Table S1. The maximum admissible concentration of selected elements establishes by European legislation (in mg/kg of fresh weight) for some foodstuff

Heavy metals	Maximum Acceptable Limit (M.A.L.) (mg/kg)				
	Type of food				
	Maximum permissible limit according to Romanian Ministry of Agriculture Food and Forestry Order No. 293/640/2001-1/2002 on the security and quality conditions for fresh fruit and vegetables for human consumption (M.Of 173/13 March 2002) mg/kg wet product weight				
	Fresh fruit, excluding leafy vegetables	Leafy vegetables	Fresh fruit, including melons, table grapes and strawberries	-	-
As	0.50	-	0.50	-	-
Cd	0.10	0.20	0.05	-	-
Pb	0.50	0.50	0.50	-	-
Zn	15.00	-	5.00	-	-
Cu	5.00	-	5.00	-	-
Sn	-	-	-	-	-
Hg	0.05	0.03	0.05	-	-
	Maximum permissible limit according to Romanian Health Minister Order no. 1201/106/2003 the approval of food contaminants regulation (M.Of. 142/17 February 2004) (mg/kg wet product weight)				
	Cereals (including buckwheat), vegetables, and legumes	Vegetables, except *Brassicaceae* (cauliflower, cabbage, and turnip), leafy vegetables, fresh greens and mushrooms	*Brassicaceae* (cauliflower, cabbage, and turnip), leafy vegetables, fresh greens and mushrooms	Fruit, other than berry leaves (grapes, strawberries, blackberries, raspberries) and small fruits (blueberries, currants)	Berries fruits (grapes, strawberries, blackberries, raspberries) and small fruits (blueberries, currants)
Pb	0.20	0.10	0.30	0.10	0.20
	Cereals other than bran, wheat grains, and rice	Bran, wheat grains, and rice	Vegetables and fruit, excluding leafy vegetables, fresh greens, mushrooms, vegetables (leaks, asparagus, artichokes), roots, and potatoes	Leafy vegetables, fresh greens, celery and cultivated mushrooms	Stem vegetables (leaks, asparagus, artichokes)
Cd	0.10	0.20	0.05	0.20	0.10
	Commission Regulation (EC) No. 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs				

	Vegetables, excluding *Brassica*, leaf vegetables, fresh herbs and fungi; for potatoes the maximum level applies to peeled potatoes	*Brassica* vegetables, leaf vegetables and cultivated fungi	Fruits, excluding berries and small fruit	Berries and small fruit	-
Pb [1]	0.10	0.30	0.10	0.20	-
	Vegetables and fruit, excluding leaf vegetables, fresh herbs, fungi, stem vegetables, pine nuts, root vegetables and potatoes	Leaf vegetables, fresh herbs, cultivated fungi and celeriac	Steam vegetables, roots vegetables and potatoes, excluding celeriac; for potatoes the maximum level applies to peeled potatoes	-	-
Cd [1]	0.05	0.20	0.10	-	-
	Maximum permissible limit according to Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (FAO-WHO 2011) (mg/kg)				
	Assorted (sub)tropical fruits, edible peel, inedible peel	Berries and other small fruits,	Citrus fruits, pome fruits, stone fruits	Brassica vegetables	Bulb vegetables, fruits vegetables, cucurbits, other than cucurbits
Pb	0.10	0.20	0.10	0.30	0.10
	Leafy vegetables	Legume vegetables	Pulses	Root and tuber vegetables	Pickled cucumbers
Pb	0.30	0.20	0.20	0.10	1.00
	Brassica vegetables, bulb vegetables, fruiting vegetables, cucurbits, other than cucurbits	Leafy vegetables	Legume vegetables, potato, pulses, tot and tuber vegetables, stalk and stem vegetables	Cereal gains, expect buckwheat, canihua and quinoa	Rice, polished
Cd	0.05	0.20	0.10	0.10	0.4

[1] The maximum level applies after washing of the fruit or vegetables and separating the edible part.

Table S2. A review of the scientific literature on the concentration of elements in fruits and vegetable samples

