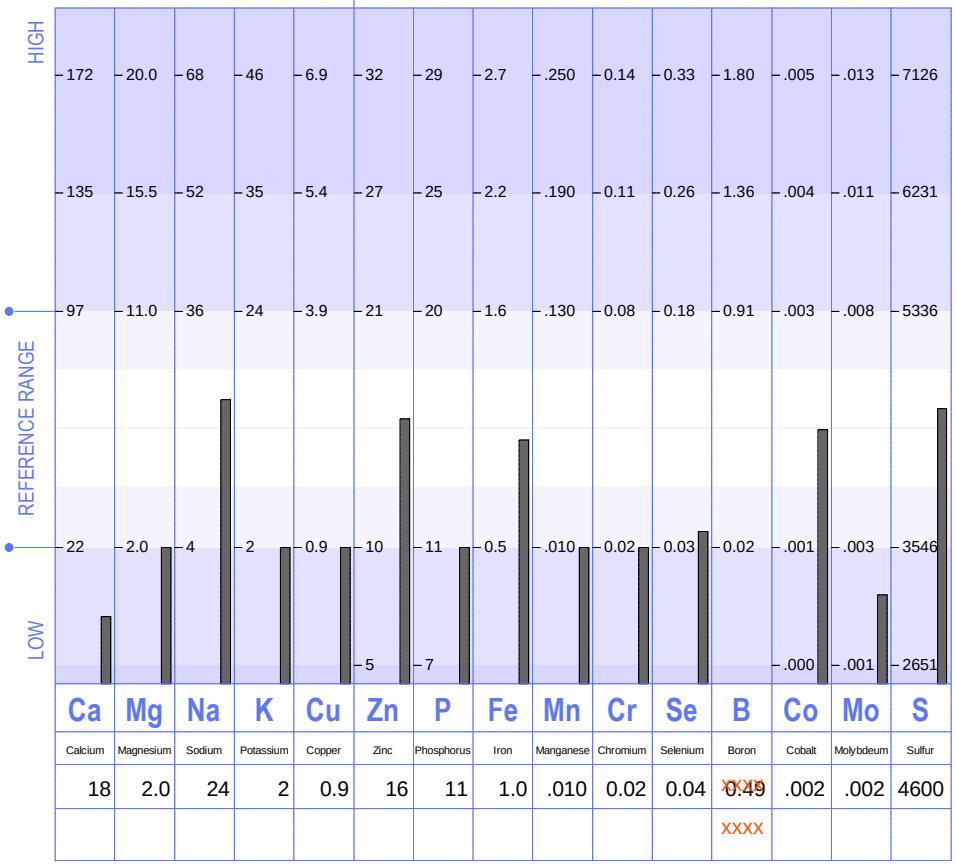
# Hair Mineral Analysis

**Mineral State**
Hair Mineral Analysis Testing
www.mineralstate.co.uk - linda@mineralstate.co.uk

Health Energy Ltd
28 Oliver's Battery Road North
Winchester
Hampshire
SO22 4JA

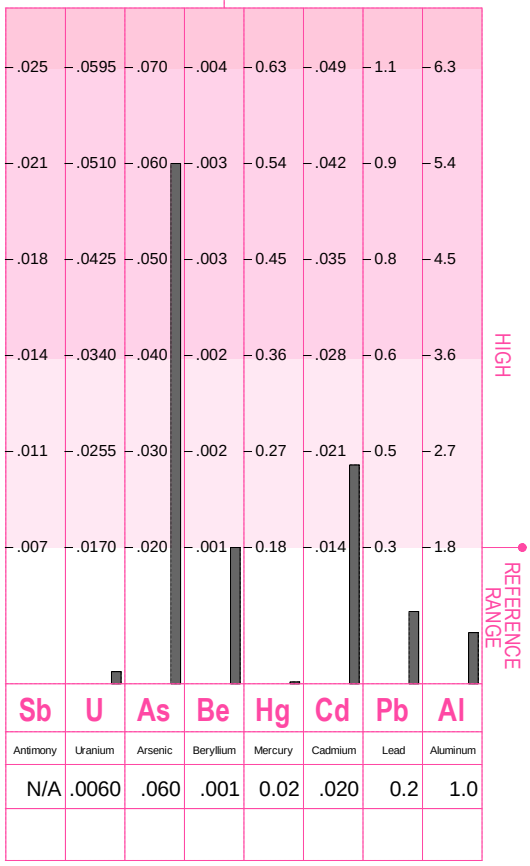
| | | | |
|---|---|---|---|
| LABORATORY NO.: | 1 | | |
| PROFILE NO.: | 2 | SAMPLE TYPE: | SCALP |
| PATIENT: | AGE: 47 | SEX: F | METABOLIC TYPE: FAST 2 |
| REQUESTED BY: | ACCOUNT NO.: 007 | DATE: | 1/5/2012 |

