Supplementary materials

Table S1: Distribution of ages

	Mean	Median	Min-Max
<2y.o.	1.046154	1	0.6-2
>2y.o.	3.52381	3	3-5

Table S2: Swine diet composition.

Ingredients	**[%]**
Corn	44.02
Integral barley flour	14.67
Wheat bran	12.72
Soya extract flour	8.8
Carob	7.83
Wheat meal	7.83
Brown molasses	1.96
Calcium carbonate	1.17
Sodium bicarbonate	0.49
Sodium chloride	0.49
L-Lysine	0.02
TOT	100

Figure S1: Calibration curve for Crhomium.

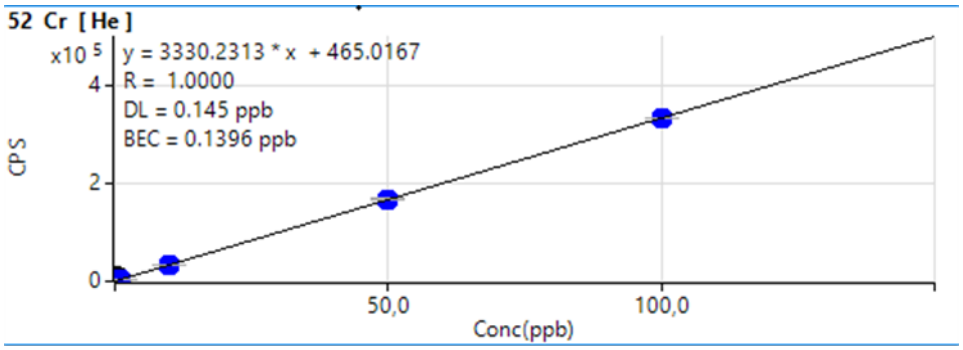

Figure S2: Calibration curve for Arsenic.

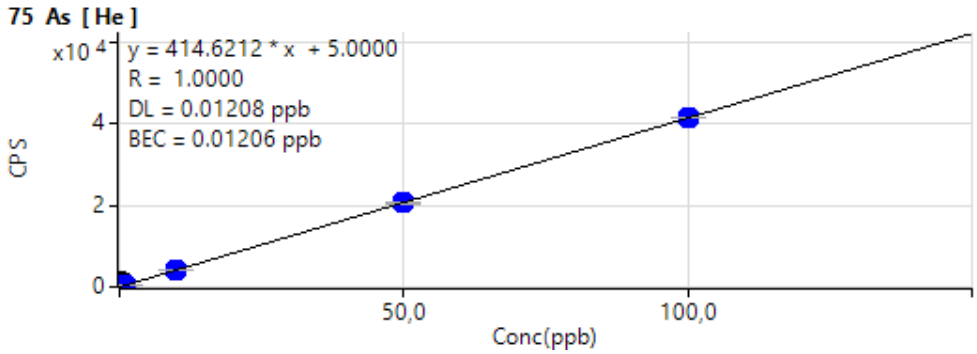

Figure S3: Calibration curve for Selenium.

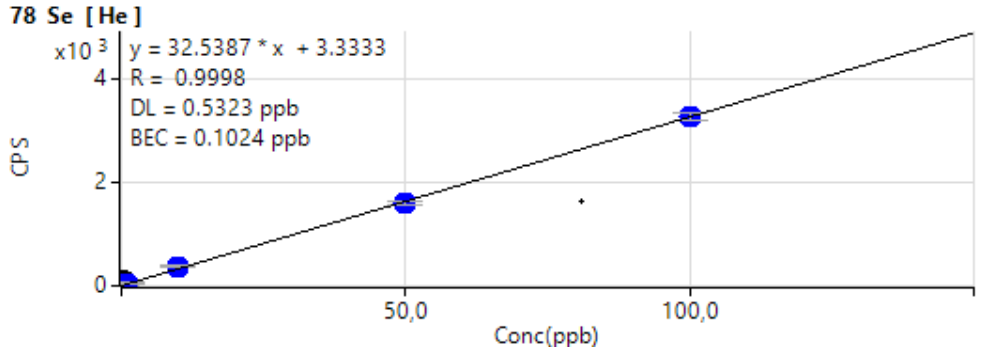

Figure S4: Calibration curve for Cadmium.

