

Mercury and nickel allergy: risk factors in fatigue and autoimmunity

Sterzl Ivan, MD., et al. Neuroendocrinology Letters, 1999;20:221–228

This study further explores the link between hypersensitivity to dental metals in patients with chronic fatigue syndrome (CFS). It looks at 22 patients with autoimmune thyroiditis, 28 fatigued patients free from endocrinopathy and 22 fatigued professionals with no evidence of autoimmunity. All had their dental amalgams replaced with non-metallic materials. After six months, many patients reported disappearance of many symptoms previously encountered. Their MELISA® response also fell considerably. The authors suggest that hypersensitivity to metals affects the hypothalamic-pituitary-adrenal axis (HPA axis) and indirectly triggers psychosomatic symptoms characterising CFS, fibromyalgia and other diseases of unknown etiology.

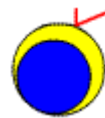
MELISA® - an *in vitro* tool for the study of metal allergy

Stejskal, Vera, PhD, et. al., Toxicology In Vitro, 1994,8; 991-1000

This article describes how to diagnose allergy to various mercury compounds such as thimerosal, phenyl mercury and inorganic mercury. Since these mercurials are immunologically non-cross reacting, it is possible by MELISA® not only to determine the existence of mercury allergy but also the source of sensitization. Thimerosal, a component of vaccines, eye drops and nose drops, is ethyl mercury salt of thiosalicylic acid. Strong allergenic properties of thimerosal have been known for years, as reflected by the presence of thimerosal as a standard component of patch-tests.

[For more information about our research, articles and the MELISA® test, please contact:](#)

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MELISA® **THE ALLERGY BLOOD TEST**

MELISA® is a blood test which measures hypersensitivity to metals and other allergens. By pin-pointing the source of allergy, it can be used as an objective modern diagnostic tool.

Metal allergy has been found to be common in patients with various diseases such as, to mention a few, skin diseases (psoriasis, eczema), autoimmune diseases (Multiple Sclerosis, thyroiditis, Sjögren's disease) and gastrointestinal diseases. Many patients with symptoms of profound fatigue of unclear etiology (Chronic Fatigue Syndrome, Myalgic Encephalitis or Multiple Chemical Sensitivity) often suffer from metal hypersensitivity induced by dental metals. Candida allergy, drug allergy (such as penicillin allergy) and allergy to chemicals (such as formaldehyde) can also be tested. Metal allergy has also been implicated in autistic disorders and allergy against thimerosal (a mercury preservative in vaccines) can be detected by MELISA®.

Avoidance of allergens often results in significant health improvement of the patient. Follow up MELISA® usually shows reduced lymphocyte reactivity as well.

MELISA® has been validated by an independent laboratory and the validation article has been published.

Why use MELISA®?

It is the most accurate and reliable tool yet developed for the diagnosis of cellular hypersensitivity (type IV allergy) to metals and other low-molecular allergens such as drugs, chemicals and microbial antigens (candida). It offers state-of-the-art medical technology at an affordable price.

How MELISA® works

MELISA® tests the patient's white blood cells (lymphocytes) against allergens chosen accordingly to the patient's anamnesis and dental history. The lymphocyte reaction is measured by two separate technologies: one based on the uptake of radioisotope by dividing lymphocytes; the other by classical evaluation by microscopy. The level of reactivity is measured as a Stimulation Index (SI). A value over 3 indicates a positive reaction to a given allergen. The results are available in ten days.

MELISA® and health screening

MELISA® is ideally-suited for diagnosis of metal allergy in patients with various immunological diseases such as autoimmune and allergic diseases. It is also suitable as a health screening in subjects suffering from health problems of unclear etiology such as profound fatigue and eczema.

MELISA® in the world

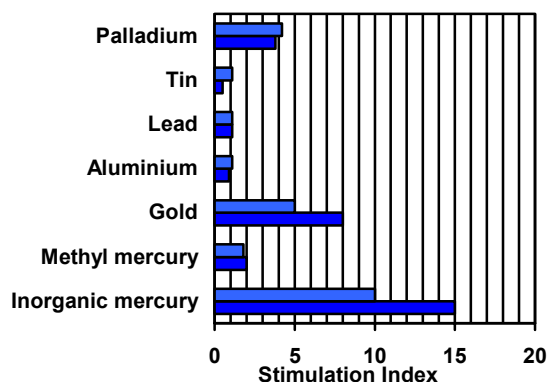
Laboratories licensing MELISA® are operating in Germany, Belgium, Czech Republic and USA. MELISA® can also be ordered at private clinics in England, France, Switzerland and South Africa. We are currently looking for doctors, dentists and other practitioners interested in referring patients. We are also seeking new laboratories for licensing of the test in countries all over the world.

Other ways of detecting METAL ALLERGY

Avoidance Many people spend years avoiding certain substances, trying to identify what they could be reacting to. MELISA® will test against many allergens in one blood sample – and give the results within ten days.

Patch test This is still the most common method for diagnosis of cellular hypersensitivity to metals. Metal is taped against the skin of a subject and the reaction, such as redness, is monitored. However, this is a subjective method and therefore dependent on the skill of the dermatologist. If a patient is reacting to, say, mercury then taping the substance against the skin raises obvious health concerns.

LTT test This is, like MELISA®, a blood test but it is inferior for three reasons. MELISA® uses ten times more lymphocytes and has a higher degree of accuracy. The LTT test has not been scientifically validated. MELISA® has been peer-reviewed and **independently validated**. Finally, LTT involves no morphological evaluation which gives MELISA® its double layer of accuracy.



A MELISA® test result. Two concentrations of each metal are tested. A positive reaction to palladium, gold and inorganic mercury is shown.

Reference literature:

www.melisa.org/articles

Validity of MELISA® for metal sensitivity testing

Valentine-Thon, Elizabeth, PhD. et. al, Neuroendocrinology Letters, 2003;24(1/2):57–64
This study was carried out to evaluate the reproducibility, sensitivity, specificity, and reliability of the MELISA® test for detecting metal sensitivity in patients with clinical symptoms of a type IV hypersensitivity to metals. Blood from 250 patients was tested in MELISA® against up to 20 different metals. The frequency and distribution of metal reactivity, sensitivity and specificity was determined. The MELISA® test was found to be reproducible, sensitive, specific, and reliable for detection of metal allergy.

The role of metals in autoimmunity

Stejskal, Jenny, MD., Stejskal, Vera, PhD, Neuroendocrinology Letters, 1999; 20:351–364,
Can metal allergy make the body attack itself? This article reviews the scientific studies into the subject so far, and looks at how metal allergy can play a role in conditions like multiple sclerosis (MS), rheumatoid arthritis (RA) and amyotrophic lateral sclerosis (ALS). It also discusses the role of inflammation-induced changes in the hypothalamus-pituitary-adrenal (HPA) axis as a possible explanation of chronic fatigue syndrome (CFS), depression and other psychosomatic symptoms observed in these diseases.

Metal-specific lymphocytes: biomarkers of sensitivity in man

Stejskal, Vera, PhD., et al., Neuroendocrinology Letters, 1999;20:289–298,

The biggest-ever MELISA® experiment was performed in more than 3,000 patients suffering from various symptoms resembling chronic fatigue, often in combination with intolerance to metals. Nickel was found to be the most common sensitizer followed by inorganic mercury, gold, cadmium and palladium. Replacement of amalgam and other dental metals resulted in health improvement for a majority of patients. Follow-up MELISA® tests showed that, for these patients, the severity of their allergy had also subsided.