

The BSPED is one of the affiliated speciality groups of the Royal College of Paediatrics and Child Health.

The society aims to improve the care of children and young people with endocrine disorders or diabetes mellitus, by bringing together professionals from a range of disciplines.

Please contact your local nurse or hospital doctor if you need more advice about your child's condition.

Produced by members of the BSPED and reviewed by the BSPED Clinical Committee.

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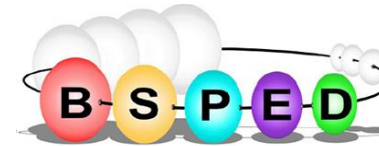
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**British Society for  
Paediatric Endocrinology  
and Diabetes**

## Hyperthyroidism(overactive thyroid gland)

### Information for patients, parents and carers



## What is a hormone?

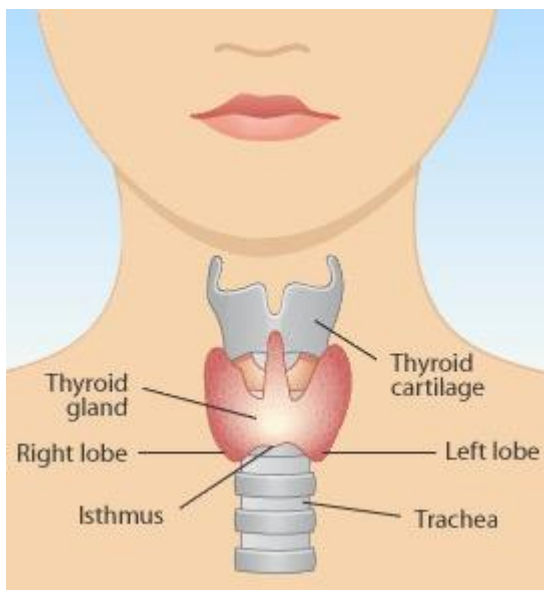
Hormones are chemical messengers. They are made in glands and travel around the body in the bloodstream. Hormones affect how other organs and systems in the body work.

## What is the thyroid gland?

The thyroid gland is shaped like a butterfly and found in the neck at the front of the windpipe just below the Adam's apple. It produces a hormone called thyroxine. Thyroxine controls the speed at which all the organs and systems in the body work.

## What is hyperthyroidism?

Hyperthyroidism is a condition where the thyroid gland produces more thyroxine than the body needs. When this happens everything in the body will work too fast. This is called hyperthyroidism (or overactive thyroid gland).



## Why does hyperthyroidism happen?

Hyperthyroidism usually appears as part of a disease called Graves' disease although it can also be present in some rarer thyroid conditions. It can also occur when too much replacement thyroxine is taken as a treatment for hypothyroidism.

## How does hyperthyroidism affect a child?

Too much thyroxine in the body can cause:

Increased heart rate/palpitations

Weight loss despite increased hunger

Shakiness

Fast growth

Enlarged thyroid gland which can cause swallowing problems

Mood swings, nervousness and irritability

Tiredness and weak muscles

Eye problems – eyes may appear larger than before which could affect eye movement and vision

Sweating and heat intolerance

Thirst

Increased frequency of passing urine and loose bowel movements

## How is it diagnosed?

Patients with hyperthyroidism should be assessed at least initially by a specialist in thyroid disorders. Hyperthyroidism can then be confirmed with a blood test.

## How is this treated?

Depending on the type of hyperthyroidism the doctor may recommend:

- Antithyroid drugs to reduce the production of thyroid hormones. These have a very rare but unpredictable side effect of lowering white cell count (agranulocytosis). If you observe a sore throat, mouth ulcers, rash or unexplained fever, your medical team should be contacted immediately.
- Surgery to remove all or part of the thyroid gland.
- Radioactive iodine.
- Beta-blockers are tablets that are sometimes used in the first few weeks after diagnosis. They can help relieve some of the symptoms associated with hyperthyroidism.
- In some cases the thyroid over-activity may settle down without any specific treatment when caused by a thyroiditis.

## How long will treatment be needed?

The length of treatment will depend on the type of hyperthyroidism and what treatment is chosen by the doctor.

If managed with medication alone, hyperthyroidism has a 40% recurrence rate after treatment stops. Therefore, medication may need to be started again.

Surgery and radioactive iodine are permanent treatments but are likely to

result in hypothyroidism (under-active thyroid), requiring lifelong thyroxine replacement.

Your clinic doctor or nurse will be able to give you more information about your child.

## Resources

[www.btf-thyroid.org](http://www.btf-thyroid.org)

[www.thyroid.org](http://www.thyroid.org)

[www.eurospe.org](http://www.eurospe.org)

[You and Your Hormones](#)