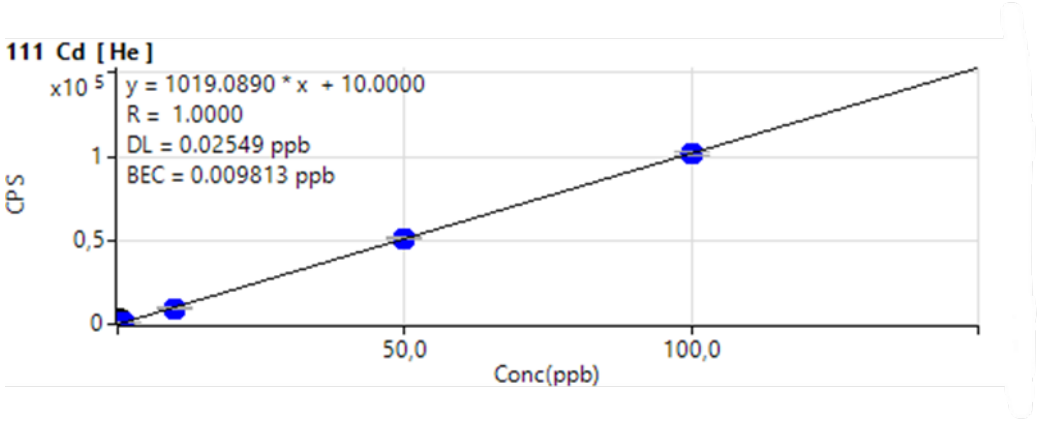

Figure S5: Calibration curve for Lead.

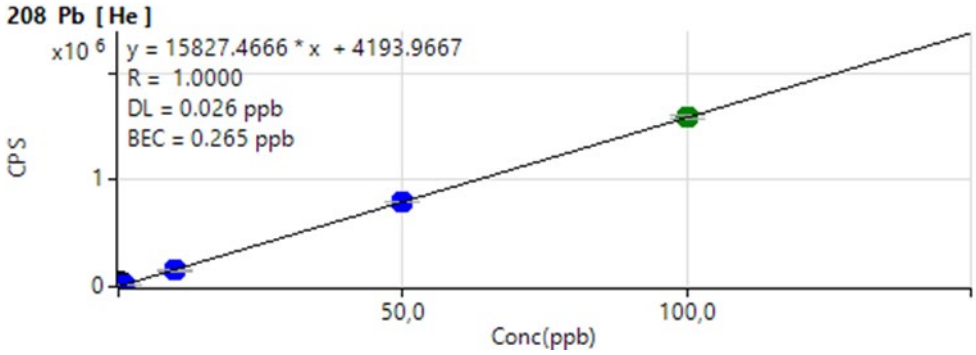

Table S3: Comparison of concentrations ($\mu g \cdot kg^{-1}$) of trace and potentially toxic elements in liver of wild boar according to the two different geographic areas PV and PC

Element	Area	Mean ± SD	Min - Max	25th	Mediana	75th	p-Value
Li	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	PV	4016.32 ± 478.02	3286.99 - 5059.56	3672.81	4054.09	4242.75	> 0.05
	PC	3999.27 ± 558.16	3155.22 - 5320.32	3551.03	3996.69	4295.41	
V	PV	47.15 ± 8.97	33.79 - 63.22	38.77	47.04	52.86	> 0.05
	PC	45.13 ± 9.28	33.56 - 68.90	39.31	41.56	50.01	
Cr	PV	57.06 ± 27.79	36.22 - 122.78	39.89	43.42	67.48	> 0.05
	PC	43.19 ± 4.47	35.91 - 51.65	38.56	43.84	45.77	
Mn	PV	2371.98 ± 769.24	1409.95 - 3595.02	1636.22	2441.56	2995.36	> 0.05
	PC	2377.19 ± 918.99	1396.41 - 3917.74	1584.62	2232.57	3182.82	
Fe	PV	210194 ± 73761.08	109920.34 - 356189.40	152940.88	207533.60	251237.68	> 0.05
	PC	227208.31 ± 83912.81	113142.74 - 341860.26	163245.67	189854.52	319272.58	
Co	PV	27.44 ± 4.14	21.69 - 35.40	24.52	26.58	30.07	> 0.05
	PC	26.67 ± 4.77	21.43 - 36.63	23.47	24.25	30.12	
Ni	PV	27.02 ± 8.16	15.62 - 41.06	20.15	26.15	33.20	> 0.05
	PC	28.21 ± 8.33	15.59 - 39.21	21.80	26.99	36.94	
Cu	PV	3543.53 ± 522.92	2682.02 - 4453.64	3203.49	3516.74	3849.41	> 0.05
	PC	3304.78 ± 603.44	2393.55 - 4606.05	2826.75	3435.96	3635.14	
Zn	PV	30371.08 ± 2874.59	25470.24 - 38400.22	28649.67	29814.06	32111.73	> 0.05
	PC	31046.19 ± 3136.80	26822.84 - 38138.15	28442.01	31057.21	33525.35	
As	PV	16.42 ± 10.22	7.06 - 34.65	8.25	13.76	23.43	> 0.05
	PC	11.40 ± 6.34	7.22 - 33.89	7.76	8.77	13.81	
Se	PV	238.09 ± 53.77	148.57 - 309.41	193.74	249.75	281.08	> 0.05
	PC	240.03 ± 41.71	169.72 - 302.94	210.20	240.49	272.97	
Mo	PV	758.06 ± 182.24	534.25 - 1023.87	576.53	769.26	924.70	> 0.05
	PC	691.75 ± 201.90	481.11 - 1039.25	555.38	575.11	892.81	
Cd	PV	156.47 ± 111.03	43.17 - 313.41	47.61	206.31	254.41	> 0.05
	PC	120.87 ± 108.75	38.52 - 303.65	50.41	52.00	240.15	
Sb	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	PV	75.46 ± 19.80	49.830 - 101.19	54.55	78.56	95.34	> 0.05
	PC	70.55 ± 21.81	50.03 - 105.29	51.81	55.65	93.60	
Tl	PV	4.99 ± 4.30	0.690 - 11.40	1.31	2.29	10.29	> 0.05
	PC	5.93 ± 3.72	0.70 - 11.55	2.32	5.63	9.45	
Pb	PV	51.81 ± 10.99	38.94 - 71.39	42.59	48.77	60.02	> 0.05
	PC	55.69 ± 11.07	39.69 - 71.96	47.23	56.75	64.29	

