

## **What is hypothyroidism?**

Hypothyroidism is a condition that makes you feel tired.

There is a gland in your neck called the thyroid gland. It makes thyroid hormone. This hormone controls how the body uses and stores energy ([figure 1](#)).

Hypothyroidism is the medical term for when a person does not make enough thyroid hormone. People sometimes confuse this condition with HYPERTHYROIDISM, which is when a person makes too much thyroid hormone.

## **What are the symptoms of hypothyroidism?**

Some people with hypothyroidism have no symptoms. But most people feel tired. That can make the condition hard to diagnose, because a lot of conditions can make you tired.

Other symptoms of hypothyroidism include:

- Lack of energy
- Getting cold easily
- Developing coarse or thin hair
- Getting constipated (having too few bowel movements)

If it is not treated, hypothyroidism can also weaken and slow your heart. This can make you feel out of breath or tired when you exercise and cause swelling (fluid buildup) in your ankles. Untreated hypothyroidism can also increase your blood pressure and raise your cholesterol – both of which increase the risk of heart trouble.

In women, hypothyroidism can disrupt monthly periods. It can also make it hard to get pregnant. In women who do get pregnant, hypothyroidism can cause problems. For instance, it can increase the chances of having a miscarriage. (A miscarriage is when a pregnancy ends on its own before the woman has been pregnant for 20 weeks.)

## **Is there a test for hypothyroidism?**

Yes. Your doctor or nurse can test you for hypothyroidism using a simple blood test.

## **How is hypothyroidism treated?**

Treatment for hypothyroidism involves taking thyroid hormone pills every day. After you take the pills for about 6 weeks, your doctor or nurse will test your blood to make sure the levels are where they should be. They might adjust your dose depending on the results. Most people with hypothyroidism need to be on thyroid pills for the rest of their life.

Thyroid hormone pills come in different brand name and generic forms. All the pills work equally well. But you should not switch from one generic or brand name to another. Switching between pills can cause your levels to go up and down.

Never change your dose of thyroid hormone on your own. Taking too much thyroid hormone can cause heart rhythm problems and even damage your bones.

### **What if I want to get pregnant?**

You can try to get pregnant. Many women with hypothyroidism have healthy pregnancies. But your doctor or nurse will most likely need to change your dose of thyroid hormone once you are pregnant. That's because you need more thyroid hormone during pregnancy. They will also measure your levels of thyroid hormone 4 weeks after any change in your dose, and at least once during each trimester of pregnancy.

### **What is hyperthyroidism?**

Hyperthyroidism is a condition that can make you feel shaky, anxious, and tired. It happens when a gland in your neck, called the thyroid gland, makes too much thyroid hormone. This hormone controls how the body uses and stores energy.

Hyperthyroidism is the medical term for when a person makes too much thyroid hormone. People sometimes confuse this condition with HYPOTHYROIDISM, which is when a person does not make enough thyroid hormone.

### **What are the symptoms of hyperthyroidism?**

Some people with hyperthyroidism have no symptoms. When they do occur, symptoms can include:

- Anxiety, irritability, or trouble sleeping
- Weakness (especially in the arms and thighs, which can make it hard to lift heavy things or climb stairs)
- Trembling
- Sweating a lot and having trouble dealing with hot weather
- Fast or uneven heartbeats
- Feeling tired
- Weight loss even when you are eating normally
- Frequent bowel movements

Hyperthyroidism can also cause a swelling in the neck called a "goiter." If it is caused by a medical problem called Graves' disease, the condition can also make the eyes bulge ([figure 2](#)).

Untreated hyperthyroidism can cause a heart rhythm disorder called "atrial fibrillation," chest pain, and rarely, heart failure.

In women, hyperthyroidism can disrupt monthly periods. It can also make it hard to get pregnant. In men, hyperthyroidism can cause the breasts to grow or lead to sexual problems. These problems go away when hyperthyroidism is treated.

