



Zinc

(Chelated)

Stock #1657-9 (150 tablets)

Zinc is an important element in the healthy absorption and function of vitamins, especially the B-complex vitamin. Zinc is involved in digestion and metabolism, and is essential to the functioning of more than 200 human enzymes, including those necessary to synthesize DNA and RNA. Zinc also enables proteins to connect with nucleic acids, and is a “building block” of cellular membranes. Zinc supplements have already been reported to increase the healing of surgical wounds and ulcers, including gastric ulcers. However, it is still uncertain whether the increased healing and recovery observed is associated with a pre-existing zinc deficiency in the individuals tested, or whether zinc, as a primary agent in cellular repair, is generally effective for everyone.

A zinc deficiency will slow skin healing. In fact, studies have shown skin damage can be reversed with zinc supplementation, as zinc is essential for tissue growth, maintenance and repair. Zinc is used and eliminated quickly within days following a serious burn or injury.

Although serious zinc deficiencies in developed countries are rare, marginally low levels seem to be common. Zinc deficiency can hamper growth and healing, and can lead to abnormalities of sense and perception (loss of smell or taste), increased risk of infection, lethargy, malfunctioning sex glands, and poor appetite. Marginal zinc deficiency is actually common in this country due to the amount of extensively processed foods consumed—food processing destroys zinc. Dr. Earl Mindell, author of the best-seller, *The Vitamin Bible*, confirms zinc deficiency is common, either due to loss through processing or because it exists in minute amounts in food due to nutrient-poor soil. Further, Dr. Harman, professor emeritus at the Nebraska School of Medicine, asserts that 90% of the population consumes a zinc-deficient diet.

Zinc requires sufficient iron and copper in order to be used by the body. If zinc levels are low or even normal, and there is insufficient copper, the body may register anemia, high cholesterol, or irregular heartbeat known as PVC (premature ventricular contraction).

The prostate gland requires 10 times more zinc than any other organ in the body, as zinc defeats the body's production of dihydrotestosterone—the hormone responsible for promoting prostate cell growth. In other words, an enlarged prostate may very well be the result of a zinc deficiency. Research reported in a government medical journal stated zinc supplementation was effective in reducing prostate enlargement and also helped many of the painful symptoms associated with this problem. Another study, published in the *Journal of Steroid Biochemistry*, confirmed zinc supplementation prevented prostate swelling. Men who have prostate problems, or men who would like to prevent them, should consider adding zinc supplements to their daily diet. Dr. Mindell has observed success in cases of impotence by adding zinc and vitamin B supplements to the diet. Dr. Mindell encourages a combination of both nutrients, as vitamin B increases the body's ability to absorb zinc, which has been substantiated by a study published in the *Journal of Nutrition*. The addition of vitamin B helps ensure the prostate will get the zinc it needs. Furthermore, in regards to mens' health, zinc is similar to the male sex hormone testosterone, and has been shown to improve potency and sex drive in men with less than optimum levels of zinc.

Zinc is also vital for normal joint performance. Studies have validated that sufferers of rheumatoid arthritis have lower levels of zinc in their system than non-sufferers. A double-blind study reported in *Lancet* showed zinc supplementation notably reduced morning stiffness and joint inflammation.

With regards to eye health, a report shared with the American Academy of Optometry stated insufficient zinc levels inhibit the ability of the eyes to adjust in darkness. Zinc has also been found helpful in fighting macular degeneration, which can lead to blindness in the elderly. Mounting evidence shows all people may develop zinc deficiency with age.

Zinc is vital to a healthy immune system because it speeds the healing of wounds and assists thymus function and hormone activity. A deficiency of zinc can lead to weakened immunity. Both people and animals with zinc absorption problems are vulnerable to an assortment of infections, thus proving zinc's ability to protect the immune system. AIDS patients have been found to have low levels of zinc. New evidence shows insufficient zinc leads to the steady breakdown of maturing immune systems and the rise in numerous autoimmune disorders of the elderly, including arthritis. Since zinc is known to stimulate the immune system and also provides anti-viral properties, researchers are studying zinc as a treatment for colds. In fact, one double-blind clinical trial found that zinc

gluconate lozenges, containing 23mg of elemental zinc, significantly shortened the average duration of common colds by 7 days. Participants were given an initial double dose and then instructed to dissolve the lozenges in their mouths every 2 waking hours. After only 7 days, 86% of those taking zinc were free of cold symptoms, compared to only 46% given placebos.

Diabetics, due to their specialized diets and abnormal metabolism, often exhibit symptoms of insufficient zinc. Also, diabetics typically lose too much zinc through urination, thereby requiring supplementation. Since zinc plays a role in virtually every aspect of insulin metabolism—production, secretion and utilization—numerous researchers suggest taking zinc supplements to reduce the problems of diabetes.

Zinc, combined with an antibiotic and applied topically, has been shown to improve acne, whether or not the person is deficient in zinc.

Zinc supplements, along with calcium, may also reduce symptoms of PMS.

Many foods contain zinc with some of the best sources being whole grains, brewer's yeast, wheat bran and wheat germ. Some health professionals hold to the theory that seafood and meat furnish more readily absorbed forms of zinc than vegetables.