

■ Nutritional profiles

Hair mineral analysis (HMA)

Used to assess

Hair mineral analysis (HMA) is a safe, non-invasive test that measures the levels and comparative ratios of nutrients and toxic metals found in hair.

Clinical relevance

Hair mineral analysis can detect whether there is an excess or deficiency of vital nutrient minerals such as calcium, potassium, zinc and iron. It can also identify over-exposure to toxic metals such as aluminium, lead, arsenic and mercury. HMA is an invaluable screening tool in both every day and preventive health care.

This test provides a reading of the minerals deposited in the cells and interstitial spaces of the hair over a 2-3 month period. It does not provide an assessment of the mineral content of other tissues of the body. However, testing the hair can allow one to infer what is occurring in other tissues.

Specimen requirements

One hair specimen is required.

Specimen collection method

Self-collection test kit (mail order)

Comprehensive urine elements profile (CUEP)

Used to assess

The Comprehensive Urine Elements Profile (CUEP) assesses the urinary excretion of 15 nutrient elements and 20 toxic metals, acquired through either chronic or acute exposure. This is an ideal test for patients suspected of toxic metal exposure as well as potential nutrient deficiency.

Toxic elements: aluminium, antimony, arsenic, barium, bismuth, cadmium, cesium, gadolinium, lead, mercury, nickel, niobium, platinum, rubidium, thallium, thorium, tin, tungsten, uranium.

Nutrient elements: calcium, chromium, cobalt, copper, iron, lithium, magnesium, manganese, molybdenum, potassium, selenium, strontium, sulphur, vanadium, zinc.

Clinical relevance

Accumulation of toxic elements can occur in the body in response to occupational and environmental exposure and from toxic release in air, soil and industrial waste. Evidence suggests that toxic element exposure can adversely affect respiratory, renal, hepatic and immune function and compromise cognitive and neurological health.

In addition to the classic elemental toxins, this profile also measures newer technology toxins used in commercial, industrial, and medical science, such as gadolinium which is used in manufacturing for computer memory, compact discs and medical imaging (MRI).

Specimen requirements

Two urine specimens are required from the first morning void.

Specimen collection method

Self-collection test kit (mail order)

Vitamins, minerals and antioxidants

Used to assess

A number of trace elements, vitamins, minerals and antioxidants, providing valuable information on the body's nutritional and biochemical status. A combination of any or all of the following nutrients can be tested:

- Minerals - Copper, Magnesium, Manganese, Selenium, Zinc

- Fluoride
- Vitamins - B1, B6, B12, D and folate
- Coenzyme Q10

Clinical Relevance

An invaluable screening tool in both every day and preventive health care.

Specimen requirements

A blood specimen is required, which can be taken at any time of the day. Overnight fasting may be required for some nutrients.

Specimen collection method

Healthscope Pathology collection centre

Toxic elements

Used to assess

Toxic elements can be tested in various specimen types. A blood analysis for toxic metals is ideally used in acute situations to determine the level of recent exposure and toxicity. Urine provides the best specimen type for longer term exposure to toxic metals.

Clinical relevance

Toxic metal accumulation from chronic dietary, environmental and/or industrial exposure is common and the symptoms may be similar to many other health conditions such as fatigue, nausea, insomnia, impaired mental function, nervousness and damage to vital organs.

Specimen requirements

Urine, blood or hair specimen.

Specimen collection method

Healthscope Pathology collection centre (blood) or self-collection test kit (mail order - for urine or hair analysis).