

Zinc Supreme™



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Adequate zinc levels are essential for the healthy functioning of every cell in our bodies. The beneficial effects of zinc are extensive because it is involved in so many enzyme and body functions. Zinc is essential for growth and physical development, and for the metabolism of proteins, fats, and carbohydrates. Most aspects of reproduction in both males and females require zinc. This mineral is also vitally important to the immune system. Practically every enzyme reaction in the brain involves zinc and so does the development and function of the central nervous system. The highest concentrations of zinc are in the ear and eye. Some individuals are poor absorbers of this mineral but most cases of zinc deficiency are due to poor diet, chronic stress, vegetarianism, or excessive alcohol intake. Some deficiencies result from exposure to toxic metals, such as cadmium from cigarettes or excess copper from copper-lined tap water pipes.

Severe deficiency is associated with skin changes, diarrhea, hair loss, mental disturbances, and recurrent infections as a result of impaired immune function.¹ Marginal zinc deficiency may be manifested in poor wound healing, diabetes, prostate enlargement, cataracts, ulcers, food allergies, toxic metal accumulation, osteoporosis, decreased sense of taste or smell, skin disorders including acne, eczema, and psoriasis, and hearing impairments, and blood sugar imbalances.

Alzheimer's Disease

Zinc deficiency is a common nutrient deficiency in the elderly. Zinc deficiency may result in the destruction of nerve cells and the formation of plaque tangles found in Alzheimer's Disease.² In one study, almost all Alzheimer's patients given zinc supplements showed improvement in memory, understanding, communication, and social contact.³

Diabetes/Insulin Resistance

Zinc has the ability to balance blood sugar in the body.⁴ One study showed that lower consumption of dietary zinc and low serum zinc levels were associated with an increased prevalence of coronary artery disease and diabetes and several of their associated risk factors including hypertension, hypertriglyceridemia and other factors suggestive of mild insulin resistance.⁵ Zinc supplementation will assist the pancreas in manufacturing insulin and protect the insulin receptor sites on cell membranes that allow insulin to enter and do its job of metabolizing glucose.⁶ Zinc is important for a healthy pregnancy and supplementation benefits women with gestational diabetes.

Eating Disorder

Poor dietary habits predispose teenagers to many mineral deficiencies, and insufficient zinc stores are associated with both anorexia and bulimia. In one study, anorexic women receiving zinc supplementation gained double the amount of body weight compared to those in the study that did not receive zinc.⁷ Zinc also improves their desire to eat.

Elevated Copper

Copper elevation can result from a zinc deficiency. The zinc to copper ratio in the body needs to be a 15:1 balance. If one mineral is deficient the other gets elevated. Poor diet, vegetarianism, and certain lifestyle habits (e.g. smoking) can create zinc deficiency which can cause an elevation in copper. Ceruloplasmin is a copper-binding protein needed for proper copper utilization. Unhealthy adrenal glands have difficulty making ceruloplasmin. This can be a major cause of copper build-up (unusable copper), or copper toxicity. Taking birth control pills, hormone replacement therapy, and drinking tap water from copper-lined pipes can also lead to elevated copper and decreased zinc. This elevation in copper can lead to migraine headaches, damage to the eyes⁸ and possibly macular degeneration, preeclampsia⁹, breast cancer¹⁰, lymphoma, depression, anxiety, schizophrenia, and chronic leukemia¹¹. Other symptoms of elevated copper are acne, adrenal insufficiency, anemia, PMS, mind racing, candida overgrowth, osteoarthritis, and viral infections.

Vision, Taste, and Smell

Zinc is essential for the maintenance of vision, taste, and smell. Night blindness often occurs because of zinc deficiency. Poor zinc status is prevalent among the elderly and loss of taste and smell is a common problem for this age group. Supplementation with zinc can improve taste and smell in some of these individuals.

