

Supplementary Table S1. Results of calibration parameters from the determination of ascorbic acid, lycopene, total phenolics, and trace metals.

Supplementary Table S2. Recovery of analytes and relative standard deviation percentage of sample replicates.

Analyte	Recovery (%)	RSD (%)
Ascorbic acid ¹	89.01–111.01 ^a	0.02–8.92
Lycopene ²	97.54–110.32 ^a / 92.38–109.53 ^b	0.63–9.84
Total phenolics ³	94.85–107.58 ^b	0.29–5.70
Copper ³	120.32 ^c	< 3.41
Iron ³	93.86–94.71 ^d	0.37–5.66
Manganese ³	107.50–108.50 ^d	0.37–5.90
Zinc ³	91.89 ^c	0.25–2.89
Cadmium ⁴	84.13–98.11 ^c	< 14.77
Lead ³	75.08–91.60 ^b	< 2.56

^aspiked samples; ^bfortified samples; ^ccertified reference material;
^dstandard control
RSD: relative standard deviation.
AOAC (55) limits: ¹recovery 85–110%, RSD: 8%; ²recovery: 80–115%, RSD: 11%; ³recovery: 75–120%, RSD: 16%; ⁴recovery: 70–125%, RSD: 32%.