

Hair Sample Collection Protocol – Trace Elements

Proper collection of the hair sample is extremely important and cannot be over-emphasized. Collection should be done under professional supervision, or by someone trained in proper collection procedures within a clean environment. The following guidelines should be maintained to insure the collection of a metabolically representative sample and to avoid the introduction of external contaminants prior to, during and following the collection process.

Sample Type

Scalp hair is the only source recommended for analysis. Pubic and other body hair should only be used as a last resort if scalp hair is not available.

Note: Pubic and other body hair is only recommended for confirmation of elevated toxic metals found in the scalp hair and/or to rule out external contamination of the scalp hair.

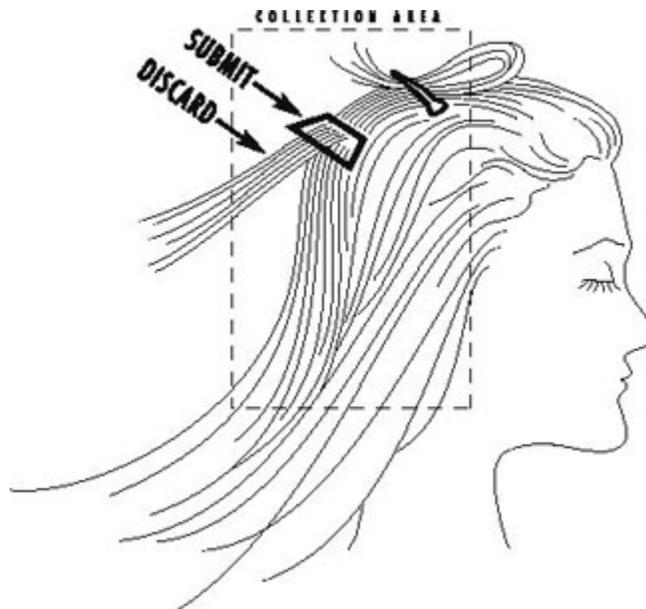
Preparation

The portion of hair to be collected should be untreated, i.e. not permed, dyed or bleached. If all of the hair has been chemically treated, wait until sufficient new virgin growth has emerged to allow collection. The hair should also be free of all gels, oils and hair creams prior to sample collection. For those individuals environmentally and/or occupationally exposed to external contaminants, (welding, mining, etc...) special care should be taken to limit exposure between washing of the hair and the collection of the sampled hair.

Location

Each collected sample should be taken in small portions from at least four to five different locations of the scalp. The recommended areas for collection are the nape of the neck, posterior vertex and posterior temporal regions.

Note: All reference range correlations, dietary recommendations and interpretive report content assumes that the complete hair specimen originated solely from the above defined regions of the scalp.



Sample Length

High grade stainless steel scissors or thinning shears should be used to cut the hair as close to the scalp as possible. The length of the collected hair should not exceed one and one-half inches. The proximal portion (one and one-half inches closest to the root) should be retained and the excess discarded.

Note: The proximal portion is reflective of the most recent metabolic activity.

Weight

The weight requested for a hair specimen is 125 milligrams (0.125 Gram). Use of the TEI Hair Weight Scale Cards will insure the collection of sufficient sample weight. However, if a Hair Weight Scale is not available, one full teaspoon should approximate the weight requirement.

Packaging

Upon cutting the sample, the hair should be placed directly into a clean hair specimen envelope normally provided by the laboratory and then sealed with the glue flap only. Do not use plastic bags in place of the standard paper envelopes to hold the hair specimen. In addition, do not use staples, paper clips, adhesive tape, aluminum foil or other metal and paper material of any kind to seal, secure or wrap the hair envelope and/or the hair specimen contained within.

Submittal Form

Each sample specimen must be accompanied by a standard [HTMA Laboratory Submittal Form](#), completed in its entirety and signed by the health professional.