

Hello Freddy.

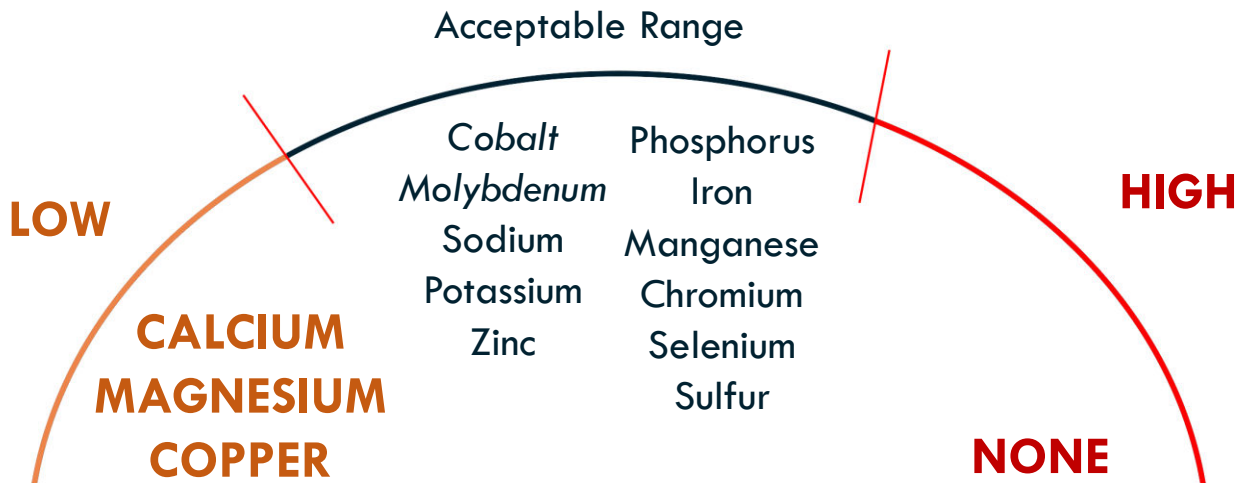
Your HTMA result from **September** are in.



Metabolic Type:
Fast Metabolism, Type 4
[Learn More](#)



8 toxic elements were tested.
NONE were detected at toxic levels.



15 nutritional elements & 14 subsidiary elements were tested.
Calcium, Magnesium and Copper are low, **Cobalt and Molybdenum** are borderline low. **None** are high.

These nutritional mineral levels that reveal moderate or significant deviations from normal based on statistical data that identifies the reference range for a healthy individual. The following sections, however, are based on clinical data. As such, an element that is moderately outside the reference range may not be commented on unless determined to be clinically significant. In contrast, a level that indicated it is within the reference range may be commented on based on level or ratio with other elements. This report is for self-educational and informational purposes only and in no way is intended as medical counseling or medical advice concerning any medical condition, disorder or disease.

Your HTMA result from **September Page 2.**

Sodium, Potassium and Hydrochloric Acid Production - Chloride from sodium chloride is utilized by the parietal cells of the stomach for the production of hydrochloric acid. Low sodium levels may indicate a decrease in normal hydrochloric acid production, which can lead to poor protein digestion, and an acid/alkaline imbalance.

Low Calcium - Your calcium level is below reference range. This is not uncommon for your age and metabolism type. If the profile worsens or continues for an extended period of time, you may experience symptoms like mood swings, depression, osteoporosis, insomnia, and dental problems. Common factors that can contribute to low calcium levels in the body include hypoparathyroid activity, high phosphorus intake and retention, toxic metal accumulation, inadequate calcium intake, poor absorption, stress or Vitamin D, magnesium, or copper deficiency.

Magnesium - Magnesium will fluctuate up and down with calcium. It is necessary for muscle relaxation, protein synthesis, nerve excitability, and energy production on a cellular level. When magnesium is chronically low, an increased tendency toward the following conditions are possible: hyperactivity, muscle cramps/spasms, insomnia, body odor, noise sensitivity, irritability, tremors, excessive perspiration.

Other factors that contribute to low magnesium levels are low magnesium intake, vitamin D deficiency, excess phosphorus intake, stress, pancreatitis, chronic diarrhea, excess alcohol intake, laxatives, tissue acidity, intestinal malabsorption, diuretics, enteritis.

