

Hyperthyroidism FAQ

This page and its contents are Copyright © 2018 the American Thyroid Association®

WHAT IS THE THYROID GLAND?

The thyroid gland located in the neck produces thyroid hormones which help the body use energy, stay warm and keep the brain, heart, muscles, and other organs working normally.

1 SYMPTOMS

What are the symptoms of hyperthyroidism?

Hyperthyroidism refers to any condition in which there is too much thyroid hormone produced in the body. Symptoms may include weight loss, nervousness, irritability, increased perspiration, a racing heart, hand tremors, anxiety, difficulty sleeping, increased bowel movements, fine brittle hair, and muscular weakness—especially in the upper arms and thighs. In Graves' disease, a bulging of one or both eyes may occur.

2 CAUSES

What causes hyperthyroidism?

The most common cause is Graves' disease, an autoimmune disease that leads to a generalized overactivity of the entire thyroid gland (see [Graves' Disease brochure](#)). Another cause is one or more overactive nodules or lumps in the thyroid. Hyperthyroid symptoms may temporarily occur from inflammation of the thyroid gland (*called thyroiditis*), or from taking too much thyroid hormone in tablet form.

3 DIAGNOSIS

How is the diagnosis made?

A physical examination and laboratory tests that measure the amount of thyroid hormone (thyroxine, or T4, and triiodothyronine, or T3) and thyroid-stimulating hormone (TSH) in your blood are necessary. Your doctor may choose to obtain a picture of your thyroid (a thyroid scan). Measurement of antibodies in the blood that attack the thyroid (antithyroid antibodies) may help in diagnosing the cause of hyperthyroidism.

4 TREATMENT

How is hyperthyroidism treated?

Therapy for hyperthyroidism is generally safe and effective, and should be personalized depending on the patient

- **Antithyroid drugs.** Methimazole (Tapazole®) or propylthiouracil (PTU) block the thyroid gland's ability to make new thyroid hormone. These drugs control hyperthyroidism and do not cause permanent damage to the thyroid gland. Allergic reactions occur in about 5% of patients. Rarely (1 in 500 patients), a serious reaction (agranulocytosis) may lower your resistance to infection. If you develop a fever or sore throat while on an antithyroid drug, you should immediately stop taking the drug and have a white blood cell count that day.
- **Radioactive iodine.** Radioiodine, which is administered by mouth, is quickly taken up by overactive thyroid cells and destroys them. Thus, eventually, you will become hypothyroid. Radioiodine may take several weeks to months to control hyperthyroidism and occasionally additional radioiodine treatments may be necessary. This treatment option is not recommended in patients who have moderate or severe Graves' eye disease.
- **Surgery.** During surgery, the thyroid gland is removed to eliminate hyperthyroidism. After surgery, patients require thyroid hormone medication. Major complications of thyroid surgery occur in 1-3% of patients operated on by an experienced thyroid surgeon. Before surgery, an antithyroid drug and/or a beta-blocker is taken to control your hyperthyroidism.
- **Beta-blockers.** These drugs may be helpful in reducing symptoms of a racing heart, shakiness, and nervousness, even though they do not change the levels of thyroid hormone in the blood.

FURTHER READING

Further details on this and other thyroid-related topics are available in the patient information section on the American Thyroid Association® website at www.thyroid.org.

