

# Hair Mineral Analysis

---

## Hair Sampling Protocol

Hair Mineral Analysis (HMA) has been available for many years. Modern computer-controlled instruments have greatly improved the accuracy and reliability of the analysis.

It is important to submit a proper hair sample to the lab. Lab studies have indicated it is best not to wash the hair samples at the laboratory. It is, therefore, imperative that samples arrive in good condition.

Samples arriving at the laboratory are first logged and assigned a lab number. Following the identification process, the samples are then cut into small pieces and weight to an exact amount. The sample is then dissolved in an overnight acid process. The next day, precise amounts of the sample are introduced into the testing instrument. Here, the sample is burned and the spectra or colors from each mineral are measured.

When properly sample and performed, hair testing is accurate to within about plus or minus 5%, the same or better than most blood tests.

### How Much is Enough?

The amount of hair is very important. Don't skimp by sending in small samples. Always use the scale rather than guessing how much to send in. Place the scale on a level surface and be sure the scale tips completely to the other side.

This will provide enough hair (500-800 mg) so that a full sample can be run, with some remaining to retest any mineral that is out of the normal ranges.

### Cleanliness Matters

When cutting a sample, the hair needs to be clean and dry. It is best if the hair was washed the morning of, or the day before, the test. If the hair is dusty, grimy, greasy, or gritty, it is best to wash it before taking the sample. The only exception is if a person is very ill, and sampling would be difficult at a future time. In this case, it is acceptable to risk some loss of accuracy.

If the hair is wet, it is best to let it dry before sampling. If you must cut the hair when wet, cut extra hair because wet hair will tip the scale prematurely.

A sample should not be taken directly after work if the person works in a dusty environment such as a machine shop or metal shop. Metallic dust in the hair may affect the readings.

It is important to use good-quality, clean scissors. Inexpensive scissors may leave indistinguishable flecks of metal in the sample. The use of razors to cut hair samples is not recommended, as they are more likely to leave metallic residues in the hair.

It is best not to cut a hair sample if the hair is sweaty, such as after vigorous exercise. Extreme sweating can raise sodium and potassium levels. Regular swimming in swimming pools can raise copper levels.

## **Where to Cut**

To obtain the most reliable results, we recommend using only head hair. Readings will vary somewhat when using an alternative source of hair, such as pubic hair. We suggest using other sources only when head hair is absolutely impossible to use or obtain. It is possibly to use fingernails when there is no hair available at all, but this would be as a last resort.

If you use pubic hair on your initial analysis, it is imperative to use pubic hair on any follow-up analysis. If it is necessary to change the source of hair on a retest, request a Profile II (initial test), so the new analysis will not be inaccurately compared to the previous test.

It is important to collect a hair sample from as close to the scalp as possible. This growth will provide the most current readings available. Be sure to cut off the distal ends of the sample longer than 1.5-2 inches. Including long strands of hair will not produce the most up-to-date results. This is especially critical for retests.

## **Hair Products**

Most shampoos, rinses, conditioners, tints, dyes and hair sprays will not affect the test. Do not use greasy creams, Bryl Creme, gels, glycerin, olive oil – or any other products that are put on the hair after showering. These may or may not contain contaminants, but they can cause problems in the laboratory. Some hair products will affect the test readings. Head and Shoulders Shampoo contains zinc. Selsun Blue Shampoo is high in selenium. Grecian Formula and Youth Hair are dyes that contain lead, and are best to be voided!

After a permanent or bleach treatment, it is best to wash the hair four or five times before sampling. When possible, have the hair sampled before using a bleach or permanent treatment.

The cost for a complete Hair Mineral Analysis is \$69.00.

For complete information and instructions on how to obtain your Hair Mineral Analysis, contact HealthStyles4U at:

Phone: 1.800.288.9552

Email: [HealthStyles4U@healthstyles4urx.com](mailto:HealthStyles4U@healthstyles4urx.com)

Fax: 303.223.7100