

# Molybdenum Overview

## Why We Need It?

Molybdenum is an essential trace mineral that plays a critical role in enzyme function, detoxification, and metabolism. It helps break down harmful sulfites, supports liver function, and assists in the metabolism of amino acids and other nutrients.

## Functions in the Body

Enzyme Activation: Essential for enzymes that break down toxins and sulfur-containing compounds.

Detoxification: Helps neutralize sulfites and prevent buildup in the body.

Amino Acid Metabolism: Supports the breakdown of proteins and nucleotides.

Antioxidant Function: Works with enzymes to reduce oxidative stress.

Liver Health: Aids in the elimination of waste products and heavy metals.

## Daily Recommended Intake (RDI):

Infants (0-6 months): 2 mcg/day

Children (1-8 years): 17-22 mcg/day

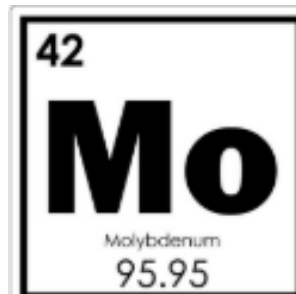
Adolescents (9-18 years): 34-43 mcg/day

Men & Women (19+ years): 45 mcg/day

Pregnant Women: 50 mcg/day

Lactating Women: 50 mcg/day

Upper Limit (UL): 2,000 mcg/day (excess intake may cause gout-like symptoms due to increased uric acid levels).



## Benefits of Supplementation

- Supports proper detoxification and protects against sulfite sensitivity.
- Enhances enzyme activity for efficient metabolism.
- May aid in liver health and detoxification of harmful substances.
- Helps protect cells from oxidative stress.
- Supports metabolic processes for protein and amino acid utilization.

## Most Bioavailable Form

Sodium Molybdate: Commonly used in supplements, well-absorbed.

Ammonium Molybdate: Another bioavailable form found in food fortification.

Molybdenum Glycinate/Chelate: Highly bioavailable and gentle on digestion.

## Best Food Sources

Legumes: Lentils, chickpeas, black beans, peas.

Whole Grains: Oats, barley, whole wheat, brown rice.

Nuts & Seeds: Almonds, sunflower seeds.

Vegetables: Spinach, broccoli, cauliflower.

Dairy Products: Milk, cheese, yogurt.

Animal Products: Beef liver, eggs.

## Conclusion

Molybdenum is an essential mineral that supports detoxification, metabolism, and enzyme activity. While deficiency is rare, ensuring a balanced intake through whole foods or supplementation can optimize metabolic and liver function. Excessive intake should be avoided to prevent adverse effects.