

Table S1. Operating conditions for the ICP OES determination of studied elements by using the PN (Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Ni, P, Pb, and Zn) and HG (As, Sb, and Se) systems.

<i>ICP OES spectrometer (detection)</i>	
RF power / W	1.2
Ar gas flow rates / L min ⁻¹	Plasma: 15.0 Auxiliary: 1.5 Nebulizing: 0.75
Stabilization time / s	15
Sample delay time / s	15 (PN), 30 (HG)
Sample flow rate / mL min ⁻¹	0.75 (PN)
Rinse time / s	10
Replicate time / s	1
Number of replicates	3
Fast pump	On (PN), Off (HG)
Analytical line wavelengths / nm	396.1 (Al), 188.9 (As), 249.7 (B), 455.4 (Ba), 317.9 (Ca), 228.8 (Cd), 267.7 (Cr), 327.3 (Cu), 238.2 (Fe), 766.4 (K), 285.2 (Mg), 257.6 (Mn), 589.5 (Na), 231.6 (Ni), 213.6 (P), 220.2 (Pb), 206.8 (Sb), 196.0 (Se), 407.7 (Sr), 213.8 (Zn)
<i>Hydride generation</i>	
Solutions uptake rate / mL min ⁻¹	Acidified sample: 1.5 NaBH ₄ : 1.0
Reagents concentrations:	
NaBH ₄ / %	1.0 (in 0.10% NaOH)
Pre-reduction:	0.50% (TU)–2.0% (AA)–3 mol L ⁻¹ HCl (As, Sb) 6 mol L ⁻¹ HCl (Se)

PN: Pneumatic nebulization with a OneNeb® nebulizer/cyclonic spray chamber system. HG: Hydride generation with a OneNeb® nebulizer/modified cyclonic spray chamber system. TU: thiourea. AA: ascorbic acid.