

Red Cell				Whole Blood		Plasma			
Essential Panel		Toxic Panel		Toxi Panel		Essential Panel		Toxic Panel	
Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range
Chromium	5.6 - 58.0 nmol/L	Antimony	0.00 - 1.64nmol/L	Antimony	0.00 - 0.74 nmol/L	Chromium	1.90 - 5.80 nmol/L	Aluminum	0 - 370 nmol/L
Copper	8.7 - 14.6 nmol/L	Arsenic	0.0 - 40.1 nmol/L	Arsenic	0.0 - 21.4 nmol/L	Cobalt	0.51 - 6.80 nmol/L	Antimony	0.00 - 0.41 nmol/L
Magnesium	1.57 - 2.73 mmol/L	Cadmium	0.0 - 20.1 nmol/L	Cadmium	0.0 - 8.9 nmol/L	Copper	Age Dependant	Nickel	1.7 - 25.5 nmol/L
Molybdenum	2.1 - 13.6 nmol/L	Lead	0.00 - 0.48 umol/L	Lead	0.00 - 0.22 umol/L	Iodine	0.24 - 0.63 umol/L		
Potassium	80 - 94 mmol/L	Mercury	0.0 - 24.9 nmol/L	Mercury	0.0 - 18.0 nmol/L	Manganese	5.5 - 18.2 nmol/L		
Selenium	2.53 - 5.06 umol/L	Nickel	1.7 - 51.1 nmol/L	Nickel	1.7 - 34.1 nmol/L	Molybdenum	2.1 - 14.6 nmol/L		
Vanadium	0.56 - 4.12 nmol/L	Thallium	0.00 - 0.39 nmol/L	Thallium	0.00 - .024 nmol/L	Selenium	Age Dependant		
Zinc	175 - 251 umol/L			Zinc Protoporphyrin	30 - 70 umol/mol(heme)	Vanadium	0.2 - 2.0 nmol/L		

Urine				Water		Hair			
Essential Panel		Toxic Panel		Total Panel		Essential Panel		Toxic Panel	
Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range
Boron	0.05 - 0.65 mmol/L	Aluminum	0.00 - 0.63 umol/L	Aluminum	0.000000 - 0.010000 mg/L	Boron	0.037 - 0.314 umol/g	Aluminum	0.000 - 0.296 umol/g
Calcium	0.75 - 4.25 mmol/L	Antimony	0.00 - 0.46 nmol/L	Antimony	0.000000 - 0.006000 mg/L	Calcium	7.5 - 25.0 umol/g	Antimony	0.00 - 0.33 nmol/g
Chromium	1.7 - 10.0 nmol/L	Arsenic (Total)	0.00 - 0.53 umol/L	Arsenic	0.000000 - 0.005000 mg/L	Chromium	1.0 - 6.7 nmol/g	Arsenic	0.0 - 2.0 umol/g
Cobalt	1.2 - 14.1 nmol/L	Barium	0.0 - 25.2 nmol/L	Barium	0.000000 - 0.100000 mg/L	Cobalt	0.03 - 0.84 nmol/g	Barium	0.0 - 10.9 nmol/g
Copper	0.04 - 0.19 umol/L	Beryllium	0.0 - 11.1 nmol/L	Beryllium	0.000000 - 0.004000 mg/L	Copper	0.16 - 0.44 umol/g	Beryllium	0.00 - 0.44 nmol/g
Iron	0.02 - 0.24 umol/L	Cadmium	0.0 - 13.4 nmol/L	Cadmium	0.000000 - 0.001000 mg/L	Germanium	0.028 - 0.207 nmol/g	Bismuth	0.00 - 0.45
Magnesium	0.8 - 4.3 mmol/L	Lead	0.0 - 14.5 nmol/L	Calcium	0.000000 - 2.000000 mg/L	Iodine	0.9 - 9.5 nmol/g	Cadmium	0.00 - 1.33 nmol/g
Manganese	1.3 - 9.1 nmol/L	Mercury	0.0 - 15.0 nmol/L	Chromium	0.000000 - 0.014000 mg/L	Iron	0.08 - 0.27 umol/g	Lithium	0.9 - 5.8 nmol/g
Molybdenum	0.14 - 1.25 umol/L	Nickel	0.0 - 59.6 nmol/L	Copper	0.000000 - 0.100000 mg/L	Magnesium	0.82 - 4.11 umol/g	Lead	0.0 - 7.2 nmol/g
Potassium	30.0 - 120.0 mmol/L	Silver	0.00 - 0.46 nmol/L	Iron	0.000000 - 0.030000 mg/L	Manganese	1.5 - 9.1 nmol/g	Mercury	0.0 - 5.0 nmol/g
Selenium	0.25 - 1.14umol/L	Thallium	0.00 - 1.96 nmol/L	Lead	0.000000 - 0.005000 mg/L	Molybdenum	0.26 - 1.04 nmol/g	Nickel	0.0 - 6.0 nmol/g
Sodium	40 - 200 mmol/L	Uranium	0.000 - 0.042 nmol/L	Magnesium	0.000000 - 4.000000 mg/L	Phosphorus	4.0 - 7.8 umol/g	Palladium	0.00 - 1.88 nmol/g
Stronium	0.34 - 1.82 umol/L			Manganese	0.000000 - 0.050000 mg/L	Potassium	0.13 - 1.02 umol/g	Platinum	0.0 - 20.5 pmol/g
Sulfur	4.4 - 18.7 mmol/L			Mercury	0.000000 - 0.000200 mg/L	Selenium	6.3 - 22.8 nmol/g	Silver	0.00 - 2.32 nmol/g

Urine				Water		Hair			
Essential Panel		Toxic Panel		Total Panel		Essential Panel		Toxic Panel	
Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range	Element	Reference Range
Tin	4.2 - 42.2 nmol/L			Nickel	Ranges not established	Sodium	0.22 - 2.83 umol/g	Thallium	0.0 - 9.8 pmol/g
Vanadium	0.26 - 2.36 nmol/L			Potassium	0.000000 - 8.000000 mg/L	Strontium	3.4 - 61.4 nmol/g	Thorium	0.0 - 17.2 pmol/g
Zinc	0.9 - 6.1 umol/L			Selenium	0.000000 - 0.090000 mg/L	Sulfur	1.40 - 1.72 mmol/g	Titanium	0.0 - 8.4 nmol/g
				Silver	0.000000 - 0.005000 mg/L	Tin	0.42 - 3.37 nmol/g	Uranium	0.00 - 0.25 nmol/g
				Sodium	0.000000 - 70.000000 mg/L	Vanadium	0.05 - 0.59 nmol/g	Zinc	2.14-3.06 umol/g
				Sulfur	0.000000 - 33.300000 mg/L				
				Thallium	0.000000 - 0.002000 mg/L				
				Zinc	0.000000 - 0.100000 mg/L				