## 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 | Molybdeum | Sulfur |
| 18 | 2.0 | 24 | 2 | 0.9 | 16 | 11 | 1.0 | .010 | 0.02 | 0.04 | 0.49 XXXX | .002 | .002 | 4600 |
| | | | | | | | | | | | XXXX | | | |

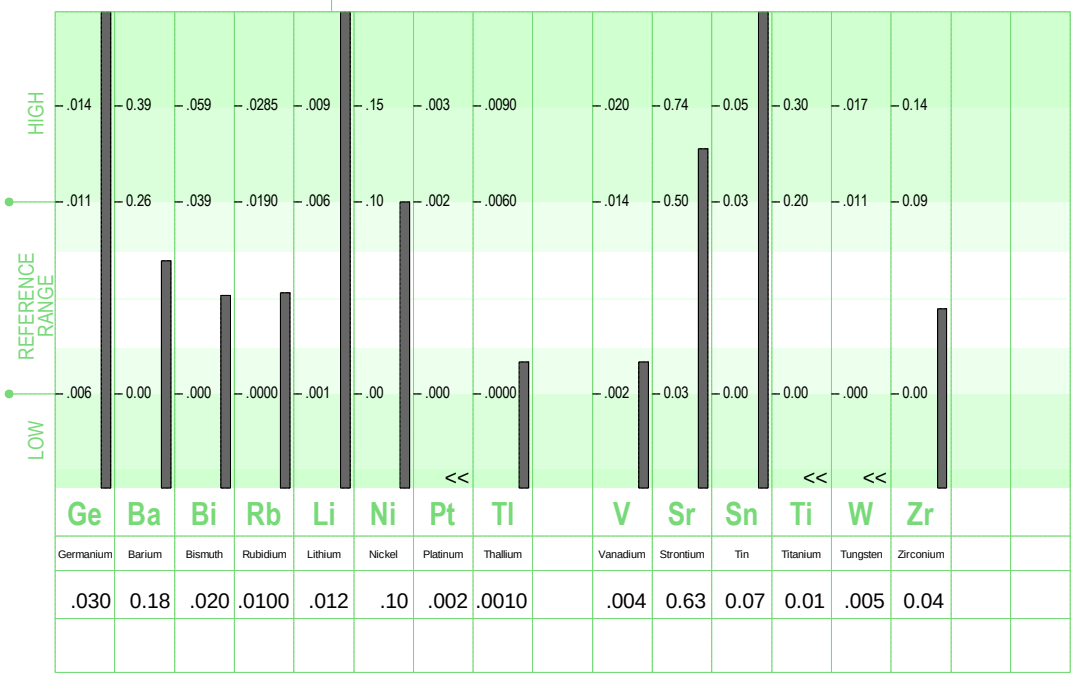
## TOXIC ELEMENTS




| Sb | U | As | Be | Hg | Cd | Pb | Al |
|---|---|---|---|---|---|---|---|
| Antimony | Uranium | Arsenic | Beryllium | Mercury | Cadmium | Lead | Aluminum |
| N/A | .0060 | .060 | .001 | 0.02 | .020 | 0.2 | 1.0 |
| | | | | | | | |

Boron is not tested by default: If you require a test for boron please contact us prior to ordering.

## 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 |
| .030 | 0.18 | .020 | .0100 | .012 | .10 | .002 | .0010 | .004 | 0.63 | 0.07 | 0.01 | .005 | 0.04 |
| | | | | | | | | | | | | | |

"<<": 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.

