

Riboflavin Fact Sheet for Consumers



Eggs, organ meats, lean meats, and milk are rich sources of riboflavin.

What is riboflavin and what does it do?

Riboflavin (also called vitamin B2) is important for the growth, development, and function of the cells in your body. It also helps turn the food you eat into the energy you need.

How much riboflavin do I need?

The amount of riboflavin you need depends on your age and sex. Average daily recommended amounts are listed below in milligrams (mg).

Life Stage	Recommended Amount
Birth to 6 months	0.3 mg
Infants 7–12 months	0.4 mg
Children 1–3 years	0.5 mg
Children 4–8 years	0.6 mg
Children 9–13 years	0.9 mg
Teen boys 14–18 years	1.3 mg
Teen girls 14–18 years	1.0 mg
Men	1.3 mg
Women	1.1 mg
Pregnant teens and women	1.4 mg
Breastfeeding teens and women	1.6 mg

What foods provide riboflavin?

Riboflavin is found naturally in some foods and is added to many fortified foods. You can get recommended amounts of riboflavin by eating a variety of foods, including the following:

- Eggs, organ meats (such as kidneys and liver), lean meats, and low-fat milk
- Some vegetables (such as mushrooms and spinach)
- Fortified cereals, bread, and grain products

What kinds of riboflavin dietary supplements are available?

Riboflavin is found in multivitamin/multimineral supplements, in B-complex dietary supplements, and in supplements containing only riboflavin. Some supplements have much more than the recommended amounts of riboflavin, but your body can't absorb more than about 27 mg at a time.

Am I getting enough riboflavin?

Most people in the United States get enough riboflavin from the foods they eat and deficiencies are very rare. However, certain groups of people are more likely than others to have trouble getting enough riboflavin:

- Athletes who are vegetarians (especially strict vegetarians who avoid dairy foods and eggs)
- Pregnant women and breastfeeding women and their babies
- People who are vegan

- People who do not eat dairy foods
- People with a genetic disorder called riboflavin transporter deficiency. This disorder prevents the body from properly absorbing and using riboflavin, causing riboflavin deficiency

What happens if I don't get enough riboflavin?

You can develop riboflavin deficiency if you don't get enough riboflavin in the foods you eat, or if you have certain diseases or hormone disorders.

Riboflavin deficiency can cause skin disorders, sores at the corners of your mouth, swollen and cracked lips, hair loss, sore throat, liver disorders, and problems with your reproductive and nervous systems.

Severe, long-term riboflavin deficiency causes a shortage of red blood cells (anemia), which makes you feel weak and tired. It also causes clouding of the lens in your eyes (cataracts), which affects your vision.

What is an effect of riboflavin supplements on health?

Scientists are studying riboflavin to better understand how it affects health. Here is an example of what this research has shown.

Migraine headache

Some studies show that riboflavin supplements might help prevent migraine headaches, but other studies do not. Riboflavin supplements usually have very few side effects, so some medical experts recommend trying riboflavin, under the guidance of a health care provider, for preventing migraines.

Can riboflavin be harmful?

Riboflavin has not been shown to cause any harm.

Does riboflavin interact with medications or other dietary supplements?

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

Riboflavin 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 components that benefit health. In some cases, fortified foods and dietary supplements are useful when it is not possible to meet needs for one or more nutrients (e.g., during specific life stages such as pregnancy). For more information about building a healthy dietary pattern, see the *Dietary Guidelines for Americans* and the U.S. Department of Agriculture's MyPlate.

Where can I find out more about riboflavin?

For general information on riboflavin:

- Office of Dietary Supplements (ODS) Health Professional Fact Sheet on <u>Riboflavin</u>
- Riboflavin, MedlinePlus*

For more information on food sources of riboflavin:

- ODS Health Professional Fact Sheet on Riboflavin
- U.S. Department of Agriculture's (USDA) FoodData Central
- Nutrient List for riboflavin listed by <u>food</u> or by <u>riboflavin</u> <u>content</u>, USDA

For more advice on choosing dietary supplements:

• ODS Frequently Asked Questions: Which brand(s) of dietary supplements should I purchase?

For information about building a healthy diet:

- MyPlate
- Dietary Guidelines for Americans

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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.



