

Biotin Fact Sheet for Consumers



Biotin is naturally present in some foods, such as salmon and eggs.

What is biotin and what does it do?

Biotin is a B-vitamin found in many foods. Biotin helps turn the carbohydrates, fats, and proteins in the food you eat into the energy you need.

How much biotin do I need?

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

Life Stage	Recommended Amount
Birth to 6 months	5 mcg
Infants 7–12 months	6 mcg
Children 1–3 years	8 mcg
Children 4–8 years	12 mcg
Children 9–13 years	20 mcg
Teens 14–18 years	25 mcg
Adults 19+ years	30 mcg
Pregnant teens and women	30 mcg
Breastfeeding teens and women	35 mcg

What foods provide biotin?

Many foods contain some biotin. You can get recommended amounts of biotin by eating a variety of foods, including the following:

- Meat, fish, eggs, and organ meats (such as liver)
- Seeds and nuts
- Certain vegetables (such as sweet potatoes, spinach, and broccoli)

What kinds of biotin dietary supplements are available?

Biotin is found in some multivitamin/multimineral supplements, in B-complex supplements, and in supplements containing only biotin.

Am I getting enough biotin?

Most people get enough biotin from the foods they eat. However, certain groups of people are more likely than others to have trouble getting enough biotin:

- People with a rare genetic disorder called “biotinidase deficiency”
- People with alcohol dependence
- Pregnant and breastfeeding women

What happens if I don't get enough biotin?

Biotin deficiency is very rare in the United States. Biotin deficiency can cause thinning hair and loss of body hair; a rash around the eyes, nose, mouth, and anal area; pinkeye; high levels of acid in the blood and urine; seizures; skin infection; brittle nails; and nervous system disorders. Symptoms of biotin deficiency in infants include weak muscle tone, sluggishness, and delayed development.

What are some effects of biotin on health?

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

Hair, nail, and skin health

Dietary supplements that contain biotin are often promoted to improve the health of your hair, skin, and nails, but there is little scientific evidence to support these claims. In a few small studies, some people with thin and brittle nails who took high doses of biotin had harder nails. Doctors have also reported that in a few cases, high doses of biotin have improved a rare hair disorder in children and skin rash in infants. More research is needed before biotin supplements can be recommended for any of these conditions.

Can biotin be harmful?

Biotin has not been shown to cause any harm. However, supplements that contain biotin above recommended amounts may cause false results in some lab tests, including those that measure levels of certain hormones, like thyroid hormone.

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

Yes, some medications you take may affect your biotin levels, and biotin may interact with certain medications. For example, treatment for at least 1 year with antiseizure medications (used to treat epilepsy) can significantly lower biotin levels.

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 the dietary supplements might interact with your medicines or laboratory tests, or if the medicines might interfere with how your body absorbs, uses, or breaks down nutrients such as biotin.

Biotin and healthful eating

People should get most of their nutrients from food, advises 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 otherwise may be consumed in less-than-recommended amounts. For more information about building a healthy diet, refer to the Dietary Guidelines for Americans and the U.S. Department of Agriculture's MyPlate.

Where can I find out more about biotin?

For general information on biotin:

- Office of Dietary Supplements Health Professional Fact Sheet on Biotin

For more information on food sources of biotin:

- Office of Dietary Supplements Health Professional Fact Sheet on Biotin

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.



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