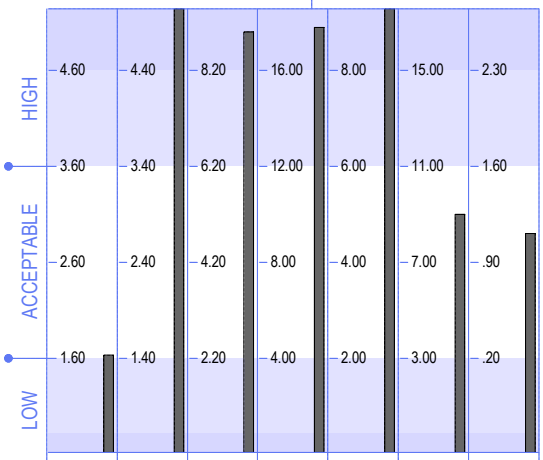
Laboratory Analysis Provided by Trace Elements, Inc., an H. H. S. Licensed Clinical Laboratory. FNo. 45 D0481787

1/5/2012
CURRENT TEST RESULTS

PREVIOUS TEST RESULTS

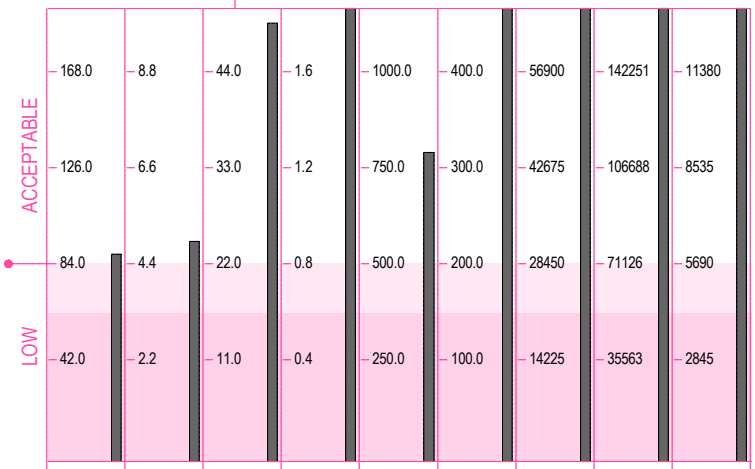
© Trace Elements, Inc. 1998, 2000

## SIGNIFICANT RATIOS




| Ca/P | Na/K | Ca/K | Zn/Cu | Na/Mg | Ca/Mg | Fe/Cu |
|---|---|---|---|---|---|---|
| 1.64 | 12.00 | 9.00 | 17.78 | 12.00 | 9.00 | 1.11 |

## TOXIC RATIOS




| Ca/Pb | Fe/Pb | Fe/Hg | Se/Hg | Zn/Cd | Zn/Hg | S/Hg | S/Cd | S/Pb |
|---|---|---|---|---|---|---|---|---|
| 90.0 | 5.0 | 50.0 | 2.0 | 800.0 | 800.0 | 230000 | 230000 | 23000 |

## ADDITIONAL RATIOS

| RATIO | CALCULATED VALUE | | EXPECTED |
|---|---|---|---|
| | Current | Previous | |
| Ca/Sr | 28.57 | | 131/1 |
| Cr/V | 5.00 | | 13/1 |
| Cu/Mo | 450.00 | | 625/1 |
| Fe/Co | 500.00 | | 440/1 |
| K/Co | 1000.00 | | 2000/1 |
| K/Li | 166.67 | | 2500/1 |
| Mg/B | 4.08 | | 40/1 |
| S/Cu | 5111.11 | | 1138/1 |
| Se/Tl | 40.00 | | 37/1 |
| Se/Sn | .57 | | 0.67/1 |
| Zn/Sn | 228.57 | | 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.

Mineral State
Hair Mineral Analysis Testing
www.mineralstate.co.uk - linda@mineralstate.co.uk

Health Energy Ltd
28 Oliver's Battery Road North
Winchester
Hampshire
SO22 4JA

# INTRODUCTION TO HAIR TISSUE MINERAL ANALYSIS (HTMA)

Hair is used for mineral testing because of its very nature. Hair is formed from clusters of specialized cells that make up the hair follicle. During the growth phase the hair is exposed to the internal environment such as blood, lymph and extra-cellular fluids. As the hair continues to grow and reaches the surface of the skin its outer layers harden, locking in the metabolic products accumulated during the period of formation. This biological process provides a blueprint and lasting record of mineral status and nutritional metabolic activity that has occurred during this time.