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
Romania					
150 samples of vegetables (15 species) and fruits (8 species) were collected from the inhabitants' gardens, from five urban areas: Baia Mare, Ferneziu, Grivița, Valea Roșie, Valea Borcutului, and four rural areas: Tăuții de Sus, Satu Nou de Sus, Recea, Lăpușel during June and August 2014	Zn, Cu, Pb, Cd	AAS	The vegetables and fruits samples were cleared of rotten parts and inedible ends, washed with distilled water, and dried at 80-90 °C for 15-30 min and then at 65 °C for 12-24 h; dried samples were ground and sieved through a 0.5 mm sieve; 0.5 g sample was accurately weighed and digested with 1 mL of $HClO_4$ 70 % and 4 mL of HNO_3 65 %, until the transparent solution was achieved; the digested samples were then diluted to 50 mL and filtered	Mean concentration of element in urban samples: potato (Zn 8.2 mg/kg fresh weight basis); carrot (Zn 21.7 mg/kg fresh weight basis); parsley (Zn 45.7 mg/kg fresh weight basis); onion (Zn 9.6 mg/kg fresh weight basis); garlic (Zn 15.7 mg/kg fresh weight basis); kohlrabi (Zn 11.8 mg/kg fresh weight basis); lettuce (Zn 21.4 mg/kg fresh weight basis); dill (Zn 9.7 mg/kg fresh weight basis); tarragon (Zn 11.6 mg/kg fresh weight basis); cabbage (Zn 4.9 mg/kg fresh weight basis); tomato (Zn 5.6 mg/kg fresh weight basis); cucumber (Zn 3.5 mg/kg fresh weight basis); zucchini (Zn 5.2 mg/kg fresh weight basis); bell pepper (Zn 2.8 mg/kg fresh weight basis); beans (Zn 4.5 mg/kg fresh weight basis); sour cherries (Zn 1.9 mg/kg fresh weight basis); plumbs (Zn 1.9 mg/kg fresh weight basis); grapes (Zn 0.9 mg/kg fresh weight basis); apples (Zn 0.6 mg/kg fresh weight	[16]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				basis); pear (Zn 2.1 mg/kg fresh weight basis); raspberries (Zn 4.2 mg/kg fresh weight basis); gooseberry (Zn N/A); blackcurrant (Zn N/A); potato (Cu 2.9 mg/kg fresh weight basis); carrot (Cu 7.1 mg/kg fresh weight basis); parsley (Cu 15.2 mg/kg fresh weight basis); onion (Cu 1.35 mg/kg fresh weight basis); garlic (Cu 2.2 mg/kg fresh weight basis); kohlrabi (Cu 9.2 mg/kg fresh weight basis); lettuce (Cu 2.1 mg/kg fresh weight basis); dill (Cu 1.3 mg/kg fresh weight basis); tarragon (Cu 2.3 mg/kg fresh weight basis); cabbage (Cu 0.9 mg/kg fresh weight basis); tomato (Cu 1.3 mg/kg fresh weight basis); cucumber (Cu 0.8 mg/kg fresh weight basis); zucchini (Cu 0.7 mg/kg fresh weight basis); bell pepper (Cu 0.3 mg/kg fresh weight basis); beans (Cu 0.8 mg/kg fresh weight basis); sour cherries (Cu 0.7 mg/kg fresh weight basis); plumbs (Cu 1.6 mg/kg fresh weight basis); grapes (Cu 0.8 mg/kg fresh weight basis); apples	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				(Cu 1.1 mg/kg fresh weight basis); pear (Cu 1.4 mg/kg fresh weight basis); raspberries (Cu 1.1 mg/kg fresh weight basis); gooseberry (Cu N/A); blackcurrant (Cu N/A); potato (Pb 1.2 mg/kg fresh weight basis); carrot (Pb 5.4 mg/kg fresh weight basis); parsley (Pb 6.6 mg/kg fresh weight basis); onion (Pb 1.7 mg/kg fresh weight basis); garlic (Pb 0.7 mg/kg fresh weight basis); kohlrabi (Pb 0.5 mg/kg fresh weight basis); lettuce (Pb 4.1 mg/kg fresh weight basis); dill (Pb 0.6 mg/kg fresh weight basis); tarragon (Pb 0.9 mg/kg fresh weight basis); cabbage (Pb 0.8 mg/kg fresh weight basis); tomato (Pb 0.5 mg/kg fresh weight basis); cucumber (Pb 0.2 mg/kg fresh weight basis); zucchini (Pb 0.3 mg/kg fresh weight basis); bell pepper (Pb 0.1 mg/kg fresh weight basis); beans (Pb 1.2 mg/kg fresh weight basis); sour cherries (Pb 0.4 mg/kg fresh weight basis); plumbs (Pb 1.1 mg/kg fresh weight basis); grapes (Pb 2.6 mg/kg fresh weight	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				basis); apples (Pb 0.8 mg/kg fresh weight basis); pear (Pb 4.3 mg/kg fresh weight basis); raspberries (Pb 0.9 mg/kg fresh weight basis); gooseberry (Pb N/A); blackcurrant (Pb N/A); potato (Cd 0.03 mg/kg fresh weight basis); carrot (Cd 0.59 mg/kg fresh weight basis); parsley (Cd 0.48 mg/kg fresh weight basis); onion (Cd 0.12 mg/kg fresh weight basis); garlic (Cd 0.32 mg/kg fresh weight basis); kohlrabi (Cd 0.06 mg/kg fresh weight basis); lettuce (Cd 0.32 mg/kg fresh weight basis); dill (Cd 0.04 mg/kg fresh weight basis); tarragon (Cd 0.25 mg/kg fresh weight basis); cabbage (Cd 0.04 mg/kg fresh weight basis); tomato (Cd 0.11 mg/kg fresh weight basis); cucumber (Cd 0.02 mg/kg fresh weight basis); zucchini (Pb 0.02 mg/kg fresh weight basis); bell pepper (Cd 0.03 mg/kg fresh weight basis); beans (Cd 0.03 mg/kg fresh weight basis); sour cherries (Cd 0.04 mg/kg fresh weight basis); plumbs (Cd N/A); grapes (Cd N/A); apples (Cd	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				N/A); pear (Cd 0.02 mg/kg fresh weight basis); raspberries (Cd 0.05 mg/kg fresh weight basis); gooseberry (Cd N/A); blackcurrant (Cd N/A); Mean concentration of element in rural samples: potato (Zn 8.3 mg/kg fresh weight basis); carrot (Zn 20.2 mg/kg fresh weight basis); parsley (Zn 71.7 mg/kg fresh weight basis); onion (Zn 9.9 mg/kg fresh weight basis); garlic (Zn 8.9 mg/kg fresh weight basis); kohlrabi (Zn 32.3 mg/kg fresh weight basis); lettuce (Zn 7.9 mg/kg fresh weight basis); dill (Zn 9.7 mg/kg fresh weight basis); tarragon (Zn 11.5 mg/kg fresh weight basis); cabbage (Zn 4.6 mg/kg fresh weight basis); tomato (Zn 6.7 mg/kg fresh weight basis); cucumber (Cd 3.7 mg/kg fresh weight basis); zucchini (Zn 3.1 mg/kg fresh weight basis); bell pepper (Zn 2.8 mg/kg fresh weight basis); beans (Zn 5.1 mg/kg fresh weight basis); sour cherries (Zn 0.7 mg/kg fresh weight basis); plumbs (Zn 2.1 mg/kg fresh	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				weight basis); grapes (Zn 2.4 mg/kg fresh weight basis); apples (Zn 2.2 mg/kg fresh weight basis); pear (Zn 2.1 mg/kg fresh weight basis); raspberries (Zn 4.1 mg/kg fresh weight basis); gooseberry (Zn 4.6 mg/kg fresh weight basis); blackcurrant (Zn 4.7 mg/kg fresh weight basis); potato (Cu 3.0 mg/kg fresh weight basis); carrot (Cu 4.5 mg/kg fresh weight basis); parsley (Cu 10.9 mg/kg fresh weight basis); onion (Cu 2.31 mg/kg fresh weight basis); garlic (Cu 2.5 mg/kg fresh weight basis); kohlrabi (Cu 10.8 mg/kg fresh weight basis); lettuce (Cu 2.2 mg/kg fresh weight basis); dill (Cu 1.9 mg/kg fresh weight basis); tarragon (Cu 2.4 mg/kg fresh weight basis); cabbage (Cu 0.9 mg/kg fresh weight basis); tomato (Cu 2.1 mg/kg fresh weight basis); cucumber (Cu 0.7 mg/kg fresh weight basis); zucchini (Cu 0.6 mg/kg fresh weight basis); bell pepper (Cu 0.3 mg/kg fresh weight basis); beans (Cu 0.7 mg/kg fresh weight basis);	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				sour cherries (Cu 0.3 mg/kg fresh weight basis); plumbs (Cu 0.7 mg/kg fresh weight basis); grapes (Cu 0.6 mg/kg fresh weight basis); apples (Cu 2.7 mg/kg fresh weight basis); pear (Cu 1.3 mg/kg fresh weight basis); raspberries (Cu 0.7 mg/kg fresh weight basis); gooseberry (Cu 0.7 mg/kg fresh weight basis); blackcurrant (Cu 0.5 mg/kg fresh weight basis); potato (Pb 0.7 mg/kg fresh weight basis); carrot (Pb 1.6 mg/kg fresh weight basis); parsley (Pb 4.4 mg/kg fresh weight basis); onion (Pb 0.7 mg/kg fresh weight basis); garlic (Pb 0.6 mg/kg fresh weight basis); kohlrabi (Pb 2.8 mg/kg fresh weight basis); lettuce (Pb 1.5 mg/kg fresh weight basis); dill (Pb 1.9 mg/kg fresh weight basis); tarragon (Pb 1.1 mg/kg fresh weight basis); cabbage (Pb 0.7 mg/kg fresh weight basis); tomato (Pb 0.4 mg/kg fresh weight basis); cucumber (Pb 0.2 mg/kg fresh weight basis); zucchini (Pb N/A); bell pepper (Pb 0.2 mg/kg fresh weight	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				basis); beans (Pb 0.4 mg/kg fresh weight basis); sour cherries (Pb 0.2 mg/kg fresh weight basis); plumbs (Pb 0.7 mg/kg fresh weight basis); grapes (Pb 3.7 mg/kg fresh weight basis); apples (Pb 0.8 mg/kg fresh weight basis); pear (Pb 3.7 mg/kg fresh weight basis); raspberries (Pb 1.2 mg/kg fresh weight basis); gooseberry (Pb 1.1 mg/kg fresh weight basis); blackcurrant (Pb 3.3 mg/kg fresh weight basis); potato (Cd 0.11 mg/kg fresh weight basis); carrot (Cd 0.25 mg/kg fresh weight basis); parsley (Cd 0.55 mg/kg fresh weight basis); onion (Cd 0.10 mg/kg fresh weight basis); garlic (Cd 0.19 mg/kg fresh weight basis); kohlrabi (Cd 0.38 mg/kg fresh weight basis); lettuce (Cd 0.15 mg/kg fresh weight basis); dill (Cd 0.08 mg/kg fresh weight basis); tarragon (Cd 0.22 mg/kg fresh weight basis); cabbage (Cd 0.04 mg/kg fresh weight basis); tomato (Cd 0.09 mg/kg fresh weight basis); cucumber (Cd 0.02 mg/kg fresh weight basis); zucchini (Cd	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				0.01 mg/kg fresh weight basis); bell pepper (Cd 0.05 mg/kg fresh weight basis); beans (Cd 0.05 mg/kg fresh weight basis); sour cherries (Cd N/A); plumbs (Cd N/A); grapes (Cd 0.02 mg/kg fresh weight basis); apples (Cd N/A); pear (Cd 0.02 mg/kg fresh weight basis); raspberries (Cd 0.02 mg/kg fresh weight basis); gooseberry (Cd 0.02 mg/kg fresh weight basis); blackcurrant (Cd N/A)	