Table S4: Comparison of concentrations ($\mu g \cdot kg^{-1}$) of essential and non essential elements in muscle of wild boar according to the two different geographic areas PV and PC.

Element	Area	Mean ± SD	Min - Max	Percentile			p-Value
				25th	Mediana	75th	
Li	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	PV	5572.23 ± 2177.29	2943.25 - 8990.14	3700.64	4359.30	7588.88	> 0.05
	PC	5114.68 ± 2023.84	2987.73 - 8773.58	3208.22	3961.37	7262.17	
V	PV	72.52 ± 9.20	54.96 - 88.89	66.96	72.31	79.79	> 0.05
	PC	72.86 ± 9.33	59.87 - 97.24	64.90	71.82	79.30	
Cr	PV	157.86 ± 105.18	45.25 - 329.30	65.40	99.35	262.61	> 0.05
	PC	85.48 ± 25.42	46.92 - 128.90	63.12	91.10	99.79	
Mn	PV	628.04 ± 310.85	157.88 - 1126.62	316.93	624.47	911.58	> 0.05
	PC	587.81 ± 358.94	170.25 - 1112.37	296.93	340.34	971.17	
Fe	PV	31838.52 ± 8702.71	20628.17 - 46870.62	23477.91	29112.98	38065.84	> 0.05
	PC	27352.26 ± 6989.32	20134.93 - 47678.89	21909.98	25517.20	31307.11	
Co	PV	8.57 ± 6.06	3.40 - 20.20	4.23	5.53	14.29	< 0.05
	PC	4.37 ± 0.99	3.07 - 5.91	3.50	4.09	5.32	
Ni	PV	81.64 ± 35.03	18.54 - 135.52	60.48	78.82	104.52	< 0.05
	PC	60.13 ± 32.88	17.98 140.74	20.57	59.82	79.04	
Cu	PV	1836.40 ± 547.72	1155.87 - 2909.51	1467.84	1574.78	2318.64	> 0.05
	PC	1489.71 ± 190.4	1227.15 - 1808.12	1293.36	1535.15	1621.39	
Zn	PV	35492.01 ± 17614.1	16781.84 - 65909.36	19389.53	23017.68	48924.47	< 0.05
	PC	19425.25 ± 2505.25	15558.35 - 23473.28	17825.67	18878.96	21271.08	
As	PV	8.81 ± 1.59	6.75 - 11.84	7.61	8.41	9.80	> 0.05
	PC	8.71 ± 1.39	6.90 - 11.22	7.54	8.47	9.55	
Se	PV	116.63 ± 67.66	34.00 - 228.60	71.21	89.57	178.98	< 0.05
	PC	72.70 ± 31.35	37.51 - 166.31	39.86	73.70	89.36	
Mo	PV	9.44 ± 4.29	0.00 - 14.18	8.73	10.59	12.05	> 0.05
	PC	10.98 ± 2.10	7.87 - 13.53	8.38	11.85	12.76	
Cd	PV	11.86 ± 4.07	7.16 - 20.66	8.81	10.04	14.82	> 0.05
	PC	13.34 ± 5.01	7.55 - 21.59	9.08	13.26	15.97	
Sb	PV	N.D.	N.D.	N.D.	N.D.	N.D.	
	PC	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	PV	156.09 ± 102.76	54.86 - 337.08	62.56	117.89	245.18	> 0.05
	PC	96.30 ± 45.93	53.88 - 228.18	64.08	68.64	131.27	
Tl	PV	0.084 ± 0.21	0.00 - 0.61	0.00	0.00	0.00	> 0.05
	PC	0.026 ± 0.12	0.00 - 0.55	0.00	0.00	0.00	
Pb	PV	48.88 ± 7.43	35.76 - 63.35	43.30	49.21	51.97	> 0.05
	PC	50.24 ± 8.83	36.79 - 65.91	40.59	50.42	58.56	

Table S5: Comparison of concentrations ($\mu g \cdot kg^{-1}$) of essential and non essential elements in liver of wild boar according to age classes.

