ZincUltra 25 Advanced formula

30 vegetable capsules - Code FE1592



The formula **Zinc Ultra 25** is a food supplement that provides the body with a form of zinc (citrate) that is characterized by its excellent absorption, as well as a series of cofactors (taurine, green tea, vitamin B₆, B₂, B₃ and B₁, malic acid, pumpkin seed extract and molybdenum) that reinforce the therapeutic effect of zinc. This product provides **25 mg of elemental zinc per capsule**.

HEALTH CLAIMS (EU Regulation 432/2012): Zinc contributes to the normal function of the immune system and to the protection of cells from oxidative stress; to normal fertility and reproduction and normal testosterone levels; to the maintenance of normal hair. Vitamin B6 contributes to normal cysteine synthesis, a sulphur amino acid helpful for hair health. Molybdenum contributes to normal sulphur amino acid metabolism.



FORMAT: 30 vegetable capsules

FORMULA

Ingredients: Taurine, bulking agent (microcrystalline cellulose), zinc citrate, green tea extract (*Camellia sinensis*), malic acid, molybdenum citrate, anticaking agent (magnesium salts of fatty acids), pumpkin seed extract (*Curcubita pepo* var. *moschata*), riboflavin (vit. B2), pyridoxine hydrochloride (vit. B6), inositol hexanicotinate (vit. B3), thiamin hydrochloride (vit. B1), pyridoxal 5'-phosphate (vit. B6), anticaking agent (silicon dioxide), riboflavin 5'-phosphate sodium (vit. B2), vegetable capsule (glazing agent: hydroxypropylmethylcellulose; purified water).

Nutritional information:	1 capsule
Zinc (from zinc citrate)	25 mg (250%*)
Taurine	350 mg
Thiamin (vit. B1) (from 6 mg thiamin HCl)	5,4 mg (491%*)
Riboflavin (vit. B2) (from 12 mg riboflavin + 3 mg riboflavin 5'-phosphate sodium)	14,3 mg (1 021%*)
Niacin (vit. B3) (from 8 mg inositol hexanicotinate, flush-free)	7,3 mg NE (46%*)
Vitamin B6 (from 10,5 mg pyridoxine HCl + 5 mg piridoxal 5'-phosphate)	12 mg (857%*)
Molybdenum (from molybdenum citrate)	200 μg (400%*)
Malic acid	50 mg
Pumpkin seeds (Curcubita pepo var. mostacha) (4:1)	15mg
Green tea (C. sinensis) (50% polyphenols) (7,5 mg EGCG/caps.) 75 mg	75 mg

^{*}NRV: Nutrient Reference Value in %.

Cautions: Should not be used by pregnant or lactating women, children below 18 years old, if you are already using other products containing green tea, or on empty stomach. Consult with your health-care practitioner before using if you are treated with medication, or if you have a special medical condition. Zinc supplementation can cause copper deficiency. Hypersensitivity, such as allergy, has been known to occur; in which case, discontinue use.

Recommended daily dose: 1 capsule daily with food. Take preferably a few hours before or after taking medications. Do not exceed the stated recommended daily dose (1 caps.) or a daily amount of 800 mg of EGCG.

Indications and uses:

- As an immune system booster. As an antioxidant protector. Heavy metal poisoning.
- Important in male sexual development and prostate health (benign prostatic hyperplasia). Male infertility.
- In cases of acne and skin problems.
- Mineral deficiency states that often occur in cases of alcoholism, candidiasis, premenstrual syndrome, during fibrocystic breast disease and in people with rheumatoid arthritis, zinc deficiency is also linked to the development of Alzheimer's disease.

ZincUltra 25 Advanced formula

30 vegetable capsules - Code FE1592



INGREDIENTS:

<u>ZINC (citrate)</u>: a very absorbable form of this essential mineral and cofactor in over 100 enzymatic systems. Zinc has important antioxidant properties. It's an essential component of superoxide dismutase (SOD), an enzyme which, thanks to its antioxidant effect, protects cells from free radicals and heavy metals. Zinc has been proven to protect cells from intoxication by cadmium, lead, nickel, aluminium and mercury (1-3).

It carries out a fundamental role in the synthesis of the nucleic acids RNA and DNA which are responsible for cell division, growth and repair (4-5).

It is considered very important for immune function since it is capable of stimulating T cell production and improving thymus gland function. It has properties that help fight infection. It impedes the growth of viruses, especially those that cause colds and *Herpes simplex*. AIDS patients have been shown to have a zinc deficit ⁽⁶⁻¹⁰⁾. Zinc is an essential nutrient for prostate health. It plays an important role in the prevention and treatment of BPH. The prostate gland accumulates zinc in order to regulate excessive DHT production. Zinc is involved in sperm production so it has a positive influence on male fertility ⁽¹¹⁻¹⁴⁾.

Zinc is an integrative part of the hormone insulin, and is involved in its metabolism (15-16).