Libya					
250 samples of fruit and vegetables produce, purchased from several local suppliers and markets in Misurata City, Libya during 2010	Pb, Cd, Cu, Zn, Co, Ni,	AAS	Samples was first oven dried at 105 °C, for 24 h, and powdered in a mixer grinder; dry-ashing process was carried out in muffle furnace at 550 °C with a gradual increase in temperature for 6 h; the ash was left to cool in desiccators and then rinsed with 3 N HCI, and filtered into a 50 mL volumetric flask through Whatman No. 1 filter paper, and the volume was made up to the mark with3 N HCI	Mean concentration of elements in fruits: banana (Pb 0.10 mg/kg); peach (Pb 0.25 mg/kg); orange (Pb 0.20 mg/kg); strawberries (Pb 0.53 mg/kg); watermelon (Pb 0.50 mg/kg); melon (Pb 0.25 mg/kg); apple (Pb 0.20 mg/kg); grape (Pb 0.40 mg/kg); mango (Pb 1.824 mg/kg); banana (Cd 0.50 mg/kg); peach (Cd 0.02 mg/kg); orange (Cd 0.03 mg/kg); strawberries (Cd 0.01 mg/kg); watermelon (Cd 0.03 mg/kg); melon (Cd 0.03 mg/kg); apple (Cd 0.06 mg/kg); grape (Cd 0.05 mg/kg);	[17]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				mango (Cd 0.362 mg/kg); banana (Zn 6.34 mg/kg); peach (Zn 5.87 mg/kg); orange (Zn 2.15 mg/kg); strawberries (Zn 1.32 mg/kg); watermelon (Zn 5.11 mg/kg); melon (Zn 8.24 mg/kg); apple (Zn 2.34 mg/kg); grape (Zn 1.33 mg/kg); mango (Zn 0.635 mg/kg); banana (Cu 3.21 mg/kg); peach (Cu 1.87 mg/kg); orange (Cu 1.25 mg/kg); strawberries (Cu 3.14 mg/kg); watermelon (Cu 1.19 mg/kg); melon (Cu 6.21 mg/kg); apple (Cu 1.50 mg/kg); grape (Cu 2.13 mg/kg); mango (Cu 3.186 mg/kg); banana (Co 1.18 mg/kg); peach (Co 1.049 mg/kg); orange (Co 0.379 mg/kg); strawberries (Co 0.026 mg/kg); watermelon (Co 0.141 mg/kg); melon (Co 0.340 mg/kg); apple (Co 0.437 mg/kg); grape (Co 0.521 mg/kg); mango (Co 0.561 mg/kg); banana (Ni 1.316 mg/kg); peach (Ni 1.119 mg/kg); orange (Ni 1.099 mg/kg); strawberries (Ni 1.818 mg/kg); watermelon (Ni 0.597	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				mg/kg); melon (Ni 0.645 mg/kg); apple (Ni 1.00 mg/kg); grape (Ni 0.631 mg/kg); mango (Ni 5.143 mg/kg); Mean concentration of elements in vegetables: tomatoes (Pb 0.511 mg/kg); onion (Pb 0.14 mg/kg); potatoes (Pb 0.02 mg/kg); green pepper (Pb 0.47 mg/kg); carrot (Pb 0.21 mg/kg); cucumber (Pb 0.10 mg/kg); spinach (Pb 0.32 mg/kg); tomatoes (Cd 0.250 mg/kg); onion (Cd 0.02 mg/kg); potatoes (Cd 0.02 mg/kg); green pepper (Cd 0.07 mg/kg); carrot (Cd 0.12 mg/kg); cucumber (Cd 0.20 mg/kg); spinach (Cd 0.27 mg/kg); tomatoes (Zn 8.427 mg/kg); onion (Zn 11.40 mg/kg); potatoes (Zn 7.11 mg/kg); green pepper (Zn 0.042 mg/kg); carrot (Zn 3.61 mg/kg); cucumber (Zn 9.65 mg/kg); spinach (Zn 16.83 mg/kg); tomatoes (Cu 2.245 mg/kg); onion (Cu 1.49 mg/kg); potatoes (Cu 0.75 mg/kg); green pepper (Cu 2.97 mg/kg); carrot (Cu 5.00 mg/kg); cucumber (Cu 5.75	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				mg/kg); spinach (Cu 5.32 mg/kg); tomatoes (Co 0.45 mg/kg); onion (Co 0.51 mg/kg); potatoes (Co 0.55 mg/kg); green pepper (Co 0.34 mg/kg); carrot (Co 0.54 mg/kg); cucumber (Co 0.62 mg/kg); spinach (Co 0.54 mg/kg); tomatoes (Ni 0.20 mg/kg); onion (Ni 0.32 mg/kg); potatoes (Ni 0.25 mg/kg); green pepper (Ni 0.19 mg/kg); carrot (Ni 0.21 mg/kg); cucumber (Ni 0.22 mg/kg); spinach (Ni 0.26 mg/kg);	
Egypt					
330 samples of (fruits): apple; banana melon; date; grapefruit; peach; orange; strawberries; watermelon; and (vegetables): lettuce; tomatoes; carrot; cucumber; eggplant; garlic; green bean; green pepper; onion; squash; spinach; sweet pea; potatoes; from several local markets in Alexandria	Pb, Cd, Cu, Zn	AAS	Samples was first oven dried at 105 °C, for 24 h, and powdered in a mixer grinder; dry-ashing process was carried out in electrical furnace at 550 °C with a gradual increase in temperature for 4 h; the ash was left to cool and then rinsed with 1 M nitric acid and filtered into a 25 mL volumetric flask	Mean concentration of elements (fruits): apple Pb (0.19 mg/kg dry wt); banana Pb (0.05 mg/kg dry wt); melon Pb (0.33 mg/kg dry wt); date Pb (0.22 mg/kg dry wt); grapefruit Pb (0.16 mg/kg dry wt); peach Pb (0.38 mg/kg dry wt); orange Pb (0.15 mg/kg dry wt); strawberries Pb (0.87 mg/kg dry wt); watermelon Pb (0.30 mg/kg dry wt); Mean concentration of elements (vegetables): lettuce Pb (0.58 mg/kg dry wt); tomatoes Pb (0.26 mg/kg dry wt); carrot Pb (0.18 mg/kg dry wt); cucumber Pb (0.19 mg/kg dry wt);	[18]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
city, Egypt during 2005				eggplant Pb (0.21 mg/kg dry wt); garlic Pb (0.12 mg/kg dry wt); green bean Pb (0.08 mg/kg dry wt); green pepper Pb (0.47 mg/kg dry wt); onion Pb (0.14 mg/kg dry wt); squash Pb (0.42 mg/kg dry wt); spinach Pb (0.34 mg/kg dry wt); sweet pea Pb (0.19 mg/kg dry wt); potatoes Pb (0.01 mg/kg dry wt); Mean concentration of elements (fruits): apple Cd (0.05 mg/kg dry wt); banana Cd (0.02 mg/kg dry wt); melon Cd (ND); date Cd (0.22 mg/kg dry wt); grapefruit Cd (0.002 mg/kg dry wt); peach Cd (0.01 mg/kg dry wt); orange Cd (0.04 mg/kg dry wt); strawberries Cd (0.02 mg/kg dry wt); watermelon Cd (0.02 mg/kg dry wt); Mean concentration of elements (vegetables): lettuce Cd (0.07 mg/kg dry wt); tomatoes Cd (0.01 mg/kg dry wt); carrot Cd (0.01 mg/kg dry wt); cucumber Cd (0.15 mg/kg dry wt); eggplant Cd (0.02 mg/kg dry wt); garlic Cd (0.03 mg/kg dry wt); green bean Cd (0.01 mg/kg dry wt); green pepper Cd (0.05 mg/kg dry wt);	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				onion Cd (0.02 mg/kg dry wt); squash Cd (0.03 mg/kg dry wt); spinach Cd (0.11 mg/kg dry wt); sweet pea Cd (0.01 mg/kg dry wt); potatoes Cd (0.02 mg/kg dry wt); Mean concentration of elements (fruits): apple Cu (1.47 mg/kg dry wt); banana Cu (2.51 mg/kg dry wt); melon Cu (5.72 mg/kg dry wt); date Cu (18.3 mg/kg dry wt); grapefruit Cu (7.75 mg/kg dry wt); peach Cu (1.46 mg/kg dry wt); orange Cu (1.27 mg/kg dry wt); strawberries Cu (2.17 mg/kg dry wt); watermelon Cu (1.22 mg/kg dry wt); Mean concentration of elements (vegetables): lettuce Cu (1.97 mg/kg dry wt); tomatoes Cu (1.83 mg/kg dry wt); carrot Cu (1.51 mg/kg dry wt); cucumber Cu (5.69 mg/kg dry wt); eggplant Cu (1.41 mg/kg dry wt); garlic Cu (1.80 mg/kg dry wt); green bean Cu (2.27 mg/kg dry wt); green pepper Cu (4.53 mg/kg dry wt); onion Cu (1.49 mg/kg dry wt); squash Cu (2.84 mg/kg dry wt); spinach Cu (4.48 mg/kg dry wt); sweet pea Cu (16.5 mg/kg	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				dry wt); potatoes Cu (0.83 mg/kg dry wt); Mean concentration of elements (fruits): apple Zn (1.36 mg/kg dry wt); banana Zn (5.59 mg/kg dry wt); melon Zn (10.5 mg/kg dry wt); date Zn (4.02 mg/kg dry wt); grapefruit Zn (3.01 mg/kg dry wt); peach Zn (6.22 mg/kg dry wt); orange Zn (2.38 mg/kg dry wt); strawberries Zn (7.49 mg/kg dry wt); watermelon Zn (5.35 mg/kg dry wt); Mean concentration of elements (vegetables): lettuce Zn (9.76 mg/kg dry wt); tomatoes Zn (7.69 mg/kg dry wt); carrot Zn (8.03 mg/kg dry wt); cucumber Zn (19.9 mg/kg dry wt); eggplant Zn (11.5 mg/kg dry wt); garlic Zn (14.9 mg/kg dry wt); green bean Zn (14.7 mg/kg dry wt); green pepper Zn (12.5 mg/kg dry wt); onion Zn (11.4 mg/kg dry wt); squash Zn (14.6 mg/kg dry wt); spinach Zn (20.9 mg/kg dry wt); sweet pea Zn (14.2 mg/kg dry wt); potatoes Zn (7.16 mg/kg dry wt);	
