

Supplementary Table

Supplementary Table S1. The validity and reliability of urinary arsenic species, plasma selenium, and red blood cell lead and cadmium.

Metals or metalloids	Method	Detection limit ($\mu\text{g/L}$)	Recovery rate	SRM	CV%
Plasma selenium	Inductively coupled plasma mass spectrometry	0.193		SRMs (Seronorm Trace Elements Whole Blood Label II (SERO AS, Norway) contained 112 ± 46 mg/L of selenium, in our system 118.7 ± 11.1 mg/L ($n = 7$))	9.8%
Red blood cell lead	Inductively coupled plasma mass spectrometry	0.32		SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129)) certificate value 310.0 $\mu\text{g/L}$ (range 186.0 – 434.0 $\mu\text{g/L}$), in our system 329.0 ± 17.0 $\mu\text{g/L}$	<10%
Red blood cell cadmium	Inductively coupled plasma mass spectrometry	0.07		SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129) certificate value 5.8 $\mu\text{g/L}$ (range: 5.4 – 6.2 $\mu\text{g/L}$), in our system 6.1 ± 0.5 $\mu\text{g/L}$	<10%
Arsenite (As^{III})	High-performance liquid chromatography-hydride generator-atomic absorption spectrometry	0.02	93.8–102.2%	SRM (National Institute of Standards and Technology (NIST, Gaithersburg, MD) 2670 certificate value 480 ± 100 $\mu\text{g/L}$ inorganic arsenic, in our system 507 ± 17 $\mu\text{g/L}$ ($n = 4$))	<10%
Arsenate (As^{V})		0.10			
Monomethylarsonic acid (MMA^{V})		0.07			
Dimethylarsinic acid (DMA^{V})		0.06			