The precise analytical method of determining the levels of minerals in the hair is a highly sophisticated technique: when performed to exacting standards and interpreted correctly, it may be used as a screening aid for determining mineral deficiencies, excesses, and/or imbalances. HTMA provides you and your healthcare professional with an economical and sensitive indicator of the long-term effects of diet, stress, toxic metal exposure and their effects on your mineral balance that is difficult to obtain through other clinical tests.

It is important for the attending healthcare professional to determine your mineral status as minerals are absolutely critical for life and abundant health. They are involved in and are necessary for cellular metabolism, structural support, nerve conduction, muscular activity, immune functions, anti-oxidant and endocrine activity, enzyme functions, water and acid/alkaline balance and even DNA function.

Many factors can affect mineral nutrition, such as; food preparation, dietary habits, genetic and metabolic disorders, disease, medications, stress, environmental factors, as well as exposure to heavy metals. Rarely does a single nutrient deficiency exist in a person today. Multiple nutritional imbalances however are quite common, contributing to an increased incidence of adverse health conditions. In fact, it is estimated that mild and sub-clinical nutritional imbalances are up to ten times more common than nutritional deficiency alone.

*The laboratory test results and the comprehensive report that follows should not be construed as diagnostic. This analysis is provided only as an additional source of information to the attending doctor.*

*Test results were obtained by a licensed clinical laboratory adhering to analytical procedures that comply with governmental protocol and standards established by Trace Elements, Inc. U.S.A. The interpretive data based upon these results is defined by research conducted by David L. Watts, Ph.D.*

# UNDERSTANDING THE GRAPHICS

### NUTRITIONAL ELEMENTS

This section of the cover page graphically displays the test results for each of the reported

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nutritional elements and how they compare to the established population reference range. Values that are above or below the reference range indicate a deviation from "normal". The more significant the deviation, the greater the possibility a deficiency or excess may be present.

**TOXIC ELEMENTS**

The toxic elements section displays the results for each of the reported toxic elements. It is preferable that all levels be as low as possible and within the lower white section. Any test result that falls within the upper dark red areas should be considered as statistically significant, but not necessarily clinically significant. Further investigation may then be warranted to determine the possibility of actual clinical significance.

**ADDITIONAL ELEMENTS**

This section displays the results of additional elements for which there is limited documentation. These elements may be necessary for biochemical function and/or may adversely effect biochemical function. Further study will help to reveal their function, interrelationships and eventually their proper therapeutic application or treatment.

**SIGNIFICANT RATIOS**

The significant ratios section displays the important nutritional mineral relationships. This section consists of calculated values based on the respective elements. Mineral relationships (balance) is as important, if not more so, than the individual mineral levels. The ratios reflect the critical balance that must be constantly maintained between the minerals in the body.

**TOXIC RATIOS**

This section displays the relationships between the important nutritional elements and toxic metals. Each toxic metal ratio result should be in the white area of the graph, and the higher the better. Toxic ratios that fall within the darker red area may indicate an interference of that toxic metal upon the utilization of the nutritional element.

**ADDITIONAL RATIOS**

The additional ratios section provides calculated results on some additional mineral relationships. At this time, there is limited documentation regarding these ratios. For this reason, these ratios are only provided as an additional source of research information to the attending health-care professional.

## METABOLIC TYPE

This section of the report will discuss the metabolic profile, which is based on research conducted by Dr. D. L. Watts. Each classification is established by evaluating the tissue mineral results and determining the degree to which the minerals may be associated with a stimulating and/or inhibiting effect upon the main "energy producing" endocrine glands. These glands regulate nutrient absorption, excretion, metabolic utilization, and incorporation into the tissues of the body: the skin, organs, bone, hair, and nails. How efficiently each nutrient is utilized depends largely upon proper functioning of the endocrine glands.

