



# Hypothyroidism



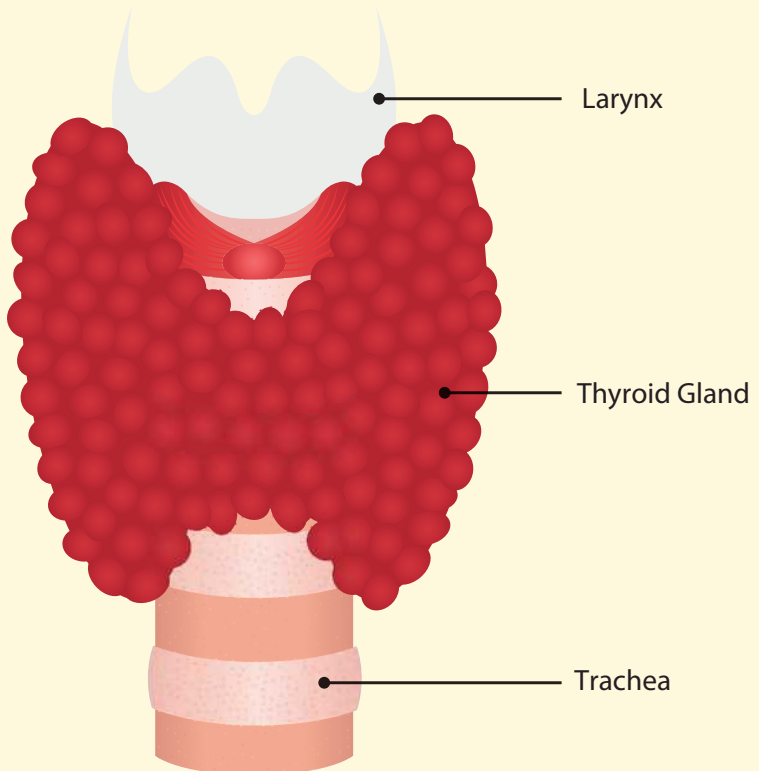
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## What is the thyroid gland?

The thyroid gland is a butterfly-shaped gland located in the lower front neck. It produces thyroid hormones, which play a key role in regulating the body's metabolism, temperature, heart rate, weight, bone health and fertility.



# What is hypothyroidism?

Hypothyroidism occurs when there is an insufficient amount of thyroid hormones in the body.

## Common causes include:

- Hashimoto's thyroiditis (an autoimmune condition where antibodies attack the cells in the thyroid).
- Previous thyroid surgery.
- Previous radioactive iodine treatment for over-active thyroid or thyroid cancer.
- Certain medications that can affect the thyroid function, including Amiodarone, Lithium, and some cancer immunotherapies.
- Exposure to head and neck radiation.
- Brain tumours, injuries, or previous brain surgery.

# What are the symptoms and signs of hypothyroidism?



Fatigue



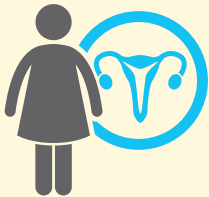
Weight gain



Cold intolerance



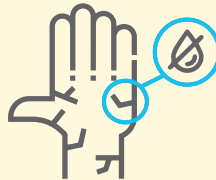
Constipation



Infrequent /  
no menses



Muscle pain



Dry skin



Low heart rate

## Diagnosis

Blood tests are required to confirm low thyroid hormone levels. Your doctor may also advise on other tests to identify the cause of hypothyroidism.



## Treatment

Hypothyroidism is treated with Levothyroxine to replace thyroid hormones. This oral medication is taken once daily (usually in the mornings), and is best taken on an empty stomach (either one hour before or four hours after meals). It is also important that Levothyroxine is taken at least four hours apart from any calcium and iron supplements to improve absorption.

Thyroid hormone replacement is generally safe as there are no associated side-effects, unless there is over or under replacement of thyroid hormones. Elderly patients and those with ischemic heart disease will be started on a low dose of thyroid hormone, that is gradually increased. Blood tests are carried out every 2-3 months after initiation of thyroid hormone replacement to monitor the patient's condition. When the dosage of thyroid hormone replacement has stabilised, the blood tests can be taken every 6-12 months at polyclinics or with general practitioners. In addition, the dose of thyroid hormone will need to be increased for pregnant women, with closer monitoring during pregnancy.

For more information on hypothyroidism, please consult your doctor.

## Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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