

## (Zinc Sulphate Tablet 200 mg)

### Each film coated tablet contains:

Colour: Sunset Yellow FCF

#### **Elemental Zinc:**

# **Clinical Pharmacology**

Zinc, an essential trace mineral, is required for the metabolic activity of 300 of the body's enzymes, and is considered essential for cell division and the synthesis of DNA and protein. Zinc ions (Zn2+) are closely involved in the normal development, differentiation, and function of immune cells, thus considered critical for generating both innate and acquired (humoral) antiviral responses. Zn is involved in various cellular processes and possesses a variety of direct and indirect antiviral properties. It was demonstrated that Zn deficiency is associated with reduced antibody production, affected function of the innate immune system (e.g., low natural killer cell activity), decreased cytokine production by monocytes, and the chemotaxis and oxidative burst of neutrophil granulocytes. It also results in thymic atrophy, altered thymic hormones production, lymphopenia, and defective cellular- and antibody-mediated responses that lead to increased rates and duration of infection. In particular, Zn deficiency reduces the number of peripheral and thymic T cells, their proliferation in response to phytohemagglutinin, and the functions of T helpers and cytotoxic T cells. In addition, Zn deficiency acts indirectly by reducing the levels of active serum thymulin, a zinc-dependent nonapeptide hormone that regulates the differentiation of immature T cells in the thymus and the function of mature peripheral T cells. On the other hand, Zn can affect several aspects of monocyte signal transduction and secretion of pro-inflammatory cytokines, and interfere with the binding of leukocyte function-associated antigen-1 to ICAM-1, thus suppressing inflammatory reaction. Zinc is also critical to tissue growth, wound healing, taste acuity, connective tissue growth and maintenance, immune system function, prostaglandin production, bone mineralization, proper thyroid function, blood clotting, cognitive functions, fetal growth and sperm production.

#### Indication:

- In Viral infection management.
- ❖ To promote wound healing.
- In prevention of cold.
- Enhance immune function.

### **Benefits of Zinc:**

- ❖ An antioxidant.
- Increased immunity.
- Balancing hormones.
- Increased fertility.
- Helps in muscle growth & repair.
- Mental health support.
- Protection against diabetes

## Adverse effect:

Growth retardation, Low blood pressure, Retarded bones, Loss of appetite, Loss of sense of smell and taste, Weight loss.

Route of administration: Oral

**Type of Tablet:** Film Coated tablet.

For Therapeutic use.

**Dosage:** As directed by the Physician.

**Storage:** Store in a cool, dry & dark place Keep the medicines out of reach of children.

Presentation: Zsmart-200 is available as 10x 10 Tablet.

# Marketed By:



804, Suyog Center, Gultekdi, Pune-411037 (MH), India.