Hello Rebecca.

Your HTMA result from January 2020 are in.

Metabolic Type:
Slow Metabolism, Type 1
Learn More

8 toxic elements were tested.

NONE were detected at toxic levels.

15 nutritional elements & 14 subsidiary elements were tested.
Sodium, Potassium and Boron are low, Phosphorus and Molybdenum are borderline low. None are high, Magnesium and Cobalt are borderline 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.

Hello Rebecca.

Your HTMA result from January 2020 Page 2.

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 Sodium - Sodium is vital for the maintenance of body fluids and the acid-alkaline balance. It is also necessary for the transport of nutrients across the cell membrane, especially glucose and essential amino acids. Low sodium in a slow metabolizer can be indicative of either a decreased ability to retain and utilize sodium, or most likely, a decrease in dietary sodium intake. This can be associated with poor digestion, flatulence, constipation, low adrenal cortical activity, low blood pressure, dry skin, and fatigue.

Factors that can contribute to a low sodium level are high calcium intake, slow metabolism, high magnesium intake, low sodium intake, and chronic diarrhea.

Low Potassium - Low tissue potassium may be due to poor retention of the mineral, even though dietary intake of potassium may be adequate. Poor potassium retention can result from adrenal and thyroid insufficiency, prolonged diarrhea, or from the use of medications, such as diuretics and laxatives. Non-steroidal anti-inflammatory will also suppress adrenal function.

Electrolyte Levels & Energy - When both sodium and potassium HTMA levels are below normal, it is a further indication that the adrenal response may be diminished. If this pattern becomes chronic, emotional changes may occur due to a lack of sufficient energy production by the adrenal glands. When energy levels are extremely low, the ability to cope with stress may become markedly reduced.

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 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.

High Calcium/Phosphorus- Phosphorus is involved in almost every reaction of metabolism. When low levels of phosphorus are found in the hair relative to tissue calcium, it often reflects abnormal calcium and/or phosphorus metabolism.

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.

Hello Rebecca.

Your HTMA result from January 2020 Page 3.

Low Sodium/Magnesium - This ratio is below normal. The adrenal glands play an essential role in regulating sodium retention and excretion. Studies have also shown that magnesium will affect adrenal cortical activity and response, and reduced adrenal activity results in increased magnesium retention. You may notice fatigue, dry skin, allergies, constipation, low blood pressure, and/or lowered immunity function.

Hello Rebecca.

Your HTMA result from January 2020 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

⬆ **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 sugar and refined carbs – sugar, candy, soda, alcohol, pastries, white bread and more…

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

⬇ **Fruit-based juices** - vegetables juices are okay!

⬇ **Fats and Oils** – fried foods, cream, butter, mayo and more…

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

Supplement Recommendations

TAKE:

ActivFulvic
Daily Multiple
Iodine
Potassium
Iron
RePlenish
Digestive Support
(prebiotic and probiotic)

DON'T TAKE:

Vitamin D
Calcium
Thymus
Cod Liver Oil

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

Hello Rebecca.

Your HTMA result from January 2020 Page 5.

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.

