Thyroid Stimulating Hormone (TSH) Test

The thyroid-stimulating hormone (TSH) test determines the level of TSH in the blood. The pituitary gland, which is located at the base of your brain, produces TSH. It is in charge of controlling the number of hormones produced by the thyroid.

The thyroid gland is a tiny, butterfly-shaped gland near the front of the neck. It is a vital gland that produces three key hormones:

- triiodothyronine (T3)
- thyroxine (T4)
- calcitonin

Through the secretion of these three hormones, the thyroid regulates a variety of body activities, including metabolism and growth.

If your pituitary gland generates more TSH, your thyroid will create more hormones. In this way, the two glands collaborate to ensure that the proper quantity of thyroid hormones is generated.

When this system malfunctions, your thyroid might generate either too many or too few hormones.

A TSH test is frequently used to diagnose the underlying reason for elevated thyroid hormone levels. It is also used to determine if the thyroid gland is underactive or hyperactive. Your doctor can tell how well your thyroid is performing by evaluating the level of TSH in your blood.

Why is a Thyroid-Stimulating Hormone Test Performed

If you have signs of a thyroid disorder, your doctor may recommend a TSH test. Thyroid illnesses are classified as hypothyroidism or hyperthyroidism.

Hypothyroidism

Hypothyroidism is a disorder in which the thyroid produces insufficient hormones, resulting in a slowing of metabolism. Hypothyroidism symptoms include weariness, weakness, and difficulty focusing.

Some of the most prevalent causes of hypothyroidism are as follows:

- **Hashimoto’s Thyroiditis.** This is an autoimmune disorder in which the body attacks its thyroid cells. As a result, the thyroid is unable to create an adequate quantity of hormones. Because the illness does not often generate symptoms, it can grow for years before causing obvious damage.
- **Thyroiditis.** This is a thyroid gland inflammation. A viral infection or an autoimmune condition, such as Hashimoto's thyroiditis, are frequently to blame. This disorder disrupts thyroid hormone production, eventually leading to hypothyroidism.
- **Postpartum Thyroiditis.** This is a transient type of thyroiditis that can occur after delivery in certain persons.