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**FAST METABOLISM (TYPE #2)**

** Sympathetic Dominance
** Tendency Toward Decreased Thyroid Function (decreased secretion of hormones)
** Tendency Toward Increased Adrenal Activity (increased secretion of hormones)

The current mineral pattern is indicative of a fast metabolic rate (Fast Metabolism, Type #2). The glandular imbalance associated with Fast Metabolism (Type#2) is usually the result of an acute stress reaction or possible inflammatory condition. Type #2 Fast Metabolism is often associated with high energy. However, energy levels may fluctuate particularly when under stress. It should be noted that stress is a normal part of life and serves a useful purpose when it is controlled. However, chronic uncontrolled stress will eventually contribute to various vitamin and mineral imbalances, and the ability to maintain adequate energy levels and optimum health will decrease.

## NUTRIENT MINERAL LEVELS

This section of the report may discuss those nutritional mineral levels that reveal moderate or significant deviations from normal. The light blue area's of each graph section represent the reference range for each element based upon statistical analysis of apparently healthy individuals. The following section, however, is based upon clinical data, therefore an element that is moderately outside the reference range may not be commented on unless determined to be clinically significant.

**NOTE:**
For those elements whose levels are within the normal range, it should be noted that nutritional status is also dependent upon their critical balance with other essential nutrients. If applicable, discussion regarding their involvement in metabolism may be found in the ratio section(s) of this report.

**CALCIUM (Ca)**
The tissue calcium level is below the normal level. This is not uncommon for this age and fast metabolism (Type #2). However, if this profile worsens or continues for an extended period of time, a tendency toward experiencing one or more of the following symptoms will increase:

Anxiety
Allergies
Irritability
Aggressiveness
Insomnia
Dental Problems
Muscle Cramps
Mood Swings

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**SOME FACTORS THAT MAY CONTRIBUTE TO A LOW TISSUE CALCIUM LEVEL**

* Increased Adrenal Activity
* Hypoparathyroid Activity
* Excess Phosphorus Retention
* Toxic Metal Accumulation
* Inadequate Calcium Intake

**MAGNESIUM AND PARATHYROID HORMONE**

Magnesium, along with calcium regulates the synthesis and/or release of parathyroid hormone. Together, low tissue levels of magnesium and calcium may be indicative of decreased parathyroid activity, which can result in decreased calcium and magnesium absorption from the diet.

**MANGANESE (Mn) AND BLOOD SUGAR REGULATION**

The mineral manganese in combination with certain vitamins and minerals is essential for many biochemical reactions, including carbohydrate metabolism and energy production. Manganese deficiency is frequently related to such manifestations as, low blood sugar levels, ligamentous problems and reproductive dysfunction.

**GERMANIUM (Ge)**

Your germanium level of 0.03 mg% is above the established reference range for this element. Excessive intake of germanium has been reported to adversely affect kidney function and cause disturbance in skeletal muscle function. Long-term intake of germanium has been reported to cause:

| | |
|---|---|
| Anemia | Weight Loss |
| Neuropathy | Myopathy |
| Autonomic Dysfunction | Nerve Palsies |
| Kidney Dysfunction | Vomiting |

**HERBAL SOURCES OF GERMANIUM**

Some herbs naturally contain significant levels of germanium. At this time, the following herbs should be discontinued if presently being consumed.

| | |
|---|---|
| Garlic | Aloe |
| Comfrey | Ginseng |
| Watercress | Chlorella |
| Reishi Mushrooms | Shiitake Mushrooms |

**LITHIUM (Li)**

Although your lithium level is moderately elevated, it should not be considered as clinically significant at this time. However, if a disturbance between this element and another mineral

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exists, clinical significance may be noted in the appropriate ratio section of this report.

**TIN (Sn)**

Your tin level of 0.07 mg% is above the established reference range. It has been reported that an excessive level of tin can interfere with iron metabolism and will produce heme breakdown. Elevated tin also increases the excretion of selenium and zinc from the body.

**SOME SOURCES OF TIN**

| | |
|---|---|
| Canned Foods | Dental Fillings |
| Herbs | PVC |
| Fungicides | |
| Dental Treatments | Stannous Fluoride |
| Toothpaste | Marine Paints |
| Cooking Utensils | Collapsible Metal Containers |
| Solders | Mining |

## NUTRIENT MINERAL RATIOS

This section of the report will discuss those nutritional mineral ratios that reveal moderate or significant deviations from normal.

