



## Hair Tissue Mineral Analysis (HTMA)

*Your hair tells the story of your health...*

A hair tissue mineral analysis or hair analysis provides a unique reading of heavy metal and mineral levels in the cells of the hair from over a two to three month period. It takes into consideration that toxins are stored in the tissues of the body, not in the blood. For instance, you can have normal copper levels in the blood, but high copper levels in the tissues.

The reason hair is used for testing mineral status and metabolic activity is because of its very nature. Our 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 metal content 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.

To get an idea of how helpful a hair tissue analysis can be, think about this: Researchers using tissue mineral analysis determined, more than 100 years after Napoleon Bonaparte's death, discovered that he had been poisoned by arsenic. Even though his hair sample was tested more than a century after his death, it still revealed pathological amounts of arsenic that had gradually proved fatal.

### COMPREHENSIVE HAIR ANALYSIS

A comprehensive hair analysis contains a detailed report, which shows bar graph readings indicating high, low and reference range levels for toxic metals, essential minerals and significant mineral ratios. It should also include a metabolic profile, recommendations for diet and supplements based on individual results.

The Comprehensive Hair Tissue Analysis we do details graph results for 8 toxic heavy metals/elements, 15 nutritional minerals/elements, 15 additional elements, 7 significant mineral ratios, and 9 toxic metal ratios.

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 such as muscular activity, endocrine function, reproduction, skeletal integrity, and overall development.

## HTMA TESTING AND COST

To do a HTMA test one must:

- Make sure that your hair is clean and dry
- Do not use anti-dandruff shampoo, if you do then change to another shampoo for 3 weeks before having a hair sample taken.
- If the hair is dyed or highlighted, wait 4 weeks and then take the sample.

\*Full Report    Comprehensive reports for both the Doctor & Patient    R 1120.00 (Incl. VAT)

\*Retest            Graph results, dietary & supplement recommendations R 1090.00 (Incl. VAT)

To have the HTMA test done by Dr Davidson contact her receptionist on 011 787 1221 to make an appointment.