



Micro Trace Minerals Laboratory

40+ years of clinical & environmental
laboratory diagnostics

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MTM Newsletter

N° 32 - February 2023

■ Laboratory News

■ Tips for your practice

- Iron (Fe) in Urine
- High Iron (Fe) levels after Chelation
- Titanium (Ti)
- Titanium (Ti) Diagnostic

■ Hair Analysis: an update

■ DGUHT creates internet platform for chelation therapists

■ Medical Workshops and Conferences

- Conferences and Workshops 2023
- Webinars

Laboratory News

■ Tips for your practice

■ Iron (Fe) in Urine

Extreme levels of iron are not normally found in urine samples. An iron value of < 45 mcg/g creatinine in baseline urine is considered normal. Of 4,433 baseline urine readings, 284 were abnormal. Of these, 32 were above 200 mcg/g creatinine. The highest reading was almost 19,000 mcg/g creatinine. These abnormal readings could be traced back to blood in urine, using test strips. Eleven abnormal results came from male patients.

We recommend that chelation therapists routinely determine the presence of blood in urine. Test strips are easy to handle. If blood is detected in urine, a note to the laboratory would be helpful. The following evaluation of test values shows that extreme iron values caused by blood in urine justify are not uncommon.

■ High Iron (Fe) levels after Chelation

The **EDTAs** are chelating agents with strong iron binding ability. For EDTA provocation urine, the upper limit determined by MTM is 350 mcg/g creatinine. Of 1,758 EDTA provocation urines, 672 had higher iron values, i.e. about 4% showed higher values. The maximum value achieved was 2282 mcg/g creatinine.

DMPS does not show a strong iron binding ability. The statistical evaluation of 1900 urine measurements after DMPS iv (administration 1 amp.) showed that 624 of these provocation urines showed values above the reference range of 45 mcg/l. The maximum value of over 80,000 mcg/g creatinine was found in an 81-year-old male patient. Blood in the urine was responsible for this high measurement.

DMSA also shows no strong iron binding. Of 3,815 urine samples taken after oral administration of DMSA, 214 exceeded the reference range. The highest measurement of 3280 mcg/g creatinine was seen in the provocation urine of a male patient.



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Attention: Iron supplementation influences the gastrointestinal and renal excretion.

Our **Swiss Seminar** presents chelation protocols and helpful tips for the practice, please take a look at our workshops.

■ Titanium (Ti)

In 2019, the EU classified some forms of the whitening agent titanium dioxide as carcinogenic. However, according to a new court ruling, the risk of cancer only exists with certain titanium dioxide particles, and only if they are present in a certain shape, size and quantity. The new ruling concluded that there is not sufficient evidence to classify titanium dioxide as carcinogenic.

Titanium dioxide primarily ensures that products look particularly white or shiny, such as in chewing gum and until recently, the substance was approved as a food additive that could be used in foods and baked goods. The use of TiO₂ as a food additive is now banned throughout the EU.

Link to the article: 'Titanium Dioxide Banned as a Food Additive in the EU':

<https://www.fas.usda.gov/data/european-union-titanium-dioxide-banned-food-additive-eu>

■ Titanium (Ti) Diagnostic

The detection of titanium in human samples is unproblematic. Routinely, the element titanium (not titanium dioxide) is detected in metal diagnostics. Hair and nails indicate long-term exposure. In blood, saliva or urine, elevated readings may be due to patient contact with titanium dioxide before or during sample collection.

If elevated titanium measurements are noted, the following should be considered:

Saliva: elevated values may be obtained if chewing gum containing titanium dioxide was used for the chewing gum test.

Blood or baseline urine: the consumption of food, drink, medicines or supplements containing titanium dioxide affects readings, as do capsules containing TiO₂.

Provocation or Challenge urine: encapsulated oral chelating agents should be free of TiO₂. Ask your supplier. According to Heyl, Berlin Dimaval capsules are TiO₂-free.

■ Hair Analysis: an update

In 1979, an EPA report stated: *Hair analysis, when properly performed, is a reliable measure of tissue levels.* In the years since, this test received criticism, but though modern laboratory technology and research its value could be established.

This article evaluates the pros and cons of hair mineral analysis and provides an up-to-date evaluation. Check our website for detailed information and this article on our website:

<https://microtraceminerals.com/diagnostic-humans/hair-mineral-analysis>

■ DGUHT creates internet platform for chelation therapists

Due to increasing inquiries from patients searching for chelation therapists, the "Metal Toxicology" working group of the German Society for Environmental and Human Toxicology (www.dguht.de) is creating an information platform and referral website that provides a listing of qualified chelation therapists, naming their specialties, and contact information.

The aim of this list is to support patients with multiple stresses and chronic illnesses in their search for



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an appropriate therapist. This requires a network of experts who are organized under the umbrella of DGUHT. Those interested in participating are requested to contact info@dguht.de.

Medical Workshops and Conferences

International Conferences & Workshops 2023

Evidence-based Chelation plus Tips for the Chelation Practice

Lake Geneva, Switzerland (English)
(Place to be determined)

Cost: € 200.00 includes Handbook of Chelation Therapy

04/22/2023
10:00 AM -
03:00 PM
(UTC +1)

Registration:

<https://microtraceminerals.com/workshops-and-seminars/workshop-registration>

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Registration deadline: March 22, 2023

If you are interested in workshops on environmental issues, chelation, laboratory testing or metal toxicology, check our website:

<https://microtraceminerals.com/en/workshops>

Webinars

03/15/2023
07:00 PM -
08:00 PM

Chelation therapy optimization with tips for practical application.
(German)

For registration and further information, please visit:

<https://www.edudip.com/academy/e.blaurock-busch>

Thank you for your attention. Let us know if you have questions.

And all the best

Your

E. Blaurock-Busch and Team