REACTED ZINC

Ortho Molecular Products®
Because Efficacy Matters®

CLINICAL APPLICATIONS

- *Provides Highly-Absorbed Zinc for a Variety of Protocols*
- *High-Concentration Zinc to Boost Immune Function*

ESSENTIAL MINERALS

Reacted Zinc provides 54 mg of highly-absorbed zinc, ideally formulated using the amino acid chelate form of zinc (zinc glycinate) for enhanced absorption, optimal utilization and gastrointestinal (GI) comfort. Supplementing the right form of zinc is key to maintaining healthy levels within the body and compliance to a supplement regimen. Zinc plays a crucial role in boosting immune function, maintaining healthy tissue growth, and increasing the antioxidant reserves that protect the body from free radical damage.

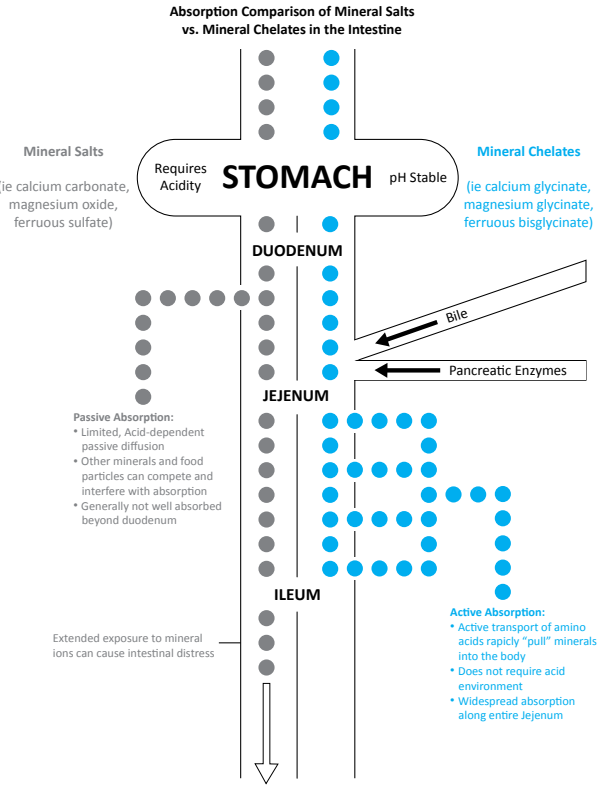
Overview

Zinc is an essential trace mineral important to many functions of human health. It plays a role in maintaining cellular metabolism and gene expression. Zinc is critical to a diverse group of physiological processes, such as immune function, insulin signaling, tissue repair, vision and neuro-transmission. It is second only to iron in worldwide incidence of deficiency, impacting 2 billion people in developing nations. Due to the wide range of functions regulated by zinc, deficiency, or even marginal deficiency, can have serious health implications.

Zinc is fundamental to the activity of over 100 enzymes and supports immune function, protein synthesis, tissue growth, DNA synthesis and cell division.[1-5] During pregnancy, infancy and childhood, the body needs zinc for proper growth and development.[6-9] Zinc also helps tissue repair and is important for adequate functioning of the senses of taste and smell. Daily intake of zinc is necessary to maintain adequate levels within the body because the body has no specialized zinc storage system. [10]

Bioavailability†

The importance of bioavailability is obvious. If consuming a zinc supplement has little effect on improving the body's zinc balance, there is no reason to ingest it. Signs of inferior mineral supplements include the use of cheap, poorly absorbed, rock-salt minerals. Reacted Zinc is formulated with the superior amino acid chelate form, zinc glycinate, which does not ionize in the gut and therefore is not impacted by dietary factors and is absorbed at a higher rate than those formulated with zinc salt forms (See Figure 1).



† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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Comparison studies have shown significantly superior absorption of mineral chelates compared to other mineral forms.

- Chelated zinc is 230% better absorbed than zinc sulfate
- Chelated zinc is 390% better absorbed than zinc oxide
- Chelated zinc offers greater protection from interfering dietary factors

Immune Function†

Mild to moderate zinc deficiency impacts immune function[11] by slowing down the activity of macrophages, neutrophils, natural killer cells, and complement activity.[12] Individuals with low zinc levels have shown below- normal immune activity that can be corrected by zinc supplementation.[12-13] Low zinc status has been associated with increased risk of immune challenges that benefit from improving zinc levels.[14-17]

Tissue Growth†

Zinc plays a role in maintaining the integrity of skin and mucosal membranes.[12] Patients with skin weakness have been observed to have abnormal zinc metabolism and low serum zinc levels.[18] Many clinicians have used zinc to benefit patients with thin, fragile skin.[19]

