



## Lenas Supplements Plus

Committed to Providing You with the Highest Quality Products  
& Services and the Latest in Nutritional Technology!

### All about Hair Sampling

The accuracy of mineral analysis depends upon many factors. While the laboratory is responsible for the technical aspects of the test, the results will only be as good as the raw material or sample that is received. For this reason, the more care that is exercised by the person sampling the hair, the better the results will be.

#### Head Hair versus Pubic Hair

The best tissue for sampling is one that is clean, fast growing, and that grows evenly. Head hair fulfills these requirements better than any other type of hair. The normal values have been established based on head hair samples.

In the event that head hair is not available, pubic hair or other body hair may be used. Accutrace Laboratories has performed comparison testing to determine the differences in the mineral readings between head and pubic hair samples. The study found that; 1) the major ratios are the same in the pubic and head hair samples. 2) However, all of the levels tend to be higher in pubic hair.

The difference may be due to the slower growth rate of pubic hair, and that it is more protected from the elements than head hair. We ask that you do not mix sources, such as half head hair and half pubic hair. This will cause inaccurate reading.

#### Using other Body Hair

Hair from a beard, other body hair or finger nails could be analyzed, but the laboratory has not performed extensive testing on these. Hair shaved off by an electric shaver is definitely not acceptable. Particles of metal from the blades become mixed with the hair.

#### Sampling the Hair

**Quantity.** Be sure to sample enough hair. One of the most frequent problems at the laboratory occurs when too little hair is sent (less than 500mg.). The laboratory normally keeps some extra hair to re-run should any mineral levels fall outside a reasonable range. If the sample is too small, extra hair cannot be saved. When in doubt add extra hair.

**Scissors** should be clean and sharp. Steel scissors are better than aluminum scissors. Cutting hair will dull scissors, which must be sharpened or replaced when this occurs. If plated scissors are used, be sure the plating is not peeling off, which would contaminate the sample. Be sure to cut off the ends of any hair that is over 1 ½ to 2 inches long.

**Short hair** can be a challenge. A thinning shears is often helpful. Thinning will allow a more even sampling without leaving any 'holes'. Thinning shears are best when the hair is less than 1 ½" long. One method is to make a cut with the thinning shears. Then, pull the scissors away from the head, holding them parallel to the head. The cut hair will come away in the scissors, and can be scraped into the envelope. It may also be necessary to run a comb through the hair after cutting, to remove the rest of the cut hair.

**Washing.** Hair should be dry when it is being sampled. If possible, wait four or five hours after washing before taking the sample. This allows the hair to re-equilibrate after washing. Hair that has not been washed for more than four or five days is more prone to environmental contamination.

**Retest samples** should be taken from the same area as the original sample, if at all possible.

This assures continuity from sample to sample. However, it is not necessary to find the precise strands of hair for the next retest. Simply take the sample from the same general area.

**Animal samples.** Before sending in a sample for an animal, please call Lenas Supplements Plus for specific instructions.

### Hair treatments

Most shampoos, rinses, conditioners, tints, dyes, sprays and other hair products don't affect the test for three reasons. First, most of these products do not contain metals, which is all the hair test measures. Second, the hair is only 10-15% porous. This means that not very much is absorbed by the hair itself. (The scalp is porous, and can absorb many chemicals.) Finally, most shampoos are only applied for 15-30 seconds, not long enough for much absorption to take place.

Grecian Formula contains lead and should be avoided. Head and Shoulders shampoo contains zinc and could elevate zinc readings, Selsun blue shampoo contains selenium and could elevate this reading.

Home permanents do not alter the test appreciably. However, it is best to wash the hair several times after a permanent before sampling. After a beauty parlor permanent or bleach treatment, ideally it would be best to let the hair grown out for several weeks. However, you may make a clinical decision that it is not possible to wait this long. The test may not be as accurate in this case, but the readings can still be very useful.

Heavy sweating just before sampling can increase sodium and potassium readings. Swimming in pools can increase copper and sodium.

If you should have any concerns or questions in reference to your sample please do not hesitate to call.

This material is for educational purposes only

317 NW Locust Street Prineville OR 97754  
Voice & Fax 877-207-5110 Email [sandy@lenassupplements.com](mailto:sandy@lenassupplements.com)