

Supplementary Material (SM)

Exposure to Metal Accumulation in Chicken Giblets and Human Health Risk in Lokoja, Nigeria

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SM 1 Results of recovery study for metals determined (Mean \pm SD, n = 3)

Metal	Unspiked sample conc. ($\mu\text{g g}^{-1}$)	Concentration added ($\mu\text{g g}^{-1}$) to each sample	Total expected by analysis	Result of spiked sample ($\mu\text{g g}^{-1}$)	% Recovery	Mean % recovery
Al	7.18	5.00	12.18	12.08	98	98.5 \pm 0.8
	9.13	5.00	14.13	14.10	99.4	
	13.8	10.00	23.8	23.6	98	
Cd	0.01	0.50	0.51	0.49	96	97.3 \pm 1.2
	0.02	0.50	0.52	0.50	98	
	0.03	0.50	0.53	0.52	98	
Co	1.22	1.00	2.22	2.20	98	97.5 \pm 1.3
	2.12	1.00	3.12	3.08	96	
	3.52	2.00	5.52	5.49	98.5	
Cr	0.11	0.50	0.61	0.58	94	96.7 \pm 2.3
	0.11	0.50	0.61	0.60	98	
	0.27	0.50	0.77	0.76	98	
Mn	0.18	0.50	0.68	0.66	96	98.0 \pm 2.0
	0.37	0.50	0.87	0.87	100	
	0.49	0.50	0.97	0.98	98	
Ni	0.04	0.50	0.54	0.51	94	94.7 \pm 1.2
	0.08	0.50	0.58	0.56	96	
	0.20	0.50	0.70	0.67	94	
Pb	0.01	0.20	0.21	0.20	95	91.7 \pm 2.9
	0.08	0.20	0.28	0.26	90	
	0.24	0.20	0.44	0.42	90	

SM 2 Principal component loadings (varimax-normalized) and communalities for heavy metals in chicken giblets samples (n = 45)

Heavy metals	PC1	PC2	PC3	Communalities
Al	-0.280	0.282	-0.002	0.158
Cd	-0.415	0.485	0.006	0.407
Co	-0.027	0.739	-0.005	0.547
Cr	0.528	0.227	-0.039	0.332
Ni	-0.043	-0.020	0.994	0.990
Mn	0.515	0.105	0.047	0.278
Pb	0.450	0.278	0.091	0.288
Eigenvalue	2.307	1.415	1.003	
% of total variance	32.95	20.21	14.32	
Cumulative % of variance	32.95	53.17	67.49	