correlation	-.095	-	.267	.105	.114
	p-value	.018	-	.000	.009	.004
Catalase activity (k/mg)	Correlation	.058	.267	-	-.452	-.028
	p-value	.151	.000	-	.000	.485
Milliequivalents of Trolox (µM)	Correlation	-.192	.105	-.452	-	.022
	p-value	.000	.009	.000	-	.577
Ceruloplasmin activity (U/ml)	Correlation	-.080	.114	-.028	.022	-
	p-value	.046	.004	.485	.577	-

The correlations are the results from a partial correlation analysis adjusted by age, gender, tobacco smoking, alcohol use, physical activity, and caloric intake.

**Table S3.** Results from the linear regression models considering the main effects of the components of lipid profiles and their association with the activity of superoxide dismutase-1, catalase, and FRAP.

Parameter	Term in the Equation	Unadjusted β Coefficient (95%CI)	Unadjusted Standardize d β Coefficient	p- Value	Adjusted β Coefficient (95%CI)	Adjusted Standardize d β Coefficient	p- Value
			d β Coefficient				
Superoxide dismutase-1	↑TG	0.12 (-1.09, 1.33)	0.020	0.845	0.56 (-0.66, 1.79)	0.095	0.369
	↑LDLC	0.20 (-0.55, 0.96)	0.034	0.599	0.14 (-0.63, 0.91)	0.024	0.718
	↓HDLC	-0.08 (-0.76, 0.61)	-0.013	0.826	-0.17 (-0.85, 0.51)	-0.029	0.629
	↑TGx↑LDLC	-0.87 (-2.42, 0.68)	-0.120	0.272	-0.95 (-2.49, 0.59)	-0.132	0.227
	↑TGx↓HDLC	-0.101 (-1.56, 1.36)	-0.015	0.893	-0.35 (-1.81, 1.11)	-0.047	0.640
	↑LDLCx↓HDLC	0.72 (-0.69, 2.13)	0.088	0.319	0.73 (-0.67, 2.13)	0.090	0.306
	↑TGx↑LDLCx↓HDLC	-0.39 (-2.56, 1.78)	-0.041	0.726	-0.32 (-2.45, 1.84)	-0.033	0.771
	↑TG	0.03 (-0.08, 0.12)	0.051	0.627	-0.01 (-0.11, 0.09)	-0.013	0.809
Log catalase activity	↑LDLC	-0.01 (-0.07, 0.05)	-0.018	0.778	-0.02 (-0.08, 0.05)	-0.030	0.651
	↓HDLC	-0.04 (-0.09, 0.02)	-0.077	0.207	-0.04 (-0.09, 0.02)	-0.077	0.209
	↑TGx↑LDLC	0.01 (-0.12, 0.14)	0.016	0.883	0.03 (-0.10, 0.16)	0.049	0.656
	↑TGx↓HDLC	-0.00 (-0.13, 0.12)	-0.008	0.944	0.01 (-0.11, 0.13)	0.023	0.837
	↑LDLCx↓HDLC	0.05 (-0.07, 0.16)	0.069	0.437	0.05 (-0.07, 0.17)	0.076	0.389
	↑TGx↑LDLCx↓HDLC	-0.06 (-0.24, 0.12)	-0.073	0.531	-0.07 (-0.25, 0.11)	-0.092	0.428
	↑TG	0.04 (-0.02, 0.11)	0.136	0.183	0.02 (-0.05, 0.08)	0.048	0.624
	↑LDLC	0.01 (-0.03, 0.05)	0.028	0.665	0.03 (-0.01, 0.07)	0.093	0.132
Log ferric- reducing ability	↓HDLC	0.01 (-0.03, 0.05)	0.030	0.615	0.03 (-0.10, 0.06)	0.081	0.153
	↑TGx↑LDLC	0.03 (-0.06, 0.11)	0.065	0.547	0.01 (-0.07, 0.09)	0.022	0.831
	↑TGx↓HDLC	0.02 (-0.06, 0.10)	0.066	0.543	0.04 (-0.04, 0.11)	0.103	0.315
	↑LDLCx↓HDLC	0.02 (-0.06, 0.10)	0.044	0.612	0.01 (-0.06, 0.09)	0.031	0.702
	↑TGx↑LDLCx↓HDLC	-0.08 (-0.20, 0.04)	-0.149	0.191	-0.07 (-0.18, 0.04)	-0.139	0.198

The adjusted β coefficient resulted from the linear models adjusted for all the covariates (age, gender, tobacco smoking, alcohol use, physical activity, and caloric intake).