Element	Age class	Mean ± SD	Min - Max	Percentile			p-Value
				25th	Median	75th	
Li	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	< 2 y.o.	3924.77 ± 468.25	3155.22 - 4881.72	3583.92	3976.28	4237.88	> 0.05
	> 2 y.o.	4086 ± 554.14	3318.43 - 5320.32	3676.18	4094.93	4354.60	
V	< 2 y.o.	43.06 ± 6.10	34.82 - 54.04	37.67	41.34	48.03	> 0.05
	> 2 y.o.	47.86 ± 9.60	33.56 - 63.22	39.98	47.43	55.36	
Cr	< 2 y.o.	42.46 ± 4.22	36.22 - 49.49	38.34	42.31	45.42	> 0.05
	> 2 y.o.	57.03 ± 25.86	35.91 - 114.17	40.29	44.71	68.56	
Mn	< 2 y.o.	2474.52 ± 869.63	1396.41 - 3915.63	1590.49	2433.28	3309.35	> 0.05
	> 2 y.o.	2274.66 ± 811.75	1408.02 - 3917.74	1592.59	1853.24	2752.64	
Fe	< 2 y.o.	213839.11 ± 81212.15	109920.34 - 356189.40	150331.42	189923.36	275494.82	> 0.05
	> 2 y.o.	223563.21 ± 77392	113142.74 - 333019.24	165204.21	211863.29	291835.96	
Co	< 2 y.o.	27.37 ± 4.78	21.43 - 36.09	23.34	25.34	30.81	> 0.05
	> 2 y.o.	26.74 ± 4.14	21.77 - 36.63	23.71	25.32	29.09	
Ni	< 2 y.o.	26.59 ± 8.20	15.62 - 41.06	20.06	25.01	32.16	> 0.05
	> 2 y.o.	28.63 ± 8.21	15.59 - 39.21	23.27	30.20	35.98	
Cu	< 2 y.o.	3446.61 ± 562.74	2621.69 - 4606.05	2979.32	3511.46	3767.52	> 0.05
	> 2 y.o.	3401.70 ± 591.55	2393.55 - 4453.64	2956.64	3485.72	3771.05	
Zn	< 2 y.o.	30071.37 ± 2480.87	25470.24 - 34791.74	28716.08	29585.43	32018.93	> 0.05
	> 2 y.o.	31977.41 ± 4111.65	26822.84 - 40956.24	29117.34	31264.43	33525.35	
As	< 2 y.o.	10.47 ± 3.30	7.06 - 15.48	7.60	8.64	13.76	> 0.05
	> 2 y.o.	16.20 ± 10.58	7.42 - 34.65	8.13	12.90	23.35	
Se	< 2 y.o.	248.31 ± 39.01	163.23 - 302.94	224.53	251.88	275.34	> 0.05
	> 2 y.o.	229.82 ± 54.13	148.57 - 309.41	180.98	230.21	277.02	
Mo	< 2 y.o.	713.32 ± 202.47	481.11 - 1024.17	547.18	607.01	924.70	> 0.05
	> 2 y.o.	736.48 ± 187.13	531.50 - 1039.25	568.42	659.91	896.38	
Cd	< 2 y.o.	131.54 ± 113.32	40.69 - 310.91	47.87	51.76	255.45	> 0.05
	> 2 y.o.	145.79 ± 108.97	38.52 - 313.41	49.66	55.00	239.11	
Sb	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	< 2 y.o.	73.54 ± 21.18	49.83 - 101.19	54.55	59.59	95.56	> 0.05
	> 2 y.o.	72.47 ± 20.76	50.27 - 105.29	52.56	77.79	88.71	
Tl	< 2 y.o.	6.07 ± 4.03	0.73 - 11.55	2.24	5.49	10.29	> 0.05
	> 2 y.o.	4.88 ± 3.98	0.69 - 11.19	1.32	4.96	7.56	
Pb	< 2 y.o.	54.73 ± 10.85	39.69 - 71.39	45.34	54.93	62.77	> 0.05
	> 2 y.o.	52.76 ± 11.48	38.94 - 71.96	42.59	47.32	60.96	

Table S6: Comparison of concentrations (μg·kg-1) of essential and non essential elements in muscle of wild boar according to age classes.

