

Hyperthyroidism

Hyperthyroidism means your thyroid makes too much thyroid hormone. Your thyroid is a gland in the front of your neck. It controls your metabolism, which is how your body turns food into energy. It also affects your heart, muscles, bones, and cholesterol level.

Hypothyroidism is most common in adult women between the ages of 30 and 50. It means you make too little thyroid hormone. A person with hypothyroidism may also have an enlarged thyroid and the eyes sometimes become pushed outward. It is most commonly caused by Graves' disease, which tends to run in families.

These two conditions are very different and each causes their own set of problems.

Symptoms

The symptoms of hyperthyroidism may include weakness, difficulty sleeping, weight loss, shakiness, feelings of warmth and sweating, rapid heart beat, palpitations, difficulty breathing, and trouble concentrating.

If left untreated, hyperthyroidism tends to put extra strain on the heart and causes irregular heart rhythms. It may also promote bone cell loss that can lead to osteoporosis.

Diagnosis

Diagnosing hyperthyroidism is generally done through a common blood test, which measures thyroid stimulating hormone—also known as TSH. TSH is released by the pituitary gland in the brain to control thyroid activity. When the thyroid gland is overactive, it reduces the release of TSH—resulting in a low value on the blood test. By measuring TSH, your health care professional can tell whether or not your thyroid is overactive.

There are also tests to directly determine the levels of the thyroid hormones circulating in the blood. A thyroid scan is sometimes done to determine how much of the thyroid is overactive.

Treatment Options

There are three ways to treat hyperthyroidism. The most common treatment uses radioactive iodine, which is effective for most people. Iodine is stored in the thyroid gland and used to form thyroid hormones. Radioactive iodine goes to the thyroid and destroys the overactive cells. This treatment is taken in pill or liquid form, is painless and has not been shown to cause cancer or other significant side effects. After radioactive iodine treatment, many people will develop hypothyroidism, or an under active thyroid gland. This is treated with synthetic thyroid hormones.

Another treatment for hyperthyroidism is anti-thyroid pills. These block the formation of the thyroid hormones in the gland and generally cure one-third of people treated for at least a year; the other two-thirds have a return of symptoms when the medication is stopped.

The least common method of treatment is surgery to remove thyroid tissue. This is usually reserved for children who fail to respond to the anti-thyroid drugs or who have an adverse reaction to the drugs. Thyroid surgery is also appropriate for patients with greatly enlarged thyroids.

All of these treatment methods have both risks and benefits. Talk with your health care professional to determine which treatment option would be best for you.

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Other resources

- Connect to our Web site at **kp.org** to access health and drug encyclopedias, interactive programs, health classes, and much more.
- Check your *Kaiser Permanente Healthwise Handbook*.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.