Poland					
370 samples of fruits: apples, pears, grapes, raspberries,	Cd, Pb	AAS	The frozen samples were homogenized, the dried sample were grinded in a vibratory,	Mean concentration of elements in fruits (dried): apple (Cd 0.023 mg/kg);	[44]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
strawberries, cranberries, and vegetables: beetroots, celeries, carrots, tomatoes from Polish markets in the form of fresh, frozen, dried or processed			the processed products store in syrup or marinade were separated and homogenized, and the sample in the form of juice, compote, jam and marmalade were thoroughly mixed; 2 g frozen samples, 1 g for dried samples, 2 g for processed samples, 10 mL liquid samples + 8 mL nitric acid, dried samples were diluted by 1 mL 30 % H_2O_2, after that mineralization process	cranberry (Cd 0.005 mg/kg); grape (Cd 0.001 mg/kg); pear (Cd 0.015 mg/kg); raspberry (Cd 0.116 mg/kg); strawberry (Cd 0.131 mg/kg); apple (Pb 0.127 mg/kg); cranberry (Pb 0.009 mg/kg); grape (Pb 0.047 mg/kg); pear (Pb 0.036 mg/kg); raspberry (Pb 0.111 mg/kg); strawberry (Pb 0.161 mg/kg); Mean concentration of elements in vegetables (dried): beetroot (Cd 0.048 mg/kg); carrot (Cd 0.2 mg/kg); celery (Cd N/A); tomato (Cd 0.103 mg/kg); beetroot (Pb 0.115 mg/kg); carrot (Pb 0.206 mg/kg); celery (Pb 0.259 mg/kg); tomato (Pb 0.081 mg/kg);	
Kosovo					
90 apple samples collected from Drenas region and the reference area during September-November	Pb, Cd, Cr, Ni, As, Zn, Cu, Fe	AAS	2.0 g samples were treated with a 1:3 aqueous regia mixture (4 mL HNO_3 + 12 mL of concentrated HCl) at 200 °C for 60 minutes; the organic matter was disintegrated with concentrated hydrogen peroxide (35 % H_2O_2); samples were mixed with distillated water and filtrated with Whatman 0.45 μm filtration paper; the filter was placed on a volumetric balloon at	Mean concentration of elements in samples (Drenas region): apple M106 (Pb 1.55 mg/kg); apple M26 (Pb 1.49 mg/kg); apple M9 (Pb 2.17 mg/kg); apple M106 (Cd 0.21 mg/kg); apple M26 (Cd 0.17 mg/kg); apple M9 (Cd 0.18 mg/kg); apple M106 (Cr 11.6 mg/kg); apple M26 (Cr 8.22 mg/kg); apple M9 (Cr 8.31 mg/kg); apple M106 (Ni 17.2 mg/kg); apple	[35]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
			50 cm^3 and levelled up to the mark with distilled water;	M26 (Ni 16.5 mg/kg); apple M9 (Ni 15.33 mg/kg); apple M106 (As ND); apple M26 (As ND); apple M9 (As 0.009 mg/kg); apple M106 (Zn 1.51 mg/kg); apple M26 (Zn 1.78 mg/kg); apple M9 (Zn 2.03 mg/kg); apple M106 (Cu 2.24 mg/kg); apple M26 (Cu 2.87 mg/kg); apple M9 (Cu 2.05 mg/kg); apple M106 (Fe 2.49 mg/kg); apple M26 (Fe 2.27 mg/kg); apple M9 (Fe 3.12 mg/kg); Mean concentration of elements in samples (reference site): apple M106 (Pb 0.51 mg/kg); apple M26 (Pb 0.38 mg/kg); apple M9 (Pb 0.31 mg/kg); apple M106 (Cd 0.009 mg/kg); apple M26 (Cd 0.08 mg/kg); apple M9 (Cd 0.003 mg/kg); apple M106 (Cr 1.27 mg/kg); apple M26 (Cr 0.99 mg/kg); apple M9 (Cr 0.49 mg/kg); apple M106 (Ni 0.28 mg/kg); apple M26 (Ni 0.18 mg/kg); apple M9 (Ni 0.19 mg/kg); apple M106 (As ND); apple M26 (As ND); apple M9 (As ND); apple M106 (Zn 0.88 mg/kg); apple M26 (Zn 0.74 mg/kg); apple M9 (Zn 0.31 mg/kg); apple M106 (Cu 0.98	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				mg/kg); apple M26 (Cu 0.78 mg/kg); apple M9 (Cu 0.93 mg/kg); apple M106 (Fe 3.36 mg/kg); apple M26 (Fe 3.23 mg/kg); apple M9 (Fe 4.13 mg/kg);	
Romania					
10 samples of tomatoes, potatoes, apples, apricots, peaches, and pears, whereas for sweet cherries, sours, plums, and grapes different amounts (between 100 g and 1000 g), from Banat area of Southern Carpathians during 2018-2019	Zn, Cd, Pb	AAS	After being washed with deionized water and homogenized about 100 g of vegetal foodstuff samples were transferred in a quartz capsule, died at 105 °C, and after cooling, homogenized again; 0.5-1 g were next rated with aqua regia solution (10 mL 65 % υ/υ HNO_3 and 30 mL 32 % υ/υ HCl) at 170 °C in a digestion system; solution was centrifuged and then brought to 50 mL with double distilled water	Mean concentration of element samples: carrot leaf (Zn (reddish brown soils) 1.36 mg/kg FW); carrot root (Zn (reddish brown soils) 2.07 mg/kg FW); parsley leaf (Zn (reddish brown soils) 9.13 mg/kg FW); parsley root (Zn (reddish brown soils) 3.50 mg/kg FW); cabbage (Zn (reddish brown soils) 3.28 mg/kg FW); lettuce (Zn (reddish brown soils) 5.32 mg/kg FW); onion (Zn (reddish brown soils) 0.77 mg/kg FW); potato (Zn (reddish brown soils) 2.35 mg/kg FW); cucumber (Zn (reddish brown soils) 0.93 mg/kg FW); green bean (Zn (reddish brown soils) 9.67 mg/kg FW); tomato (Zn (reddish brown soils) 2.09 mg/kg FW); carrot leaf (Cd (reddish brown soils) 0.01 mg/kg FW); carrot root (Cd (reddish brown soils)	[50]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				0.01 mg/kg FW); parsley leaf (Cd (reddish brown soils) 0.03 mg/kg FW); parsley root (Cd (reddish brown soils) 0.03 mg/kg FW); cabbage (Cd (reddish brown soils) 0.01 mg/kg FW); lettuce (Cd (reddish brown soils) 0.02 mg/kg FW); onion (Cd (reddish brown soils) 0.01 mg/kg FW); potato (Cd (reddish brown soils) 0.02 mg/kg FW); cucumber (Cd (reddish brown soils) 0.03 mg/kg FW); green bean (Cd (reddish brown soils) 0.03 mg/kg FW); tomato (Cd (reddish brown soils) 0.02 mg/kg FW); carrot leaf (Pb (reddish brown soils) 0.03 mg/kg FW); carrot root (Pb (reddish brown soils) 0.04 mg/kg FW); parsley leaf (Pb (reddish brown soils) 0.28 mg/kg FW); parsley root (Pb (reddish brown soils) 0.08 mg/kg FW); cabbage (Pb (reddish brown soils) 0.05 mg/kg FW); lettuce (Pb (reddish brown soils) 0.08 mg/kg FW); onion (Pb (reddish brown soils) 0.04 mg/kg FW); potato (Pb (reddish brown soils) 0.25	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				mg/kg FW); cucumber (Pb (reddish brown soils) 0.16 mg/kg FW); green bean (Pb (reddish brown soils) 0.07 mg/kg FW); tomato (Pb (reddish brown soils) 0.18 mg/kg FW);	
Spain					
81 different individual foods were selected and aggregated into twelve food groups: vegetable oils, mineral water, non-alcoholic beverages, meat and meat products, cereals, pulses, tuber, nuts and dried, cereals, prepared dishes, sweeteners and condiments, vegetables and fruits, eggs, milk and dairy products, fish and seafood	Pb, Cd, As, Cu, Cr, Sn,	ICP-MS	0.25 g of lyophilized or dried sample were weighed in quartz digestion vessels and 5 mL of suprapure HNO_3 (65%) were added in fume hood followed by digestion process; after cooling at room temperature, sample solutions were quantitatively transferred into 25 mL glass volumetric flasks and completed with ultra-pure water to the final volume	Mean concentration of elements in fruits: beans (Pb 0.0522 mg/kg); potatoes (Pb 0.0147 mg/kg); strawberries (Pb 0.0031 mg/kg); green beans (Pb 0.0028 mg/kg); onions (Pb 0.0025 mg/kg); garlic (Pb 0.0129 mg/kg); aubergine, courgetti, cucumber Pb 0.0050 mg/kg); aubergine, courgetti, cucumber (Pb 0.0065 mg/kg); carrots and pumpkins (Pb 0.0067 mg/kg); apples and pears (Pb 0.0039 mg/kg); sherry and plum (Pb 0.0029 mg/kg); melon and watermelon (Pb 0.0119 mg/kg); bananas (Pb 0.0034 mg/kg); peach and apricot (Pb 0.0028 mg/kg); grapes (Pb 0.0037 mg/kg); cauliflower, cabbage and broccoli (Pb 0.0022 mg/kg); beans (Cd 0.0150 mg/kg); potatoes (Cd 0.0233 mg/kg); strawberries (Cd 0.0025 mg/kg);	[36]