				Percentile			
Element	age	Mean ± SD	Min - Max	25th	Mediana	75th	p-Value
Li	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	< 2 y.o.	5039.20 ± 2084.94	2974.10 - 8235.62	3407.16	3780.52	7492.65	> 0.05
	> 2 y.o.	5647.70 ± 2098.83	2943.25 - 8990.14	3647.54	6379.95	7345.56	
V	< 2 y.o.	73.14 ± 9.26	57.41 - 88.89	65.12	72.88	80.23	> 0.05
	> 2 y.o.	70.99 ± 7.44	54.96 - 82.46	66.86	71.71	75.40	
Cr	< 2 y.o.	150.36 ± 94.92	58.63 - 324.55	93.07	99.38	253.46	< 0.05
	> 2 y.o.	94.22 ± 65.19	45.25 - 329.30	61.19	65.09	111.32	
Mn	< 2 y.o.	515.75 ± 314.58	157.88 - 1060.02	275.60	340.34	854.69	< 0.05
	> 2 y.o.	700.08 ± 330.93	170.25 - 1126.62	338.05	725.86	993.06	
Fe	< 2 y.o.	29091.32 ± 9648.75	20134.93 - 46870.62	21823.47	23477.91	38065.84	> 0.05
	> 2 y.o.	30236.82 ± 6381.18	20859.10 - 47678.89	25554.82	30163.97	33523.25	
Co	< 2 y.o.	7.79 ± 6.29	3.07 - 20.20	3.43	4.24	14.29	> 0.05
	> 2 y.o.	5.29 ± 2.14	3.64 - 13.33	4.02	5.21	5.53	
Ni	< 2 y.o.	74.96 ± 28.28	18.00 - 135.52	58.52	75.90	94.42	> 0.05
	> 2 y.o.	66.80 ± 41.43	17.98 - 140.74	20.57	68.48	94.97	
Cu	< 2 y.o.	1805.45 ± 469.56	1227.15 - 2805.83	1502.34	1599.14	2279.57	< 0.05
	> 2 y.o.	1493.91 ± 280.36	1155.87 - 2335.55	1284.09	1470.63	1621.39	
Zn	< 2 y.o.	30797.65 ± 17911.71	15558.35 - 65909.36	17825.67	20037.37	47558.72	> 0.05
	> 2 y.o.	30653.98 ± 15552.83	18125.32 - 64744.32	19589.19	21271.08	48073.32	
As	< 2 y.o.	8.65 ± 1.49	6.75 - 11.84	7.27	8.35	9.40	> 0.05
	> 2 y.o.	8.86 ± 1.49	6.90 - 11.28	7.61	8.59	10.50	
Se	< 2 y.o.	112.65 ± 62.35	37.51 - 228.60	73.70	89.57	166.51	< 0.05
	> 2 y.o.	69.58 ± 33.27	34.00 - 166.31	39.74	71.06	88.95	
Mo	< 2 y.o.	10.90 ± 3.02	0.00 - 14.18	10.05	11.73	12.41	> 0.05
	> 2 y.o.	9.44 ± 3.78	0.00 - 13.53	8.25	10.08	12.40	
Cd	< 2 y.o.	14.16 ± 4.73	8.21 - 21.59	9.94	13.52	17.68	< 0.05
	> 2 y.o.	11.02 ± 3.90	7.16 - 20.34	7.81	9.29	13.98	
Sb	< 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
	> 2 y.o.	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	< 2 y.o.	138.18 ± 106.28	58.00 - 337.08	62.40	70.07	242.83	> 0.05
	> 2 y.o.	123.41 ± 62.56	53.88 - 262.46	67.13	124.32	139.82	
Tl	< 2 y.o.	0.02 ± 0.12	0.00 - 0.59	0.00	0.00	0.00	> 0.05
	> 2 y.o.	0.08 ± 0.21	0.00 - 0.61	0.00	0.00	0.00	
Pb	< 2 y.o.	48.06 ± 7.82	35.76 - 65.91	42.43	48.39	51.73	> 0.05
	> 2 y.o.	51.05 ± 8.26	37.20 - 63.35	45.05	53.17	59.11	

Table S7: Comparison of concentrations ($\mu g \cdot kg^{-1}$) of essential and non essential elements in liver of wild boar according to sexes.