Immune Health

Zinc is involved in virtually every aspect of immunity. Zinc has antiviral activity, including activity against several viruses that cause the common cold.¹²

Supplement Facts

Serving Size 1 capsule

Amount Per Serving	% Daily Value	
Riboflavin (Vitamin B-2)	5 mg	294%
Vitamin B-6 (as Pyridoxine HCL)	50 mg	2500%
Zinc (TRAACS® Zinc Glycinate Chelate)	30 mg	200%
Molybdenum (TRAACS® Molybdenum Glycinate Chelate)	250 mcg	333%
Taurine	400 mg	*
Malic Acid	30 mg	*

*Daily Value not established.

Other Ingredients: Vegetable stearate, rice flour, microcrystalline cellulose.

A clinical study found that using zinc lozenges reduced cold symptoms from an average of seven days to four days.¹³ Supplementation with zinc stimulates the manufacture of white blood cells, one of the immune system's tumor-fighting components, and generally supports the activities of other immune system activities such as, neutrophils, T lymphocytes, and natural tumor-fighting (NK) cells.¹⁴ Zinc is also required for producing thymulin, the major thymus hormone.¹⁵ A reduction of this thymus hormone leads to impaired immune function.

Prostate Health

Zinc supplementation has been shown to reduce the size of the prostate and symptoms of benign prostatic hyperplasia (BPH) due its critical involvement in the many aspects of hormone metabolism.¹⁶ BPH is reaching epidemic proportions among men over 50 years of age and is tied to a lifetime of inadequate zinc intake. Frequent urge to urinate and other symptoms of an enlarged prostate diminish with zinc supplementation.

Skin Health

Several studies have demonstrated the effectiveness of zinc in the treatment of acne. In a study of advanced acne in both men and women, zinc levels were significantly lower than those without acne.¹⁷ Although some see dramatic improvement with zinc supplementation the majority will not see results immediately. Weeks or months may pass before one sees a noticeable difference in the appearance of the skin.

Sexual Health

Although it has a reputation as a male nutrient, zinc is fundamental to the sexual and reproductive health of both genders. Zinc is required for fertility and in men is used in virtually every aspect of male reproduction, including hormone metabolism, sperm formation, and sperm motility.¹⁸ Zinc deficiency is characterized by decreased testosterone levels and sperm counts. Zinc levels are typically much lower in infertile men with low sperm counts. Infertile men receiving a supplement of zinc had an increase in both lower than normal testosterone levels and sperm count.¹⁹ In women, zinc deficiency can lead to many pregnancy-related problems, including spontaneous abortion, toxemia, premature births, low birth weight, growth retardation, and delivery problems.

Stress

Stress lowers zinc body stores and leaves one vulnerable to immune weakness, fertility problems, acne, depression and other symptoms of elevated copper, potential prostate problems and Alzheimer's. A great way to test zinc stores is to use Designs for Health's liquid zinc (Zinc Challenge Liquid) as a way to gauge how much of the mineral is actually inside the body's cells. The test works because our sense of taste depends on zinc. Take a tablespoon of liquid zinc and swish it around in your mouth. If you immediately notice a metal taste, you are not deficient in zinc. However, if you taste nothing or have a delayed recognition of the taste, you need to replenish your zinc stores.

ZINC CHALLENGE TEST

We recommend the Zinc Challenge test with patients to determine their need for zinc, recommended dose, and when to reduce to a maintenance dose. Zinc is present in gustin, a salivary polypeptide that appears to be necessary for normal function of taste buds. Zinc is needed for taste acuity and appetite regulation.

How to Dose Zinc Based on Zinc Challenge Test Results:

1. No taste at all means very low zinc levels: Recommend 2-3 Zinc Supreme™ daily with food.
2. A slight taste resembling hydrogen peroxide is noticed: Recommend 1 Zinc Supreme™ daily until strong taste develops.
3. Strong, immediate metal taste is noticed: Zinc status is fine. No extra zinc supplementation is needed.

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