Magnesium and Stress - When the body becomes stressed physically or emotionally, the stress reaction will result in a release of stress hormones from the adrenal glands. This is a normal response. However, this response to stress is exaggerated when a magnesium deficiency is present. This over-response can then contribute to a periodic flare-up of stress related conditions, such as gastrointestinal irritability, cardiovascular disturbances, arthritis, blood sugar fluctuations, or emotional disturbances such as anxiety.

Low Copper - Your mineral profile shows below normal levels. Deficiency or lower levels of cellular copper can be due to one or more factors: excessive iron, zinc or vitamin C intake/retention, excessive tissue acidity or toxic metal accumulation. Low copper levels can contribute to dental caries, anemia, skin blemishes, periodontal problems, calcium loss from bones and teeth, bleeding gums, ligamentous laxity, infections, and cardiac irregularities.

As your zinc, iron and heavy metal levels are within range, it is advisable to review your vitamin C intake. Low tissue copper may contribute to: dental caries, anemia, skin blemishes, bleeding gums, ligamentous laxity, infections, and/or periodontal problems.

Depression and Copper Deficiency - Copper is intricately involved in the production of neurotransmitters in the brain, a deficiency can contribute to depression.

Your HTMA result from **September** Page 3.

High Bismuth - The bismuth level is elevated above the referenced range. This element is relatively non-toxic and has no known biochemical function, although it is commonly found in low concentrations in the body. High levels may be found in the following products: cosmetics, burn ointments, antiseptic powders, products used for G.I. disturbances, wart treatments, hair dyes. Other sources may include superconductors, dentistry and silvering of mirrors.

Low Sodium/Potassium - The body's response to stress is often reflected by the tissue sodium-to-potassium balance. The adrenal glands are sensitive to the effects of stress, and will directly affect this electrolyte balance. A low sodium-potassium ratio is usually indicative of the secondary stage of stress, which is the resistance or exhaustion stage.

Exhaustion Stage of Stress Indicated by Low Tissue Sodium and Potassium Levels - Low tissue sodium and potassium can often reflect a reduction in adrenal cortical activity. This pattern is indicative of an exhaustion stage of stress in the fast metabolizer. This stage of stress is frequently the result of prolonged or severe stress, and is often referred to as a "stress burnout".

High Zinc/Copper - The zinc level is high relative to tissue copper status. A low copper level in conjunction with a zinc-copper imbalance is a strong indicator of a decrease in the role of copper in many functions of metabolism. One of the basic functions of copper is its necessity in collagen synthesis. If this profile becomes both severe and chronic, a decrease in collagen synthesis can occur. This can then be a precursor to capillary fragility, bleeding gums, osteoporosis and premature greying of the hair.

High Iron/Copper - Both iron and copper in sufficient amounts and in balance are required for normal red blood cell formation. When there are inadequate levels of copper available, sufficient levels of iron may not be incorporated into the hemoglobin molecule, thereby, instead resulting in soft tissue storage of this essential nutrient. If chronic, this pattern is indicative of a tendency toward anemia. A copper deficiency induced anemia does not respond to iron supplementation or increased iron intake.

Your HTMA result from **September** Page 4.

These dietary and supplement recommendations are not intended to be a permanent recommendation plan. These recommendations are made based on your existing HTMA results. Periodic reevaluation is recommended as desired.



Dietary Recommendations

Optimize your body chemistry

↑ **High purine protein** – liver, kidney, heart, sardines, salmon, crab, tuna, oysters and more...

↑ **Milk & milk products** - cheese, yogurt, cream and unsalted butter, also nuts and seeds such as walnuts, peanuts, sunflower seeds and more...

Avoid sugars and refined carbs – sugar, pastries, candy, honey, alcohol and white bread...

↓ **Daily carbohydrates** - preference for unrefined carbs – cereals, vegetables, legumes, whole grains...



Supplement Recommendations

TAKE:

ActivFulvic

Trace Minerals

Iodine

Cal/Mag

Digestive Support

(prebiotic and probiotic)

DON'T TAKE:

Vitamin A

Vitamin B3

Vitamin B5

Zinc

Fructose

The above nutrient levels should be met through dietary recommendations without additional supplementation that may contribute to mineral ratio imbalances.



Your Customized Supplement Plan

Keeping Your Nutritional Health on Target

Not all supplements are created equal. We create high-quality professional-grade mineral supplements that are uniquely formulated for maximum bio-availability and rapid absorption. Our liquid base formulas enhanced with CHD-FA Fulvic Acid increases nutrient availability up to 99.9%.

ActivFulvic – 30 Day Detox Protocol

Balance elevated mineral levels with the 30 day detox protocol helping to reduce higher levels of heavy metals.