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

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

Potassium – 1x Daily AM or PM

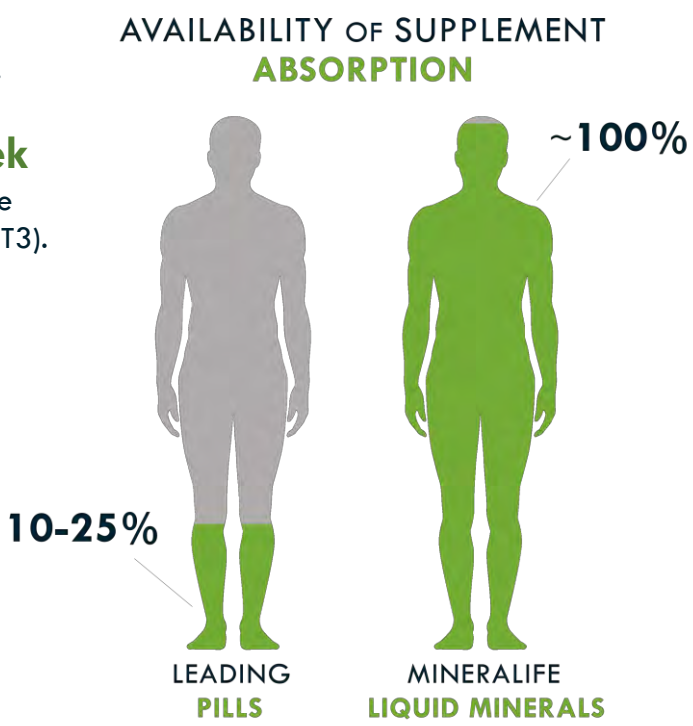
Balance potassium ratios and levels with daily supplementation of liquid potassium.

Iron – 1x Daily AM or PM

Low HCL levels will sometimes decrease iron absorption, increase absorption of iron with daily supplementation of liquid iron.

RePlenish – 1x Daily AM or PM

Obtain healthy sodium and potassium levels in the body and encourages muscle endurance while preventing cramping.



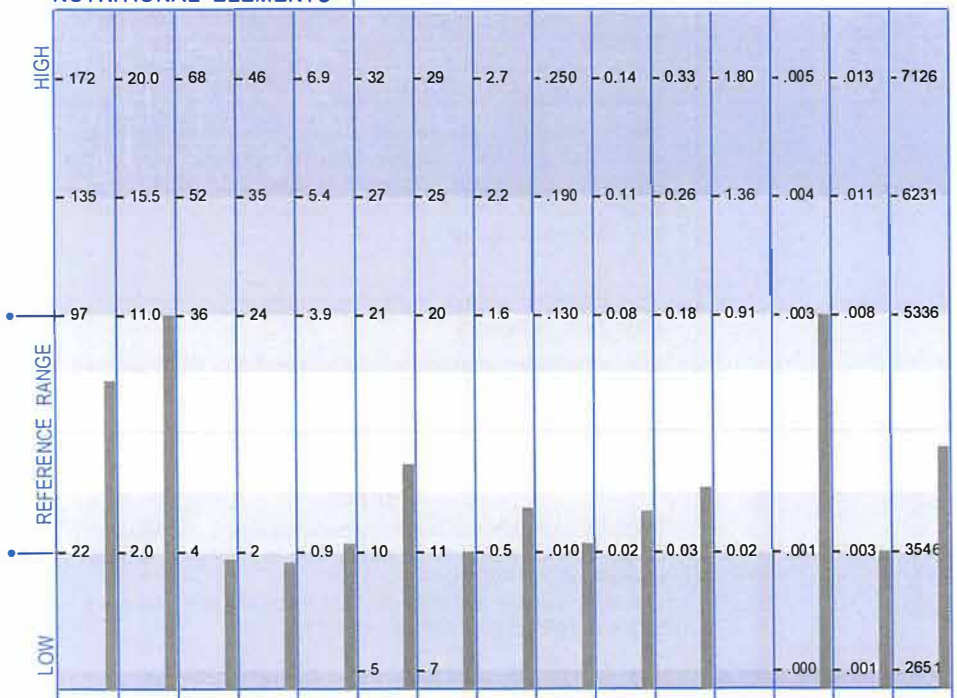
Are You Ready for Better Health?

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**!

