

# Metal allergy

## - a trigger for chronic disease

- Allergy diagnosis from a single blood test
- Identifies causes of inflammation
- Confirmation of reaction to metals

Chronic inflammation is associated with numerous diseases. Although many triggers for inflammation exist, inflammation induced by metals is a common, easy to diagnose but often overlooked condition. In sensitive individuals, exposure to metal ions present in joint prostheses, dental work, surgical implants and the environment can trigger an immune response that will continue until the source of exposure is removed.

### Metal allergy

People with metal hypersensitivity may have numerous symptoms associated with an overactive immune system, including chronic fatigue, joint and muscle pain, cognitive impairment, depression, headaches, fibromyalgia and skin rashes. MELISA® is the only scientifically proven and clinically validated blood test that detects type-IV allergy to multiple metals, such as mercury, gold, silver and titanium. The test can identify individuals who may suffer side effects from metal exposure and pinpoint which metals to avoid. Lymphocyte transformation tests, such as MELISA, are better suited for diagnosing metal allergy than patch tests, as implant-related hypersensitivity reactions are mediated by sensitised T-cells and the relationship between skin allergy and systemic allergy is ill defined. In addition, MELISA does not expose the patient to potentially harmful substances and the results can be measured objectively.

### Symptoms disappear after removal of immune triggers

Seventy-six percent of [chronic fatigue](#) patients in a clinical trial experienced health improvement after removing dental restorations containing allergenic metals, as identified by MELISA testing. An additional study of patients with [autoimmune diseases](#) showed that 71% of those with positive responses in MELISA improved after having their fillings removed. Finally, a recent study on [fibromyalgia](#) patients showed that after restriction of exposure to metals that stimulated their immune system, half of the patients no longer fulfilled the criteria for fibromyalgia, and the remaining half all reported improvement in symptoms.

### Allergy vs. toxicity

MELISA measures whether the immune system reacts to specific metals: it does not show the levels of metals in the body. Other tests, such as hair analysis, quantify excreted or current levels of metals, but these are usually found to be below the official safe level. For hypersensitive individuals, there is no such thing as a “safe” level; even trace amounts may cause harm if the substance triggers an allergic reaction. This reaction will be on-going unless the source of exposure is removed.

### MELISA method

MELISA is an optimised and validated lymphocyte transformation test. It tests the patient's lymphocytes against a panel of suspected allergens based on the anamnesis. The test report shows the strength of the reaction as a Stimulation Index and results are ready within 14 days.

### TESTING REQUIREMENTS

Before testing it is helpful to establish which metals the patient is currently exposed to. A pre-test questionnaire can be used to establish this.

The test is time sensitive and a blood sample may be sent to any licensed MELISA laboratory as long as it arrives within 48 hours (ideally 24). The blood should be kept at room temperature.

The amount of blood required depends on how many antigens are to be tested. For a screening of 10 metals, 36 ml blood, or 4 large tubes of blood, is needed.

Steroids or other immunosuppressant drugs may affect the test result.