Trace Minerals – 1x Daily AM or PM

Fill in nutritional gaps and increase your nutrient absorption with a liquid trace minerals supplement

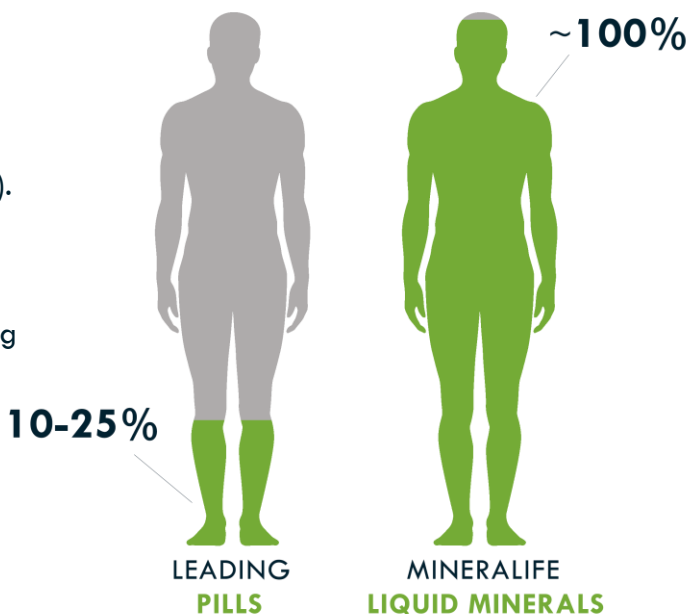
Iodine – 2-3 drops, 3-4 days/week

An essential mineral for thyroid health stimulating the thyroid hormones: thyroxin (T) and triiodothyronine (T3).

Cal/Mag – 1x Daily AM or PM

Elevate calcium and magnesium levels while maintaining the perfect balance between calcium and magnesium with a liquid cal-mag supplement.

AVAILABILITY OF SUPPLEMENT ABSORPTION



Are You Ready for Better Health?

Start resolving nutrient shortfalls, balance your nutrition, and optimize your metabolism with our supplement recommendation plan.

Get your supplement program and **Save 30% and Get FREE shipping!**



TRACE ELEMENTS

4501 Sunbelt Drive · Addison, Tx · 75001 · U.S.A.

PROFILE NO.: 2

SAMPLE TYPE: SCALP

PATIENT: FREDDY

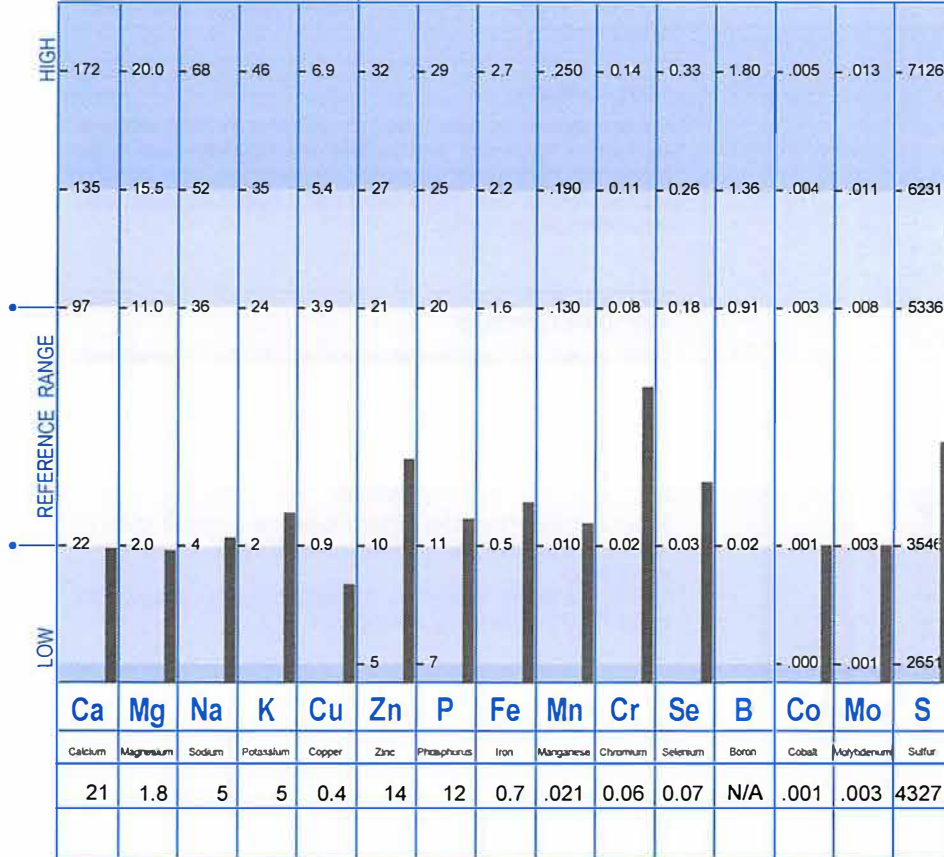
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SEX: M

