

## Anaemia

### What is it?

Anaemia is a condition in which there are not enough healthy red blood cells to transport oxygen to your body's cells.

Anaemia can be temporary or long term and can range from mild to severe. It could be a sign of a more serious illness, or be related to low B Vitamin levels, so it's best to see your healthcare practitioner if you suspect that you have it.

### What are some of the signs and symptoms?

As many initial signs of anaemia are mild, the condition can go unnoticed. However, symptoms can worsen, so it's important to see your healthcare practitioner if you are experiencing any of the following:

- Feeling unnecessarily fatigued, tired or weak
- Easily becoming short of breath
- Fast or irregular heartbeats
- Feeling faint or dizzy
- Cold hands and feet
- Pale skin

Keep in mind that signs and symptoms can vary depending on the cause of anaemia.

### What causes anaemia?

Anaemia can come in many different forms, each with its own cause. Anaemia results from a deficiency of red blood cells. This can occur if:

- You don't make enough red blood cells – due to a genetic or bone marrow disease
- Bleeding causes you to lose red blood cells quicker than they can be replaced
- Your body destroys red blood cells
- You lack nutrients, such as iron and other vitamins required to produce haemoglobin

Your next appointment is:



### Did you know?

That while your body can store iron, it can't produce it? It must come from your food.

# orthoplex

**Bio Concepts Pty Ltd**

19a Guardhouse Road,  
Banyo QLD 4014.

[www.orthoplex.com.au](http://www.orthoplex.com.au)

# Ignite your *Iron*



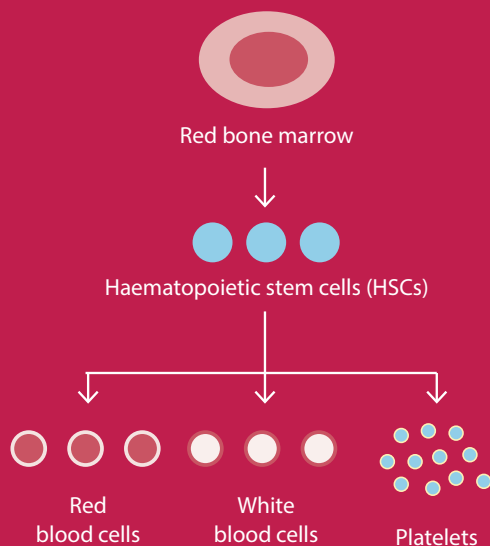
## Tips on healthy iron levels and avoiding deficiency

# Red blood cells

**Iron is the building block required to produce haemoglobin which is a component of red blood cells.**

As with most cells, red blood cells are produced deep within your bone marrow – that's the spongy tissue inside the cavities of some of your largest bones. To produce these cells, your body requires iron, as well as other vitamins and nutrients, from the food you eat.

Red blood cells contain haemoglobin – the iron-rich protein molecule that gives blood its distinctive red colour. Red blood cells and haemoglobin operate as tiny vehicles that transport oxygen from your lungs to the rest of your body, where it's delivered to your cells so they can function. In turn, your cells produce carbon dioxide, and red blood cells return this waste to the lungs, where it can be exhaled.



Healthy bone marrow contains stem cells which mature into red blood cells, white blood cells and platelets.

## Iron deficiency

A low level of this mineral in your body is called an iron deficiency. It occurs when the body doesn't have enough iron, leading to low levels of red blood cells. Keep in mind, you can have an iron deficiency without being anaemic. However, ongoing depletion of iron stores without replacement can, over time, lead to anaemia.

### You could experience iron deficiency if:

#### 1. You follow a vegetarian or vegan diet

As a vegetarian or vegan you need to be particularly mindful of including enough iron in your diet. For some people, these diets can result in insufficient iron intake, since animal products are the highest-containing and most readily absorbed source of dietary iron. A well-balanced plant-based diet can still provide some iron but you may need to supplement in order to provide sufficient intake.

#### 2. You have a compromised gut

Low stomach acid and gastrointestinal disorders can affect your small intestine's ability to properly break down and absorb the nutrients in the food you eat, including iron.

#### 3. You are lacking other vitamins

The absorption of iron depends on the support of other vitamins, including vitamins A and C, and Vitamin B2. A diet deficient in these complementary vitamins can have a knock-on effect to your iron levels – something to consider when you're also experiencing iron deficiency.

#### 4. You're pregnant or menstruating

Pregnancy increases the need for iron, while iron stores can become depleted with ongoing, heavy menstruation.

## Iron-rich foods

As iron is the building block for haemoglobin and red blood cells, it's important to feed your foundation!



There are two types of iron found in food – 'haeme iron' found in meat, and 'non-haeme iron' found in plants. Haeme iron is more bio-available and therefore more easily absorbed than plant-based iron. Some sources include **red meat, chicken, duck, turkey, pork, fish and eggs.**



But vegetarians shouldn't fear – many plant-based foods contain iron, with top plant sources including green leafy vegetables (such as **spinach, silverbeet and broccoli**), **lentils, beans, nuts, seeds, whole grains and dried fruit.**

It's important to note that if you have an iron deficiency, diet alone may not be enough to restore your levels, but it can certainly help to maintain them once they're back to normal.

## Iron absorption

Bear in mind that food preparation and combining can affect how much iron you can absorb.



**Foods rich in Vitamin C** increase the uptake of iron. **Citrus fruits, tomatoes, berries, kiwifruit and capsicum** all encourage the uptake of iron. Simply toss some cherry tomatoes in your green leafy salad or squeeze some lemon over your salmon to boost your iron intake!



**Foods that can hinder iron absorption** include **coffee, tea, red wine and chocolate**, as well as calcium-rich foods such as **milk and cheese**. To ensure that you're getting the most iron from your food, drink your beverages between meals rather than with meals.