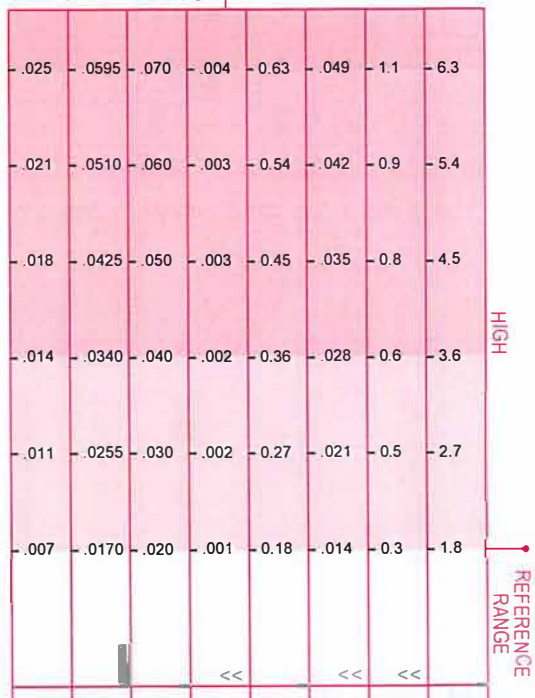
PROFILE NO.: 2			SAMPLE TYPE: SCALP
PATIENT: REBECCA	AGE: 26	SEX: F	METABOLIC TYPE: SLOW 1
REQUESTED BY: MINERALIFE			DATE: 01/2020

NUTRITIONAL ELEMENTS



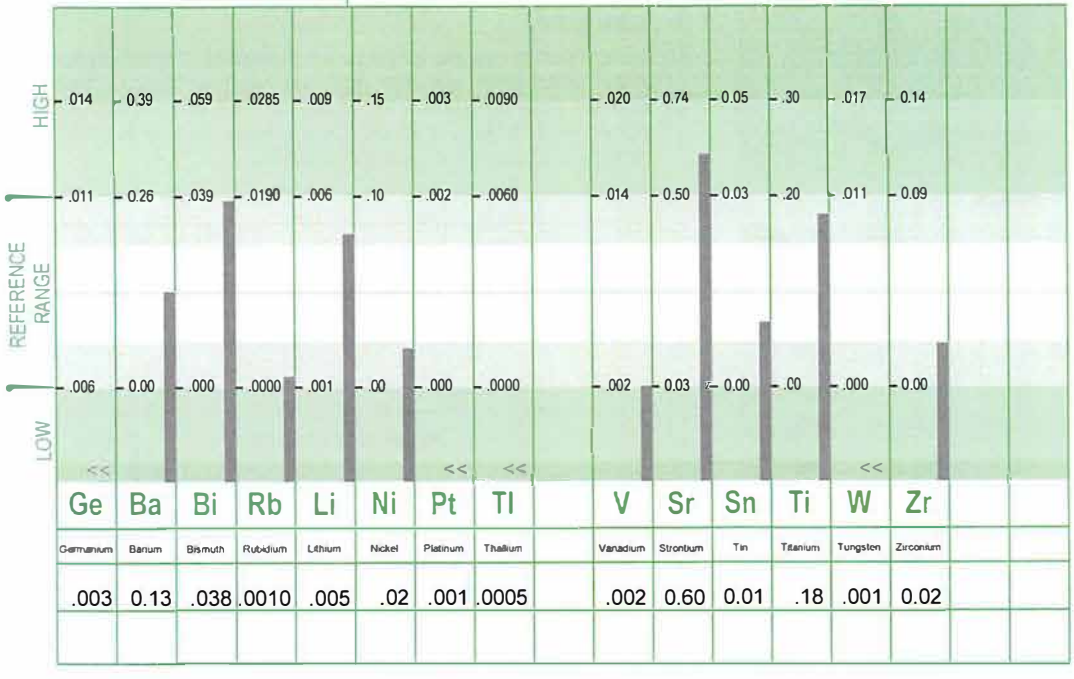
Ca	Mg	Na	K	Cu	Zn	P	Fe	Mn	Cr	Se	B	Co	Mo	S
Calcium	Magnesium	Sodium	Potassium	Copper	Zinc	Phosphorus	Iron	Manganese	Chromium	Selenium	Boron	Cobalt	Molybdenum	Sulfur
76	11.0	3	1	1.0	14	11	0.7	.014	0.03	0.07	N/A	.003	.003	4328