Continuing research indicates that metabolic dysfunction occur not necessarily as a result of a deficiency or excess of a particular mineral level, but more frequently from an abnormal balance (ratio) between the minerals. Due to this complex interrelationship between the minerals, it is extremely important that imbalances be determined. Once these imbalances are identified, corrective therapy may then be used to help re-establish a more normal biochemical balance.

NOTE: The "Nutritional Graphic" developed by researchers at Trace Elements, and presented on the cover of this report shows the antagonistic relationships between the significant nutrients, including the elements (arrows indicate antagonistic effect upon absorption and retention).

**HIGH SODIUM/POTASSIUM (Na/K) RATIO AND STRESS**

Stress produces an indirect affect upon your body's mineral patterns. The body responds to stress by increasing and/or decreasing the release of certain hormones from the endocrine glands. The hormones in turn will influence the body's absorption, retention and excretion of nutrients, including the minerals. The early stage of stress is known as the

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alarm stage, and the hormones initiating an alarm reaction will produce an increase in sodium retention relative to potassium. Therefore, this pattern is indicative of the alarm stage of stress. This pattern may also be associated with an inflammatory reaction or increased histamine production.

**HIGH ZINC/COPPER (Zn/Cu) RATIO**

The zinc level is high relative to tissue copper status (see high Zn/Cu ratio). 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 precurser to capillary fragility, bleeding gums, osteoporosis and premature greying of the hair.

**HIGH SODIUM/MAGNESIUM (Na/Mg) RATIO**

The sodium level is high relative to magnesium (see high Na/Mg ratio). These two minerals should be in balance (4.2/1), and when sodium is excessive relative to magnesium, there is frequently an increase in magnesium requirements.

**MAGNESIUM AND ASTHMA**

Low magnesium intake has been found in groups of people experiencing lung problems such as wheezing and asthma. Histamines can trigger lung problems and are also known to increase the requirement for magnesium.

## TOXIC METAL LEVELS

Hair is used as one of the tissue's of choice by the Environmental Protection Agency in determining toxic metal exposure. A 1980 report from the E.P.A. stated that human hair can be effectively used for biological monitoring of the highest priority toxic metals. This report confirmed the findings of other studies which concluded that human hair may be a more appropriate tissue than blood or urine for studying community exposure to some trace metals.

A heavy metal may be elevated in this HTMA and yet no known environmental exposure can be ascertained at this time. This is not unusual, as exposure may have originated years earlier. Additionally, research has found that heavy metals can be inherited by the fetus during pregnancy. Heavy metals can be found in the body for years following the original exposure and will remain in body tissues until removal is initiated. For example, the half-life of cadmium in some tissues will range from ten to thirty years.

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**ARSENIC (As)**

Your arsenic level of 0.06 mg% is above the established reference range. Arsenic has been found high in some seafood obtained from coastal waters, particularly shrimp, oysters, and mussles. Other sources include arsenic rich soils, herbicides, arsenic containing insect sprays, burning of arsenate treated building materials in fireplaces, coal combustion, and smelters.

**CADMIUM (Cd)**

The cadmium level is within the cautionary range. The following are some fairly common sources of cadmium:

- Tobacco
- Burning Plastics
- Superphosphate Fertilizers
- Electronics Industry
- Zinc Smelters
- Galvanized Water Pipes
- Auto Exhaust

**NOTE:**

At this time, further confirmation of heavy metal toxicity using a blood test may or may not reveal an elevated level. This is due to the protective response of the body, in which following a toxic metal exposure, the element is sequestered from the blood and stored in various other tissues. Therefore, if the exposure is not ongoing or chronic, elevated levels in the blood may not be present. It is recommended that another analysis be performed in at least one year to monitor any changes in toxic metal accumulation.

## TOXIC METAL RATIOS

**ALL CURRENT TOXIC METAL RATIOS ARE WITHIN THE ACCEPTABLE RANGE**

## DIETARY SUGGESTIONS

The following dietary suggestions are defined by several factors: the individual's mineral levels, ratios and metabolic type, as well as the nutrient value of each food

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including protein, carbohydrate, fat, and vitamin and mineral content. Based upon these determinations, it may be suggested that foods be avoided or increased temporarily in the diet to aid in the improvement of your biochemistry.

