

# Show Me Health

## Subject: Thyroid Conditions & Diagnosis

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Your thyroid is a butterfly-shaped gland in your neck, just above your collarbone. It is one of your endocrine glands, which make hormones.

Thyroid hormones regulate how the body breaks down food and either uses that energy immediately or stores it for the future. In other words, our thyroid hormones regulate our body's metabolism.

Another gland, called the pituitary gland, actually controls how well the thyroid works. The pituitary gland is located at the base of the brain and produces thyroid-stimulating hormone (TSH). The bloodstream carries TSH to the thyroid gland, where it tells the thyroid to produce more thyroid hormones, as needed.

Thyroid hormones influence virtually every organ system in the body. They tell organs how fast or slow they should work. Thyroid hormones also regulate the consumption of oxygen and the production of heat.

Millions of people in the U.S. have thyroid diseases. Most of them are women. If you have a thyroid disease, your body uses energy more slowly or quickly than it should.

A thyroid gland that is not active enough, called hypothyroidism, is far more common. In hypothyroidism, the body's metabolism is slowed. It can make you gain weight, feel fatigued and have difficulty dealing with cold temperatures.

This thyroid disease's symptoms include the following:

- \* Fatigue
- \* Mental depression

- \* Sluggishness
- \* Feeling cold
- \* Weight gain
- \* Dry skin and hair
- \* Constipation
- \* Menstrual irregularities

Hypothyroidism is treated by replacing the thyroid hormone the body needs. This is usually done with an oral tablet or pill of the thyroid hormone thyroxine (T4 or levothyroxine). Most patients with hypothyroidism will need to be on medication for the rest of their lives. They have to work closely with their doctor, take their medication as directed, and be monitored regularly in case the medication dose needs to be adjusted.

Too much thyroid hormone from an overactive thyroid gland is called hyperthyroidism, because it speeds up the body's metabolism. This hormone imbalance occurs in about 1 percent of all women, who get hyperthyroidism more often than men. Because the thyroid gland is producing too much hormone in hyperthyroidism, the body develops an increased metabolic state, with many body systems developing abnormal function.

The symptoms of this thyroid condition can be frightening.

Symptoms can include:

- \* Muscle weakness
- \* Trembling hands
- \* Rapid heartbeat
- \* Fatigue
- \* Weight loss
- \* Diarrhea or frequent bowel movements
- \* Irritability and anxiety

- \* Vision problems (irritated eyes or difficulty seeing)
- \* Menstrual irregularities
- \* Intolerance to heat and increased sweating
- \* Infertility

There are three basic methods to treat hyperthyroidism, including anti-thyroid drugs, which block production of the thyroid hormone; beta-blocker drugs, which control the symptoms of the disorder; radioactive iodine treatment, which causes permanent destruction of the thyroid; and surgery to remove the thyroid gland.

There are many causes for both conditions. Treatment involves trying to reset your body's metabolism to a normal rate.

The best way to initially test thyroid function is to measure the TSH level in a blood sample. A high TSH level indicates that the thyroid gland is failing because of a problem that is directly affecting the thyroid (primary hypothyroidism). The opposite situation, in which the TSH level is low, usually indicates that the person has an overactive thyroid that is producing too much thyroid hormone (hyperthyroidism).

TSH is included in the CBC/Chem Profile available for just \$25 through our Adult Blood Draw Clinics. Our next clinic is scheduled for Wednesday, January 26<sup>th</sup> from 7 a.m. to 10 p.m. If you or your doctor suspect you might have an undiagnosed thyroid condition, or you are trying to manage a diagnosed thyroid condition, you should take advantage of this service. Call 646-5506 for more information.

Information sources: Medline Plus, The Hormone Foundation, American Thyroid Association