				Percentile			
Element	Sex	Mean ± SD	Min - Max	25th	Median	75th	p-Value
Li	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	Female	3984.11 ± 442.58	3286.99 - 4881.72	3681.280	3962.66	4253.28	> 0.05
	Male	4038.36 ± 608.31	3155.22 - 5320.32	3518.333	4057.99	4261.40	
V	Female	44.99 ± 7.95	34.82 - 63.22	38.997	41.80	50.30	> 0.05
	Male	47.72 ± 10.45	33.56 - 68.90	38.755	47.89	55.17	
Cr	Female	43.33 ± 4.12	36.22 - 51.65	40.388	44.23	45.73	> 0.05
	Male	60.05 ± 30.52	35.91 - 122.78	38.505	42.79	85.52	
Mn	Female	2429.99 ± 868.19	1396.41 - 3917.74	1576.633	2368.74	3272.90	> 0.05
	Male	2298.41 ± 810.92	1408.02 - 3915.63	1602.210	2076.13	2938.89	
Fe	Female	218475.40 ± 84165.05	109920.34 - 341860.26	139606.015	194796.24	315235.39	> 0.05
	Male	219011.57 ± 72418.04	113142.74 - 356189.40	178715.037	208452.63	258740.53	
Co	Female	26.65 ± 4.66	21.43 - 36.63	23.408	24.95	29.79	> 0.05
	Male	27.61 ± 4.14	22.26 - 36.09	24.108	27.14	30.12	
Ni	Female	27.40 ± 8.46	15.62- 39.21	18.783	26.25	36.50	> 0.05
	Male	27.89 ± 7.99	15.59 - 41.06	22.250	27.81	34.98	
Cu	Female	3404.56 ± 612.72	2532.40 - 4606.05	2837.965	3496.14	3797.72	> 0.05
	Male	3451.09 ± 523.70	2393.55 - 4284.18	3224.195	3493.19	3720.63	
Zn	Female	30168.50 ± 2338.57	25470.24 - 34342.33	28649.670	29885.11	31740.53	> 0.05
	Male	32100.23 ± 4257.92	26822.84 - 40956.24	28976.622	31688.08	34055.64	
As	Female	10.11 ± 3.19	7.06 - 15.40	7.550	8.43	13.85	< 0.05
	Male	17.64 ± 10.76	7.60 - 34.65	8.763	13.56	31.52	
Se	Female	244.06 ± 39.21	164.90 - 302.90	220.653	245.12	276.38	> 0.05
	Male	232.19 ± 57.62	148.57 - 309.41	180.280	245.37	276.31	
Mo	Female	706.77 ± 204.23	481.11 - 1024.17	542.530	577.57	932.05	> 0.05
	Male	749.83 ± 178.93	527.59 - 1039.25	584.980	714.59	885.44	
Cd	Female	131.82 ± 114.09	38.52 - 310.91	48.353	51.88	269.93	> 0.05
	Male	148.08 ± 106.78	40.69 - 313.41	49.902	130.16	231.77	
Sb	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	Female	70.30 ± 20.96	49.83 - 101.19	52.367	58.34	93.72	> 0.05
	Male	76.72 ± 20.40	50.27 - 105.29	54.410	81.69	95.67	
Tl	Female	5.86 ± 3.93	0.70 - 11.55	2.235	5.43	10.53	> 0.05
	Male	4.90 ± 4.15	0.69 - 11.05	0.750	3.90	9.43	
Pb	Female	56.31 ± 10.88	40.75 - 71.96	47.178	56.12	64.98	> 0.05
	Male	50.22 ± 10.63	38.94 - 69.64	41.940	46.59	59.66	

Table S8: Comparison of concentrations (μg·kg-1) of essential and non essential elements in muscle of wild boar according to sexes.

