

Ordering Physician:

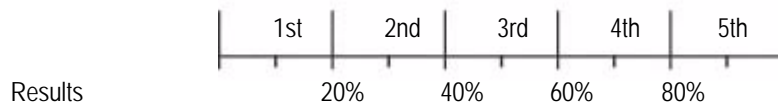
Metamatrix

3425 Corporate Way  
 Duluth, GA 30096

**0022 Element Analysis - Erythrocytes and Whole Blood**

Methodology: Inductively Coupled Plasma/Mass Spectroscopy

**Percentile Ranking by Quintile**



**95%  
Reference  
Interval**

**Nutrient Elements**

Element	Result	Percentile	Reference Interval	Units
Potassium	3,521	3,055	2,426 - 4,472	ppm packed cells
Magnesium*	41 <b>L</b>	49	36 - 70	ppm packed cells
Zinc	12.4	10.4	7.5 - 16.3	ppm packed cells
Copper	815	604	535 - 962	ppb packed cells
Selenium	0.14 <b>L</b>	0.19	0.14 - 0.47	ppm whole blood
Calcium	35	44	24 - 65	ppm packed cells

Relevant to membrane permeability, not nutritional status.

\*The expanded abnormal range approximates the population at risk for magnesium insufficiency disorders. See: Johnson S, Med Hypotheses. Feb 2001;56(2):163-170.

These test results are not for the diagnosis of disease. They are intended to provide nutritional guidelines to qualified healthcare professionals with full knowledge of patient history and concerns to assist in their design of an appropriate healthcare program.

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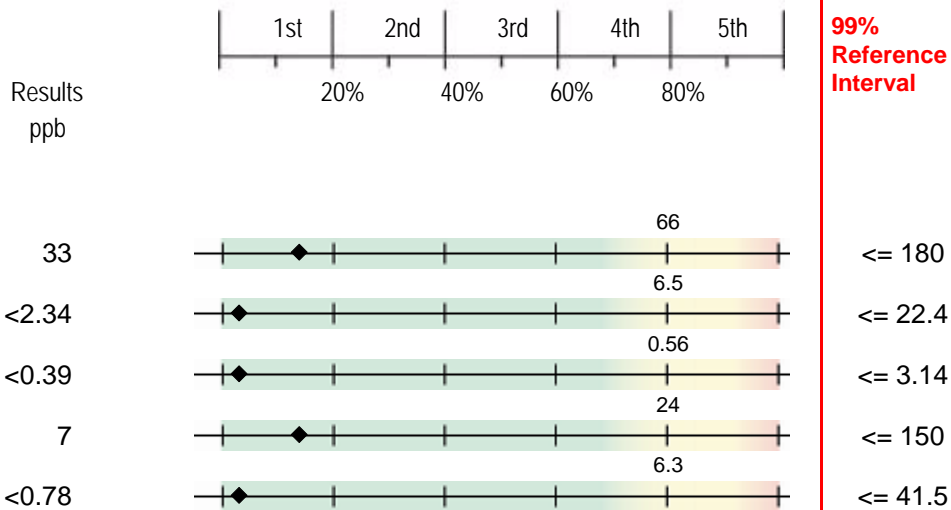
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**Toxic Elements**

Results for whole blood toxic elements that are within normal limits do not rule out metal accumulation in other tissues. This can be evaluated by urinary porphyrin or 24-hour urine chelation challenge tests.

**Lead Levels Considered Elevated in Adults (1)**

- At levels above 800 ppb, serious, permanent health damage may occur (extremely dangerous).
- Between 400 and 800 ppb, serious health damage may be occurring, even if there are no symptoms (seriously elevated).
- Between 250 and 400 ppb, regular exposure is occurring. There is some evidence of potential physiological problems (elevated).
- Between 100 and 250 ppb, lead is building up in the body and exposure is occurring.

In children, lead levels even below 100 ppb are associated with IQ deficits.(2), and, in adults, levels as low as 50-90 ppb cause an increased risk of death from all causes, cardiovascular disease and cancer.(3)

(1)Lead Exposure in Adults. A Guide for Health Care Providers, State of New York, Department of Public Health.

(2) Lanphear BP, Hornung R, Khoury J, et al. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. Environ Health Perspect. Jul 2005;113(7):894-899.

(3) Schober, Susan et al. Blood Lead Levels and Death from All Causes, Cardiovascular Disease, and Cancer: Results from the NHANES III Mortality Study. Environmental Health Perspect. Oct 2006; 114(10):1538-1541.

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