Skin needs significant amounts of zinc. This mineral has a wound healing effect in tissues (for ex. post-operative). Zinc is an ideal supplement in case of burns, lesions and wounds, as well as for wound healing disorders (due to diabetes). Treatment with zinc also has good results in skin diseases (acne, eczema and psoriasis) (17-19).

<u>TAURINE</u>: an amino acid rich in sulphur which is essential for normal bile production, nerve transmission, endocrine system function, sugar metabolism and other important metabolic processes. It is also an important antioxidant (20-22)

<u>B VITAMINS</u>: important for energy production, they intervene in the enzymatic functions in which zinc is involved. Vitamin B_1 (thiamine) is attributed with a positive effect on mental function and therefore offers complementary support to the treatment of Alzheimer's disease. It also plays an important role in glucose metabolism. Vitamin B_2 (riboflavin) and riboflavin 5'-phosphate sodium (the active, quickly assimilated form of B_2) are involved in the regeneration of glutathione (important cell protector). Vitamins B_3 (niacin), B_6 (pyridoxine) and pyridoxal 5'-phosphate (the active, quickly assimilated form of B_6) are important for carbohydrate metabolism. In addition to improving zinc absorption, vitamin B_6 helps zinc strengthen the immune system through its ability to increase lymphocyte function (23-30).

MALIC ACID: an intermediary organic acid in the Krebs Cycle, it regulates energy production in the mitochondria and is used to treat chronic fatigue syndrome and fibromyalgia (31-32).

MOLIBDENUM (citrate): an easily absorbed trace mineral that regulates toxins and participates in hepatic detoxification processes (33).

<u>PUMPKIN SEED</u>: the extract of the seeds of *Curcubita pepo* is rich in zinc. It has traditionally been attributed with important medicinal properties such as antidiabetic, antioxidant, anti-carcinogenic and anti-inflammatory ⁽³⁴⁻³⁵⁾.

<u>GREEN TEA</u>: the extract of *Camellia sinensis* is rich in polyphenols (50%) which support and intervene in antioxidant functions, help repair damage caused by oxidation to DNA and can prevent cancer. It helps zinc regulate sugar metabolism (36-38).

The antioxidant properties of zinc are accentuated by the presence of the antioxidants L-taurine and green tea.