Element	Sex	Mean ± SD	Min - Max	Percentile			p-Value
				25th	Mediana	75th	
Li	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
Al	Male	4988.70 ± 2040.85	2974.10 - 7731.17	3252.77	3686.66	7373.78	> 0.05
	Female	5609.52 ± 2128.07	2943.25 - 8990.14	3719.01	5362.61	7409.48	
V	Male	75.22 ± 8.14	63.72 - 97.24	69.43	74.19	79.67	> 0.05
	Female	70.79 ± 9.57	54.96 - 88.89	62.87	71.37	77.17	
Cr	Male	126.69 ± 85.25	45.25 - 344.67	72.86	99.36	126.57	> 0.05
	Female	145.25 ± 104.69	46.92 - 329.30	64.53	96.38	246.49	
Mn	Male	571.48 ± 348.29	170.25 - 1126.62	305.99	356.83	953.88	> 0.05
	Female	635.25 ± 324.52	157.88 - 1112.37	312.36	651.45	927.63	
Fe	Male	29086.44 ± 8235.6	20859.10 - 47678.89	22652.35	26209.71	33579.50	> 0.05
	Female	30802.16 ± 8759.72	20134.93 - 47153.56	22431.58	29981.99	37236.11	
Co	Male	6.74 ± 5.45	3.30 - 20.54	3.91	4.29	5.66	> 0.05
	Female	7.85 ± 5.66	3.07 - 20.20	3.83	5.38	12.99	
Ni	Male	63.32 ± 30.73	18.54 - 127.89	54.49	61.72	75.77	> 0.05
	Female	76.56 ± 37.97	17.98 - 140.74	57.20	78.93	98.10	
Cu	Male	1628.78 ± 402.79	1155.87 - 2565.77	1429.93	1545.97	1672.55	> 0.05
	Female	1824.76 ± 551.12	1237.35 - 2909.51	1465.91	1599.36	2289.34	
Zn	Male	27405.97 ± 15322.57	17298.22 - 64744.32	18542.67	19800.60	23270.32	> 0.05
	Female	33215.70 ± 17340.79	15558.35 - 65909.36	18979.04	22250.11	49030.97	
As	Male	8.70 ± 1.49	6.90- 11.84	7.56	8.47	9.45	> 0.05
	Female	8.79 ± 1.50	6.75 - 11.23	7.63	8.44	9.98	
Se	Male	91.56 ± 54.83	34.00 - 228.60	64.14	84.80	92.30	> 0.05
	Female	109.36 ± 67.39	37.51 - 235.83	70.91	85.77	169.63	
Mo	Male	10.63 ± 3.26	0.00 - 14.08	8.95	11.62	12.66	> 0.05
	Female	9.44 ± 4.08	0.00 - 14.18	8.25	10.51	12.22	
Cd	Male	13.19 ± 4.60	7.16 - 21.58	8.95	13.39	16.28	> 0.05
	Female	12.15 ± 4.59	7.55 - 21.59	8.99	9.90	15.71	
Sb	Male	N.D.	N.D.	N.D.	N.D.	N.D.	
	Female	N.D.	N.D.	N.D.	N.D.	N.D.	
Ba	Male	119.22 ± 85.24	53.88 - 334.27	62.01	66.45	137.19	> 0.05
	Female	149.29 ± 97.90	54.86 - 358.98	68.02	122.19	231.84	
Tl	Male	0.03 ± 0.14	0.00 - 0.61	0.00	0.00	0.00	> 0.05
	Female	0.07 ± 0.19	0.00 - 0.59	0.00	0.00	0.00	
Pb	Male	49.37 ± 7.61	39.39 - 63.35	42.65	47.75	55.69	> 0.05
	Female	49.69 ± 8.59	35.76 - 65.91	44.55	50.20	55.36	

Table S9: Comparison between concentrations ($\mu g \cdot kg^{-1}$) of essential and non essential elements in liver of wild boar and swine.

Element	Species	Mean ± SD	Min - Max	Percentile			p-Value
				25th	Median	75th	
Li	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Co	Swine	28.25 ± 8.16	13.8 - 44.6	23.88	27.91	34.16	p>0.05
	Wild boar	27.05 ± 4.42	21.43 - 36.6	23.67	25.33	30.15	
Cu	Swine	16700.72 ± 8969.23	7279.6 - 34576.3	9115.43	16819.97	18882.48	p<0.05
	Wild boar	3424.16 ± 569.92	2393.55 - 4606.1	2906.65	3495.93	3797.72	
Fe	Swine	336705.3 ± 95226.41	186823.61 - 572838.8	282535.7	318962.8	390318.2	p<0.05
	Wild boar	218701.16 ± 78400.76	109920.34 - 356189.4	160623.3	206287.8	299503.5	
Mn	Swine	2634.62 ± 977.11	1315.67 - 4737.6	1656.91	2657.7	3181.25	p>0.05
	Wild boar	2374.59 ± 835.9	1396.41 - 3917.7	1582.97	2301.61	3088.43	
Mo	Swine	2054.06 ± 307.38	1421.13 - 2718.3	1927.27	2076.3	2198.3	p<0.05
	Wild boar	724.9 ± 192.66	481.11 - 1039.3	559.68	626.64	909.07	
Ni	Swine	58.99 ± 57.33	10.55 - 153.4	13.15	35.05	132.07	p>0.05
	Wild boar	27.61 ± 8.16	15.59 - 41.1	21.35	26.25	35.23	
Se	Swine	320.24 ± 25.86	273.18 - 371.9	297.49	318.91	341.34	p<0.05
	Wild boar	239.06 ± 47.47	148.57 - 309.4	208.26	245.12	276.96	
Zn	Swine	66531.84 ± 17365.84	36310.75 - 99415.6	51416.77	66518.42	80377.87	p<0.05
	Wild boar	31236.67 ± 3644.44	25470.24 - 40956.2	28716.08	30197.55	32883	
Al	Swine	12029.17 ± 9551.85	2176.35 - 28549.4	2683.48	13290.72	18216.73	p>0.05
	Wild boar	4055.12 ± 585.28	3155.22 - 5814.6	3650.7	3997.19	4275.25	
As	Swine	6.28 ± 1.73	3.3 - 10.2	5.08	6.31	7.13	p<0.05
	Wild boar	14.49 ± 9.25	7.06 - 34.6	7.81	10.71	14.87	
Ba	Swine	73.94 ± 42.03	32.66 - 162.7	38.76	75.77	84.54	p>0.05
	Wild boar	73 ± 20.69	49.83 - 105.3	53.4	68.69	94.38	
Cd	Swine	48.34 ± 11.25	33.07 - 75.6	42.15	45.45	51.07	p<0.05
	Wild boar	138.67 ± 109.89	38.52 - 313.4	48.35	53.87	243.55	
Cr	Swine	116.37 ± 127.26	5.52 - 329.1	6.71	47.8	281.41	p>0.05
	Wild boar	53.39 ± 24.2	35.91 - 122.8	39.83	44.23	48.61	
Pb	Swine	41.17 ± 12.6	17.19 - 63.4	35.39	44.03	50.52	p<0.05
	Wild boar	53.75 ± 11.06	38.94 - 72	42.79	54.09	61.06	
Sb	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Tl	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	5.46 ± 4	0.69 - 11.6	1.94	5.33	9.8	
V	Swine	68.4 ± 21.47	35.93 - 113.5	51.26	66.94	72.46	p<0.05
	Wild boar	46.14 ± 9.06	33.56 - 68.9	38.96	44.45	51.55	

