

Eat Right

Food, Nutrition and Health Tips from the Academy of Nutrition and Dietetics

Why Your Body Needs Iodine



Iodine is an essential mineral that's not naturally found in many foods, and the amount will depend on where the food is harvested or how it is produced. Iodine is needed for making thyroid hormones and, in fact, about 75% of total body iodine is stored in your thyroid gland. Thyroid hormones are necessary for growth, reproductive function, brain development, healing, central nervous system and healthy thyroid function.

How Much Iodine Do I Need Daily?

Daily iodine needs for healthy people depend on life stage. Here's how much to aim for daily in micrograms:

Age	Male	Female
Birth – 6 months	110 mcg	110 mcg
7–12 months	130 mcg	130 mcg
1–8 years	90 mcg	90 mcg
9–13 years	120 mcg	120 mcg
14–18 years	150 mcg	150 mcg
19+ years	150 mcg	150 mcg
Pregnancy 14+ years		220 mcg
Lactation 14+ years		290 mcg

Which Foods Contain Iodine?

Iodine is naturally present in soil, so plant foods offer some iodine, although amounts can vary widely. Iodine also is found in saltwater, making seafood a reliable source, as are some dairy foods. In the early 1920s, a voluntary salt iodization program was launched to help Americans get adequate amounts of iodine. To this day, regular table salt is fortified with iodine.

You can get recommended amounts of iodine by eating a variety of foods including the following:

Food Sources	mcg/serving	Rating
3 ounces baked cod	146	Excellent
2 tablespoons dried nori seaweed	116	Excellent
¾ cup plain Greek nonfat yogurt	87	Excellent
1 cup nonfat milk	84	Excellent
¼ teaspoon iodized table salt	78	Excellent
1 large hardboiled egg	50	Excellent
1 ounce Swiss cheese	41	Excellent
1 cup enriched pasta, boiled in salted water	30	Excellent

Did you Know?

Most of the sodium in your diet comes from foods that are already prepared or prepackaged, not the table salt you use to sprinkle on your food or use in your cooking at home. Processed foods, such as canned soups, snacks and frozen entrees, almost never contain iodized salt. Specialty salts, which have increased in popularity — such as sea salt, kosher salt, Himalayan salt and fleur de sel — are not usually iodized, either. Table salt and product labels that state “iodized” are fortified with iodine.

References

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What Happens If I Don't Get Enough Iodine — or Get Too Much?

Iodine deficiency is uncommon in the United States, thanks in large part to the fortification of table salt. People who don't get enough iodine can't make enough thyroid hormone, resulting in other health issues. A telltale sign of severe iodine deficiency is goiter, an enlarged thyroid gland that looks like a large lump on the neck. During pregnancy, severe iodine deficiency can be harmful to the fetus and may cause stunted growth, intellectual disability and delayed sexual development if it persists. Less severe iodine deficiency can cause lower IQs in infants and children, which follows into adulthood.

Some research suggests iodine deficiency may be linked to certain cancers. Low levels of thyroid hormone can lead to infertility in women and autoimmune disease of the thyroid, increasing the risk of thyroid cancer. People who follow a vegan diet or avoid seafood, eggs and milk products may be at increased risk for iodine deficiency.

Getting too much iodine can be harmful, too. Interestingly, it can cause some of the same symptoms as deficiency, including goiter, an inflamed thyroid gland and thyroid cancer. A very large dose of iodine can cause burning in the mouth, throat and stomach. Although rare, chronic excess iodine from foods like kelp, supplements or water that is high in iodine can cause toxicity. Nausea, diarrhea, runny nose, headache and a metallic taste are common side effects.

The Bottom Line

Using iodized table salt is one of the most common ways to get iodine in your diet, but that must be balanced with other foods that also provide sodium, since too much sodium can negatively affect your health. Most Americans get adequate iodine in their diet. However, due to the increased amount of iodine that is needed during pregnancy and breastfeeding and due to iodine not being included in all prenatal vitamins, a dietary supplement may be recommended. Certain medications can interact with iodine supplements, so if you're concerned, talk to your registered dietitian nutritionist or another health care provider.

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