## **Is there a test for hyperthyroidism?**

Yes. Your doctor or nurse can test you for hyperthyroidism using a simple blood test. If the blood test indicates a problem, the doctor or nurse might run other tests, too.

## **How is hyperthyroidism treated?**

Hyperthyroidism can be treated with:

- **Medicines** – Two types of medicines can be used to treat hyperthyroidism:
  - Anti-thyroid medicines reduce the amount of hormone your thyroid gland makes.
  - Beta-blocker medicines help reduce the symptoms of hyperthyroidism. Beta-blockers can make you more comfortable until the thyroid imbalance is under control.
- **Radioactive iodine** – Radioactive iodine comes in a pill or liquid you swallow. It destroys much of the thyroid gland. Pregnant women should not use this treatment, because it can damage the baby's thyroid gland. But the treatment is safe for women who are not pregnant and for men. The amount of radiation used is small. It does not cause problems getting pregnant in the future or increase the risk of birth defects in future pregnancies.

Radioactive iodine can make eye bulging worse in people with Graves' disease, especially if they smoke cigarettes. If you have Graves' eye disease, your doctor might suggest medicines instead of radioactive iodine, or might give you a different medicine (a steroid) before radioactive iodine to help prevent bulging of the eyes.

- **Surgery** – Doctors can do surgery to remove part or all of the thyroid gland. Doctors do not often recommend surgery, because the other treatment choices are safer and less costly. But surgery is the best choice in some cases.

Most people who are treated with radioactive iodine or who have surgery end up making too little thyroid hormone after treatment. They must take thyroid hormone pills after treatment – for the rest of their life.

## **What if I want to get pregnant?**

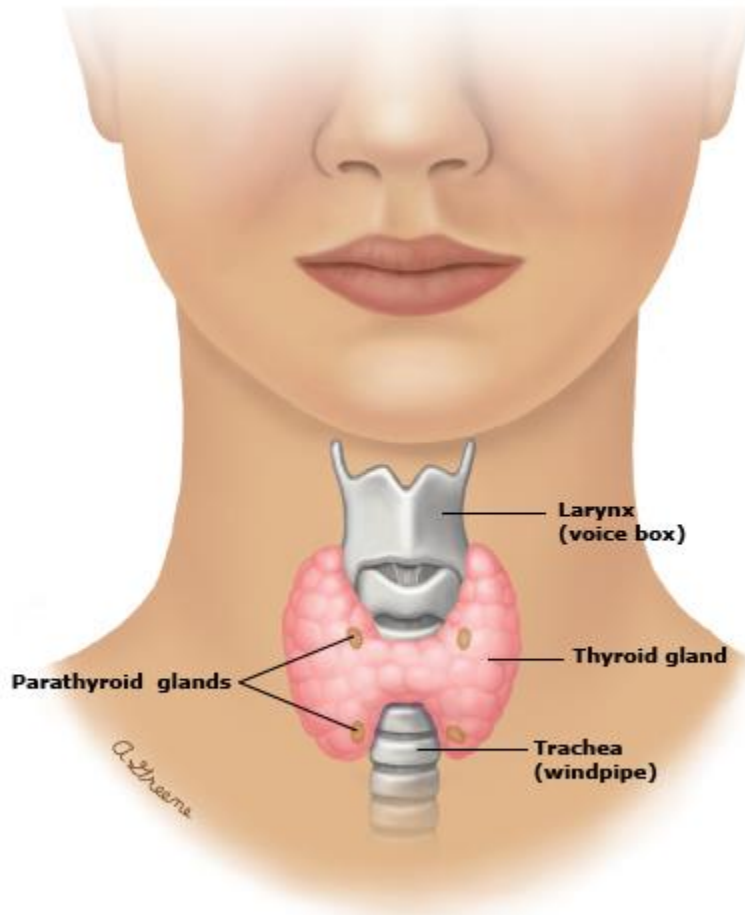
If you take anti-thyroid medicine, talk to your doctor or nurse before you start trying to get pregnant. You will probably need to take different medicines at different times in your pregnancy. Plus, your doses might need to be adjusted.

