

# Zinc Overview

## Why We Need It?

Zinc is an essential trace mineral involved in immune defense, wound healing, hormone regulation, and over 300 enzymatic reactions in the body. It supports skin health, fertility, DNA synthesis, and overall growth and development. Since the body does not store zinc, consistent daily intake is necessary.

## Functions in the Body

Immune Function: Strengthens immune response and helps fight infections.

Wound Healing: Promotes tissue repair and skin regeneration.

Hormonal Health: Supports testosterone production and reproductive function.

Antioxidant Support: Helps protect against oxidative stress and inflammation.

DNA & Protein Synthesis: Crucial for growth, development, and cellular repair.

Cognitive & Mood Support: Aids neurotransmitter function and brain health.

## Daily Recommended Intake (RDI):

Children (1-8 years): 3-5 mg/day

Adolescents (9-18 years): 8-11 mg/day

Men (19+ years): 11 mg/day

Women (19+ years): 8 mg/day

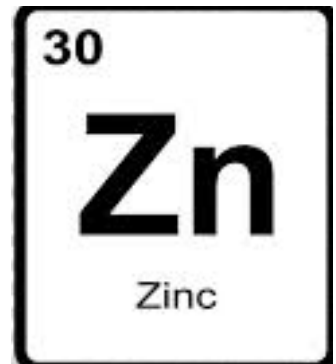
Pregnant Women: 11 mg/day

Lactating Women: 12 mg/day

Upper Limit (UL): 40 mg/day (excessive intake may impair copper absorption and immune function).

## Benefits of Supplementation

- Boosts immune defense and reduces the duration of colds.
- Enhances wound healing and skin repair (including acne and eczema).
- Supports fertility and hormone balance in both men and women.
- Improves cognitive function and may help with mood regulation.
- Reduces inflammation and supports antioxidant activity.



## Most Bioavailable Form

Zinc Picolinate: Highly absorbable, excellent for general use.

Zinc Gluconate: Common in lozenges and cold remedies.

Zinc Citrate: Well-absorbed and gentle on the stomach.

Zinc Bisglycinate: Chelated form with high bioavailability and low GI irritation.

Zinc Oxide: Less bioavailable, mainly used in topical creams and sunscreens.

## Best Food Sources

Animal-Based: Oysters (highest natural source), beef, lamb, chicken, turkey, eggs.

Plant-Based: Pumpkin seeds, cashews, chickpeas, lentils, quinoa, tofu.

Whole Grains: Oats, brown rice, whole wheat (phytates can reduce absorption—soaking/sprouting helps).

Dairy Products: Cheese, milk, yogurt.

## Conclusion

Zinc is vital for immune strength, skin health, hormone balance, and cellular repair. While found in many foods, bioavailability is higher in animal products. Those with higher needs—like athletes, pregnant women, or individuals with immune concerns—may benefit from targeted zinc supplementation in a bioavailable form.