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Supplementary material

Toxic and essential elements in trabecular and cortical femoral neck of Serbian inhabitants: A correlation with whole blood samples

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Content

Table S1. Content of elements in whole blood, trabecular and cortical bones of male (n = 10) and female (n = 15) patients

Element	Gender	Trabecular bone		Cortical bone		Whole blood	
		Mean ± St. dev.	***t-test****	*Mean ± St. dev.*	***t-test***	*Mean ± St. dev.*	***t-test***
Ca (mg/g)	Men Women	273 ± 12 272 ± 19	0.928	269 ± 28 294 ± 52	0.181	97 ± 7 97 ± 8	0.949
Mg (mg/g)	Men Women	2.74 ± 0.29 2.81 ± 0.28	0.586	2.35 ± 0.29 2.57 ± 0.24	0.053	21 ± 2 20 ± 2	0.349
Na (mg/g)	Men Women	6.09 ± 0.45 5.97 ± 0.9	0.575	6.32 ± 0.54 6.42 ± 0.27	0.539	3742 ± 104 3665 ± 191	0.262
K (µg/g)	Men Women	436 ± 197 432 ± 204	0.952	477 ± 184 421 ± 117	0.352	204 ± 15 200 ± 34	0.717
Zn (µg/g)	Men Women	130 ± 12 125 ± 15	0.339	98 ± 19 104 ± 13	0.373	658 ± 213 689 ± 276	0.765
Sr (µg/g)	Men Women	53.9 ± 9.0 53.3 ± 18.0	0.919	57 ± 12 53 ± 16	0.517	29 ± 10 28 ± 8	0.666
Ni (µg/g)	Men Women	0.18 ± 0.14 0.2 ± 0.17	0.723	0.18 ± 0.14 0.24 ± 0.30	0.533	959 ± 169 1110 ± 254	0.114
Cu (µg/g)	Men Women	0.33 ± 0.17 0.31 ± 0.17	0.760	0.21 ± 0.14 0.18 ± 0.11	0.536	6 ± 5 5 ± 4	0.597
Pb (µg/g)	Men Women	1.09 ± 0.38 0.78 ± 0.41	0.073	1.05 ± 0.70 0.66 ± 0.92	0.270	31 ± 19 21 ± 16	0.174
Se (µg/g)	Men Women	0.09 ± 0.17 0.05 ± 0.03	0.349	0.084 ± 0.063 0.041 ± 0.029	**0.029**	45 ± 12 43 ± 15	0.739
V (µg/g)	Men Women	0.014 ± 0.023 0.013 ± 0.024	0.891	0.0030 ± 0.0048 0.0033 ± 0.0082	0.909	0.113 ± 0.044 0.127 ± 0.049	0.466
Mo (µg/g)	Men Women	0.20 ± 0.34 0.10 ± 0.17	0.318	0.0160 ± 0.0084 0.0180 ± 0.0127	0.666	1.57 ± 0.51 1.79 ± 0.60	0.362
Mn (µg/g)	Men Women	0.30 ± 0.26 0.26 ± 0.15	0.616	0.121 ± 0.081 0.124 ± 0.056	0.913	2.8 ± 1.3 3.0 ± 1.4	0.734
Co (µg/g)	Men Women	0.071 ± 0.095 0.027 ± 0.024	0.094	0.025 ± 0.031 0.012 ± 0.008	0.134	0.43 ± 0.20 0.47 ± 0.22	0.640
Cr (µg/g)	Men Women	2.9 ± 4.7 1.9 ± 2.8	0.512	0.39 ± 0.21 0.57 ± 0.46	0.278	1.01 ± 1.24 0.27 ± 0.54	0.051
Cd (µg/g)	Men Women	0.014 ± 0.011 0.015 ± 0.013	0.791	0.0090 ± 0.0099 0.0047 ± 0.0064	0.196	0.26 ± 0.21 0.21 ± 0.11	0.509
Rb (µg/g)	Men Women	0.10 ± 0.06 0.14 ± 0.11	0.349	0.105 ± 0.048 0.105 ± 0.055	0.988	100 ± 8 110 ± 35	0.392
As (ng/g)	Men Women	8.6 ± 5.3 8.9 ± 3.7	0.908	4.1 ± 2.1 4.2 ± 2.4	0.926	1.03 ± 0.34 1.05 ± 0.47	0.906
U (ng/g)	Men Women	0.37 ± 0.26 0.36 ± 0.18	0.934	0.42 ± 0.29 0.34 ± 0.19	0.375	17 ± 17 8 ± 10	0.107

*The mean difference is significant at the 0.05 level.

Table S2. Results of analysis of variances (ANOVA) for evaluation of element differencies in whole blood, trabecular and cortical bones according to age (categories: 50-59, 60-69, 70-79, 80+ age)

	Trabecular bone		Cortical bone		Whole blood	
	F	*Sig.**	*F*	*Sig.*	*F*	*Sig.*
Ca	1.092	0.374	0.946	0.436	0.908	0.454
Mg	1.501	0.243	0.291	0.832	1.094	0.374
Na	1.551	0.231	0.388	0.763	0.253	0.858
K	0.405	0.751	0.183	0.907	2.408	0.096
Zn	2.136	0.126	0.721	0.551	1.112	0.366
Sr	2.280	0.109	2.691	0.072	0.932	0.442
Ni	5.668	**0.005**	0.498	0.688	1.259	0.314
Cu	1.201	0.334	1.779	0.182	0.392	0.760
Pb	1.183	0.340	3.760	**0.026**	0.368	0.777
Se	0.369	0.776	0.987	0.418	3.580	**0.031**
V	0.274	0.844	0.441	0.726	0.272	0.845
Mo	1.248	0.318	0.609	0.616	0.397	0.757
Mn	0.995	0.415	1.991	0.146	0.117	0.949
Co	0.446	0.723	0.083	0.969	1.470	0.251
Cr	2.095	0.131	0.894	0.461	0.411	0.747
Cd	2.103	0.130	0.423	0.738	0.204	0.892
Rb	1.120	0.363	0.711	0.556	1.282	0.306
As	0.612	0.615	4.748	**0.011**	0.726	0.548
U	0.499	0.687	0.343	0.795	0.473	0.705

*The mean difference is significant at the 0.05 level