

Molybdenum Fact Sheet for Consumers



Legumes are a rich source of molybdenum.

What is molybdenum and what does it do?

Molybdenum is a mineral that you need to stay healthy. Your body uses molybdenum to process proteins and genetic material like DNA. Molybdenum also helps break down drugs and toxic substances that enter the body.

How much molybdenum do I need?

The amount of molybdenum you need depends on your age. Average daily recommended amounts are listed below in micrograms (mcg).

Life Stage	Recommended Amount
Birth to 6 months	2 mcg
Infants 7–12 months	3 mcg
Children 1–3 years	17 mcg
Children 4–8 years	22 mcg
Children 9–13 years	34 mcg
Teens 14–18 years	43 mcg
Adults 19 years and older	45 mcg
Pregnant teens and women	50 mcg
Breastfeeding teens and women	50 mcg

What foods provide molybdenum?

Many foods contain molybdenum. The amount of molybdenum in food depends on the amount of molybdenum in the soil and in the water used for irrigation. You can get recommended amounts of molybdenum by eating a variety of foods, including the following:

- Legumes such as black-eyed peas and lima beans
- Whole grains, rice, nuts, potatoes, bananas, and leafy vegetables
- Dairy products, like milk, yogurt, and cheese
- Beef, chicken, and eggs

What kinds of molybdenum dietary supplements are available?

Some multivitamin/multimineral supplements contain molybdenum. Other supplements contain molybdenum alone or together with other minerals.

Am I getting enough molybdenum?

Most people in the United States get enough molybdenum from the foods they eat.

What happens if I don't get enough molybdenum?

Molybdenum deficiency is very rare in the United States. It happens only in people with a very rare genetic disorder called molybdenum cofactor deficiency. This

disorder prevents the body from using molybdenum. It can cause seizures and severe brain damage that usually leads to death within days after birth.

What are some effects of molybdenum on health?

Whether molybdenum affects any disease or health condition isn't known.

Can molybdenum be harmful?

Molybdenum from food doesn't cause any harm. However, people exposed to high levels of molybdenum in the air and soil, such as miners and metalworkers, sometimes develop achy joints, gout-like symptoms, and high blood levels of uric acid (a substance that is normally excreted in your urine).

The daily upper limits for molybdenum are listed below in micrograms (mcg).

Ages	Upper Limit
Birth to 12 months	Not established
Children 1–3 years	300 mcg
Children 4–8 years	600 mcg
Children 9–13 years	1,100 mcg
Teens 14–18 years	1,700 mcg
Adults	2,000 mcg

Are there any interactions with molybdenum that I should know about?

Molybdenum is not known to interact or interfere with any medicines. But it's always important to tell your doctor, pharmacist, and other healthcare providers about any dietary supplements and prescription or over-the-counter medicines you take. They can tell you if these dietary supplements might interact with your medicines or if the medicines might interfere with how your body absorbs, uses, or breaks down nutrients, such as molybdenum.

Molybdenum and healthful eating

People should get most of their nutrients from food and beverages, according to the federal government's *Dietary Guidelines for Americans*. Foods contain vitamins, minerals, dietary fiber, and other substances that benefit health. In some cases, fortified foods and dietary supplements may provide nutrients that people otherwise might consume in less-than-recommended amounts. For more information about building a healthy diet, see the *Dietary Guidelines for Americans* and the U.S. Department of Agriculture's MyPlate.

Where can I find out more about molybdenum?

For more information on molybdenum:

- Office of Dietary Supplements Health Professional Fact Sheet on Molybdenum

For more advice on buying dietary supplements:

- Office of Dietary Supplements Frequently Asked Questions: Which brand(s) of dietary supplements should I purchase?

For information about building a healthy diet:

- MyPlate
- *Dietary Guidelines for Americans*

Disclaimer

This fact sheet by the Office of Dietary Supplements (ODS) provides information that should not take the place of medical advice. We encourage you to talk to your healthcare providers (doctor, registered dietitian, pharmacist, etc.) about your interest in, questions about, or use of dietary supplements and what may be best for your overall health. Any mention in this publication of a specific product or service, or recommendation from an organization or professional society, does not represent an endorsement by ODS of that product, service, or expert advice.



For more information on this and other supplements, please visit our website at: <http://ods.od.nih.gov> or e-mail us at: ods@nih.gov.

Updated: September 19, 2019