Zinc Glycinate

Clinical Applications

- Supports Enzymatic Reactions and Protein Metabolism*
- Promotes Immune and Reproductive Health*
- Supports Antioxidant Activity*
- Plays a Role in Sensory Perception*

Zinc Glycinate *is a fully reacted, proprietary TRAACS® amino acid chelate formulated for enhanced absorption. As an essential mineral, zinc serves catalytic, structural, and regulatory functions in the body. Zinc ultimately supports immune and neurological function, growth, taste acuity, nutrient metabolism, and reproductive health.**

All The 3rd Opinion Inc Formulas Meet or Exceed cGMP Quality Standards

Discussion

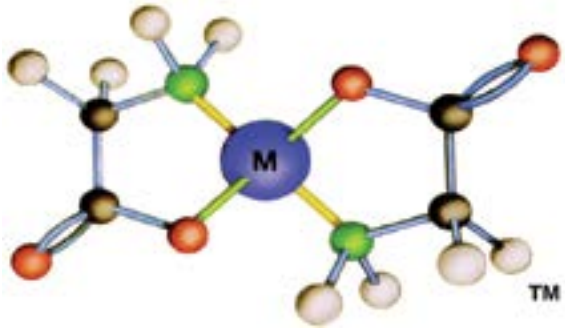
Zinc is an essential trace mineral and serves important roles in the body. More than 300 enzymes depend on zinc for their normal activities in cellular metabolism. As a cofactor, zinc participates in carbohydrate and protein metabolism as well as copper-zinc superoxide dismutase (CuZnSOD) antioxidant activity. Zinc's role in supporting immune function includes regulating T lymphocytes, natural killer cells, CD4 cells, and interleukin II.[1] A review of the research suggests that "zinc supplementation can significantly reduce the morbidity and mortality of apparently well-nourished children and shorten the time to recovery from acute [health problems]"*[2]

Zinc's pivotal role in protein metabolism translates into a pivotal role in wound healing, DNA synthesis, normal inflammatory response, and normal growth and development during childhood, adolescence, and pregnancy.[3] Zinc helps maintain the structural integrity of cell membranes; it assists them in their normal function and protects them from oxidative damage.[4] Research in human subjects of various ages suggests that zinc supplementation decreases oxidative stress markers, supports a normal response to inflammation, and appears to be a factor in balancing TH1 and TH2 immune cell activity.[5,6] Skin and mucous membranes also depend on zinc for their maintenance and integrity.*[3,7]

Zinc and vitamin A have a fundamental relationship as zinc is required for synthesis of retinol-binding protein—the protein that transports vitamin A in the blood. Zinc is also essential to the production of an enzyme that converts vitamin A to one of its active forms, and this helps support vitamin A's vital role in night vision.[4] Zinc supports healthy vision in general, especially as we age.[8] Zinc's role in sensory perception extends not only to vision but also to normal taste and smell acuity.*[1,4,5,9]

Zinc is highly concentrated in the liver, pancreas, kidneys, bone, muscles, eyes, prostate gland, sperm, skin, hair, and nails.[1] The mineral is required for sperm maturation and fetal development. The endocrine system relies on adequate zinc status to assist in the regulation of insulin activity and the conversion of thyroxine (T4) to the active thyroid hormone triiodothyronine (T3).[1] Zinc's regulatory role extends to gene expression, cell signaling, and nerve impulse transmission, as well as normal apoptosis.*[4]

The body has no specialized system for storing zinc, so daily intake and absorption is essential.[3] Phytates—elements found in plant-based, high-fiber foods—can bind minerals (including zinc) and inhibit their absorption. Therefore, the bioavailability of dietary zinc may be compromised.[8] Other minerals, including iron, calcium, and copper, can interfere with zinc absorption, further affecting zinc nutriture.[4] Gastrointestinal and urinary zinc losses should be considered as well. Assessment of overall zinc status must take into account not only intake but also absorption and retention. Zinc Glycinate —an Albion® TRAACS amino acid chelate—is a high-potency source of zinc formulated for enhanced absorption. In this form, zinc is coupled with two glycine molecules to facilitate its absorption across the intestinal wall and reduce interference from phytates and competing minerals.*[10]



Zinc bisglycinate Courtesy of Albion Laboratories, Inc.®

***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.**

Distributed by:
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Zinc Glycinate

Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 120

	Amount Per Serving	%Daily Value
Zinc (as TRAACS® zinc bisglycinate chelate)	20 mg	133%

Other Ingredients: Microcrystalline cellulose, HPMC (capsule), stearic acid, magnesium stearate, and silica.

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Directions

Take one capsule daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

Does Not Contain

Wheat, gluten, corn, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

References

1. Pelton R, LaValle JB, Hawkins EB, et al. *Drug-Induced Nutrient Depletion Handbook*. 2nd ed. Hudson, OH: LexiComp, Inc. 2001.
2. Cuevas LE, Koyanagi A. Zinc and infection: a review. *Ann Trop Paediatr*. 2005 Sep;25(3):149-60. [PMID: 16156979]
3. Dietary Supplement Fact Sheet: Zinc. Office of Dietary Supplements, National Institutes of Health. http://ods.od.nih.gov/factsheets/ZincHealthProfessional/. Updated September 20, 2011. Accessed July 24, 2012.
4. Linus Pauling Institute. Zinc. http://lpi.oregonstate.edu/infocenter/minerals/zinc/. Updated March 14, 2011. Accessed July 24, 2012.
5. Prasad AS. Zinc in human health: effect of zinc on immune cells. *Mol Med*. 2008 May-Jun;14(5-6):353-7. Review. [PMID: 18385818]
6. Beck FW, Prasad AS, Kaplan J, et al. Changes in cytokine production and T cell subpopulations in experimentally induced zinc-deficient humans. *Am J Physiol*. 1997 Jun;272(6 Pt 1):E1002-7. [PMID: 9227444]
7. Schwartz JR, Marsh RG, Draelos ZD. Zinc and skin health: overview of physiology and pharmacology. *Dermatol Surg*. 2005 Jul;31(7 Pt 2):837-47; discussion 847. Review. [PMID: 16029676]
8. Prasad AS. Discovery of human zinc deficiency: 50 years later. *J Trace Elem Med Biol*. 2012 Jun;26(2-3):66-9. [PMID: 22664333]
9. Stewart-Knox BJ, Simpson EE, Parr H, et al. Zinc status and taste acuity in older Europeans: the ZENITH study. *Eur J Clin Nutr*. 2005 Nov;59 Suppl 2:S31-6. [PMID: 16254578]
10. Zinc: A Mineral of Complex Biological Activity. Albion Human Nutrition Research Notes. 2004 Mar;13(1):1-3. http://www.albionhumannutrition.com/search?searchword=zinc+2004+March&ordering=newest&searchphrase=all&limit=50. Accessed July 24, 2012.

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