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				green beans (Cd 0.0051 mg/kg); onions (Cd 0.0040 mg/kg); garlic (Cd 0.0088 mg/kg); aubergine, courgetti, cucumber (Cd 0.0065 mg/kg); carrots and pumpkins (Cd 0.0046 mg/kg); apples and pears (Cd N/A); sherry and plum (Cd N/A); melon and watermelon (Cd 0.0028 mg/kg); bananas (Cd 0.0005 mg/kg); peach and apricot (Cd N/A); grapes (Cd N/A); cauliflower, cabbage and broccoli (Pb 0.0049 mg/kg); beans (As 0.0188 mg/kg); potatoes (As 0.0031 mg/kg); (As 0.0044 mg/kg); green beans (As 0.0058 mg/kg); onions (As 0.0077 mg/kg); garlic (As 0.0099 mg/kg); aubergine, courgetti, cucumber (As 0.0261 mg/kg); carrots and pumpkins (As 0.0179 mg/kg); apples and pears (As 0.0032 mg/kg); sherry and plum (As 0.0022 mg/kg); melon and watermelon (As 0.0096 mg/kg); bananas (As 0.0035 mg/kg); peach and apricot (As 0.0026 mg/kg); grapes (As 0.0026 mg/kg); cauliflower, cabbage	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				and broccoli (As 0.0101 mg/kg); beans (Cu 8.2161 mg/kg); potatoes (Cu 0.8546 mg/kg); orange (Cu 0.3485 mg/kg); strawberries (Cu 0.2380 mg/kg); lettuces (Cu 0.4353 mg/kg); green beans (Cu 0.6377 mg/kg); onions (Cu 0.4433 mg/kg); garlic (Cu 1.4096 mg/kg); aubergine, courgetti and cucumber (Cu 0.6973 mg/kg); carrots and pumpkins (Cu 0.5035 mg/kg); tomatoes (Cu 0.4674 mg/kg); apples and pears (Cu 0.5808 mg/kg); sherry and plum (Cu 0.6211 mg/kg); melon and watermelon (Cu 0.3658 mg/kg); bananas (Cu 0.6308 mg/kg); peach and apricot (Cu 0.9204 mg/kg); grapes (Cu 0.8825 mg/kg); cauliflower, cabbage and broccoli (Cu 0.4658 mg/kg); beans (Cr 0.3400 mg/kg); potatoes (Cr 0.0192 mg/kg); orange (Cr 0.0470 mg/kg); strawberries (Cr 0.0129 mg/kg); lettuces (Cr 0.0285 mg/kg); green beans (Cr 0.0180 mg/kg); onions (Cr 0.0121 mg/kg); garlic (Cr 0.0310 mg/kg);	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				aubergine, courgetti and cucumber (Cr 0.0178 mg/kg); carrots and pumpkins (Cr 0.0136 mg/kg); tomatoes (Cr 0.0189 mg/kg); apples and pears (Cr 0.0392 mg/kg); sherry and plum (Cr 0.0325 mg/kg); melon and watermelon (Cr 0.0219 mg/kg); bananas (Cr 0.0549 mg/kg); peach and apricot (Cr 0.0265 mg/kg); grapes (Cr 0.0367 mg/kg); cauliflower, cabbage and broccoli (Cr 0.0434 mg/kg); beans (Sn 0.0545 mg/kg); potatoes (Sn 0.0340 mg/kg); orange (Sn 0.0055 mg/kg); strawberries (Sn 0.0155 mg/kg); lettuces (Sn N/A); green beans (Sn N/A); onions (Sn N/A); garlic (Sn N/A); aubergine, courgetti and cucumber (Sn N/A); carrots and pumpkins (Sn N/A); tomatoes (Sn N/A); apples and pears (Sn 0.0057 mg/kg); sherry and plum (Sn 0.0053 mg/kg); melon and watermelon (Sn 0.0285 mg/kg); bananas (Sn 0.0019 mg/kg); peach and apricot (Sn 0.0055 mg/kg); grapes (Sn 0.0044 mg/kg);	

