

# Hypothyroidism FAQ

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## 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 hypothyroidism?

*Hypothyroidism* refers to any condition in which the thyroid gland produces too little thyroid hormone. Symptoms may include feeling run down, slow, depressed, sluggish, cold, or tired and having dry skin and hair, constipation, muscle cramps, or weight gain. Women may have an increased menstrual flow. Some patients have a swelling in the front of the neck due to thyroid enlargement (*a goiter*).

## 2 CAUSES

### What causes hypothyroidism?

In most cases, hypothyroidism is caused by a condition called *Hashimoto's thyroiditis*, in which a patient's immune system attacks and destroys the thyroid. Hypothyroidism can also be caused by treatment of hyperthyroidism or by certain medications, and it may be present from birth. The thyroid may temporarily become underactive after pregnancy or if it is inflamed due to a viral infection. Finally, a problem with the pituitary gland can cause hypothyroidism.

## 3 DIAGNOSIS

### How is the diagnosis made?

A physical examination and laboratory tests that measure the amount of thyroid hormone (thyroxine, or T4) and thyroid-stimulating hormone (TSH) in your blood are necessary. Measurement of antibodies in the blood that attack the thyroid (*antithyroid antibodies*) may help in diagnosing the cause of hypothyroidism. There is absolutely no evidence that hypothyroidism can be detected solely by taking your temperature.

## 4 TREATMENT

### How is hypothyroidism treated?

- **Synthetic thyroxine.** Pure synthetic thyroxine (T4), taken once daily by mouth, fully replaces the thyroid gland and successfully treats the symptoms of hypothyroidism in most patients. Because the potency of generic thyroxine has varied considerably in the past, your physician may specify a brand name to treat your thyroid problem. The current branded forms of synthetic T4 are Synthroid®, Levoxyl®, Levothyroid®, Tirosint® and Unithroid®. For the few patients who do not feel completely normal taking a synthetic preparation of T4 alone, the addition of T3 (Cytomel®) may be of benefit.
- **Desiccated animal thyroid.** Desiccated (dried and powdered) animal thyroid, now mainly obtained from pigs, was the most common form of thyroid therapy before the individual active thyroid hormones were discovered. Desiccated animal thyroid is prescribed less frequently today, and there is no evidence that desiccated thyroid has any advantage over synthetic T4.
- **Problems with too much or too little hormone.** If you are not taking enough thyroid hormone, some of the symptoms of hypothyroidism may continue. If you take too much thyroid hormone, you may have symptoms mimicking an overactive thyroid, including nervousness, a racing heart, trouble sleeping, and shaking.
- **Long-term follow-up and family members at risk.** If you have hypothyroidism, you need to continue to see your doctor for follow-up at least once a year so that your thyroid hormone and TSH levels can be checked and your dose adjusted. Because hypothyroidism often runs in families, examinations of your family members may reveal other individuals with thyroid problems.

### 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](http://www.thyroid.org) and in the following scientific reviews:

Lazarus JH: *Aspects of treatment of subclinical hypothyroidism.* *Thyroid* 2007, 17(4):313-316.

Pinchera A, Santini F: *Is combined therapy with levothyroxine and liothyronine effective in patients with primary hypothyroidism?* *Nat Clin Pract Endocrinol Metab* 2005, 1(1):18-19.

Surks MI, Ortiz E, Daniels GH, Sawin CT, Col NF, Cobin RH, Franklyn JA, Hershman JM, Burman KD, Denke MA et al: *Subclinical thyroid disease: scientific review and guidelines for diagnosis and management.* *JAMA* 2004, 291(2):228-238.

