

What is T4?

Thyroxine (T4) is the main thyroid hormone produced by the thyroid gland, but it acts as a source for T3 production as the activity of T3 is more pronounced. TSH (thyroid stimulating hormone) secreted from the pituitary and TRH (thyrotropin-releasing hormone) secreted from the hypothalamus control the secretion of thyroid hormones. Even if everything is normal in the thyroid gland, the gland does not produce thyroid hormone without TSH stimulation!

What is T3?

T3, the second hormone produced by the thyroid gland, is also formed when T4 loses an iodine in other tissues. The main active hormone, T3, helps maintain muscle control, brain function and development, and heart and digestive functions. It also plays a role in the body's metabolic rate and maintains bone health.

Problems Associated with T3 and T4

Having too much T3 in the bloodstream is called thyrotoxicosis. This condition is usually caused by overactivity in the thyroid gland (hyperthyroidism). Thyroid hormone elevation may occur in conditions such as Graves' disease, thyroid inflammation or a benign tumor, or even when thyroid hormone is taken externally. Symptoms of thyrotoxicosis include weight loss, increased appetite, palpitations, irregular menstrual cycles, fatigue, irritability and thinning hair.

Hypothyroidism is when the thyroid gland does not produce enough thyroid hormone. It can occur in pituitary dysfunction such as pituitary tumors or inflammation, as well as autoimmune conditions such as Hashimoto's thyroiditis or certain medications.

Hypothyroidism runs in families, more often in women and adults. There may be fatigue, slowing of perception and thinking, feeling cold, weight gain, dry skin, constipation and menstrual irregularities. If you have these complaints, it is useful to ask the following questions:

Are my thyroid hormone levels normal?

What test should I have to check my thyroid function?

Could my symptoms be due to thyroid hormone abnormalities?

If my thyroid hormone levels are too high or too low - What are the treatment options?

Should I see a thyroid specialist or endocrinologist?