Samples / Origin	Elements	Analysis Technique	Sample Preparation	Maximum/Minimum or Mean - values	Ref.
				cauliflower, cabbage and broccoli (Sn 0.072 mg/kg);	
Poland, Italy, Spain					
The fresh fruits samples were purchased from local market from Gdańsk (Poland), but they were of Polish and Europa (blueberry – Poland); grapes black – Italy; grapes black – Poland; grapes black – Spain; grapes crimson – Italy; grapes pink – Italy; grapes white – Italy; grapes white – Spain; raspberry – Poland; strawberry – Poland;	Zn	FAAS	10 g of samples were weighed and transferred to quartz crucibles; samples were ashed in an electrical furnace at 540 °C with a gradual increased in temperature; for digestion 1.5 mL of 36.5 % HCl and 0.05 mL 65 % HNO_3 were added to quartz crucible; subsequently, it was placed on a water bath util evaporation of acids, then 1.5 mL of 36.5 % HCl was added to the residue and crucible covered with a watch glass was heated 1 min on the water bath; every sample was dissolved up to 25 mL with ultra-pure water (18.2 MΩ cm^{-1})	Mean concentration of element in samples: blueberry (0.16 mg/100 g wet weight); grapes – black (0.05 mg/100 g wet weight); grapes – black (0.07 mg/100 g wet weight); grapes – black (0.07 mg/100 g wet weight); grapes – crimson (0.06 mg/100 g wet weight); grapes – pink (0.03 mg/100 g wet weight); grapes – white (0.05 mg/100 g wet weight); grapes – white (0.04 mg/100 g wet weight); raspberry (0.44 mg/100 g wet weight); strawberry (0.14 mg/100 g wet weight)	[20]