ZincUltra 25 Advanced formula

30 vegetable capsules - Code FE1592



References

- 1) Frassinetti, Stefania, et al. "The role of zinc in life: a review." Journal of environmental pathology, toxicology and oncology 25.3 (2006).
- 2) Seagrave, JeanClare, Robert A. Tobey, and C. Edgar Hildebrand. "Zinc effects on glutathione metabolism relationship to zinc-induced protection from alkylating agents." Biochemical pharmacology 32.20 (1983): 3017-3021.
- 3) Afonne, Onyenmechi Johnson, et al. "Zinc protection of mercury-induced hepatic toxicity in mice." Biological and Pharmaceutical Bulletin 23.3 (2000): 305-308.
- 4) Prasad, Ananda S. "Zinc: an overview." Nutrition (Burbank, Los Angeles County, Calif.) 11.1 Suppl (1995): 93-99.
- 5) Eckhert, Curtis D., and Lucille S. Hurley. "Reduced DNA synthesis in zinc deficiency: regional differences in embryonic rats." The Journal of nutrition 107.5 (1977): 855-861.
- 6) Rink, Lothar. "Zinc and the immune system." Proceedings of the Nutrition Society 59.4 (2000): 541-552.
- 7) Haase, Hajo, and Lothar Rink. "The immune system and the impact of zinc during aging." Immunity & Ageing 6.1 (2009): 9.
- 8) Mocchegiani, Eugenio, and Mario Muzzioli. "Therapeutic application of zinc in human immunodeficiency virus against opportunistic infections." The Journal of nutrition 130.5 (2000): 1424S-1431S.
- 9) Read, Scott A., et al. "The Role of Zinc in Antiviral Immunity." Advances in Nutrition (2019).
- 10) Mocchegiani, Eugenio, and Mario Muzzioli. "Therapeutic application of zinc in human immunodeficiency virus against opportunistic infections." The Journal of nutrition 130.5 (2000): 1424S-1431S.
- 11) Leitzmann, Michael F., et al. "Zinc supplement use and risk of prostate cancer." Journal of the National Cancer Institute 95.13 (2003): 1004-1007.
- 12) Wakwe, Victor C., Ehimen Odum, and Collins Amadi. "The impact of plasma zinc status on the severity of prostate cancer disease." Investigative and Clinical Urology 60.3 (2019): 162-168.
- 13) Gutiérrez-González, Enrique, et al. "Dietary zinc and risk of prostate cancer in Spain: MCC-Spain study." Nutrients 11.1 (2019): 18.
- 14) Prasad, Ananda S., et al. "Zinc status and serum testosterone levels of healthy adults." Nutrition 12.5 (1996): 344-348.
- 15) Islam, Md Rafiqul, et al. "Zinc supplementation for improving glucose handling in pre-diabetes: a double blind randomized placebo controlled pilot study." Diabetes research and clinical practice 115 (2016): 39-46.
- 16) Kelishadi, Roya, et al. "Effect of zinc supplementation on markers of insulin resistance, oxidative stress, and inflammation among prepubescent children with metabolic syndrome." Metabolic syndrome and related disorders 8.6 (2010): 505-510.
- 17) Lin, Li-Ching, et al. "Zinc supplementation to improve mucositis and dermatitis in patients after radiotherapy for head-and-neck cancers: a double-blind, randomized study." International Journal of Radiation Oncology* Biology* Physics 65.3 (2006): 745-750.
- 18) Lansdown, Alan BG, et al. "Zinc in wound healing: theoretical, experimental, and clinical aspects." Wound repair and regeneration 15.1 (2007): 2-16.
- 19) Lei, Li, et al. "Abnormal serum copper and zinc levels in patients with psoriasis: A meta-analysis." Indian journal of dermatology 64.3 (2019): 224.
- 20) Wang, Wen-Yen, and Koung-Yi Liaw. "Effect of a Taurine-Supplemented Diet on Conjugated Bile Acids in Biliary Surgical Patients." Journal of Parenteral and Enteral Nutrition 15.3 (1991): 294-297.
- 21) Kulakowski, Elliott C., and Joseph Maturo. "Hypoglycemic properties of taurine: not mediated by enhanced insulin release." Biochemical pharmacology 33.18 (1984): 2835-2838.
- 22) Zhang, M., et al. "Beneficial effects of taurine on serum lipids in overweight or obese non-diabetic subjects." Amino acids 26.3 (2004): 267-271.
- 23) Benton, David, Rebecca Griffiths, and Jurg Haller. "Thiamine supplementation mood and cognitive functioning." Psychopharmacology 129.1 (1997): 66-71.
- 24) Héroux, Maryse, et al. "Alterations of thiamine phosphorylation and of thiamine-dependent enzymes in Alzheimer's disease." Metabolic brain disease 11.1 (1996): 81-88.
- 25) McCormick, DONALD B. "Two interconnected B vitamins: riboflavin and pyridoxine." Physiological Reviews 69.4 (1989): 1170-1198.
- 26) Thakur, Kiran, et al. "Riboflavin and health: A review of recent human research." Critical reviews in food science and nutrition 57.17 (2017): 3650-3660.
- 27) Greenbaum, Carla J., Steven E. Kahn, and Jerry P. Palmer. "Nicotinamide's effects on glucose metabolism in subjects at risk for IDDM." Diabetes 45.11 (1996): 1631-1634.
- 28) Rose, D. P., et al. "Effect of oral contraceptives and vitamin B6 deficiency on carbohydrate metabolism." The American journal of clinical nutrition 28.8 (1975): 872-878.
- 29) Evans, G. W. "Normal and abnormal zinc absorption in man and animals: the tryptophan connection." Nutr Rev 38.4 (1980): 137-141.
- 30) Chandra, Ranjit Kumar. "Nutrition, immunity and infection: from basic knowledge of dietary manipulation of immune responses to practical application of ameliorating suffering and improving survival." Proceedings of the National Academy of Sciences 93.25 (1996): 14304-14307.
- 31) Ferreira, I., Á. Ortigoza, and P. Moore. "Magnesium and malic acid supplement for fibromyalgia." Medwave 19.4 (2019): e7633-e7633.
- 32) Werbach, Melvyn R. "Nutritional strategies for treating chronic fatigue syndrome." Alternative Medicine Review 5.2 (2000): 93-108.
- 33) Abumrad, N. N. "Molybdenum--is it an essential trace metal?." Bulletin of the New York Academy of Medicine 60.2 (1984): 163.
- 34) Ovca, Andrej, et al. "Speciation of zinc in pumpkin seeds (*Cucurbita pepo*) and degradation of its species in the human digestive tract." Food chemistry 128.4 (2011): 839-846.
- 35) Yadav, Mukesh, et al. "Medicinal and biological potential of pumpkin: an updated review." Nutrition research reviews 23.2 (2010): 184-190.
- 36) Liu, Jianping, Jianmin Xing, and Yutong Fei. "Green tea (*Camellia sinensis*) and cancer prevention: a systematic review of randomized trials and epidemiological studies." Chinese medicine 3.1 (2008): 12.
- 37) Liu, Kai, et al. "Effect of green tea on glucose control and insulin sensitivity: a meta-analysis of 17 randomized controlled trials." The American journal of clinical nutrition 98.2 (2013): 340-348.
- 38) Lee, Young-Ho, et al. "Zinc boosts EGCG's hIAPP amyloid Inhibition both in solution and membrane." Biochimica et Biophysica Acta (BBA)-Proteins and Proteomics 1867.5 (2019): 529-536.