

# Testing Your Thyroid Gland

Is it proof of any use? I am often asked this question and this article represents my personal opinion as a pathologist who has worked in health screening for many years. The answer is a qualified yes.

Who are you testing for?

A wide range of people of varying ages are at risk for thyroid disease, making it difficult to give accurate advice on an age range suitable for testing, but generally young and middle-aged people, especially but not exclusively, women are at greatest risk. People without symptoms can be tested since an underactive thyroid may show no symptoms in the early stages (subclinical hypothyroidism) and if these general symptoms are present, then testing may be advisable; excessive tiredness, weight gain for no apparent reason, dry skin, constipation or depression.

What is a thyroid test?

Screening typically means evaluating normal people with no symptoms to see if they harbor an undisclosed illness. With the thyroid test, it is often people with symptoms, often vague symptoms, who show up for the test. Examination of normal persons for thyroid conditions is not performed in an equivalent organized manner, for example, for breast or bowel examination. The thyroid test involves a simple blood test. It is common to start with a very effective test, the thyroid stimulating hormone (TSH) test. A person displaying symptoms that point to thyroid disease may be recommended to undergo a panel of tests that includes TSH, but this really would not be a screening, but rather according to diagnostic tests. Therefore, for routine tests [The Thyroid Factor Reviews](#) recommended to first perform the TSH blood test and then decide on other tests depending on the result. TSH is the hormone produced by the pituitary gland at the base of the brain that drives the thyroid gland in the neck to produce thyroxine (T4) and triiodothyronine (T3). T3 and T4 enter

the bloodstream and control the rate of cellular metabolism. Too little hormonal and cellular metabolism slows down, leading to weight gain, fatigue, and other general health effects. Too much T3 and T4 cause cellular metabolism to increase and energy burns quickly, resulting in hyperactivity and weight loss. The thyroid test leans toward detecting an underactive thyroid rather than hyperactivity, although the TSH test will show an abnormal result in both situations.

What do your results mean?

The normal level of thyroid stimulating hormone (TSH) is between 0.35 and 5.5. A normal result is very reassuring. It is unusual for TSH to be normal when the thyroid is inactive, but this can occur rarely. For this reason, a person with symptoms that strongly suggest an underactive thyroid would be recommended to undergo a panel of tests to exclude rare conditions, such as pituitary gland disease.

TSH testing is most often performed on a serum sample. The serum is obtained from a blood sample by rotating the blood very rapidly in a centrifuge so that the red blood cells are thrown into the bottom of the sample tube. The yellow serum is found on top of the red blood cells and is removed for testing by leaving the red blood cells in the sample tube. Some newer TSH tests are designed to use whole blood that has not been spun. This has the advantage of meaning that the test does not have to be carried out in a sophisticated laboratory, but can be performed quickly in a clinic or doctor's surgery. However, the test samples are slightly different and the results may not always be directly comparable. However, as a tool to look for early signs of disease, a whole blood test is very convenient and can increase access to testing.

An abnormal TSH result where the TSH level is high, above 5.5 suggests that the thyroid is poorly active. This needs to be confirmed by other tests and further tests are carried out to identify the cause. Additional tests in this situation would include thyroxine (T4) and triiodothyronine (T3) measured from a serum sample. Of course, since these are the hormones that are missing when the thyroid is inactive, the results would be low for these hormones.

It is understandable that when the results of these tests are equivocal, for example, TSH is slightly high but T3 and T4 are normal, a definitive diagnosis is not possible. A situation like this can occur when there are few or no symptoms of disease and for lack of a better term, this condition