

## Supplementary Tables

**Table S1.** The validity and reliability of the measurement of urinary arsenic species, red blood cell lead and cadmium, and plasma homocysteine, vitamin B<sub>12</sub>, and folate.

Measurements	Instrument	Detection limit	Recovery rate (%)	Standard reference materials (SRM)	Coefficient of variance (%)
Arsenite (As <sup>III</sup> )	High-performance liquid chromatography-hydride generator-atomic absorption spectrometry	0.02 µg/L	93.8 - 102.2	SRM 2670 (National Institute of Standards and Technology, Gaithersburg, MD) certificate value 480 ± 100 µg/L inorganic arsenic, in our system 507 ± 17 µg/L (n = 4).	< 10
Arsenate (As <sup>V</sup> )		0.10 µg/L			
Monomethylarsonic acid (MMA <sup>V</sup> )		0.07 µg/L			
Dimethylarsinic acid (DMA <sup>V</sup> )		0.06 µg/L			
Blood lead	Inductively coupled plasma mass spectrometry	0.32 µg/dL	100 ± 20	SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129)) certificate value 5.8 µg/L (range: 5.4–6.2 µg/L) in our system 6.1 ± 0.5 µg/L	< 10
Blood cadmium	Inductively coupled plasma mass spectrometry	0.07 µg/L	100 ± 20	SRMs (Seronorm Trace Elements Whole Blood L-2 (Lot 1103129)) certificate value 310.0 µg/L (range 186.0–434.0 µg/L), in our system 329.0 ± 17.0 µg/L	< 10
Plasma Vitamin B <sub>12</sub>	Radioassay kit (Bio-Rad, Richmond, CA) and the 1470 Wizard series gamma counter	75 pg/mL			6.8
Plasma folate	Radioassay kit (Bio-Rad, Richmond, CA) and the 1470 Wizard series gamma counter	0.6 ng/mL			9.3