

**Table S1.** Medical history and medical treatment variables reported in the studied group.

Variable	Both sexes (n = 246)	Males (n = 124)	Females (n = 122)
<i>Medical indices</i>			
Age [years]	62.4 ± 1.7	62.9 ± 1.7	62.6 ± 1.6 <sup>T*</sup>
Current smoking [%]	23.4	23.4	21.3 <sup>F, n.s.</sup>
BMI [kg/m <sup>2</sup> ]	27.3 (24.7 – 30.3)	27.5 (25.06 – 30.4)	27.2 (24.4 – 30.04) <sup>U, n.s.</sup>
WHR	0.92 (0.84 – 1.00)	0.99 (0.94 – 1.04)	0.84 (0.80 – 0.91) <sup>U, ††</sup>
Hypertension [%]	46.1	53.2	39.3 <sup>F, *</sup>
Hypercholesterolaemia [%]	62.7	58.8	67.2 <sup>F, n.s.</sup>
Type 2 diabetes mellitus [%]	9.3	11.3	7.4 <sup>F, n.s.</sup>
Myocardial infarction in the past [%]	1.6	2.4	0.8 <sup>F, n.s.</sup>
Stroke in the past [%]	2.8	4.0	1.6 <sup>F, n.s.</sup>
Osteoporosis [%]	11.3	2.4	20.5 <sup>F, ††</sup>
Diseases of stomach and duodenum [%]	32.4	27.4	37.7 <sup>F, *</sup>
Cancer in the past [%]	6.8	5.6	8.2 <sup>F, n.s.</sup>
Ophtalmologic diseases [%]	20.2	20.1	20.5 <sup>F, n.s.</sup>
Depression [%]	14.9	9.7	20.5 <sup>F, #</sup>
Chronic obstructive pulmonary disease [%]	12.1	10.5	13.9 <sup>F, n.s.</sup>
Joints diseases [%]	48.2	44.3	52.5 <sup>F, n.s.</sup>
<i>Medicines taken currently</i>			
Blocker of histamine receptor H2 [%]	0.0	0.0	0.0 <sup>F, n.s.</sup>
Acetylsalicylic acid [%]	0.0	0.0	0.0 <sup>F, n.s.</sup>
Clopidogrel or ticlopidine	0.0	0.0	0.0 <sup>F, n.s.</sup>
Acenonocoumarol [%]	0.0	0.0	0.0 <sup>F, n.s.</sup>
Nitrates [%]	0.4	0.8	0.0 <sup>F, n.s.</sup>
Beta blockers [%]	19.5	19.3	19.7 <sup>F, n.s.</sup>
Digoxin [%]	0.0	0.8	0.0 <sup>F, n.s.</sup>
Angiotensin converting enzyme inhibitors [%]	18.2	18.5	18.8 <sup>F, n.s.</sup>
Calcium channel blockers [%]	10.6	13.7	7.4 <sup>F, *</sup>
Indapamide [%]	10.5	12.1	9.0 <sup>F, n.s.</sup>
Spironolactone [%]	0.8	0.8	0.8 <sup>F, n.s.</sup>

Sartans [%]	5.7	4.0	6.5 <sup>F, n.s.</sup>
Thiazide [%]	3.2	1.6	4.1 <sup>F, n.s.</sup>
Amiloride [%]	0.4	0.0	0.8 <sup>F, n.s.</sup>
Torsemide [%]	0.4	0.8	0.8 <sup>F, n.s.</sup>
Eplerenone [%]	0.0	0.8	0.0 <sup>F, n.s.</sup>
Alpha blockers [%]	5.7	11.3	0.0 <sup>F, ††</sup>
Statins [%]	17.0	19.3	14.7 <sup>F, n.s.</sup>
Fibrates [%]	2.4	0.8	4.0 <sup>F, *</sup>
Bisphosphonates [%]	2.4	0.0	4.9 <sup>F, #</sup>
Allopurinol [%]	2.4	4.0	1.6 <sup>F, n.s.</sup>
Insulin [%]	2.4	4.8	0.0 <sup>F, #</sup>
Metformin [%]	6.5	6.5	6.6 <sup>F, n.s.</sup>
Gliclazide/glimepiride [%]	3.7	5.6	1.6 <sup>F, *</sup>
Steroids [%]	1.6	0.0	3.3 <sup>F, *</sup>
Methotrexate [%]	1.2	0.8	1.6 <sup>F, n.s.</sup>
Non-steroidal anti-inflammatory drugs [%]	2.0	2.4	1.6 <sup>F, n.s.</sup>
Beta mimetics [%]	3.2	2.4	4.1 <sup>F, n.s.</sup>
Antihistamines [%]	1.6	0.0	3.2 <sup>F, *</sup>
Antidepressants [%]	3.2	1.6	4.9 <sup>F, n.s.</sup>
Neuroleptics [%]	0.8	0.8	0.8 <sup>F, n.s.</sup>
Vinpocetine/nootropics [%]	3.7	4.0	3.3 <sup>F, n.s.</sup>
Trimetazidine [%]	0.8	0.8	0.8 <sup>F, n.s.</sup>
Mesalazine [%]	0.4	0.0	0.8 <sup>F, n.s.</sup>
Trimebutine [%]	0.8	0.8	0.8 <sup>F, n.s.</sup>
Diosmin [%]	2.4	0.0	4.9 <sup>F, #</sup>
Levodopa [%]	0.4	0.8	0.0 <sup>F, n.s.</sup>

