

## Find out if you are eating right

The chemical elements that are taken in with the diet are the **micronutrients** such as calcium, phosphorus, magnesium, potassium, sodium, and chlorine which are needed in relatively high amounts, and **trace elements** such as selenium, vanadium, chromium, and molybdenum which are necessary in extremely small amounts (traces). Micronutrients and trace elements are essential for human health but only when they are within their optimal limits. When their levels are too low (from insufficient nutrition, inability to absorb or use them) or too high (excessive intake), they can have negative effects on the human body.

## Why should I be tested for Trace Elements?

- To evaluate the nutritional status of the body and diseases related to nutrition
- To evaluate the effectiveness of nutritional supplements that someone is taking
- To check nutrient losses during Heavy Metal removal treatments. Agents used to remove heavy metals can significantly increase the co-excretion of nutrients
- To assess kidney function. An early sign of kidney dysfunction can be seen in the loss of essential elements such as magnesium, calcium, potassium, and sodium
- To check the acid-base balance and water balance in the body

The determination of the metals is done by the ICP-MS method (Inductively Coupled Argon Plasma Mass Spectrometry), a method with extremely high sensitivity and accuracy compared to other conventional methods such as atomic absorption.

## How is it performed?

Metals & Traces<sup>®</sup> is easy to perform and can be done:

By appointment at Diagnostiki Athinon.  
Book your appointment in real-time and purchase the test online at [eshop.athenslab.gr](http://eshop.athenslab.gr)

By sending a sample collection kit via courier.  
Purchase the test online at [eshop.athenslab.gr](http://eshop.athenslab.gr)

Addressed to our partners throughout Greece

## We find the causes. You choose the solutions!

Diagnostiki Athinon is a laboratory  
certified with ISO 9001:2015



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# Metals & Traces<sup>®</sup>

## HEAVY METALS TESTS

Take a heavy metal and trace  
element test today

## What should we know?

Heavy metals are everywhere: in the environment, in the air, in food, in water, in medicines, in food supplements, and in products of daily use, and they can cause serious problems to human health.

Heavy metals can cause toxicity damage to the central nervous system, cardiovascular system, gastrointestinal system, lungs, kidneys, liver, endocrine glands, and bones.

Heavy metals disrupt metabolic functions in two ways:

- By accumulating and thus disrupting the functioning of vital organs
- By replacing trace nutrients from their position on enzymes and other proteins and thus hindering their biological function

In addition to direct toxic effects, some heavy metals can cause allergic reactions in susceptible individuals, resulting in reactions from the skin, endocrine glands, and the immune system.

## Why should I be tested for Heavy Metals?

Heavy Metal Testing is useful in searching for the causes of pathological conditions such as:

- Chronic fatigue syndrome
- Decreased bone density (osteoporosis / osteopenia)
- Anemia
- Cardiovascular diseases and hypertension
- Kidney function disorders
- Depression, neurodegenerative diseases (Parkinson's, Alzheimer's)
- Alopecia, dermatitis, and other dermatological diseases
- Gastrointestinal symptoms
- Immune function disorders
- Chronic inflammation
- Diabetes mellitus and pre-diabetes
- Vision disorders
- Sexual impotence or reduced testosterone production
- Nutritional deficiencies
- In pregnancy: premature birth, miscarriages
- To check possible exposure to toxic substances (occupational or environmental)
- To check and evaluate heavy metal removal treatment (e.g., with chelating agents)

## How are the tests performed?

The measurement of heavy metals can be done with the following biological materials:

**Whole Blood, Serum & Plasma:** To determine the intracellular and extracellular concentrations of metals and to diagnose their toxicity or poisoning

**Urine:** To evaluate the chronic burden on the body and the attempt to restore it by the excretion through the kidneys. In addition, it is used to check the effectiveness of treatment with chelating agents

**Hair:** Determination of metals in hair is an excellent technique for assessing chronic body burden

**Nails:** To assess the chronic burden on the body when hair sampling is not possible

**Saliva:** For measuring the burden of dental amalgams and other dental prostheses

**Faeces:** To assess the chronic burden of the organism and its restoration by elimination through bile as well as the assessment of the burden of the organism from food and water

Find out how toxic your body is.  
Find out if you are eating right