Table S10: Comparison between concentrations ($\mu g \cdot kg^{-1}$) of essential and non essential elements in muscle of wild boar and swine.

Element	Species	Mean ± SD	Min - Max	Percentile			p-Value
				25th	Median	75th	
Li	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Be	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Co	Swine	3.31 ± 0.99	2.07 - 5.82	2.402	3.26	3.98	p<0.05
	Wild boar	7.37 ± 5.53	3.07 - 20.54	3.905	5.19	5.86	
Cu	Swine	2192.87 ± 267.98	1696.51 - 2661.15	1958.62	2234.89	2421.32	p<0.05
	Wild boar	1740.77 ± 497.28	1155.87 - 2909.51	1429.928	1572.22	1786.96	
Fe	Swine	30023.03 ± 5011.51	20760.52 - 42414	26520.222	29857.6	33008.94	p>0.05
	Wild boar	30066.85 ± 8479.75	20134.93 - 47678.89	22563.592	28726.03	34355.85	
Mn	Swine	344.42 ± 72.72	188.29 - 445.62	283.923	353.97	402.32	p<0.05
	Wild boar	607.92 ± 332.26	157.88 - 1126.62	305.993	562.58	931.27	
Mo	Swine	32.14 ± 5.93	18.64 - 42.71	29.2	32.7	35.49	p<0.05
	Wild boar	9.95 ± 3.76	0 - 14.18	8.395	11.04	12.41	
Ni	Swine	22.18 ± 23.45	8.17 - 71.17	9.352	10.5	12.75	p<0.05
	Wild boar	70.88 ± 35.28	17.98 - 140.74	57.045	71.78	94.83	
Se	Swine	103.71 ± 13.68	84.83 - 130.56	92.343	102.44	112.35	p<0.05
	Wild boar	101.72 ± 62.24	34 - 235.83	66.12	84.8	99.84	
Zn	Swine	46536.27 ± 5740.44	36327.3 - 59087.38	42291.388	47079.32	50876.56	p<0.05
	Wild boar	30725.82 ± 16568.13	15558.35 - 65909.36	18542.667	21048.99	47944.67	
Al	Swine	3191.31 ± 839.44	2126.67 - 4965.56	2602.878	2842.53	3995.05	p<0.05
	Wild boar	5343.45 ± 2089.05	2943.25 - 8990.14	3411.582	4160.85	7398.73	
As	Swine	6.41 ± 1.47	4.4 - 8.85	5.13	5.77	7.82	p<0.05
	Wild boar	8.76 ± 1.48	6.75 - 11.84	7.558	8.44	9.74	
Ba	Swine	49.47 ± 17.20	19.92 - 80.39	35.442	44.83	65.02	p<0.05
	Wild boar	136.41 ± 92.83	53.88 - 358.98	63.73	108.53	148.91	
Cd	Swine	2.50 ± 1.80	0.56 - 6.1	0.682	1.98	3.24	p<0.05
	Wild boar	12.60 ± 4.57	7.16 - 21.59	8.877	10.43	15.8	
Cr	Swine	25.02 ± 15.67	8.73 - 54.67	14.027	19.9	39.67	p<0.05
	Wild boar	137.29 ± 96.17	45.25 - 344.67	64.935	99.02	138	
Pb	Swine	41.06 ± 39.81	4.97 - 115.45	7.09	10.59	83.22	p>0.05
	Wild boar	49.56 ± 8.09	35.76 - 65.91	43.127	49.6	55.72	
Sb	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	N.D.	N.D.	N.D.	N.D.	N.D.	
Tl	Swine	N.D.	N.D.	N.D.	N.D.	N.D.	
	Wild boar	0.05 ± 0.17	0 - 0.61	0	0	0	
V	Swine	59.43 ± 7.17	46.39 - 74.19	53.547	60.58	64.4	p<0.05
	Wild boar	72.69 ± 9.15	54.96 - 97.24	65.58	72.18	79.67	