

The Thyroid



Your thyroid is a gland located at the base of your neck, just below your Adam's apple. It is shaped like a butterfly. Each "wing," or lobe, of your thyroid lies on either side of your windpipe. The purpose of your thyroid gland is to make, store, and release thyroid hormone into your blood. Thyroid hormone affects essentially every cell in your body, and helps control your body's functions. If you have too little thyroid hormone in your blood, your body slows down. This is a condition called hypothyroidism. If you have too much thyroid hormone in your blood, your metabolism speeds up. This is a condition called hyperthyroidism.

The amount of thyroid hormone made by your thyroid gland is adjusted by another gland called the pituitary, as well as a part of your brain called the hypothalamus. The pituitary gland makes hormones that control many different glands in your body. The hypothalamus helps the pituitary control many of your glands, as well as helping to control other bodily functions, such as thirst, hunger, sleep, and body temperature. The thyroid gland, pituitary gland, and hypothalamus all work together to control the amount of thyroid hormone in your body. With the pituitary controlling most of the action, these structures work in a way that is similar to the way a thermostat controls the temperature in a room.

For instance, just as the thermometer in the thermostat senses the temperature of a room, your pituitary constantly senses the amount of thyroid hormone in your blood. If there is not enough thyroid hormone, your pituitary senses the need to "turn on the heat." It does this by releasing more Thyroid-Stimulating Hormone (TSH) which signals your thyroid to make more thyroid hormone. Your thyroid gland then makes and releases the hormone directly into your bloodstream and restores the amount of thyroid hormone in your blood to normal.

Your pituitary then senses that there is just the right amount of thyroid hormone in your body. With your thyroid hormone levels now restored to normal, your pituitary slows its production of TSH (Thyroid-Stimulating Hormone) back down to normal.

The thyroid gland plays a key role both in an individual's general health and in daily activities. Being on the lookout for possible signs and symptoms of thyroid disorders, especially if a patient has a family history of thyroid problems, is an excellent way to prevent the long-term effects of leaving a thyroid disorder untreated. If you think you have a thyroid disorder, speak to your doctor about your concerns.

If you are diagnosed with a thyroid-related problem, be assured that there are treatments available to increase your quality of life. Find out as much as you can about your disorder and talk to your doctor about your treatment. By following your doctor's instructions and taking your medications exactly as prescribed, you can lead a healthy, normal life.