Press Release

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A strong immune system needs zinc

Experts from the German Society for Biofactors (GfB) point to a review paper on zinc published in April this year, in which the importance of the trace element for a strong immune system is emphasised.

"Among the essential biofactors that are required for an intact immune system, zinc plays a prominent role. It supports parts of the innate and acquired immune defence," emphasises Prof. Dr. med. Hans Georg Classen, one of the authors of the publication referred to above and Chairman of the German Society for Biofactors.[1]
Zinc deficiency negatively affects the organism's defence system, which can be associated with an increased rate and duration of infection.[2] "For example, in an observational study of almost 600 residents of a retirement home who were at least 65 years of age, it was shown that low zinc levels were associated with a higher rate of pneumonia," explains Prof. Classen.[3]

According to a 2016 study, T-cell proliferation is significantly increased by zinc supplementation.[4] And in a one-year, double-blind, randomised study of 50 test subjects aged 54 and older, it was shown that substitution with 45 mg of zinc per day resulted in significantly fewer infections.[5]

If zinc deficiency is suspected, supplementation is recommended
The diagnosis of zinc deficiency is difficult because determination of the zinc level in the blood plasma or serum is not considered to be absolutely reliable.[6] "According to the recommendation of the German Nutrition Society (DGE), proof of a zinc deficiency is considered to be the decrease in symptoms after zinc administration," stresses Prof. Classen.
A dosage which is both high and safe at the same time over the long term is 25 mg of zinc per day. This so-called Tolerable Upper Intake Level, abbreviated UL, has been defined by the European Food Safety Agency (EFSA). It defines – with a safety factor – the highest safe daily intake with which no negative health effects are to be expected even in the case of lifelong consumption.[7]

What are the risk groups?
According to the National Food Consumption Study, part II, 17-44 percent of people in Germany take in less zinc through their diet than recommended in the guidelines, depending on their age and sex.[8] In the case of vegans, vegetarians and elderly people in particular, the intake through the diet is often insufficient. Furthermore, the risk of zinc deficiency increases when illnesses, medications, pregnancy and lactation or absorption disorders increase the zinc requirement. Besides a weakened immune system and an increased susceptibility to infections, a zinc deficiency can also affect the skin. For example, wound

healing disorders or inflammatory skin changes such as eczema, brittle nails or hair loss may be an indication of a zinc deficiency.[9]

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Against the background of the positive effects of zinc on the immune system referred to above, the scientists at the German Society for Biofactors (GfB) recommend that more attention should be paid to the zinc supply in immunocompromised individuals. The biofactor zinc could also have a positive effect on viral infections in patients with a zinc deficiency.

However, at the present time there are no conclusive scientific studies available which show that zinc has a positive effect on the covid 19 virus.

Bibliography:

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