

# Overactive Thyroid Gland (Hyperthyroidism)

## What is the thyroid?

The thyroid (THI-royd) gland is an organ in the lower front part of your neck. The gland makes thyroid hormones, which help control your body's use of energy, its temperature, and how your organs work.

## What is hyperthyroidism?

Sometimes, the thyroid gland makes too much thyroid hormone. This is called hyperthyroidism (HI-per-THI-royd-izm). It can cause nervousness, trouble sleeping, increased sweating, faster heart rate, shaking of the hands (tremors), frequent bowel movements, weak muscles, thinning hair, and weight loss. It may cause women to have fewer menstrual periods with lighter flow. The symptoms of hyperthyroidism are the same no matter the cause.

The most common cause of hyperthyroidism is Graves disease. This is when antibodies attack the thyroid gland, causing it to grow and make too much thyroid hormone. Graves disease is more common in women and tends to run in families. It can cause eyes to look very large or bulge. It may make the thyroid grow big enough to make the neck swell, which is called a goiter (GOY-ter).

Other causes of hyperthyroidism are nodules (lumps) that grow in the thyroid and make too much thyroid hormone.

Thyroiditis (thi-roy-DI-tis) is a condition where the thyroid leaks hormones because it is attacked by a virus or by the immune system.

People who take too much of a thyroid hormone pill may have symptoms of hyperthyroidism.

## How is it diagnosed?

Your doctor will look for signs, such as swelling of the neck, fast heart rate, brisk (increased) reflexes, shaking of the hands, smooth and moist skin, and large or bulging eyes. He or she will order blood tests. Depending on the results, your doctor may order a scan (picture) of your thyroid.

## How is it treated?

Treatment depends on the cause, your age, other medical conditions, and your preference. No matter the cause, your doctor may prescribe a medicine called a beta blocker. This medicine blocks thyroid hormones' action on your organs, slows down your heart rate, and helps with nervousness and shaking.

There are three main treatments for hyperthyroidism:

- Antithyroid medicines help the thyroid make hormones more slowly. Two of these medicines are methimazole and propylthiouracil (PTU). PTU is only used in certain times, such as during the first trimester of pregnancy. PTU is safer for the unborn baby, but it has a higher risk of hurting the liver than methimazole.



# Overactive Thyroid Gland (Hyperthyroidism) *(continued)*

- The most common treatment for hyperthyroidism is radioactive iodine, which is taken once by mouth as a pill. It destroys the cells that make thyroid hormones after a period of weeks or months. Antithyroid medicines may also be used while waiting for the radioactive iodine to work. Pregnant women should never use radioactive iodine. Most patients will have an underactive thyroid after taking radioactive iodine. They will need to take a thyroid hormone pill once a day for the rest of their life.

- The third treatment is surgery to remove the thyroid. With this surgery, there is a risk of hurting other glands that control calcium levels in your body. There is also a risk of hurting nerves that control your vocal cords, which can cause a hoarse voice. Patients who have their thyroid removed will need to take a thyroid hormone pill for the rest of their life.

## Where can I get more information?

AAFP's Patient Education Resource

<http://familydoctor.org/familydoctor/en/diseases-conditions/hyperthyroidism.html>

American Thyroid Association

<http://www.thyroid.org/what-is-hyperthyroidism/>

MedlinePlus

<https://www.nlm.nih.gov/medlineplus/ency/article/000356.htm>

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**This handout is provided to you by your family doctor and the American Academy of Family Physicians. Other health-related information is available from the AAFP online at <http://familydoctor.org>.**

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