

GNC ZINC 30MG TABLET

PRODUCT DESCRIPTION:

It is a white, standard round tablet.

COMPOSITION:

Each tablet contains Zinc 30 mg.

THERAPEUTIC PROPERTIES:

Zinc may have immunomodulatory activity. It may also have Antioxidant activity. Zinc has putative antiviral, fertility-enhancing and retinoprotective activities.

Zinc is required for a number of immune functions, including T-lymphocyte activity. Zinc deficiency results in thymic involution, depressed delayed hypersensitivity, decreased peripheral T-lymphocyte count, decreased proliferative T-lymphocyte response to phytohemagglutinin (PHA), decreased cytotoxic T-lymphocyte activity, depressed T helper lymphocyte function, depressed natural killer cell activity, depressed macrophage function (phagocytosis), depressed neutrophil functions (respiratory burst, chemotaxis) and depressed antibody production. Zinc supplementation can restore impaired immune function in those with zinc deficiency, as found in malabsorption syndromes and acrodermatitis enteropathica.

There is little evidence that zinc supplementation will enhance immune responses in those who are not zinc deficient. High doses of zinc may even be immunosuppressive. Zinc supplementation may improve immune function in healthy elderly individuals who are marginally zinc deficient.

The mechanism underlying the immune effects of zinc is not fully understood. Some of these effects may be accounted for by zinc's membrane-stabilization effect. This could affect signaling processes involved in cell-mediated immunity. Zinc is known to be involved in such signaling processes. Zinc may also influence gene expression by structural stabilization of different immunological transcription factors. Zinc ions can induce blast formation of human peripheral blood monocytes (PBMCs). In PBMCs, zinc induces cytokines, including interleukin (IL)-1, IL-6 and tumor necrosis factor (TNF)-alpha. Cytokine induction by zinc is caused by a direct interaction of zinc with monocytes. The stimulation by zinc of T-lymphocytes appears to occur via monocyte released IL-1 and cell-cell contact. High zinc concentrations inhibit T-lymphocyte proliferation by blocking the IL-1 type 1 receptor-associated kinase. T-lymphocyte activation appears to be delicately regulated by zinc concentrations.

Zinc may have secondary antioxidant activity. Zinc does not have redox activity under physiological conditions. Zinc may influence membrane structure by its ability to stabilize thiol groups and phospholipids. It may also occupy sites that might otherwise contain redox active metals such as iron. These effects may protect membranes against oxidative damage. Zinc also comprises the structure of copper/zinc-superoxide dismutase (Cu/Zn-SOD). Zinc plays a structural role in Cu/Zn-SOD. Zinc may also have antioxidant activity via its association with the copper-binding protein metallothionein.

The role of zinc gluconate in the management of the common cold remains controversial. The mechanisms proposed for zinc's effects on the duration of colds are inhibition by zinc of the replication of rhinoviruses and/or inhibition of virus entry into cells. Zinc ions, however, have only modest nonselective inhibitory effects for rhinoviruses *in vitro*.

Zinc is transported to the liver via the portal circulation. A fraction of zinc is extracted by the hepatocytes, and the remaining zinc is transported to the various cells of the body via the systemic circulation. Zinc is transported in the plasma bound to albumin (about 80%), alpha-2-macroglobulin (about 18%) and to such proteins as transferrin and ceruloplasmin (about 2%). The major route of zinc excretion is via the gastrointestinal tract. Fecal zinc excretion is comprised of unabsorbed zinc and zinc derived from biliary, pancreatic, and gastrointestinal secretions and zinc from sloughing of mucosal cells.

INDICATIONS:

Treatment of zinc deficiency.

ADVERSE/SIDE EFFECTS:

Doses of zinc up to 100 milligrams daily are generally well tolerated. Higher doses may cause adverse reactions. The most common adverse reactions are gastrointestinal and include nausea, vomiting and gastrointestinal discomfort. Other adverse reactions include a metallic taste, headache and drowsiness. There are some reports of decreased HDL-cholesterol in those taking high doses of zinc. Chronic intake of high doses of zinc can lead to copper deficiency and hypochromic, microcytic anemia secondary to zinc-induced copper deficiency.

High doses of zinc may be immunosuppressive.

CONTRA-INDICATION:

Zinc is contraindicated in those who are hypersensitive to any component of a zinc-containing product.

PRECAUTIONS:

Pregnant women and nursing mothers should avoid zinc doses higher than RDA amounts (15 milligrams/day for pregnant women, 19 mg/day for lactating women during the first six months and 16 mg/day for lactating women during the second six months).

WARNING:

Contains zinc, which may be dangerous if taken in large amounts or for long time.

DRUG INTERACTION:

Concurrent administration of a zinc salt with penicillamine might diminish the effect of penicillamine. The absorption of zinc, although poor, may be decreased by various compounds including some foods. Chelation may occur with tetracycline.

RECOMMENDED DOSAGE:

Take one tablet daily.

SYMPTOMS AND TREATMENT FOR OVERDOSAGE AND ANTIDOTE:

There are no reports of overdosage from use of zinc product.

SHELF LIFE:

4 years from manufacturing date.

PACKING/PACK SIZES:

In bottle of 30 tablets

Zinc is involved in sperm formation and testosterone metabolism. Zinc deficiency results in oligospermia. There is little evidence that zinc supplementation affects sperm production in those who are not zinc deficient. The mechanism of the putative effect of zinc in age-related macular degeneration (ARMD) is unknown.

PHARMACOLOGY:

The efficiency of absorption (fractional absorption) of a zinc salt on an empty stomach ranges from 40% to 90%. The fractional absorption of zinc with food appears to be lower. Zinc-histidine, zinc-methionine and zinc-cysteine complexes appear to be more efficiently absorbed than other zinc supplementary forms. Zinc is absorbed all along the small intestine. Most ingested zinc appears to be absorbed from the jejunum. Zinc uptake across the brush border appears to occur by both a saturable barrier-mediated mechanism and a nonsaturable nonmediated mechanism. The exact mechanism of zinc transport into the enterocytes remains unclear. Zinc transporters have been identified in animal models. Once zinc is within the enterocyte, it can be used for zinc-dependent processes, become bound to metallothionein and held within the enterocyte or pass through the cell. Transport of zinc across the serosal membrane is carrier mediated and energy dependent.

STORAGE CONDITIONS:

Store in dry place below 30°C. Protect from light and moisture.

Keep out of reach of children.

Jauhkan dari kanak-kanak.

Further information concerning this drug can be obtained from your family physician/local general practitioner/pharmacist.

Reg. No: MAL06100585X
DILULUSKAN OLEH KKM.

Manufactured By:

NUTRA MANUFACTURING, LLC.
1050, Woodruff Road, Greenville, South Carolina 29607, USA.

Product Registration Holder:

ONI Global(Malaysia) Sdn Bhd
8, Jalan 6/91, Taman Shamelin Perkasa, Batu 3 ½, Jalan Cheras,
56100 Kuala Lumpur.

Date of Revision of Package Insert: Jun 2020