

Hair Mineral Analysis



Benefits of Hair Mineral Analysis

Hair Mineral Analysis is a screening test to measure the levels of up to 60 essential minerals and toxic metals. With correct testing and interpretation, one can construct a comprehensive metabolic profile of the human body.

Hair is an excellent biopsy material. It is easy to sample, easily preserved and transported, represents a soft tissue of the body, and is a storage and eliminative tissue. As hair grows it forms a permanent record of the body's nutritional deficiencies or excesses.

This information, along with dietary and nutritional evaluations, will provide the basis for a nutritional balancing program to establish and maintain optimal levels of wellness. By correcting tissue mineral levels and ratios with proper diet, supplementary nutrients and lifestyle modifications, many physical and behavioral health conditions can be prevented or reversed.

Minerals screened include electrolytes - calcium, magnesium, sodium, potassium and phosphorus and trace minerals - copper, manganese, chromium, selenium, iron, molybdenum, lithium, cobalt, and zinc.

Elevated readings can have different meanings depending upon:

- 1) The symptomatology of the patient
- 2) The elevated concentration of the mineral in question
- 3) Whether a specific treatment, regimen or diet is being followed
- 4) Relationships to other elemental readings

Toxic metal screening includes lead, mercury, cadmium, arsenic, nickel, and aluminum.

A very high reading may represent a toxic amount of the mineral in the hair, and/or in the body tissues in general. In the case of a toxic metal, any deposition or accumulation in the hair indicates some degree of toxicity.

High levels of toxic metals inhibit the body's ability to process and assimilate specific nutritional elements that are essential to good health and have a proven link to many types of diseases.

Hair vs. Blood Analysis

“Data have been compiled from the available world literature on the accumulation and bioconcentration of selected toxic trace metals in human hair and nails and other mammalian hair, fur, nails, claws, and hoofs. The toxic trace metals and metalloids include antimony, arsenic, boron, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, tin, and vanadium. These have been tabulated by toxic metal, geographic area, subjects, sex, age, exposure gradient, analyses in ppm, and authority, from over 400 references. . . The various uses of hair for biological monitoring are reviewed for correlating with environmental exposure gradients, diseases associated with excesses and deficiencies, geographic distribution, and historic trends . . . It appears to be that if hair and nail samples are collected, cleaned, and analyzed properly with the best analytical methods under controlled conditions by experienced personnel, the data are valid. Human hair and nails have been found to be meaningful and representative tissues for biological monitoring for most of these toxic metals.” Jenkins, D. TOXIC TRACE METALS IN MAMMALIAN HAIR AND NAILS. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/4-79/049 (NTIS PB80103997), 1979

Research shows that trace minerals and metals are accumulated at concentrations that are 10-50 % higher in hair.

Blood and urine tests give an instantaneous reading that may be affected by many factors. Urine screening is a most effective tool in measuring the progress of detoxification/chelation treatments. Hair analysis gives a long term reading that is unaffected by recent meals, activities such as exercise, or emotional states.

Toxic metals rarely remain in the blood or urine for long, but often deposit in the hair where they can be measured over a three month period.

Hair Collection Protocol

Hair that has been dyed, bleached, straightened or otherwise chemically treated is vulnerable to contamination or removal of hair mineral content. Best results are obtained when hair has not been treated.

Dandruff shampoos containing zinc (Head & Shoulders), selenium (Selsun Blue) and lead (Grecian Formula) or other medicated shampoos/conditioners should not be used prior to taking a sample.

If hair is very short, clean thinning shears may be used.

Hair from the head is preferred, however, pubic hair can also be used, but is best reserved for situations where head hair is unavailable. Do not combine head and pubic hair.

1. Wash hands and ensure scissors are clean and in good condition
2. Collect hair samples from the nape of the neck.
3. Cut hair as close to the scalp as possible. It is best if small amounts are cut from four to six areas.
4. Save only new hair growth, about 2.5 cm from the scalp.
5. 1 gram or approximately 1 Tablespoon is sufficient for analysis.
6. Seal tightly in a zip-lock bag.
7. Label the bag and submit to Christine Moran

Christine Moran, DHMHS, RHN

Questions? E-mail Christine at: harmonyhousewellness@gmail.com

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