If you were treated with radioactive iodine, wait at least 6 months before you start trying to get pregnant. This will give your doctor enough time to find out if your thyroid is making enough thyroid hormone after the radioactive iodine treatment. If the radioactive iodine caused the thyroid to make too little thyroid hormone, you will need to take thyroid hormone pills. It is important to have a normal amount of thyroid hormone in your body before getting pregnant.

Whatever treatment you use, you should have your thyroid hormone levels checked often during pregnancy. Thyroid hormone levels must be at the right level during pregnancy to avoid risks to both the mother and the baby.

### **What are thyroid nodules?**

Thyroid nodules are round or oval-shaped growths in the thyroid gland. The thyroid gland is in the middle of the neck.



Thyroid nodules are common and are not usually harmful to a person's health. But sometimes, thyroid nodules are caused by a serious condition, such as cancer.

The thyroid gland makes a hormone called "thyroid hormone." Most thyroid nodules do not change the amount of thyroid hormone in the body. But some cause the thyroid gland to make too much thyroid hormone. This can cause symptoms.

### **What are the symptoms of a thyroid nodule?**

Some people do not have any symptoms. They might find out that they have a thyroid nodule when their doctor or nurse feels it during a routine exam. Or a doctor might find nodules on an imaging test that was done for another condition. (Imaging tests create pictures of the inside of the body.)

Other people have symptoms. For example, they might feel or see a lump in their neck. Or they have symptoms from having too much thyroid hormone, such as:

- Feeling worried, upset, or having trouble sleeping
- Feeling weak or tired
- Losing weight without trying
- Having a fast heartbeat
- Having frequent bowel movements

### **Will I need tests?**

Yes. Your doctor will want to make sure that the thyroid nodule is not a threat to your health. Tests usually include blood tests and an imaging test of the thyroid called an ultrasound. Sometimes, people need more tests. These include:

- Fine needle aspiration – For this test, a doctor uses a thin needle to remove a small sample of cells from the thyroid nodule. Then another doctor looks at the cells under a microscope. In some cases, the cells are sent for other tests. These tests can help doctors decide which nodules should be removed by surgery and which nodules can be watched.
- Thyroid scan – People get this test only if they have too much thyroid hormone in the body. For this test, a person gets a pill or a shot with a small amount of a radioactive substance. Then, a special camera takes a picture of the thyroid gland. This test is not safe for women who are pregnant or breastfeeding.

### **How are thyroid nodules treated?**

Thyroid nodules are treated in different ways, depending on their cause and how much thyroid hormone is in the body. Different treatments include:

- Watching and waiting – Doctors don't always treat thyroid nodules right away. Your doctor might watch a thyroid nodule if it is small and doesn't look serious. But he or she will follow it closely to see if it grows bigger or needs to be treated. This means you might have another thyroid ultrasound and sometimes another fine needle aspiration.
- Surgery to remove one or both sides of the thyroid
- Medicines – Some doctors try to shrink thyroid nodules using thyroid hormone medicines. If you take thyroid hormone medicines, your doctor or nurse will check your thyroid hormone levels on a regular basis. This treatment is not commonly used in the United States.
- Radioactive iodine – Radioactive iodine comes in a pill or liquid that you swallow. It has a small amount of radiation and can destroy a lot of the thyroid gland. It is used only to treat nodules that make too much thyroid hormone. It is not safe for women who are pregnant or breastfeeding.
- A procedure to drain fluid from the thyroid nodule, if it is filled with fluid

### **What if I want to get pregnant?**

If you want to get pregnant, talk with your doctor or nurse. Women who are pregnant should not be treated with radioactive iodine. That's because radioactive iodine can cause serious harm to a baby. If a woman is treated with radioactive iodine, she needs to wait at least 6 months before trying to get

pregnant. That way, her doctor can make sure that her nodule is no longer making too much thyroid hormone.