Beware of toxic antagonists!

Toxic metals displace minerals from binding sites on enzymes and receptors and so block their effect. For example, the toxic cadmium inhibits the effect of zinc, nickel displaces magnesium, and lead displaces calcium. An assessment of the calcium, magnesium and zinc supply should therefore consider possible loads with lead, cadmium and nickel.

Whole blood mineral analysis shows the overall supply status

Contrary to the conventional serum analysis, the mineral analysis in EDTA or heparin whole blood measures not only the extracellular, but also the intracellular mineral content. The result reflects the clinically relevant overall supply status.

PATIENT INFORMATION

Presented by:

practice stamp

Mineral profile „7+2“ 50.13 €

Magnesium, selenium, zinc, chromium, copper, manganese, molybdenum + cadmium, nickel
EDTA or Li-heparin blood

Mineral profile „11+4“ 61.79 €

Magnesium, selenium, zinc, calcium, potassium, sodium, phosphorous, chromium, copper, manganese, molybdenum + lead, cadmium, nickel, mercury
Li-heparin blood

Mineral profile „11+6“ 81.03 €

Magnesium, selenium, zinc, calcium, potassium, sodium, phosphorous, chromium, copper, manganese, molybdenum + aluminium, arsenic, lead, cadmium, nickel, mercury
Li-heparin blood

For those with private insurance, billing is according to the currently valid statutory scale of fees for physicians.

The blood collection set is available free of charge by the laboratory.
☎+49 (0) 30 7 70 01-220

IMD Labor Berlin

IMD Berlin MVZ

Nicolaistraße 22
12247 Berlin (Steglitz)
Phone +49 (0) 30 7 70 01-220
Fax +49 (0) 30 7 70 01-236
Info@IMD-Berlin.de · IMD-Berlin.de

DAkkS Deutsche Akkreditierungsstelle D-ML-13142-01-00

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PATIENT INFORMATION

Minerals

Supply Status Diagnostics

IMD Labor Berlin

Mineral deficiency damages the body

Brain functions, immune response, bone metabolism, protection from oxidative stress - almost all vital processes need a sufficient supply of minerals. A mineral deficiency therefore promotes numerous diseases.

A balanced diet does not always protect against deficiency

One requirement for a good supply situation is the sufficient intake of minerals with food. Nevertheless, deficiencies occur even with a balanced diet and even with supplementation. This is because their efficient absorption from the intestine into the blood and regular elimination through the kidney are just as important as the mineral content in the food.

Specific substitutions only!

Like all active ingredients and substances, vital trace elements can also have a harmful effect if they are supplied in excess. For example a high zinc intake can inhibit the copper intake in the intestine and cause a clinically relevant copper deficiency. Minerals should therefore only be substituted if a deficiency is proven to be present.

Minerals and their functions

Magnesium:
Function of neuromuscular synapses, promotes bone development, ATP synthesis, stabilises cell membranes, reduces thrombocyte aggregation, regulates potassium, calcium and vitamin D3 metabolism.

Selenium:
Essential for selenocysteine-containing proteins (glutathione peroxidases, selenoprotein P), decontamination of radicals and heavy metals, protection from oxidative stress, thyroid metabolism, supports lymphocyte proliferation, inhibits leukotriene and prostaglandin.

Zinc:
Neurotransmitter and hormone metabolism, bone metabolism, collagen formation, protection of cell membranes, wound healing, differentiation of T-lymphocytes, co-factor of radical inhibiters, retinol metabolism, inhibits the intestinal absorption of heavy metals.

Calcium:
Mineralisation of bone tissue and tooth enamel, muscle contractions, transmission of stimuli to the nervous system, activation of the blood clotting system, insulin release from β cells in the pancreas.

Potassium:
Stimulation of nerve and muscle cells, function of voltage-dependant ion channels, maintenance of inner cell pressure, ATP synthesis, blood pressure regulation, insulin metabolism, transepithelial transport in the kidney and intestine.

Sodium:
Regulation des Wasserhaushaltes, Aufrechterhaltung des Membranpotentials, neuronale und neuromuskuläre Reizübertragung, Regulation von Blutdruck und Säure-Basen-Haushalt.

Phosphorus:
Component of nucleic acids, nucleoproteins and phospholipids, element of co-enzymes (FAD, NADH, CoA), ATP synthesis, regulation of enzymes by phosphorylation, bone mineralisation, oxygen transport.

Chromium:
Supports the signalling through insulin, promotes glucose tolerance as a component of the glucose tolerance factor, regulates glucose metabolism genes.

Copper:
Protection from oxidative stress, electron transport of the respiratory chain, haemoglobin synthesis, co-factor of adrenaline/noradrenaline formation, crosslinking of collagen.

Manganese:
Promotes prothrombin synthesis, co-factor of mitochondrial superoxide dismutase, insulin formation, amino acid, lipid and glucose metabolism and proteoglycan synthesis (bone/cartilage metabolism).

Molybdenum:
Formation of uric acid (endogenous antioxidant), decontamination of sulphite radicals, breakdown of alcohol in the liver, participates in iron metabolism.