

## Supplementary Data



**Figure S1.** Representative specimen of the five most consumed CHMs, namely (a) Bird's Nest (燕窝), (b) Sheng Hua Tang (生化汤), (c) Ba Zhen Tang (八珍汤), and (d) So Hup Pills (苏合丸).

**Table S1.** LOD, LOQ, linearity, instrumental method repeatability and recovery for As, Cd, Pb and Cr

Target Metals	Arsenic (As)	Cadmium (Cd)	Lead (Pb)	Chromium (Cr)
LOD ( $\mu\text{g}/\text{kg}$ )	0.0414	0.0126	0.8304	0.7221
LOQ ( $\mu\text{g}/\text{kg}$ )	0.1380	0.0420	2.7680	2.4070
Linear Range ( $\mu\text{g}/\text{kg}$ )	1.0 - 100	1.0 - 100	1.0 - 100	1.0 - 100
$R^2$	0.9999	0.9999	0.9999	0.9998
Slope	181.94	231.41	2258.29	1153.54
Intra-day RSD (%)				
10 $\mu\text{g}/\text{kg}$	2.6	2.0	1.5	1.5
50 $\mu\text{g}/\text{kg}$	3.5	3.8	2.8	1.6
100 $\mu\text{g}/\text{kg}$	1.8	1.7	1.2	1.2
Inter-day RSD (%)				
10 $\mu\text{g}/\text{kg}$	1.2	0.7	2.1	1.1
50 $\mu\text{g}/\text{kg}$	1.6	1.2	1.8	2.4
100 $\mu\text{g}/\text{kg}$	0.5	0.3	0.4	0.6
Recovery (%)				
NIST 1547	92	101	98	96
Matrix effect	1.1	1.1	1.0	1.0

**Table S2.** Top four CHMs: ingredients and medicinal properties. Information gathered from the label of each CHM product

CHMs	Ingredients	Medicinal properties
Sheng Hua Tang (生化汤)	<i>Zingiber officinale</i> , <i>Glycyrrhiza uralensis</i> , <i>Angelica sinensis</i> , <i>Carthamus tinctorius</i> , <i>Semen persicae</i> , <i>Levisticum officinale</i>	Promote blood circulation, body warming, relieve pain and aid in lochia discharge
Bird's Nest (燕 窝)	Saliva of <i>Aerodramus fuciphagus</i>	Strengthen immune function, enhance energy and metabolism, and stimulate circulation
Ba Zhen Tang (八珍汤)	<i>Angelica sinensis</i> , <i>Atractylodes macrocephala</i> , <i>Rehmanniae glutinosa</i> , <i>Eucommia ulmoides</i> , <i>Codonopsis pilosula</i> , <i>Paeonia lactiflora</i> , <i>Wolfiporia cocos</i> , <i>Ligusticum striatum</i> , <i>Glycyrrhiza uralensis</i>	Help regulate irregular menstrual cycles, replenish blood and help provide relief from cold hands and feet due to poor blood circulation
So Hup Pills (苏 合丸)	<i>Notopterygii</i> , <i>Trichosanthes kirilowii</i> , <i>Terminalia chebula</i> , <i>Angelicae dahuricae</i> , <i>Blumea balsamifera</i> , <i>Agsastache rugosa</i> , <i>Glycyrrhiza glabra</i> , <i>Atractylis lancea</i> , <i>Aquilaria agallocha</i> , <i>Santalum album</i> , <i>Cyperus rotundus</i> , <i>Styrax</i> , <i>Piper longum</i> , <i>Moschus</i> , <i>Inula helenium</i>	Help expel wind, reduce stomach cramps, bloating and flatulence