[1] ICP-MS = Inductively coupled plasma mass spectrometry; FAAS = Flame atomic absorption spectroscopy; INAA = instrumental neutron activation analysis; GF-AAS = graphite furnace atomic absorption spectroscopy; FIAS = several flow injection systems; AFS = Atomic fluorescence spectrometry; ICP-OES = Inductively coupled plasma atomic emission spectroscopy; ICP-AES = Inductively coupled plasma atomic emission spectroscopy; NAA = Neutron activation analysis; PIXE = Particle induce X-Ray emission; HG-AFS = hydride generation atomic fluorescence spectrometry; BDL = below the detection limit. d.w. = dry weight.

Table S3. Samples of fruits and vegetables used in this research (common name, scientific name, and their origin)

Common name	Scientific name	Family	Weight (kg/g)	Area/Location	Year of production	Number of samples	
						Vegetable and fruit market	Amateur farmers
		Fruiting vegetables					
Tomato	*Lycopersicon esculentum* Mill.	Solanaceae	0.5 kg	Tecuci	2020	2	1
Yellow Tomato Cherry	*Lycopersicon esculentum* Var. cerasiforme sun gold hybrid	Solanaceae	0.300 kg	Galați	2021	1	no samples
Red Tomato Cherry	*Lycopersicon esculentum* Mill.	Solanaceae	0.300 kg	Galați	2021	1	1
Long Cucumber	*Cucumis sativus*	Cucurbitaceae	82 g	Tecuci	2021	2	2
Kirby Cucumber	*Cucumis sativus*	Cucurbitaceae	76 g	Galați	2021	2	1
Red Beans	*Phaseolus vulgaris*	Fabaceae	0.5 kg	Matca	2021	1	no samples
White Beans	*Phaseolus vulgaris*	Fabaceae	0.5 kg	Matca	2021	1	1
Zucchini	*Cucurbita pepo*	Cucurbitaceae	200 g	Matca	2021	2	1
		Fruits					
Raspberry	*Rubus idaeus*	Rosaceae	0.5 kg	Târgu Bujor	2021	1	2
Blueberry	*Vaccinium corymbosum*	Ericaceae	250 g	Târgu Bujor	2021	1	no samples
Strawberry	*Fragaria x ananassa*	Rosaceae	0.5 kg	Târgu Bujor	2021	1	2
Watermelon	*Citrullus lanatus*	Cucurbitaceae	3 kg	Tecuci	2020	2	1
Bell pepper	*Capsicum annuum* L. var. *grossum* (Sendt)	Solanaceae	0.250 g	Galați	2021	1	1
Chestnut	*Castanea sativa* Mill.	Fabaceae	100 g	Galați	2020	2	no samples
Apples	*Malus domestica* Borkh.	Rosaceae	0.5 kg	Târgu Bujor	2021	2	1
Plums	*Prunus domestica* L.	Rosaceae	0.250	Galați	2020	1	1
Pear	*Pyrus communis* L.	Rosaceae	0.5 kg	Târgu Bujor	2021	1	1
Quince	*Cydonia oblonga* Mill.	Rosaceae	0.5 kg	Târgu Bujor	2021	3	2
Grapes	*Vitis vinifera* L.	Vitaceae	0.5 kg	Târgu Bujor	2021	2	2
		Leafy vegetables					
Cabbage	*Brassica oleracea* convar. *capitata* (L) *f. alba L.*	Brassica	0.5 kg	Matca	2020	1	2
Tarragon	*Artemisia dracunculus* L.	Asteraceae	0.150 g	Târgu Bujor	2021	1	no samples
Parsley	*Petroselinum crispum* convar. *crispum* (Denst.)	Apiaceae	0.150 g	Târgu Bujor	2021	1	2
Lovage	*Levisticum officinale* Koch.	Apiaceae	0.150 g	Târgu Bujor	2021	no samples	1
Dill	*Anethum graveolens* L.	Apiaceae	0.100 g	Galați	2020	1	no samples
Lettuce	*Lactuca sativa L.* convar. *capitata (L.)*	Asteraceae	0.200 g	Galați	2021	2	1

