

Thalassaemia

Thalassaemia is an **inherited blood disorder** (passed down from parents to children). It affects the proper production of **haemoglobin**, a protein in red blood cells responsible for carrying oxygen to the whole body (including the muscles, heart and brain).

Thalassaemia is more common in certain Mediterranean regions such as North Africa and southern Spain and Italy.

There are two types of thalassaemia: **alpha and beta**, depending on which chain of the haemoglobin protein is affected.

People with thalassaemia **may have fewer red blood cells** (also called erythrocytes), and **these cells are smaller and less efficient**. This can lead to anaemia.

Unlike iron-deficiency anaemia, the problem is not a lack of iron but rather that the genes controlling haemoglobin production do not function properly.

The severity of thalassaemia depends on the number of genes affected.

- **Minor thalassaemia** (carriers or mild form): only one gene is affected; patients usually have no symptoms and do not require treatment.
- **Intermediate or moderate thalassaemia:** more genes are affected; moderate anaemia may develop, accompanied by symptoms (fatigue, paleness, growth problems in children, etc.). Transfusions may be required.
- **Major thalassaemia or Cooley's anaemia:** this is the most severe form, characterised by severe anaemia, extreme fatigue, slow growth, bone problems and other complications. Patients require regular transfusions, treatments to remove excess iron and, in some cases, bone marrow transplants.

Living with thalassaemia

If you have thalassaemia:

- Follow the treatment plan recommended by your doctor.
- Eat a **balanced diet** and avoid excessive amounts of foods high in iron.
- **Avoid iron supplements unless they have been specifically prescribed.**
- Lead an active lifestyle with **moderate physical exercise.**
- Consult your doctor or pharmacist before taking any medication.



Genetic counselling

If you have thalassaemia or are a carrier and are thinking about having children, consider seeking **genetic counselling** to understand the chances of passing the condition on to your children.

Remember that with proper medical care, most people with thalassaemia can lead full and active lives.