

Hello **Jessica**.

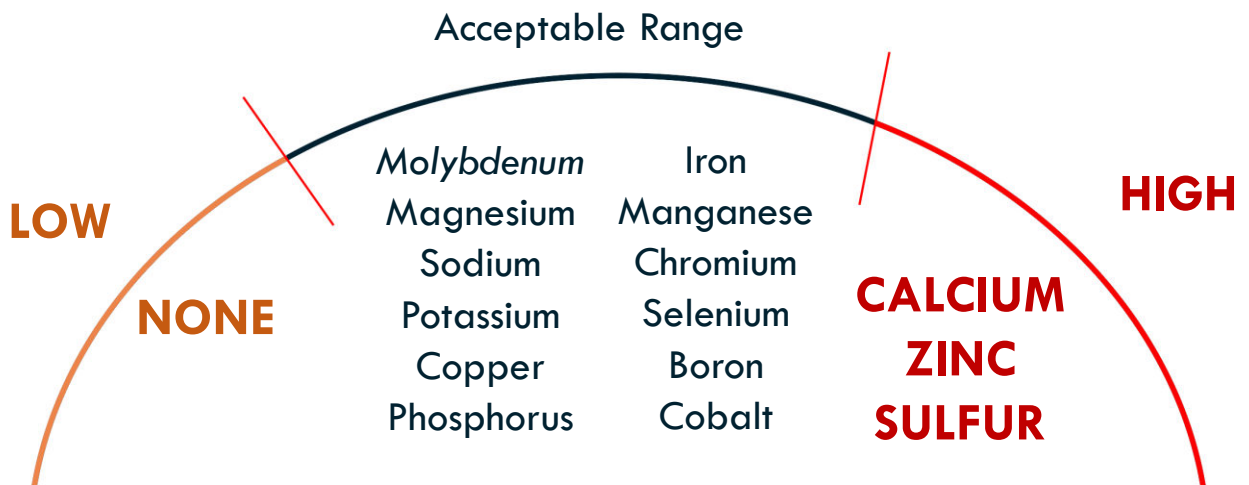
Your HTMA result from **May 2019** are in.



Metabolic Type:
Slow Metabolism, Type 1
Learn More



8 toxic elements were tested.
Mercury was detected.



15 nutritional elements & 14 subsidiary elements were tested.

None are low, **Molybdenum** is borderline low.

Calcium, Zinc and Sulfur is 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.

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Very High Calcium - Your calcium level is extremely high. This does not necessarily mean too much calcium, but instead that it may not be made bioavailable or being utilized effectively in your body. Over 90% of the calcium in the body is stored in the bones and teeth, it is drawn upon when needed. If the calcium is not being properly utilized, it can accumulate in tissue other than bones and teeth. Excess accumulation over extended periods of time may contribute to joint stiffness (especially in the mornings or in cold weather), changes in skin and hair texture, low energy levels, fatigue, muscle cramps, insomnia, depression and anemia. Some factors that may contribute to elevated levels are low thyroid and adrenal activity with a relative increase in parathyroid function and/or inadequate protein intake, excessive sugar or refined carbohydrate intake, high vitamin D intake, and increased requirements of vitamins and minerals such as phosphorus or vitamin E.

Hypoglycemia Profile - Your metabolic profile and nutrient levels indicate a tendency toward hypoglycemia (low blood sugar) that can be contributed to by dietary factors other than the commonly known factors of eating excess refined carbohydrates and sugars. Dairy products, fruit juices and foods high in fat content may also produce hypoglycemic symptoms. For this reason, observance of dietary recommendations is of special importance. Common symptoms associated include headaches, mood swings, lethargy, loss of concentration, and mid-afternoon loss of energy.

Hydrochloric Acid Production and Protein Digestion - Your mineral profile may be reflective of a deficiency in hydrochloride acid (HCL) production, which can result in inadequate protein digestion. Hydrochloric acid in a sufficient amount is necessary for the complete digestion and utilization of dietary protein. Symptoms such as bloating, flatulence and constipation may be observed, especially after high protein meals.

Low Germanium - Your current levels are below the reference range. However deficiency signs and conditions have not been identified. At this time the clinical significance can not be established.

Mercury/Iron - Low iron levels in ratio to mercury, even though mercury levels are not elevated, may effect the protective action of iron. If mercury levels increase, this may effect iron metabolism.