Eye Health†

Researchers have demonstrated that both zinc and antioxidants support eye health in those with age-related loss of visual acuity and general visual decline, by preventing free radical cellular damage in the retina.[20-21] One population-based cohort study suggests that high dietary intake of zinc, as well as beta carotene, vitamin C and vitamin E, was associated with added support for eye health in elderly subjects.[22]

Directions

1 or more capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors and flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts

V1

Serving Size 1 Capsule
Servings Per Container 60

1 capsule contains	Amount Per Serving	% Daily Value
Zinc (as TRAACS® Zinc Bisglycinate Chelate)	54 mg	360%

ID# 256060 60 Capsules

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References

1. Sandstead HH. Understanding zinc: recent observations and interpretations. *J Lab Clin Med* 1994;124:322-7.
2. Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc. Washington, DC: National Academy Press, 2001.
3. Solomons NW. Mild human zinc deficiency produces an imbalance between cell-mediated and humoral immunity. *Nutr Rev* 1998;56:27-8.
4. Prasad AS. Zinc: an overview. *Nutrition* 1995;11:93-9.
5. Heyneman CA. Zinc deficiency and taste disorders. *Ann Pharmacother* 1996;30:186-7.
6. Simmer K, Thompson RP. Zinc in the fetus and newborn. *Acta Paediatr Scand Suppl* 1985;319:158-63.
7. Fabris N, Mocchegiani E. Zinc, human diseases and aging. *Aging (Milano)* 1995;7:77-93.
8. Maret W, Sandstead HH. Zinc requirements and the risks and benefits of zinc supplementation. *J Trace Elem Med Biol* 2006;20:3-18.
9. Prasad AS, Beck FW, Grabowski SM, Kaplan J, Mathog RH. Zinc deficiency: changes in cytokine production and T-cell subpopulations in patients with head and neck cancer and in noncancer subjects. *Proc Assoc Am Physicians* 1997;109:68-77.
10. Rink L, Gabriel P. Zinc and the immune system. *Proc Nutr Soc* 2000;59:541-52.
11. Shankar AH, Prasad AS. Zinc and immune function: the biological basis of altered resistance to infection. *Am J Clin Nutr* 1998;68:447S-63S.
12. Wintergerst ES, Maggini S, Hornig DH. Contribution of selected vitamins and trace elements to immune function. *Ann Nutr Metab* 2007;51:301-23.
13. Prasad AS. Effects of zinc deficiency on Th1 and Th2 cytokine shifts. *J Infect Dis* 2000;182 (Suppl):S62-8.
14. Bahl R, Bhandari N, Hambidge KM, Bhan MK. Plasma zinc as a predictor of diarrheal and respiratory morbidity in children in an urban slum setting. *Am J Clin Nutr* 1998;68 (2 Suppl):414S-7S.
15. Brooks WA, Santosham M, Naheed A, Goswami D, Wahed MA, Diener-West M, et al. Effect of weekly zinc supplements on incidence of pneumonia and diarrhoea in children younger than 2 years in an urban, low-income population in Bangladesh: randomised controlled trial. *Lancet* 2005;366:999-1004.
16. Meydani SN, Barnett JB, Dallal GE, Fine BC, Jacques PF, Leka LS, et al. Serum zinc and pneumonia in nursing home elderly. *Am J Clin Nutr* 2007;86:1167-73.
17. Black RE. Zinc deficiency, infectious disease and mortality in the developing world. *J Nutr* 2003;133:1485S-9S.
18. Lansdown AB, Mirastschijski U, Stubbs N, Scanlon E, Agren MS. Zinc in wound healing: theoretical, experimental, and clinical aspects. *Wound Repair Regen* 2007;15:2-16.
19. Anderson I. Zinc as an aid to healing. *Nurs Times* 1995;91:68, 70.
20. Evans JR. Antioxidant vitamin and mineral supplements for slowing the progression of age-related macular degeneration. *Cochrane Database Syst Rev* 2006;(2):CD000254.
21. Age-Related Eye Disease Study Research Group. A randomized, placebo-controlled, clinical trial of high-dose supplementation with vitamins C and E, beta carotene, and zinc for age-related macular degeneration and vision loss: AREDS report no. 8. *Arch Ophthalmol* 2001;119:1417-36.
22. Van Leeuwen R, Boekhoorn S, Vingerling JR, Witteman JC, Klaver CC, Hofman A, et al. Dietary intake of antioxidants and risk of age-related macular degeneration. *JAMA* 2005;294:3101-7.