

Who can get hypothyroidism?

Thyroid disease tends to run in families, so it is important to be informed of your own family history. It is also advised to inform family members of your own hypothyroidism.

Even if hypothyroidism does not run in your family, there are other risk factors associated with it. Your risk is increased if you are a woman over 60; have an autoimmune disease; are taking any of the medications listed in this brochure, such as lithium; have been treated with any radioactive iodine; have had radiation to any part of your head, neck, or upper chest; have had a full or partial thyroidectomy; are pregnant, or have been pregnant or given birth within the past 6 months.

Diagnosing hypothyroidism:

If you are feeling more tired than usual and are having any of the other symptoms listed in this brochure, you could have hypothyroidism. Your doctor may do a physical examination to assess symptoms, but the only sure way diagnose hypothyroidism is through laboratory blood tests. Typically, you will be tested for thyroid stimulating hormone (TSH), free T4, and free T3.

For more information on Hypothyroidism and other thyroid issues, please see our websites at www.wilmingtonendo.com & www.3DTHYROID.com.

Treating hypothyroidism:

Once diagnosed with hypothyroidism, you will be prescribed a thyroid hormone replacement medication. It comes in many forms including:

T4 – Thyroxin, Synthroid, Tirosint, Levothyroxine

T3 – Liothyronine, Cytomel

T4 & T3 – Armour Thyroid

Currently, there is no cure for hypothyroidism, but in almost every patient it can be completely controlled so long as medication is being properly taken. In order to ensure effectiveness, it is important to take your pill first thing in the morning - an hour before eating, drinking, or taking other medication. It is also important to have your thyroid blood levels checked 8 weeks after starting medication or having a dosage change. If you are diagnosed with hypothyroidism, you should tell your family members because of its tendency to run in families.

Pregnancy: It is possible to develop hypothyroidism during or after pregnancy. This is due to increased thyroid hormone requirement caused by pregnancy. Usually patients with Hashimoto's thyroiditis are at higher risk to develop hypothyroidism during pregnancy. Treatment of pregnancy-related hypothyroidism is crucial because if left untreated, it increases the risk of miscarriage, premature delivery, preeclampsia, and can affect the developing fetus.

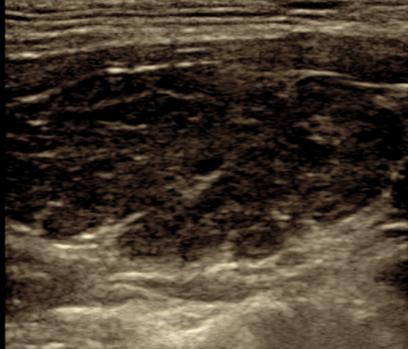
In case of pregnancy, it is very important to have your thyroid levels checked right away. Thyroid medication may be required during pregnancy. Your thyroid medication dose may be increased if you are already on thyroid medicine.

HYPOTHYROIDISM INFORMATION

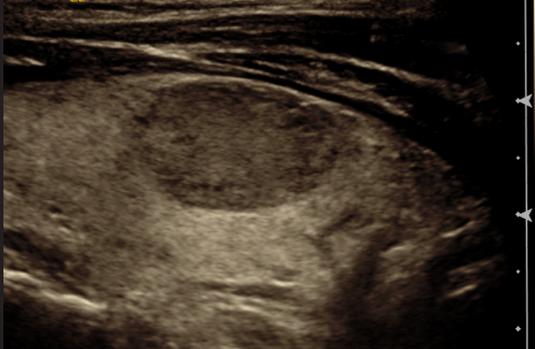


Your Guide to Hypothyroidism

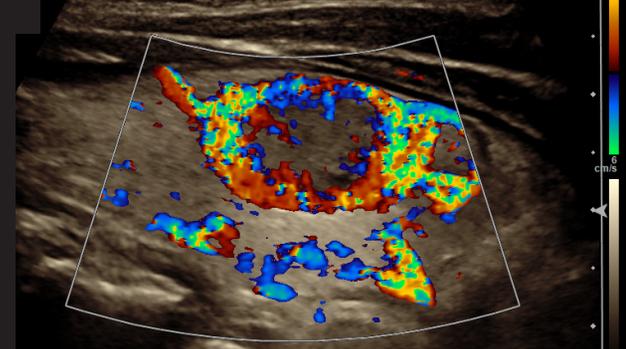
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Hypothyroid gland without nodule



Hypothyroid gland with nodule



Hypothyroid gland with nodule & blood flow

What is hypothyroidism?

Hypothyroidism is the diagnosis of an underactive thyroid gland. The thyroid cannot make enough thyroid hormone required for normal body functioning, causing the body to slow down its normal processes. If left untreated, a number of health problems can occur.

What are the symptoms?

Hypothyroidism can have a large impact on your overall health and wellness because your thyroid impacts all aspects of your metabolism. Symptoms accompanying hypothyroidism may include fatigue, weight gain, cold intolerance, constipation, cold hands and feet, hair loss, brittle nails, pain or stiffness in joints, slowed heart rate, and depression. If hypothyroidism is not treated, the symptoms can become more severe over time.

It is also possible to develop a goiter (enlarged thyroid) from hypothyroidism. This is caused by your body constantly stimulating your thyroid to release more thyroid hormone, despite its persistent lack of production.

What causes hypothyroidism?

- **Autoimmune disease:** The most common cause of hypothyroidism is an autoimmune disease called Hashimoto's thyroiditis (thyroiditis simply means inflammation of the thyroid gland). Autoimmune disorders cause your immune system to produce antibodies to attack its own tissues. In Hashimoto's, the antibodies mistake thyroid gland cells and their enzymes as invaders, causing the attack. It affects the thyroid's ability to produce thyroid hormone, leading to hypothyroidism. The exact cause of autoimmune diseases has not been determined yet by scientists. For more information, see the Hashimoto's Thyroiditis brochure.
- **Radiation therapy:** Some patients may receive radioactive iodine treatment (I-131) for Graves' disease, nodular goiter, or thyroid cancer. Other cancers of the head and neck may also be treated with radiation therapy. The radiation can cause loss of functioning in the thyroid, leaving a patient unable to produce enough thyroid hormone.
- **Certain medications:** Multiple medications can lead to hypothyroidism by preventing the thyroid from being able to produce the hormone normally. Some medications may include lithium, interferon alpha, and interleukin-2. If you are taking any medications, be sure to ask your doctor about its possible effect on your thyroid.

- **Thyroidectomy, or, removal of the thyroid gland:** The thyroid may be removed for multiple reasons, including thyroid nodules, thyroid cancer, or Graves' disease. Removal can include the whole thyroid gland or partial removal. If the full thyroid is removed, a person becomes hypothyroid and medication is needed to replace thyroid hormone loss. If there is a partial removal of the thyroid, medication may or may not be needed depending on the other half of the thyroid's ability to produce the hormone. With either surgery, the thyroid must be monitored closely to ensure proper production or replacement of thyroid hormone.
- **Congenital hypothyroidism:** Some babies may be born without a thyroid gland, with a partially formed or underdeveloped one, or with one in the wrong place (ectopic thyroid). In these cases, the thyroid, or lack thereof, is not producing sufficient thyroid hormone.
- **Inadequate amounts of, or too much, iodine:** We receive iodine daily through foods, which then travels through the blood stream to the thyroid. Iodine is required for the thyroid to produce thyroid hormone. If iodine is out of balance, hypothyroidism may develop.
- **Pituitary disorder:** If the pituitary gland has been damaged by tumor, radiation, or surgery, it may not be able to properly produce enough thyroid stimulating hormone (TSH).