

Hypothyroidism FAQ

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1 SYMPTOMS

What are the symptoms of hypothyroidism?

Hypothyroidism occurs when the thyroid gland produces too little thyroid hormone. Symptoms may include any of the following: feeling run down, slow, depressed, sluggish, cold, tired, having dry skin and hair, constipation, muscle cramps, or weight gain. Women may have a heavier 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 the United States, most cases of hypothyroidism are caused by a condition called *Hashimoto's thyroiditis*, in which a patient's immune system attacks and destroys the thyroid. Worldwide, the most common cause of hypothyroidism is lack of iodine in the diet. 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, faulty signaling of the thyroid through a problem with the pituitary gland can cause hypothyroidism.

3 DIAGNOSIS

How is the diagnosis made?

A history of symptoms, a physical examination and laboratory tests that measure the amount of thyroid-stimulating hormone (TSH) in your blood are the first steps. Measurement of thyroid hormone (thyroxine, or T4) is helpful, and detection of antithyroid antibodies that attack the thyroid may help in diagnosing the cause of hypothyroidism. Since symptoms of hypothyroidism may be caused by other disorders, hypothyroidism cannot be reliably diagnosed solely by symptoms or by taking your temperature.

4 TREATMENT

How is hypothyroidism treated?

- **Synthetic thyroxine.** Thyroxine (T4) is the major hormone produced by the thyroid gland and pure synthetic T4, taken once daily by mouth, successfully treats the symptoms of hypothyroidism in most patients. Because of variations in the potency of T4 made by different manufacturers, including generic preparations, it is best to stay on T4 from a single manufacturer whenever possible. The current branded forms of synthetic T4 are Synthroid®, Levoxyll®, Levothyroid®, and Unithroid® and the generic preparation is Levothyroxine. For the few patients who do not feel completely normal taking T4 alone, the combination of synthetic T4 and T3 (Cytomel®) may be of benefit, although this has not been proven in clinical studies.
- **Desiccated animal thyroid.** Desiccated (dried and powdered) animal thyroid, now mainly obtained from pigs, was the most common form of thyroid therapy 40 years ago before T4 was able to be synthesized in a pure form. There is no evidence that desiccated thyroid has any advantage over synthetic T4 and it may make the precise adjustment of thyroid hormone replacement difficult.
- **Problems with too much or too little hormone.** If you are not taking enough T4, some of the symptoms of hypothyroidism may continue. If you take too much, you may have symptoms of 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 see your doctor for follow-up at least once a year so that your hormone 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 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.

www.thyroid.org