

Thyroid Health

What is the Thyroid?

The thyroid is a small, butterfly-shaped gland located in the front of the throat that produces two main hormones, T3 and T4. The body needs these hormones for energy production, temperature control, heart function, digestive health, and mood regulation.¹

Thyroid and Health

It is important that levels of T3 and T4 are neither too high nor too low. Hypothyroidism, also known as an underactive thyroid, can cause low T3 and T4 levels. The most common type of thyroid disorder, hypothyroidism affects about 5 percent of people in the United States.

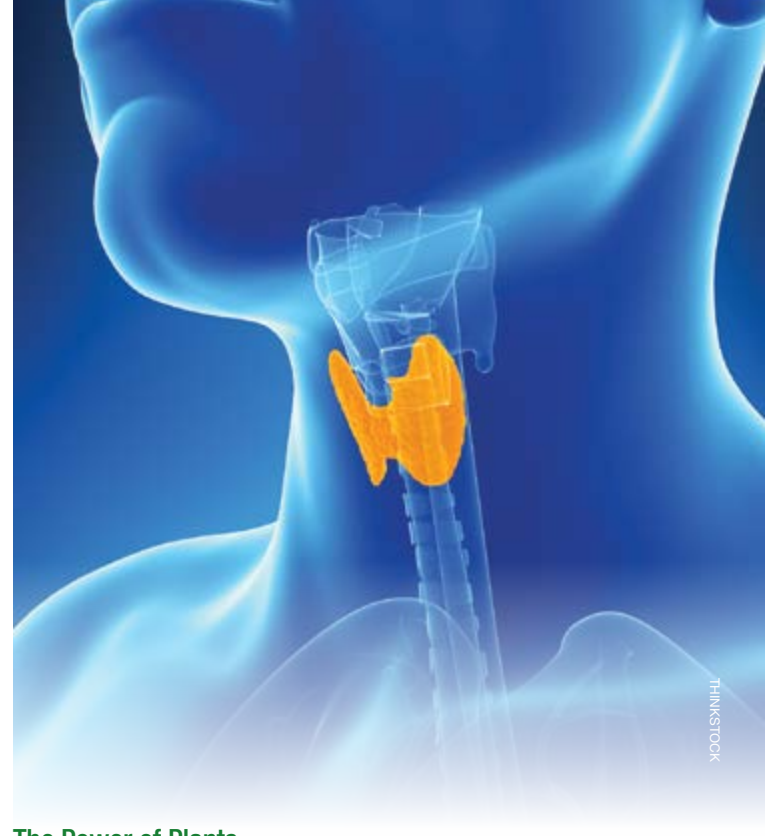
Worldwide, the most common cause of hypothyroidism is a lack of iodine in the diet. Hypothyroidism in the United States often stems from a condition called Hashimoto's disease, where the immune system mistakenly attacks the thyroid. Over time, the thyroid has a hard time making enough T3 and T4, which affects metabolism. Common symptoms of hypothyroidism include weight gain, constipation, fatigue, infertility, depression, and hair loss. People at higher risk for Hashimoto's disease include women, people of Caucasian descent, and older adults.²⁻³

Hypothyroidism, Heart Disease, and Diabetes

People with hypothyroidism may have a higher risk of heart disease because they often have high levels of LDL ("bad") cholesterol and triglycerides in the blood.⁴⁻⁵ They are also more likely to have high blood pressure, stiffness of the blood vessels, and dysfunction of the inner lining of blood vessels.⁶

The thyroid also plays a role in blood sugar control and diabetes.⁷ A 2015 study found that the risk of developing diabetes is significantly higher with poor thyroid function. People with the lowest level of thyroid function were 1.4 times more likely to progress from prediabetes to diabetes compared to those with better thyroid function.⁸

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The Power of Plants

Nutrition plays a key role in thyroid health. A 2013 study found that avoiding animal products helps protect against hypothyroidism. Researchers suspect decreased inflammation on a vegan diet may be helpful.³

Nutrients for Thyroid Health

The following nutrients are part of a healthful, plant-based diet and are essential for a proper thyroid function and preventing related conditions.

Iodine

Iodine is essential for thyroid hormone production, healthy metabolism, and a strong immune system. However, both too little and too much iodine can lead to hypothyroidism.

The recommended dietary allowance (RDA) for iodine for adults is 150 mcg per day, while pregnant women require 220 mcg of iodine per day, and women who are breastfeeding need 290 mcg per day. Plant-based foods high in iodine include iodized salt, grains, and sea vegetables. For example, a 1/4 teaspoon of iodized table salt provides approximately 71 mcg of iodine, and 1 sheet of seaweed can provide anywhere from 16 to 2,984 mcg of iodine.

Processed foods, the source for most of the salt Americans consume, often does not contain iodine.⁹ Supplemental iodine may cause symptoms in people with Hashimoto's disease, and should be approached with caution.¹⁰

Selenium

Selenium is a mineral found in Brazil nuts, brown rice, pinto beans, oatmeal, spinach, and lentils. The RDA for

selenium is 55 mcg per day for adults, a requirement satisfied by eating a single Brazil nut, which contains anywhere from 68-91 mcg of selenium. Some studies suggest that up to 200 mcg of selenium per day may benefit thyroid health, but requires more research. Moreover, getting too much selenium can cause health problems such as diarrhea and hair loss. Do not exceed a daily intake of more than 200 mcg per day of selenium unless prescribed by a doctor.¹¹

Vitamin B12

Vitamin B12 is essential for proper nerve function and the development of healthy cells. Studies show that about 30 percent of patients with hypothyroidism are low in vitamin B12.¹² Long term, vitamin B12 deficiency can cause permanent nerve damage and other health problems. Signs and symptoms of low vitamin B12 include fatigue, diarrhea, numbness, and tingling in the fingers and toes.

It is recommended that people on a vegan diet take a vitamin B12 supplement. People with very low levels of vitamin B12 may need B12 injections.¹³

Vitamin D

Low vitamin D levels have been linked to diseases where the immune system mistakenly attacks the body, such as Hashimoto's disease. Many patients with Hashimoto's disease have lower vitamin D levels when compared to those without the disease. On the other hand, optimal vitamin D levels may help protect against the development of hypothyroidism, its progression, and severity.¹⁴

Goitrogens

People with hypothyroidism are often told to avoid cruciferous vegetables such as broccoli, cauliflower, and Brussels sprouts, as well as soy products. It is thought that goitrogens, a substance in these vegetables, can inhibit production of thyroid hormones. However, studies show this may only be a concern if a person does not consume enough iodine or if they eat (or juice) large amounts of raw cruciferous vegetables (e.g., more than 2 pounds per day).¹⁵⁻¹⁶

One study showed no adverse effects on thyroid function for people who consumed 150 grams (5 ounces) of cooked Brussels sprouts daily for 4 months.¹⁷

For those low in iodine, including 1/2-3/4 teaspoon of iodized salt in their diet a day will provide the recommended amount of iodine for thyroid protection. Moreover, eating cruciferous vegetables may actually help protect against certain cancers, so it is best to include them when possible.

Exercise

Being active is a natural way to help improve mood, boost energy, and maintain a healthy weight, all of which

may be impacted by hypothyroidism. Walking, fitness classes, or sessions with a personal trainer are great ways to get active and maintain thyroid health.

Medication

While a varied, plant-based diet supports thyroid health, some conditions may require medication. If you have questions about your thyroid medications, consult your physician.

Conclusion

Given the importance of the thyroid, it is best to use a nutrient-rich, plant-based diet and healthy lifestyle to maintain proper function.

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