

# Understanding Thyroid Tests

## A Patient's Guide

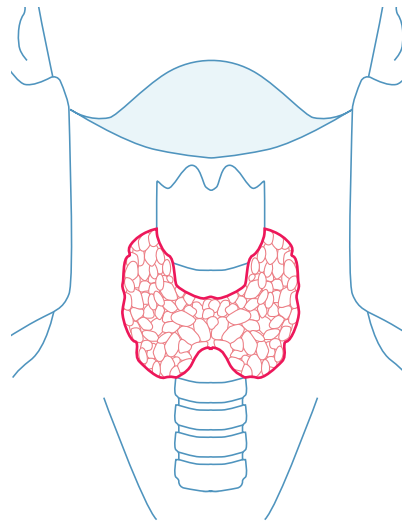
### Thyroid tests

#### TSH test

- The main test is the thyroid stimulating hormone (TSH) test.
- This hormone sends signals from the brain to the thyroid.
- Changes in TSH can provide early warning if T3 and T4 hormones are too low or high.
- If TSH is in the normal range, other tests are not usually needed.

#### T3 and T4 tests

- If TSH is abnormal, your doctor will test the Free T4 hormone.
- Sometimes the Free T3 test is done for a suspected overactive thyroid gland.



### What could your symptoms mean?

Too little thyroid hormone (hypothyroidism) or too much (hyperthyroidism) may cause symptoms. An underactive thyroid gland is much more common than an overactive thyroid gland.

#### Common symptoms

##### Hyperthyroidism



FAST HEARTBEAT

##### Hypothyroidism



TIRED



COLD



DRY SKIN



CONSTIPATED

### Thyroid antibody tests

- Antibodies are part of our body's defense system and, at times, our body produces antibodies against itself, causing problems.
- Thyroid peroxidase antibody tests may be ordered to assess for low thyroid function caused by an autoimmune issue.
- Detecting this antibody does not change clinical treatment and is often not required. In certain situations, it may be used to help your doctor detect a risk of developing low thyroid function.

### Common causes for hypothyroidism

The most common reasons for low thyroid function are related to problems with the thyroid gland. The problem is rarely related to the ability of your brain to send a signal to the gland.

Possible causes include:

- Autoimmune disease
- Surgical removal of the gland
- Radiation treatment

### Medications and thyroid tests

- Birth control pills or pregnancy can affect T4 and T3 levels.
- It's best not to take biotin for 2 days before a blood test for thyroid function.



BIRTH CONTROL



BIOTIN

### Treatment with synthetic T4 pills

- Hypothyroidism is treated with synthetic T4 pills (levothyroxine).
- If you are on T4 hormone replacement, only TSH testing is needed to monitor treatment.
- Your doctor/clinician should test TSH about 6-10 weeks after a change in medication.

Course Material for:

Navigating Thyroid Testing in Primary Hypothyroidism

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## What could your symptoms mean?

Your doctor/clinician may recommend a blood test for your thyroid because you've noticed changes in your body or health that might be related to your thyroid being too active, or not active enough. Thyroid testing helps your doctor gather information to understand and address thyroid-related issues.

## What happens if my thyroid test(s) are normal?

Thyroid testing is just one piece of information used to assess your state of health. If your thyroid tests are normal, your doctor may talk about other possible reasons for your symptoms and work with you to create a health plan.

## Are there any harms of getting a thyroid blood test? Or of testing too often?

Even if your results are a bit outside the normal range, it doesn't automatically mean you need medication. Remember, what is 'normal' can be different for different people, particularly as we age. Thyroid levels can change over time, especially if you're sick with non-thyroid-related illnesses. Testing should only be done when your doctor is trying to figure out if changes in your health are related to your thyroid. Testing too often may cause hassle, stress, and unnecessary treatment. Unneeded thyroid medication can make you feel worse rather than better.

## What if my thyroid blood test(s) are not normal?

Your doctor will explain the results and guide you through what each part means. The key indicator is TSH (thyroid stimulating hormone). If needed, you might have more tests to diagnose different thyroid conditions.

## Is thyroid dysfunction life limiting or life threatening?

Generally, thyroid issues aren't life limiting or life threatening. With proper treatment, people with thyroid problems can lead healthy lives.

## What are the types of thyroid conditions?

The most common disorder of the thyroid gland is an under active thyroid gland, usually due to an autoimmune condition where antibodies in your blood start to work against the thyroid gland. There are other causes of under active thyroid gland, which include prior surgical removal of thyroid gland, radiation, etc. Though less common, the thyroid gland can be over active, which requires treatment as well.

## Will I need other tests, like more blood tests or an ultrasound of my thyroid?

It depends on the changes you're experiencing and what your initial test (TSH) showed. If your TSH is high or low, then your doctor may order more blood tests to assess the type and cause of the abnormality. Thyroid ultrasound tests are not typically needed for an assessment of thyroid function, unless your doctor feels an abnormality of the thyroid gland on physical examination.

## When will I receive my results?

TSH and thyroid hormone tests can be run in most laboratories and you should be able to see your results within a few days. Although you can access your own results through the patient portal, we also recommend discussing the results with your doctor.