Celery	*Apium graveolens* L. conv. *rapaceum (Mill.)*	Apiaceae	0.200 g	Târgu Bujor	2021	2	2
		Bulbs					
Garlic	*Allium sativum* ssp. *vulgare*	Amaryllidaceae	73 g	Tecuci	2020	1	2
Onion	*Allium cepa*	Amaryllidaceae	0.5 kg	Tecuci	2020	1	2
		Root vegetables					
Potato	*Solanum tuberosum*	Solanaceae	0.5 kg	Galați	2021	2	1
Parsley	*Petroselinum crispum* convar. *radicosum* (Def.)	Apiaceae	25 g	Târgu Bujor	2021	2	2
Carrot	*Daucus carota* L. conv. *sativus*	Apiaceae	0.200 g	Târgu Bujor	2021	2	no samples

Table S4. The program of the microwave oven Milestone START D Microwave Digestion System

Step	Target Temp (°C)	Pressure Max. (psi)	Temperature Ramp (min.)	Hold Time (min.)	Power (%)
1.	220	800	10	20	100
2.	220	800	10	15	60
3.	35-40	800	-	45 min. cooling	-

Table S5. Instrumental (a) and data acquisition (b) parameters of ICP-MS

(a) Instrumental parameters		(b) Data acquisition parameters for quantitative mode	
RF power/W	1.4 kW	Measuring mode	Standard (Ar 5.0) Q Cell (Collision Cell) (He 6.0)
Argon (Ar) gas flow, Helium (He) gas flow		Point per peak	3
Nebulizer	1.0 L/min.	Scans/Replicate	7
Plasma gas low rate (Ar 5.0)	18.0 L/min.	Replicate/Sample	7
Auxiliary gas flow rate (He 6.0)	0.20 L/min.		
Lens voltage	37 V	Dwell time (ms)	3
Mirror lens right	32 V		
Mirror lens bottom	31 V		
Sample uptake rate	90 s	Integration time	1-5 ms
Temperature spray chamber		2.10 °C	
Background correction		2 points/peak	
Injector tube		quartz 2-mm id	
Sample cone		Sample Cone 4450	
Skimmer cone		Ni – Skimmer iCAP Q 0.5 mm insert version	
Nebulizer		MicroMist Nebulizer 0.4 mL/min.	

Table S6. Instrumental conditions for the determination of each element using ICP-MS technique

Element	Correlation coefficient	LoD (µg/L)	LoQ (µg/L)	BEC (µg/L)	Element	Correlation coefficient	LoD (µg/L)	LoQ (µg/L)	BEC (µg/L)
As	0.9999	0.006	0.743	0.018	Pb	0.9996	0.231	0.231	0.649
Cd	0.9997	0.007	0.069	0.0031	Zn	0.9999	0.079	1.203	1.310

LoD = Detection limit; LoQ = Quantification limit; BEC = Background equivalent concentration.