

Is Thyroid Testing Right for You?

Are your muscles sore and tired? Are you losing your hair? Are you cold all the time when others around you are not? Do you have low energy and low motivation? Are you gaining weight and just can't seem to shed those extra pounds?

There are different possible reasons for those symptoms and an underactive thyroid is certainly one of them.

THE THYROID SYSTEM

Let's talk about the thyroid system. It starts at the hypothalamus, that portion of your brain that coordinates various functions including the pituitary gland, located at the base of the brain. The pituitary gland is the "master gland" of the body. Part of its job is to stimulate other glands, including the thyroid gland, to produce specific hormones.

The pituitary gland sends a signal called TSH (Thyroid Stimulating Hormone) to the thyroid gland in your neck. The thyroid gland, having been activated by the TSH from the pituitary gland, secretes two hormones into the bloodstream. The main hormone is T4 (thyroxine) and a small amount of T3 (triiodothyronine) is also secreted. T4 and T3 are essential for all the cells in the body to work normally.

T4 is the inactive form of this hormone and is converted to its active form (T3) by your cells and by different organs such as the kidneys and liver. This conversion from T4 to T3 is a necessary function as it is the T3 hormone that affects such physiological processes as growth, development, metabolism, body temperature, and heart rate.

The T3 hormone feeds back into the pituitary gland

to tell it that there is enough T3 in the body and that the pituitary can shut down TSH production. Likewise, when there is insufficient T3 in the body, T3 also signals the pituitary to ramp up TSH production to stimulate the thyroid to produce more T4 which then gets converted to T3. T3 acts as a kind of thermostat to increase or decrease the amount of signal (TSH) the pituitary sends to the thyroid.

TESTING FOR THYROID FUNCTION

Blood Testing. Some thyroid function blood tests measure only the amount of TSH in the blood. This is interesting information to know, but it does not give a full picture of the thyroid function because it does not measure for T4 and T3, which can help determine conversion rate, a critical factor in the physiological functions that T3 regulates. A TSH test only assumes that if TSH is normal, then T3 and T4 are also normal; but this is not always true. Someone with symptoms of a malfunctioning thyroid system may test in the normal range for TSH but that does not mean that their thyroid system is working as it should. There could be a problem with T4 converting to T3 that is at the root of the symptoms. Standard TSH only blood tests will not show that conversion problem.

Urine Testing. A more definitive test for whether you are getting proper conversion of T4 to T3 is urine testing. The urine testing is conducted over a 24-hour period to give a complete and reliable reading of T4 and T3 levels as well as nutrients required for the conversion of T4 to T3.

The urine thyroid test will tell us if there is an inhibition of the thyroid function such as the inadequate creation of T4 and its conversion to T3. These issues could stem from nutritional deficiencies,

low iodine, stress, poor digestion, inflammation, poor sleep, and inflammatory diet, and others.

Urine testing results allow us to pinpoint the core of the problem and design a treatment program to resolve it.

Call us at (780) 485-9468 to book a consultation. Let's get you on the road to robust health and your ideal thyroid and hormone production.

