

Hyperthyroidism in Children: What You Need to Know

Hyperthyroidism is a condition in which the thyroid is overactive. In this handout, learn the causes and symptoms of hyperthyroidism, and how doctors diagnose and treat the condition.

WHAT IS HYPERTHYROIDISM?

Hyperthyroidism is a condition in which the **thyroid gland** (a small, butterfly-shaped gland in the front of the neck) makes too much thyroid hormone. Thyroid hormone helps control your body's **metabolism**. If you make too much thyroid hormone, different functions in your body and your metabolism speed up.

WHAT CAUSES HYPERTHYROIDISM?

- An **autoimmune disorder**, such as Graves' disease (this is the most common cause of hyperthyroidism)
- One or more thyroid **nodules** (growth/s within the thyroid gland) that make excess thyroid hormone
- Inflammation of the thyroid gland (acute or subacute thyroiditis)
- Over-treatment of an underactive thyroid (if too much thyroid hormone is being taken for replacement)
- Genetic conditions and rare ovarian tumors
- Very rarely, a tumor in the **pituitary gland** (a small gland in the brain that controls other glands in the body) that make an excess of a hormone called thyroid stimulating hormone (TSH) that pushes the thyroid gland to make too much thyroid hormone

Thyroid storm is a rare, but very serious type of hyperthyroidism in which thyroid hormone levels are extremely high. This can be life-threatening.

WHAT ARE THE SIGNS AND SYMPTOMS OF HYPERTHYROIDISM?

The clinical features of hyperthyroidism are different for every person. Common signs and symptoms include:

- Nervousness or irritability
- Weight loss
- Increased appetite
- More bowel movements than usual
- Trouble sleeping
- Sensitivity to hot temperatures
- Sweating more than usual
- Fatigue (tiredness)
- Muscle weakness
- Palpitations (from a very fast heart rate)
- High blood pressure
- Hand **tremors** (shakiness of hands)
- Thinning of the skin
- Fine, brittle hair
- Prominent eyes
- Irregular or lighter menstrual periods (in girls)
- Enlarged thyroid gland (**goiter**)
- Brisk reflexes

HOW DO DOCTORS DIAGNOSE HYPERTHYROIDISM?

- A thorough history and physical exam
- Blood tests to measure levels of thyroid hormones, thyroid stimulating hormone (TSH), thyroid stimulating immunoglobulins, and thyroid peroxidase antibodies
- Thyroid ultrasound (sometimes necessary)
- Thyroid scan (sometimes necessary)

HOW DO DOCTORS TREAT HYPERTHYROIDISM?

The goal of treatment is to bring your child's thyroid hormone levels back to normal. Common treatments include:

- Beta blockers (in early stages of treatment) to treat symptoms related to high blood pressure, fast heart rate or irregular heartbeat
- Antithyroid medications
- Radioactive iodine
- Surgery

Home remedies and over-the-counter supplements are not recommended as treatments. These remedies and supplements are not controlled by the Food and Drug Administration (FDA). Doctors do not know if they are safe or how well they work.

WHAT IS THE OUTCOME FOR MY CHILD WITH HYPERTHYROIDISM?

Your child should live a healthy, normal life if they receive treatment and takes their medication correctly.

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