

### WHAT IS A GOITER?

A goiter is an enlarged thyroid gland. The thyroid gland, located in the front of your neck, makes thyroid hormones. When your thyroid gland is enlarged, it can produce too much, too little, or just enough thyroid hormone.

### WHAT DO THYROID HORMONES DO?

Thyroid hormones travel from your thyroid gland through the blood to all parts of your body. They control how your body uses food for energy, and help all your organs work well. Thyroid hormones affect your metabolism rate, which means how fast or slow your brain, heart, muscles, liver, and other parts of your body work.

If your metabolism is too fast or too slow, you won't feel well. For example, if you don't have enough thyroid hormone and your metabolism slows down, you might feel tired and cold. Or, if you have too much thyroid hormone, you might feel nervous and warm.

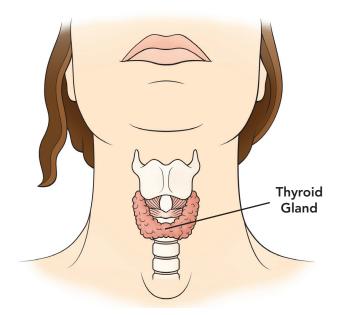
## DID YOU KNOW?

The most common cause of goiter outside of the U.S. is a lack of iodine in the diet. Iodine is a substance in food (iodized salt and seafood) that the thyroid uses to make thyroid hormones. However, a lack of iodine is not common in the U.S. because iodine is added to salt and many foods.

# WHAT ARE THE SYMPTOMS OF A GOITER?

You can have a goiter but have no symptoms at all, other than having some swelling at the base of your neck. Some people also may have

- Tightness in the throat
- Coughing
- Hoarseness
- Trouble swallowing
- Trouble breathing



### **DEFINITIONS OF THYROID CONDITIONS**

**Underactive thyroid gland:** when the thyroid gland doesn't make enough thyroid hormone; also called **hypothyroidism**. When the thyroid is underactive, the body's metabolism runs too slowly.

Overactive thyroid gland: when the thyroid gland makes too much thyroid hormone; also called **hyperthyroidism**. When the thyroid is overactive, metabolism runs too quickly.

**Hashimoto's disease** (the most common cause of underactive thyroid): when the immune system attacks and damages the thyroid gland; then the damaged gland no longer makes enough thyroid hormone.

**Graves' disease** (the most common cause of overactive thyroid): when the immune system attacks the thyroid gland and causes it to make too much thyroid hormone.

### WHAT CAUSES A GOITER?

In the U.S., the most common causes of swelling are

- Hashimoto's disease (leading to an underactive thyroid)
- Graves' disease (leading to an overactive thyroid)
- Nodules (lumps) on one or both sides of the thyroid gland

Less common causes include a hormone made during pregnancy that increases thyroid hormone production, inflammation of the thyroid, or thyroid cancer. A goiter also can be present in a newborn if his or her thyroid gland doesn't work properly before birth.

## WHAT FACTORS INCREASE THE RISK OF A GOITER?

Risk factors include

- Being a woman
- Being over age 40
- Being pregnant or in menopause
- Having a family history of autoimmune disease or goiter
- Having been exposed to radiation as a child or having had radiation treatment to your neck or chest
- Having a diet low in iodine

Some medicines also increase the risk of goiter.

### **HOW IS A GOITER DIAGNOSED?**

A goiter is often found during a physical exam when your doctor feels swelling in your neck. Your doctor also may use other tests to

find the cause of the goiter and to see how advanced it is, such as

- Hormone tests to show whether your thyroid gland is underactive or overactive
- Antibody tests for Hashimoto's disease and Graves' disease
- Ultrasound to see the size of your thyroid and whether there are nodules
- A thyroid scan to look at your thyroid, especially if your thyroid is overactive
- Other scans (CT or MRI) of the neck to check your windpipe
- A biopsy (using a needle to get a sample of your thyroid for testing)

### WHAT IS THE TREATMENT FOR A GOITER?

Treatment depends on the cause of the goiter, its size, and your symptoms. If your goiter is small and your thyroid is making normal amounts of thyroid hormone, your doctor might observe the goiter over time instead of starting treatment right away.

Possible treatments include

- Medicines for underactive or overactive thyroid
- Radioactive iodine for overactive thyroid (to shrink the goiter)

Surgery is rarely used. However, removal of the thyroid gland might be recommended for a large goiter, for one causing breathing or swallowing problems, for nodules, or for thyroid cancer.

### Questions to ask your doctor

- What is causing my goiter?
- What are my options for treatment?
- What are the risks and benefits of each treatment option?
- How long will I need treatment?
- Should I see an endocrinologist for my care?

### **RESOURCES**

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Hormone Health Network information about thyroid disorders: www.hormone.org/Thyroid/overview.cfm
- Mayo Clinic information about goiter: www.mayoclinic.com/ health/goiter/DS00217
- MedlinePlus (National Institutes of Health) information about goiter: www.nlm.nih.gov/medlineplus/ency/article/001178.htm

#### **EDITORS**

Bryan Haugen, MD James Hennessey, MD Leonard Wartofsky, MD The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.



Goiter Fact Sheet