Continuous variables presented as means  $\pm$  SD, medians with interquartile ranges (from lower [25%] to upper [75%] quartile). Categorical variables (not adjusted) presented as percentage fractions of a whole group of investigated patients.

Comparisons between men and women performed with the use of unpaired Student *t* test (<sup>T</sup>), Mann–Whitney *U* test (<sup>U</sup>) or (<sup>F</sup>) Fisher's exact test. \**P* ≤ 0.05, #*P* < 0.01, ††*P* < 0.0001, <sup>n.s.</sup>*P* > 0.05..

*Abbreviations used:* BMI. body mass index; WHR, waist-hip ratio.

**Table S2.** Canonical correlations between the set of concentrations of diet minerals and blood platelet aggregation in older men and women

<i>platelet aggregation (dependent variable)</i>	<i>total redundance [%]</i>	<i>explanatory variables (set 2)</i>	<i>extracted variance [%]</i>	<i>total redundance [%]</i>	<i>canonical correlation</i>	<i>canonical determination [R<sup>2</sup>]</i>	<i>P</i>	<i>Wilks' lambda</i>	<i>best contributors expl var</i>
<b>set I</b>									
<i>AA-dependent</i>	6.859%	<i>microelements</i>	26.179%	1.844%	0.257	0.066	0.150	0.931	Zn, K, P
<i>collagen--dependent</i>	8.779%	<i>microelements</i>	22.351%	1.952%	0.290	0.084	0.072	0.912	Zn, P, K, Mg, Fe
<i>ADP-dependent</i>	10.662%	<i>microelements</i>	20.690%	2.226%	0.323	0.104	0.020	0.893	Zn, K, P, Fe
<b>set II</b>									
<i>AA-dependent</i>	6.895%	<i>microelements</i>	26.132%	1.842%	0.257	0.066	0.149	0.931	Zn, K, P
<i>collagen--dependent</i>	8.836%	<i>microelements</i>	22.180%	1.944%	0.291	0.085	0.069	0.912	Zn, P, K, Mg, Fe
<i>ADP-dependent</i>	10.712%	<i>microelements</i>	20.615%	2.223%	0.324	0.105	0.018	0.893	Zn, K, P, Fe
<b>set III</b>									
<i>AA-dependent</i>	6.857%	<i>microelements</i>	26.091%	1.825%	0.257	0.066	0.147	0.931	Zn, K, P
<i>collagen--dependent</i>	8.837%	<i>microelements</i>	22.164%	1.946%	0.291	0.084	0.074	0.912	Zn, P, K, Mg, Fe
<i>ADP-dependent</i>	10.717%	<i>microelements</i>	20.653%	2.229%	0.323	0.104	0.021	0.893	Zn, K, P, Fe

R<sup>2</sup> is a squared canonical correlation coefficient (canonical determination), which is relevant to overall variance between canonical variables. Total redundancy is relevant to the variance between the canonical variable for set 2 (minerals of the study) and the variable describing whole blood platelet response to the agonization with AA, collagen or ADP; it shows the representation of a given canonical variable by the explanatory variables of the set 2. Extracted variance is a variance between a given canonical variable and the variables that build it up; it reflects how well a given canonical variable represents a given set of variables. The Wilks' lambda is the parameter reflecting the contribution of a set 2 to the explaining of the variance of a set 1; the lower is the Wilks' lambda,

the higher is the contribution. Canonical correlation was calculated with the use of the bootstrap-boosted procedure of resampling with replacement (10000 iterations). The following microelements were included in the set 2 (microelements): sodium (Na), potassium (K), calcium (Ca), phosphorus (P), magnesium (Mg), iron (Fe), zinc (Zn), copper (Cu) and manganese (Mn).