TOXIC ELEMENTS



Sb	U	As	Be	Hg	Cd	Pb	Al
Antimony	Uranium	Arsenic	Beryllium	Mercury	Cadmium	Lead	Aluminum
N/A	.0087	.003	.001	0.03	.001	0.1	0.5

ADDITIONAL ELEMENTS



Ge	Ba	Bi	Rb	Li	Ni	Pt	Tl	V	Sr	Sn	Ti	W	Zr
Germanium	Barium	Bismuth	Rubidium	Lithium	Nickel	Platinum	Thallium	Vanadium	Strontium	Tin	Titanium	Tungsten	Zirconium
.003	0.13	.038	.0010	.005	.02	.001	.0005	.002	0.60	0.01	.18	.001	0.02

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

"QNS": Sample Size Was Inadequate For Analysis.

"N/A": Currently Not Available

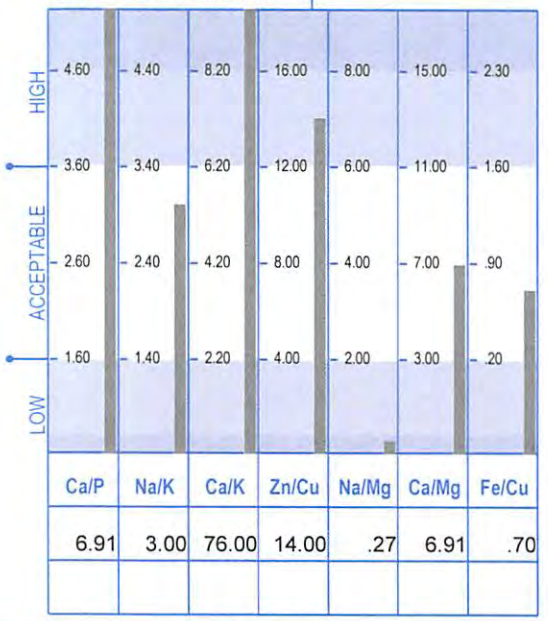
Ideal Levels And Interpretation Have Been Based On Hair Samples Obtained From The Mid-Parietal To The Occipital Region Of The Scalp.

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

01/2020
CURRENT TEST RESULTS

PREVIOUS TEST RESULTS

SIGNIFICANT RATIOS



	Ca/P	Na/K	Ca/K	Zn/Cu	Na/Mg	Ca/Mg	Fe/Cu
HIGH	4.60	4.40	8.20	16.00	8.00	15.00	2.30
ACCEPTABLE	3.60	3.40	6.20	12.00	6.00	11.00	1.60
	2.60	2.40	4.20	8.00	4.00	7.00	.90
LOW	1.60	1.40	2.20	4.00	2.00	3.00	.20
	6.91	3.00	76.00	14.00	.27	6.91	.70

TOXIC RATIOS

	Ca/Pb	Fe/Pb	Fe/Hg	Se/Hg	Zn/Cd	Zn/Hg	S/Hg	S/Cd	S/Pb
HIGH	168.0	8.8	44.0	1.6	1000.0	400.0	56900	142251	11380
ACCEPTABLE	126.0	6.6	33.0	1.2	750.0	300.0	42675	106688	8535
	84.0	4.4	22.0	0.8	500.0	200.0	28450	71126	5690
LOW	42.0	2.2	11.0	0.4	250.0	100.0	14225	35563	2845
	760.0	7.0	23.3	2.3	14000.0	466.7	144267	4328000	43280

ADDITIONAL RATIOS

RATIO	CALCULATED VALUE		EXPECTED
	Current	Previous	
Ca/Sr	126.67		131/1
Cr/V	15.00		13/1
Cu/Mo	333.33		625/1
Fe/Co	233.33		440/1
K/Co	333.33		2000/1
K/Li	200.00		2500/1
Mg/B	N/A		40/1
S/Cu	4328.00		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.