

When should a person get tested?

What can a person do?

Oxidative stress and antioxidative capacity tests are meaningful for patients with increased environmental pollution or for the elderly who would like to maintain their vitality for as long as possible. But also for patients with chronic diseases, these tests and a possibly necessary antioxidative therapy are important.

Based on the laboratory results, targeted measures can be undertaken to reduce the individual risk factors and to stimulate the body's own function-promoting processes.

Presented by:

practice stamps

Oxidative stress 118.47 €

8-OHdG, nitrotyrosine, MDA-LDL, AGE
(serum, EDTA blood, urine)

Antioxidant capacity 147.46 €

Intracellular glutathione, co-enzyme Q10, selenium, copper, manganese, molybdenum, zinc, mercury
(serum, EDTA blood, Li-heparin blood)

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

For most of these tests the blood must arrive at the laboratory within 24 hours. Use our nationwide free courier service.

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Oxidative stress and antioxidative capacity

recognising a dangerous imbalance





What is oxidative stress?

In our body highly aggressive molecules, called free radicals, develop every day. The causes are not only pollution, UV radiation, ozone and other environmental influences, but also the body's own processes, like e.g. immune defence or the mitochondrial respiratory chain.

The body protects itself against the damaging oxidative attack. This protective system is called "antioxidative capacity".

With an intensified load or reduced antioxidative capacity, however, this balance tips and reaches an excess of radicals.

This phenomenon is called oxidative stress and/or nitrostatic stress if nitrogen monoxide radicals develop. Then free radicals also attack healthy cells.

Protection through antioxidants!

The protective substances, which repel the damaging effect of free radicals in the body, include certain vitamins, minerals and plant substances. Antioxidants work effectively against short phases of oxidative stress. The daily demand of this protective system grows due to increasing environmental stresses. A permanent oxidative attack leads, however, to the exhaustion of the antioxidative capacity.

Which diseases does oxidative stress promote?

Radicals circulate freely in the blood and have access to all the organs and tissues. They attack the cells and trigger different nuclear chain reactions, which contribute to different diseases and processes:

- premature aging
- thrombosis, atherosclerosis and cardiovascular diseases
- chronic inflammatory diseases (arthritis, allergies)
- liver, kidney and lung diseases
- neurodegenerative diseases (Parkinson's, Alzheimer's)
- cancer

Recognising oxidative stress early

Laboratory tests can help counteract diseases promoted by oxidative stress at an early stage. Apart from the targeted avoidance of pollutants, a sufficient supply of antioxidants is important. Measurement of their blood level is important before the administration of antioxidants, because only if the supply situation is known, can lacking micronutrients be purposefully supplied.

Profile "Oxidative Stress":

Measurement of the extent of oxidative damage in the cell based on specific laboratory parameters:

- Nitrotyrosine
→ protein damage
- MDA-LDL (malondialdehyde modified LDL)
→ Lipid oxidation
- AGEs (advanced glycation end products)
→ sugar products formed under oxidative stress

Profile "Antioxidative Capacity":

Determination of the blood levels of antioxidants (intracellular glutathione, coenzyme Q10) and cofactors of radical inhibitors (selenium, copper, manganese, molybdenum). Since the heavy metal mercury inactivates the mineral selenium, it is also investigated and used in the interpretation of the selenium supply.