High Barium - Your barium level of 0.66mg% is above the established reference range. Elevated levels have previously been associated with high blood pressure and cardiovascular disease. Barium is widely used in textile, plastic, rubber, and electronic production, as well as an additive in cosmetics and pharmaceuticals, and is contained in rodenticides. Barium is also used in diagnostic produces, such as a GI series. Dietary sources include milk, potatoes, flour, cereal products, and nuts with Brazil nuts containing the highest amounts. Water can also be a source, either from naturally occurring sources or from industrial pollution. Atmospheric sources include coal and diesel fuel combustion. Barium is used as a drilling mud in oil wells and can be a significant environmental source.

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.

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High Strontium - Your current levels are above the established reference range. In excess, strontium is apparently antagonistic to calcium metabolism and can therefore interfere with normal calcium function. It may be contained in some mouth rinses and dental varnishes used in the treatment of dentin hypersensitivity.

High Calcium/Potassium - this ratio indicates a trend toward an under-active thyroid. Calcium antagonizes the retention of potassium in the cell that are necessary to sensitize the tissue to the effects of thyroid hormones. High Ca/K ratio suggest reduced thyroid function and/or cellular response to thyroxine. If the imbalance is present for an extended period of time, you may experience fatigue, dry skin, constipation, cold sensitivity, weight gain, and/or depression.

High Calcium/Magnesium - These minerals should always be in a proper balance to one another. If this normal equilibrium is upset, one mineral will become dominant relative to the other. In this case, calcium is high relative to magnesium, which may be indicative of abnormal calcium metabolism. This profile is indicative of a suppressing effect upon magnesium function within the body, and increased need for magnesium in the diet.

This ratio may result in excess tissue calcium that may lead to constant muscular tension and contraction. If the muscles around the bladder are in a state of tension from the imbalance, you may notice a reduced volume capacity and may contribute to increased frequency of urination due to the restricted bladder size. This ratio imbalance can also contribute to calcium deposition into the urinary tract and gallbladder. This profile has been correlated with increased tendency toward kidney and gallstones. Lastly, this overall profile shows a need for Vitamin B6 to balance this ratio and optimize your metabolism.

High Mercury - Although the mercury level is above the established reference range, this level may not be clinically significant at this time. A major source of non-occupational exposure is dietary intake of contaminated seafood. Additional sources can include deteriorating mercury amalgams, fungicides, medications, calomel laxatives, diuretics, merthiolate, polluted water, coal-fired utility plants, soft contact lens solution, burning of treated industrial building materials, pesticides, cosmetics, germicides, hemorrhoid suppositories, photographic supplies, electronics industry, battery manufacturing, bleaching skin creams, water based paints, vaccines.

Low Iron/Mercury - This ratio is below acceptable limits. Currently, even though your iron is not low, if mercury exposure increases, and the body retains increased amounts of heavy metals, iron metabolism may be affected.

Low Selenium/Mercury Ratio - Mercury, a toxic metal, causes increased oxidative damage to cells. Selenium is known to protect tissues against these adverse effects by binding with mercury, thereby, rendering it less damaging. At this time, a low selenium-to-mercury ratio may be indicative of increased free radical production.

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Low Zinc/Mercury Ratio - When zinc levels within the body are sufficient, zinc is able to produce an antagonistic or protective response to the adverse effects of mercury. However, when zinc is low in relation to mercury, the protective action of zinc upon mercury may become markedly reduced. Although the current mercury level is within the acceptable range, if this pattern becomes chronic or worsens, some minor symptoms or adverse reactions associated with mercury may occur.

Sulfur & Heavy Metals - The absorption and retention of toxic metals, such as: cadmium, lead and mercury, are enhanced in the presence of a protein deficiency, particularly the sulfur compounds. Sulfur is known to protect cells from the toxic effects of heavy metals, such as enzyme inhibition and excessive free radical production. A low S/Hg, S/Cd or S/Pb suggests a need for increased protein intake. Foods high in sulfur amino acids include, animal protein, fish, poultry and garlic.

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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

↑ **Lean Protein** - beef, fish, chick, beans, eggs with every meal - increase metabolic rate & energy production.

↑ **Frequency of meals** - 4-6/day - balance nutrient levels & decrease blood sugar fluctuations.

>40% **daily carbohydrates** - preference for unrefined carbs - vegetables, legumes, whole grains.

