

# Vitamin B7 (Biotin) Overview

## Why We Need It?

Vitamin B7, commonly known as Biotin, is a water-soluble B vitamin essential for metabolism, skin health, and cellular function. It acts as a coenzyme in several biochemical reactions that help convert food into energy and maintain healthy hair, skin, and nails.

## Functions in the Body

Energy Metabolism: Supports the breakdown of carbohydrates, fats, and proteins for energy production.

Skin, Hair, and Nail Health: Plays a role in keratin production, essential for strong nails, healthy hair, and clear skin.

Gene Regulation: Aids in DNA replication and cell signaling processes.

Blood Sugar Regulation: Supports insulin function and glucose metabolism.

Nervous System Support: Contributes to neurotransmitter activity and brain health.

## Daily Recommended Intake

Adults: 30 mcg/day

Pregnant Women: 30 mcg/day

Lactating Women: 35 mcg/day

No established Upper Limit (UL) as Biotin is considered safe even at high doses.

## Benefits of Supplementation

- Strengthens hair, skin, and nails, reducing brittleness and promoting growth.
- Supports energy metabolism and reduces fatigue.
- May help stabilize blood sugar levels in individuals with insulin resistance.
- Contributes to cognitive function and may support brain health.

## Most Bioavailable Form

**D-Biotin** – The naturally occurring and most biologically active form, ensuring optimal absorption and effectiveness.

## Best Food Sources

Animal-based: Egg yolks, liver, salmon, dairy products.

Plant-based: Nuts (almonds, walnuts), seeds, sweet potatoes, avocados, and whole grains.

## Conclusion

Vitamin B7 (Biotin) is crucial for metabolism, cellular function, and beauty-related benefits. While deficiency is rare, supplementation with D-Biotin can enhance hair growth, skin health, and energy production, making it a valuable addition to a well-rounded nutrition plan.