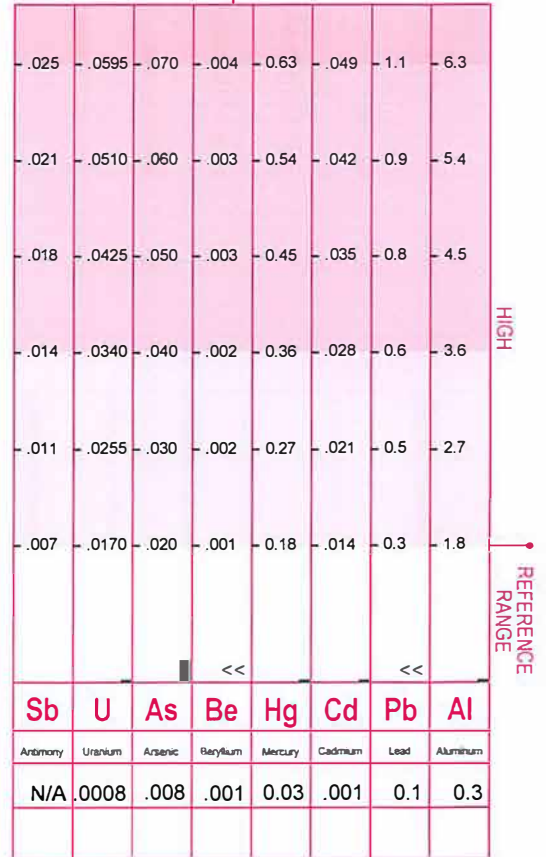
METABOLIC TYPE: FAST 4

REQUESTED BY: MINERALIFE

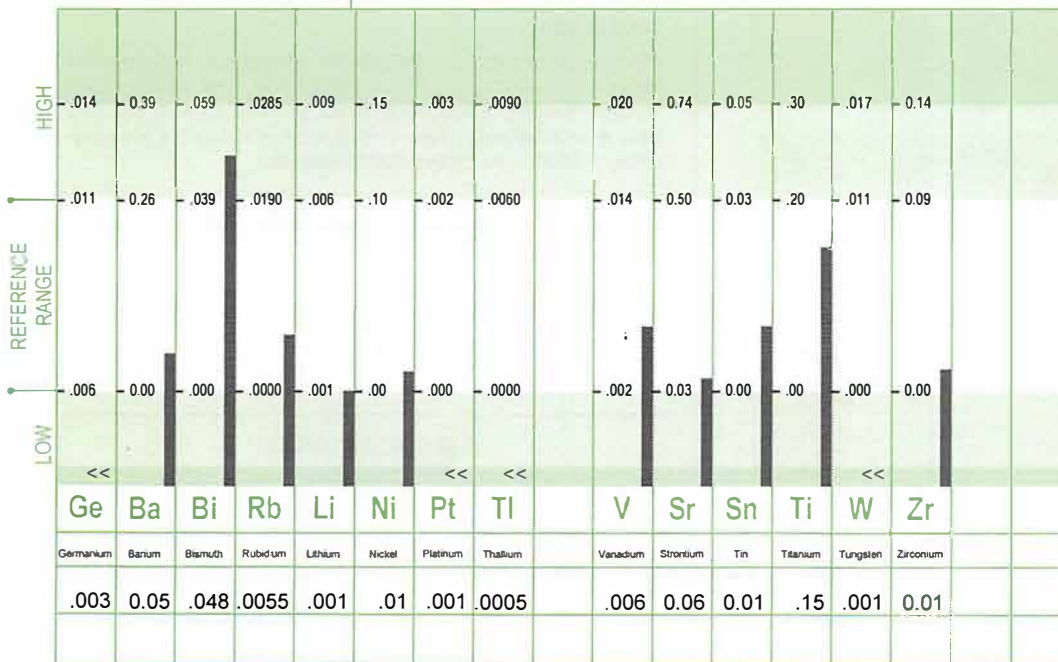
NUTRITIONAL ELEMENTS



TOXIC ELEMENTS



ADDITIONAL ELEMENTS



<<: Below Calibration Limit; Value Given Is Calibration Limit

QNS: Sample Size Was Inadequate For Analysis.

