

# Zinc

Zinc is one of the important minerals essential for the human body, which cannot be produced by the body itself neither can be stored. It must be consumed through food,

**It is required in the in body for many processes such as:**

- Immune functions
- Wound healing
- DNA synthesis
- Growth and development
- Protein synthesis
- Enzymatic reactions
- Gene expression

**Recommendation:**

**UL:** Tolerable Upper Intake = 40 mg for men and women > 19 years old.

**RDA:** Recommendation Daily Allowance = 11 mg for men, 8 mg for women, 11-12 mg for pregnancy and lactation.

**Sources:**

- Beef
- Poultry
- Legumes
- Nuts
- Seeds
- Wholegrain
- Fortified breakfast cereals
- Supplements (medicine)

**Zinc Deficiency:**

The deficiency in zinc very rare, it is found in some cases like people with low absorption of zinc due to digestive disorder (inflammation bowel disease, gastrointestinal surgery patient), chronic liver and kidney disease patient, prolong diarrhea. Increase the need of zinc in case deficiency

during pregnancy, lactating, burns, sepsis. People with vegetarian diet or Vegans may also have zinc deficiency.

### **Symptoms and signs of deficiency:**

- Poor appetite
- Depression
- Hair loss
- Diarrhea
- Slow wound healing
- Loss of taste and smells

### **Toxicity:**

Toxicity can happen only from zinc supplement, no evidence or reports of toxicity case from food or diet only.

### **Symptoms of toxicity:**

- Vomiting, nausea
- Headache
- Abdominal pain
- Diarrhea