## GENERAL DIETARY GUIDELINES FOR THE FAST METABOLIZER

* INCREASE INTAKE OF HIGH PURINE PROTEIN FOODS...high purine protein sources include liver, kidney and heart. Other good sources include sardines, tuna, clams, crab, lobster and oysters. Unless notified otherwise, high purine and moderate purine protein intake should constitute approximately 33% of total daily caloric intake.

* INCREASE INTAKE OF MILK AND MILK PRODUCTS...such as cheese, yogurt, cream, butter (unsalted). Increase intake of nuts and seeds such as almonds, walnuts, peanuts, peanut butter and sunflower seeds. Foods high in fat unless notified otherwise should constitute approximately 33% of total daily caloric intake.

* REDUCE CARBOHYDRATE INTAKE...including unrefined carbohydrates. Sources such as cereals, whole grains and whole grain products are contraindicated for frequent consumption until the next evaluation. Carbohydrate intake in the form of unrefined carbohydrates should be approximately 33% of total daily caloric intake.

* AVOID ALL SUGARS AND REFINED CARBOHYDRATES...this includes white and brown sugar, honey, candy, soda pop, cake, pastries, alcohol and white bread.

## FOOD ALLERGIES

In some individuals, certain foods can produce a maladaptive or "allergic-like" reaction commonly called "food allergies". Consumption of foods that one is sensitive to can bring about reactions ranging from drowsiness to hyperactivity in children, itching and rashes, headaches, high-blood pressure and arthritic pain.

Sensitivity to foods can develop due to biochemical (nutritional) imbalances, and which stress, pollution, and medications can aggravate. Nutritional imbalance can further be contributed to by restricting food variety, such as eating only a small group of foods on a daily basis. Often a person will develop a craving for the food they are most sensitive to and may eat the same food or food group more than once a day.

The following section may contain foods that are recommended to avoid. These foods should be considered as potential "allergy foods", or as foods that may impede a rapid and effective reponse. Consumption of these foods should be avoided

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completely for four days. Afterwhich, they should not be eaten more frequently than once every three days during course of therapy.

**FOODS THAT STIMULATE HISTAMINES**

Consumption of the following foods can stimulate histamine release in certain metabolic types and may contribute to respiratory-type allergy reactions. These foods are to be avoided until the next evaluation or until notified otherwise by attending doctor.

- Beet Greens
- Apples
- Spinach
- Eggplant
- Sweet Potatoes
- Blueberries
- Pecans
- Wheat Germ
- Cocoa
- Parsley
- Beets
- Rhubarb
- Chocolate
- Black Tea
- Strawberries
- Peanuts
- Green Beans
- Chard
- Concord Grapes
- Collards
- Blackberries

**FOODS HIGH IN MAGNESIUM**

The following foods are high in magnesium content relative to calcium and sodium. These foods may be increased in the diet until the next evaluation.

- Blackstrap Molasses
- Prunes
- Avocados
- Bananas
- Bass (broil)
- Figs (dried)
- Corn
- Cashews
- Wild Rice
- Tofu
- Garbanzo Beans

**THE FOLLOWING FOODS MAY BE INCREASED IN THE DIET UNTIL THE NEXT EVALUATION**

- Mozzarella Cheese
- Milk
- Kale
- Monterey Cheese
- Almonds
- Swiss Cheese
- Turnip Greens
- Mustard Greens
- Yogurt
- Cream
- Buttermilk

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## HIGH COPPER FOODS TO INCREASE IN THE DIET

The following foods are good sources of dietary copper. If desired, these foods may be increased in the diet until the next evaluation.

