

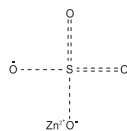
UniZinc

[Zinc sulphate]

20mg/5ml Syrup

Composition:
Each 5ml contains:
54.90 mg of Zinc sulfate monohydrate
eq. to Elemental Zinc 20mg

CHEMICAL STRUCTURE



Zinc is an integral component of many metalloenzymes in the body; it is involved in the synthesis and stabilization of proteins, DNA and RNA, and plays a structural role in ribosomes and membranes. Zinc is involved in oxygen transport and protection against free radical damage. Zinc facilitates wound healing and helps maintain normal growth rates, normal skin hydration and senses of taste and smell. Zinc acts as an integral part of several enzymes important to protein and carbohydrate metabolism. Features of zinc deficiency include growth retardation and defects of rapidly dividing tissues such as the skin and the intestinal mucosa. Zinc deficiency in humans alters several aspects of immune function. Immune defects associated with zinc deficiency include impaired function of lymphocytes, natural killer cells and neutrophils.

PHARMACOLOGY

Pharmacodynamics

Zinc supplementation improves immunity.

Zinc deficiency also has direct effects on the gastrointestinal tract such as impaired intestinal brush border, increased secretion in response to bacterial, enterotoxins and perturbations in intestinal permeability. Zinc supplementation improves the transport of water and electrolytes across the intestinal mucosa in experimental zinc deficiency.

Zinc plays a fundamental role in cellular metabolism and is postulated to Modulate host resistance to various infections.

Patients with pneumonia have been found to have lower blood zinc levels as compared to uninfected children. Even in well nourished children suffering from acute lower respiratory infection, serum zinc levels have been found to be lower. Case reports and observational studies have shown a correlation between low plasma zinc concentrations in children and a greater susceptibility to infections.

In Wilson's disease, the zinc cation inhibits the absorption of dietary copper by inducing the synthesis of metallothionein, a metal-binding protein present in the intestinal mucosa. This protein binds metals, including copper, forming a nontoxic complex that is not absorbed systematically but excreted in the stool.

Pharmacokinetics

Absorption is pH dependent; poor from GI tract (20% to 30%); solubilized by conversion to zinc chloride in the presence of gastric acid. Storage sites are liver and skeletal muscle; serum levels do not adequately reflect whole-body zinc status. Protein binding: 55% bound to albumin; 40% bound to alpha 1- macroglobulin. Excreted 90% in faeces with only traces appearing in urine and perspiration.

INDICATIONS

Zinc is indicated in children suffering from acute and persistent diarrhoea, respiratory tract infections, common cold, Wilson's disease and as an immunity booster.

Zinc is indicated as co-prescription with certain drugs like penicillamine, sodium evaporate and ethambutol which inhibit zinc absorption.

DOSAGE AND ADMINISTRATION

UNIZINC syrup

Child under 10kg: 5ml (1 teaspoonful = 20mg) 1 time daily.

Child between 10-30kg: 5ml (1 teaspoonful = 20mg) 1-3 times daily.

Adults and child over 30kg: 10ml (2 teaspoonful = 40mg) 1-3 times daily.

This drug is most effective if they are taken at least 1 hour before or 2 hours after meals. However, if it causes stomach upset, this may be taken with a meal. This medicine should be used regularly to get most benefit from it.

CONTRAINDICATIONS

Hypersensitivity to zinc salts or any component of a zinc-containing supplement.

UNDESIRABLE EFFECTS

Adverse reactions are rare. Nausea and vomiting may occur. If GI upset occurs, Zinc can be taken with food, but foods high in calcium, phosphorus and phytates must be avoided, but if excessive doses of zinc are used it may cause

یونی زنک

(زنک سلفیٹ)

۲۰ ملی گرام / ۵ ملی لیٹر سیرپ

copper deficiency.

WARNINGS AND PRECAUTIONS

Drug Interactions

Zinc may decrease penicillamine, tetracycline and quinolone absorption; iron decreases zinc absorption; agents which increase gastric PH, such as H2 blockers may decrease zinc absorption.

Renal impairment

Accumulation of zinc may occur in cases of renal failure patients. Hence caution should be exercised in patients with renal impairment with careful patient monitoring.

Pregnancy

Safety is not established in pregnant women; therefore zinc is not recommended in pregnancy.

Lactation

Safety is not established in lactating women; therefore Zinc is not recommended during lactation.

OVERDOSE

Acute zinc toxicity after oral ingestion causes nausea and vomiting, fever and respiratory distress. Chronic large doses of zinc may depress immune function and cause hypo- chronic anemia as a result of copper deficiency. Symptoms such as hypotension (dizziness or fainting), jaundice (yellow eyes or skin), pulmonary edema (chest pain or shortness of breath), corrosion and inflammation of the mucous membrane of the mouth and stomach; ulceration of the stomach followed by perforation have also been reported to occur. Gastric lavage and emesis should be avoided. Demulcents such as milk should be given. Chelating agents such as sodium calcium edentate at a dose of 50 to 75mg per kg (mg/kg) of body weight per day have been reported to be useful.

PRESENTATION

Unizinc 20 mg/5 ml suspension in 60ml and 120ml bottle.

STORAGE CONDITIONS AND INSTRUCTIONS

- Store below 30°C in a dry place, protect from light.
- To be dispensed on the prescription of a registered medical practitioner only.
- Keep out of the reach of children.

خوراک ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔

ہدایات:

- دوا کو ۳۰ ڈگری سینٹی گریڈ سے کم درجہ حرارت پر روشنی سے بچا کر خشک جگہ پر رکھیں۔
- صرف رہنمائی ڈاکٹر کے نسخے پر ہی فروخت کریں۔
- بچوں کی پہنچ سے دور رکھیں۔

Manufactured by:

Kaizen Pharmaceuticals (Pvt.) Ltd.
E-127-129, North Western Industrial Zone,
Bin Qasim, Karachi-75020, Pakistan.

ART No: 403/2