# Zinc Citrate 50 mg Tablets





# **Product Summary:**

Zinc is an important mineral, playing a role in many biological processes. Zinc is perhaps best known for its function in a healthy immune system and for the prevention of colds.

### Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Helps the body metabolize carbohydrates, fats and proteins. A factor in the connective tissue formation. Helps maintain healthy skin and immune function.









### Pharmacology:

Zinc is a biologically essential trace element and is found in hundreds of enzymes. Zinc is recognized for its role in a healthy immune system. It is also helpful in connective tissue formation, maintaining healthy skin and metabolizing carbohydrates, fats and protein. Zinc is also important for wound healing.

Zinc has been used as a herbal treatment to decrease the duration of a sore throat – one of the first signs of a cold. The use of zinc lozenges also seems to help shorten the course of the common cold in adults. The majority of studies show a significant decrease in the duration of cold symptoms when adults take zinc lozenges every 2 hours while awake, within 2 days of the start of a cold.¹ Furthermore, studies demonstrate that zinc lozenges can meaningfully reduce the number of days of throat soreness, coughing, and hoarseness.²3

General zinc supplementation on a daily basis serves as a nutritional prevention measure for avoiding infections, facilitating the action of the immune enzymes and other body enzymes as well.<sup>4</sup> Zinc also has a direct anti-bacterial effect in the throat.<sup>5</sup> Zinc is also involved in sexual function.

Zinc also plays a role in the maintenance of vision. Zinc supplementation, in conjunction with antioxidant vitamins, might slow the progression of advanced age-related macular degeneration (AMD).<sup>5</sup>







# Manufactured product information:

#### Manufacturer:

WN Pharmaceuticals Ltd.

#### Size / UPC:

#### NPN:

02240891

#### **Expiry Date:**

60 months from date of manufacture

#### **Active Ingredient:**

Each tablet contains:

#### Non-Medicinal Ingredients (in descending order):

Microcrystalline cellulose, magnesium stearate

#### Appearance:

White round tablet.

#### Packaging:

175 cc white round bottle with safety seal under a 38 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on the label applied to the exterior of the bottle.

#### Storage:

Store in tightly closed containers in a cool, dry place.





### Dose:

As per the NHPD monograph for Zinc, the adult dose for zinc is 0.7-50 mg/day; for adolescents 14-18y, the dose is 0.7-34 mg/day; for adolescents 9-13y, the dose is 0.4-23 mg/day; and for children 4-8y, the dose is 0.4-12 mg/d.<sup>4</sup>

### **Directions:**

(Adults): 1 tablet daily with a meal, a few hours before or after taking other medications, or as recommended by a physician.

### Caution:

The caution as approved by the Natural Health Products Directorate (NHPD): KEEP OUT OF THE REACH OF CHILDREN. Zinc supplementation may cause a copper deficiency. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

# **Deficiency Symptoms:**

Zinc deficiency is characterized by growth retardation, low insulin levels, reduced levels of insulin-like growth factor (IGF)-1, anorexia, mental lethargy, irritability, low sperm count, generalized hair loss, rough and dry skin, skin lesions, slow wound healing, decreased thyroid function, delayed onset of puberty, poor sense of smell and taste, diarrhea, and nausea.<sup>5</sup> It can also alter vision.<sup>5</sup>

Zinc deficiency requiring supplementation may occur in severe diarrhea, malabsorption syndromes, liver cirrhosis and alcoholism, after major surgery, and during long-term administration of total parenteral nutrition.<sup>5</sup>

### Drug Interactions/Contraindications:

When taken with meals with high fiber and/or high phytate content, zinc absorption may be compromised by fiber binding.

Quinolones, tetracyclines, and penicillamine absorption is impeded by zinc.<sup>6</sup> Application of zinc bearing lozenges, or other zinc forms, should be spaced out to avoid interaction.







Thiazide diuretics may significantly influence the tissue levels of zinc since they cause mineral losses via increased urination.<sup>6</sup> Chronic incremental losses of zinc relates to general immunocompetency.

*Calcium:* Calcium supplementation might decrease zinc absorption. However, this interaction can be avoided by taking calcium supplements at bedtime instead of with meals.<sup>5</sup>

Copper: High daily doses of zinc (>40 mg/day) might increase the risk of copper deficiency, as zinc can competitively inhibit copper absorption.<sup>5</sup>

*Chelation therapy:* EDTA and its sals chelate zinc ions. Chelation therapy can decrease zinc serum levels by 40%.<sup>5</sup>

### **Toxicity/Adverse Reactions:**

The ingredients in this product are virtually free from adverse effects when used according to the dosage recommendations.

Orally, zinc can cause nausea, vomiting, and a metallic taste in the mouth.5







# Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	
Artificial Flavors	
Artificial Sweeteners	
Corn Products	
Egg Products	
Fish	
Gluten	
Hydrolyzed Plant Protein	
Lecithin	
Milk Products	
Peanuts	
Preservatives	
Sesame Products	
Shellfish	
Soy Products	
Starch/Modified Starch	
Sulphites	
Tartrazine	
Tree Nuts	
Wheat Products	
Yeast	

#### ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTION:

Free of Animal Products

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTION:

Kosher







#### References:

- 1. Eby GA 3<sup>rd</sup>. Zinc lozenges as a cure for the common cold a review and hypothesis. Med Hypotheses. 2010 Mar;74(3):482-92.
- 2. Godfrey JC, *et al.* Zinc gluconate and the common cold: a controlled clinical study. J Int Med Res. 1992;20:234-246.
- 3. Mossad SB, et al. Zinc gluconate lozenges for treating the common cold. A randomized, double-blind, placebo-controlled study. Ann Int Med. 1996;125(2):81-88.
- 4. Health Canada, Multi-vitamin/mineral Monograph, Accessed October 5, 2010 [Available from: http://www.hc-sc.gc.ca]
- 5. Natural Medicine Comprehensive Database (NMCD), Zinc Monograph, Accessed March 2, 2011 [Available from: http://www.naturaldatabase.com/]
- 6. Graedon J, Graedon T. Deadly Drug Interactions. St. Martin Griffin, New York NY, 1995.

Revision #: 00