N/A: Currently Not Available

Ideal Levels And Interpretation Have Been Based On Hair Samples Obtained From The Mid-Parietal To The Occipital Region Of The Scalp.

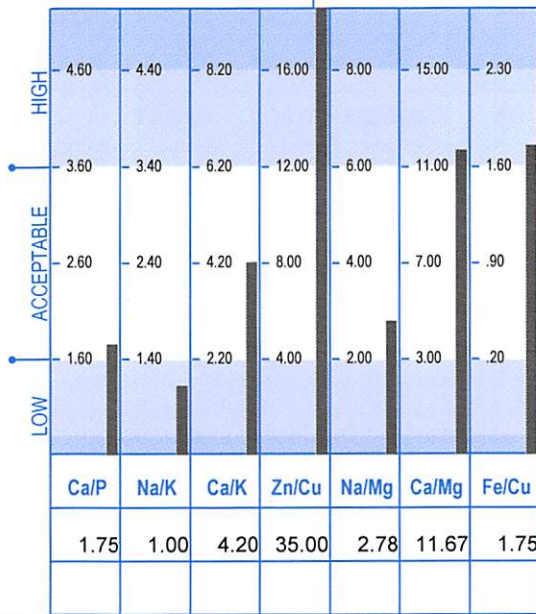
Laboratory Analysis Provided by Trace Elements, Inc. an H. H. S. Licensed Clinical Laboratory. No. 45 D0481787

9/18/2019

CURRENT TEST RESULTS

PREVIOUS TEST RESULTS

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		EXPECTED
	Current	Previous	
Ca/Sr	350.00		131/1
Cr/V	10.00		13/1
Cu/Mo	133.33		625/1
Fe/Co	700.00		440/1
K/Co	5000.00		2000/1
K/Li	5000.00		2500/1
Mg/B	N/A		40/1
Si/Cu	10817.50		1138/1
Se/Tl	140.00		37/1
Se/Sn	7.00		0.67/1
Zn/Sn	1400.00		167/1

LEVELS

All mineral levels are reported in milligrams percent (milligrams per one-hundred grams of hair). One milligram percent (mg%) is equal to ten parts per million (ppm).

NUTRITIONAL ELEMENTS

Extensively studied, the nutrient elements have been well defined and are considered essential for many biological functions in the human body. They play key roles in such metabolic processes as muscular activity, endocrine function, reproduction, skeletal integrity and overall development.

TOXIC ELEMENTS

The toxic elements or "heavy metals" are well-known for their interference upon normal biochemical function. They are commonly found in the environment and therefore are present to some degree, in all biological systems. However, these metals clearly pose a concern for toxicity when accumulation occurs to excess.

ADDITIONAL ELEMENTS

These elements are considered as possibly essential by the human body. Additional studies are being conducted to better define their requirements and amounts needed.

RATIOS

A calculated comparison of two elements to each other is called a ratio. To calculate a ratio value, the first mineral level is divided by the second mineral level.

EXAMPLE: A sodium (Na) test level of 24 mg% divided by a potassium (K) level of 10 mg% equals a Na/K ratio of 2.4 to 1.

SIGNIFICANT RATIOS

If the synergistic relationship (or ratio) between certain minerals in the body is disturbed, studies show that normal biological functions and metabolic activity can be adversely affected. Even at extremely low concentrations, the synergistic and/or antagonistic relationships between minerals still exist, which can indirectly affect metabolism.

TOXIC RATIOS

It is important to note that individuals with elevated toxic levels may not always exhibit clinical symptoms associated with those particular toxic minerals. However, research has shown that toxic minerals can also produce an antagonistic effect on various essential minerals eventually leading to disturbances in their metabolic utilization.

ADDITIONAL RATIOS

These ratios are being reported solely for the purpose of gathering research data. This information will then be used to help the attending health-care professional in evaluating their impact upon health.

REFERENCE RANGES

Generally, reference ranges should be considered as guidelines for comparison with the reported test values. These reference ranges have been statistically established from studying an international population of "healthy" individuals.

Important Note: The reference ranges should not be considered as absolute limits for determining deficiency, toxicity or acceptance.