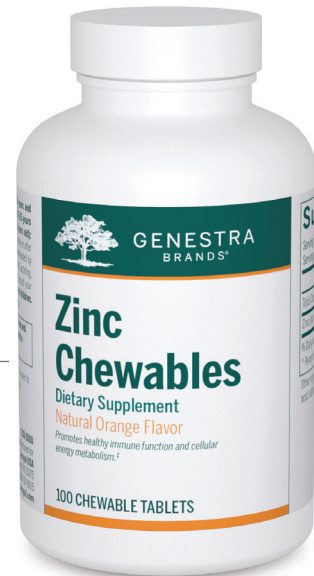




GENESTRA
BRANDS®

Zinc Chewables



Great-tasting, chewable zinc tablet

- Provides 10 mg of zinc citrate per chewable tablet
- Helps to maintain immune function[†]
- Helps maintain healthy bones, hair, nails and skin[†]
- Supports normal DNA synthesis and acid-base metabolism[†]
- Delicious natural orange flavor

Zinc Chewables feature 10 mg of elemental zinc as zinc citrate per tablet, suitable for ages 4 and up as a delicious option to help meet daily zinc requirements. Zinc is an important trace element in the body. It plays a key role in maintaining immune health by stimulating the production of immune cells, regulating natural killer cell activity, and mediating cytokine production. Clinical research has demonstrated that daily supplementation with zinc helps to maintain immune function in adults and adolescents. Zinc also has a long history of use in dermatological health. It helps to maintain immune function in the skin, while promoting collagen synthesis to help maintain skin structure. Additionally, zinc has a role in maintaining hair and nail health, and maintains bone health by regulating bone formation and resorption. This mineral is also involved in a key buffer system that helps to maintain normal acid-base balance. Zinc Chewables are delicious naturally orange-flavored chewable tablets ideal for anyone 4 years and older who have difficulty or dislike swallowing capsules.[†]

SUPPLEMENT FACTS

Serving Size 1 Chewable Tablet
Servings per Container 100

	AMOUNT PER SERVING	% DV
Total Carbohydrate	1 g	<1% [^]
Zinc (as zinc citrate)	10 mg	91%

% Daily value (DV)

[^] Percent daily values (DV) are based on a 2,000 calorie diet

Other ingredients: Xylitol, mannitol, hyprolose, ascorbyl palmitate, citric acid, natural flavors

Recommended Dose

Adults and Adolescents (14 years and older): Chew 1 tablet 1 to 3 times daily.
Adolescents (9-13 years old): Chew 1 tablet 1 to 2 times daily. Children (4-8 years old): Chew 1 tablet once daily. Take with meals, a few hours before or after taking medications or other supplements, or as recommended by your health professional.

Size

100 Chewable Tablets

Product Code

04238-100U



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Zinc Chewables

Scientific Rationale:

Zinc is an important trace element in the body.¹ It acts as a cofactor for more than 300 enzymes involved in various biological processes, such as DNA replication, membrane stability, bone formation and skin health.^{1,2} This mineral also has key roles in the immune system and stabilizes the structure of numerous proteins.^{1,2†}

Zinc is critical to the immune system as a mitogen, which stimulates the production of immune cells.¹ It is especially crucial to T cell function as a cofactor of thymulin, a hormone involved in T cell maturation and differentiation.^{1,2} Zinc is also required for immunocompetence, the ability of the body to produce an immune response after exposure to an antigen.¹ In addition, adequate levels of zinc are required for proper macrophage development, natural killer cell activity and cytokine production.^{1,3} In a double-blind study, daily supplementation with zinc for seven days significantly helped to maintain immune health in adults and adolescents.⁴ As the availability of free intracellular zinc can decrease with aging, zinc supplementation may also be particularly helpful for maintaining immune health in the elderly.⁴

Zinc has been used to support dermatological health for centuries.⁵ It is present in high levels in the skin, where it promotes cell division by regulating the activity of enzymes, such as DNA and RNA polymerases.^{5,6} Zinc is involved in connective tissue production through its role in collagen synthesis, which helps to maintain skin structure and regulate the level of oils in the skin.⁶ Zinc helps to maintain immune function in the skin by mediating cytokine production, maintaining macrophage function and activating natural killer cell activity.⁵ Additionally, zinc has roles in supporting the barrier of the skin, in the production of melanin pigments and in maintaining hair health.^{5,7} Zinc is also an important component of the nail plate.^{7,8†}

Zinc helps to maintain bone health by regulating bone formation and resorption.⁹ It is required to activate bone-forming osteoblast cells and promote protein synthesis.⁹ It is also an essential cofactor for enzymes that synthesize components of the bone matrix, helping to stimulate bone mineralization.⁹ In addition, zinc has a structural role in the bone matrix as a component of the hydroxyapatite crystals that make up bone mineral.^{9†}

Zinc is also involved in acid-base metabolism, which helps regulate the pH of blood and extracellular fluid.⁹ In the blood, a zinc metalloenzyme called carbonic anhydrase catalyzes the metabolism of carbon dioxide and water to form protons and bicarbonate.⁹ This is the primary buffer system that controls the change in acid load resulting from cellular metabolism and dietary acid intake.⁹ Therefore, adequate zinc levels are required to maintain normal acid-base balance.[‡]

Due to its role in normal growth and development, young children require adequate levels of zinc.¹⁰ Similarly, due to the pubertal growth spurt, zinc requirements are highest during adolescence.¹⁰ Once the growth spurt has ended, adolescents may still need additional zinc in order to replenish depleted zinc levels.¹⁰ Furthermore, as nutritional requirements increase during pregnancy and lactation, women in these stages of life may require zinc supplementation.¹⁰ Individuals who consume diets high in cereals and legumes may not have adequate serum levels of zinc, as high phytate contents in these foods decrease zinc bioavailability.¹⁰ Diets low in animal products may also result in inadequate zinc levels, as animal proteins increase the bioavailability of plant-derived zinc.¹⁰ It is also common for the elderly to have low zinc levels, in part due to decreased consumption of red meat, a zinc-rich food.¹⁰ Zinc Chewables is a great-tasting formula that provides a bioavailable source of zinc¹¹ to help meet daily zinc requirements.[‡]

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