- Cod
- Brazil Nuts
- Pecans
- Hazelnuts
- Pistachio Nuts
- Sunflower Seeds
- Duck
- Lobster
- Mushrooms
- Crab
- Almonds
- Sesame Seeds
- Walnuts
- Liver

## AMINO ACIDS THAT IMPROVE CALCIUM ABSORPTION

Calcium absorption is greatly enhanced when the diet is high in the amino acids, lysine, arginine and histadine. These proteins also help to reduce acidity of the tissues. Both effects are favorable for the fast metabolizer, therefore addition of any of the following foods to the diet is recommended at this time:

- Lima Beans
- Garbanzo Beans
- Rumproast
- Skim Milk
- Beef Stew
- Cottage Cheese
- Spare Ribs
- Lentils
- Flounder
- Cod
- Ham
- Salami
- Sausage (lean)
- Lamb
- Smelt
- Vegetable Stew
- Canadian bacon
- Peanuts
- Bass
- Heart
- Chuck Roast
- Liverwurst

## SPECIAL NOTE

This report contains only a limited number of foods to avoid or to increase in the diet. FOR THOSE FOODS NOT SPECIFICALLY INCLUDED IN THIS SECTION, CONTINUED CONSUMPTION ON A MODERATE BASIS IS ACCEPTABLE UNLESS RECOMMENDED OTHERWISE BY YOUR DOCTOR. Under some circumstances, dietary recommendations may list the same food item in the "TO EAT" and the "TO AVOID" categories at the same time. In these rare cases, always follow the avoid recommendation.

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# CONCLUSION

This report can provide a unique insight into nutritional biochemistry. The recommendations contained within are specifically designed according to metabolic type, mineral status, age, and sex. Additional recommendations may be based upon other supporting clinical data as determined by the attending health-care professional.

**OBJECTIVE OF THE PROGRAM:**

The purpose of this program is to re-establish a normal balance of body chemistry through individually designed dietary and supplement suggestions. Properly followed, this may then enhance the ability of the body to more efficiently utilize the nutrients that are consumed, resulting in improved energy production and health.

**REMOVAL OF HEAVY METALS:**

Re-establishing a homeostatic balance or equilibrium of body chemistry will enhance the body's ability to remove heavy metals naturally. The elimination of a heavy metal involves an intricate process of attachment of the metal to proteins, removal from storage areas, and transport to the eliminative organs for excretion. Improvement in ones nutritional balance will improve the capability of the body to perform these tasks and eliminate toxins more easily.

However, the mobilization and elimination of metals may cause temporary discomfort. As an example, if an excess accumulation of iron or lead is contributing to arthritic symptoms, a temporary flare-up of the condition may occur from time to time. This discomfort can be expected until removal of the excess metal is complete.

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## DIET SUMMARY PAGE

This page may be removed from the HTMA Report and used as a quick-reference dietary guide. As this is solely a summary page, please refer to the dietary portion of the report to obtain more detailed information on why a particular food item is listed in the "Foods To Avoid" or "Foods That May Be Increased" section. For those foods that are not specifically mentioned below, continued consumption on a moderate basis is acceptable unless recommended otherwise by the attending healthcare professional.

### FOODS TO AVOID UNTIL THE NEXT EVALUATION

| | | | |
|---|---|---|---|
| Alcohol | Apples | Beans - Green | Beet Greens |
| Beets | Blackberries | Blueberries | Bread - White |
| Cakes | Candy | Chard | Chocolate |
| Cocoa | Collards | Eggplant | Grapes - Concord |
| Honey | Parsley | Pecans | Peanuts |
| Rhubarb | Soda | Spinach | Strawberries |
| Sugar | Sweet Potatoes | Tea - Black | Wheat Germ |

### FOODS THAT MAY BE INCREASED IN THE DIET

| | | | |
|---|---|---|---|
| Almonds | Avocados | Bacon - Canadian | Bananas |
| Bass | Bass - Broiled | Beans - Garbanzo | Beans - Lima |
| Beef - Stew | Brazil Nuts | Buttermilk | Cashews |
| Cheese - Cottage | Cheese - Monterey | Cheese - Mozzarella | Cheese - Swiss |
| Clams | Cod | Corn | Crab |
| Cream | Duck | Figs - Dried | Flounder - Baked |
| Ham | Hazelnuts | Kale | Lamb |
| Lentils | Liverwurst | Lobster | Milk - Skim |
| Milk - Whole | Molasses - Blackstrap | | Mushrooms |
| Mustard Greens | Oysters | Peas | Pistachio Nuts |
| Prunes | Rice - Wild | Roast - Chuck | Roast - Rump |
| Salami | Sausage - Lean | Sesame Seeds | Smelt |
| Sunflower Seeds | Tofu | Tuna | Turnip Greens |
| Vegetable Stew | Walnuts | Yogurt | |

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