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

Avoid high purine protein – liver, kidney, sardines, salmon and more...

↓ **Milk & milk products** - cheese, yogurt, cream to once every 3-4 days a week..

↓ **Fat and oil intake** – fried food, cream, butter, salad dressings, mayo..

↓ **Fruit juice intake** – vegetable juices are okay!



Supplement Recommendations

TAKE:

Magnesium

Iodine

Potassium

Daily Multiple

Digestive Support

(prebiotic and probiotic)

DON'T TAKE:

Vitamin D

Cod Liver Oil

Thymus

Boron

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



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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%.

Daily Multiple – 1x daily AM or PM

Fill in nutritional gaps with a wholefood supplement rich in Vitamins, Minerals, Amino Acids and Enzymes.

Iodine – 2-3 drops, 3-4 days/week

Fill in nutritional gaps with a wholefood supplement rich in Vitamins, Minerals, Amino Acids and Enzymes.

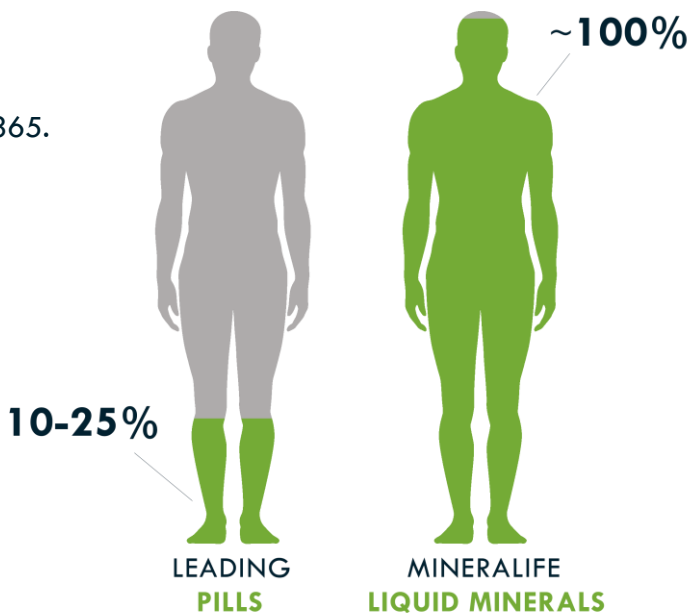
Magnesium – 2-3x weekly

Balance your magnesium/calcium ratio with supplementation of liquid magnesium or magnesium 365.

Potassium – 1x daily AM or PM

Balance your potassium/calcium ratio with daily supplementation of liquid potassium.

AVAILABILITY OF SUPPLEMENT ABSORPTION

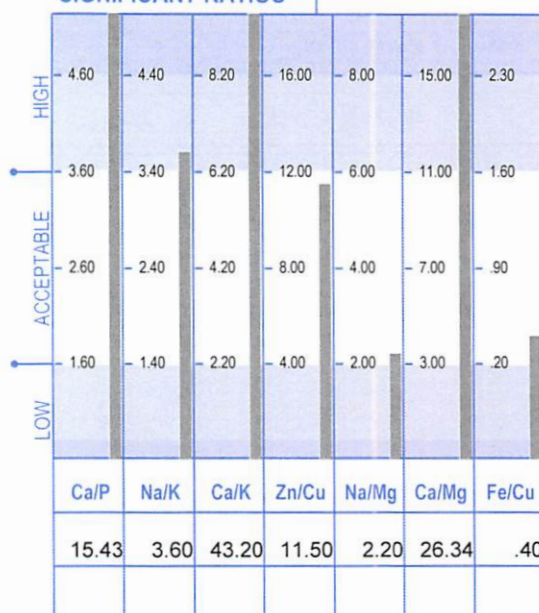


Are You Ready for Better Health?

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!**

SIGNIFICANT RATIOS



TOXIC RATIOS



ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		EXPECTED
	Current	Previous	
Ca/Sr	115.51		131/1
Cr/V	10.00		13/1
Cu/Mo	666.67		625/1
Fe/Co	400.00		440/1
K/Co	2500.00		2000/1
K/Li	1250.00		2500/1
Mg/B	74.55		40/1
S/Cu	2778.50		1138/1
Se/Tl	100.00		37/1
Se/Sn	2.50		0.67/1
Zn/Sn	1150.00		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.