
Iron deficiency - adults

Summary

- Iron deficiency is when the stores of iron in your body are too low.
 - Common causes of iron deficiency in adults include not getting enough iron in your diet, chronic blood loss, pregnancy and vigorous exercise.
 - Some people become iron deficient if they are unable to absorb iron.
 - Iron deficiency can be treated by adding iron-rich foods to the diet.
 - If you are vegetarian or vegan, make sure there is enough iron in your diet.
 - If you have iron deficiency anaemia, your GP (doctor) may recommend that you take iron supplements.
 - Only take iron supplements under the guidance of your doctor.
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Iron is an important dietary mineral. It's needed for various bodily functions, including the transport of oxygen in your blood, which is essential in providing energy for daily life.

If you don't have enough iron in your diet, the iron stores within your body become depleted (low). This can make you feel tired and lower your immunity. Including iron-rich foods in your diet can help.

Your GP (doctor) may also recommend that you take iron supplements to increase your iron stores. But don't self-diagnose and take iron supplements without your GP's advice. Having too much iron in the body can be toxic and even cause death.

Iron deficiency is common

Iron deficiency is a common health problem. High-risk groups include:

- babies
- toddlers
- preschoolers
- teenagers – especially teenage girls
- menstruating women
- pregnant women
- lactating women
- female athletes.

Without treatment, a person whose dietary intake of iron is too low will eventually develop iron deficiency **anaemia**.

Stages and symptoms of iron deficiency

Most of your body's iron is in the haemoglobin of your red blood cells, which carry oxygen to your body. Extra iron is stored in your liver and is used by your body when your dietary intake is too low.

If you don't have enough iron in your diet, your body's iron stores get lower over time.

This can cause:

- **iron depletion** – when haemoglobin levels are normal, but your body only has a small amount of stored iron, which will soon run out. This stage usually has no obvious symptoms
 - **iron deficiency** – when your stored and blood-borne iron levels are low and your haemoglobin levels have dropped below normal. You may experience some symptoms, including tiredness
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- **iron deficiency anaemia** – when your haemoglobin levels are so low that your blood is unable to deliver enough oxygen to your cells. Symptoms include looking very pale, breathlessness, dizziness and fatigue. People with iron deficiency anaemia may also have reduced immune function, so they are more vulnerable to infection. In children, iron deficiency anaemia can affect growth and brain development.

Causes of iron deficiency in adults

In adults, some of the common causes of iron deficiency include:

- **not getting enough iron in your diet** (also known as 'inadequate dietary intake') – there are two types of dietary iron, haem iron (found in animal tissue such as meat, poultry and fish) and non-haem iron (from plant-based foods). Your body absorbs haem iron much more easily than non-haem iron. There are many reasons why someone's dietary intake of iron could be too low, for example due to a poorly balanced vegetarian diet, chronic fad dieting or having limited access to a wide range of fresh foods
- **blood loss** – iron deficiency easily occurs in situations of chronic (ongoing) blood loss. Common causes include heavy menstrual periods, regular blood donation, regular nosebleeds, other chronic conditions that involve bleeding (such as peptic ulcers, polyps or cancers in the large intestine), and certain medications, particularly aspirin
- **increased need for iron** – if you are pregnant or breastfeeding your body needs more iron. If this increased need isn't met, iron deficiency can quickly occur
- **exercise** – athletes are prone to iron deficiency because regular exercise increases the body's need for iron in several ways. For example, hard training promotes red blood cell production (which requires iron), and iron is lost through sweating
- **inability to absorb iron** – healthy adults absorb about ten to 15 per cent of dietary iron, but some people's bodies are unable to absorb or use iron from food.

Learn about [iron deficiency in children](#).

Don't self-diagnose iron deficiency

Since iron supplements are available without prescription, it can be tempting to self-diagnose, but this is not recommended because:

- Having too much iron in the body can be toxic and even fatal.
- Fatigue, paleness, dizziness and breathlessness are symptoms of many other health conditions, not just iron deficiency anaemia. Some of these other conditions are serious. Incorrectly self-diagnosing and self-medicating can be dangerous and can waste valuable time in getting the treatment you need. Getting the right treatment in the early stages of a disease offers a greater chance of recovery. So always visit your GP if you think you could be iron deficient.
- Iron supplements won't help the symptoms if iron deficiency anaemia isn't the problem. And you could be spending money on tablets you or your child don't need.
- Taking an iron supplement when you don't need it can interfere with your body's absorption of other minerals, including zinc and copper.
- Doses of iron prescribed for iron deficiency anaemia in adults can cause constipation, nausea, vomiting and diarrhoea, especially if supplements are taken on an empty stomach.
- About one in 300 people have **haemochromatosis**, which is an inherited condition that prompts the body to absorb more iron than usual. Excess iron damages the body's tissues and increases the risk of cancers and heart disease. People with haemochromatosis need to limit how much iron they consume.

Iron can be toxic

Iron overdose happens when you take too much iron in the form of supplements. Iron is toxic in large amounts and can be fatal at high doses.

If you suspect an iron overdose, call your doctor or the Victorian Poisons Information Centre on 13 11 26 immediately or go to your local hospital emergency department.

Children are especially at risk because they may mistake the red iron tablets for lollies. **Always keep iron supplements tightly capped and out of children's reach.**

Diagnosis and treatment for iron deficiency

Make an appointment with your doctor if you think you may be iron deficient. Diagnosis aims to exclude other illnesses that can have similar symptoms, such as coeliac disease.

Diagnosis methods include:

- physical examination
- medical history
- blood tests

In adults, treatment for iron deficiency depends on your iron status, and the underlying cause:

- **If you have iron depletion**, your doctor will give you information about including iron-rich foods in your diet. You will have another blood test in around six months to check that your iron level has improved.
- **If you have iron deficiency**, your doctor will give you dietary advice and closely monitor your diet. They will encourage you to have iron-rich foods and discourage you from having foods and drinks (such as bran, tea and coffee) that can interfere with iron absorption with meals. They will regularly review your iron status and may prescribe supplements.
- **If you have iron deficiency anaemia**, your doctor will prescribe iron supplements. It may take six months to one year for your body to restock its iron stores. Your iron levels will be regularly reviewed with blood tests.
- **If you have an underlying problem** that is causing your iron deficiency, it is very important that the cause is investigated. If it is a medical cause, it is important that it be treated appropriately.

Preventing iron deficiency

How much iron your body absorbs can be affected by:

- how much iron you consume
- the type of iron you consume (for example, whether it is haem or non-haem iron)
- other dietary factors – for example, vitamin C can help your body absorb iron, but tea can make it harder to absorb
- your current iron levels – when your body is low in iron, it absorbs a higher percentage of iron from your food. Absorption of iron from food is about 18% from a typical western diet (including animal foods) and about 10% from a vegetarian diet.

Talk to your doctor about healthy eating and getting enough iron in your diet. Some suggestions include:

- Wholegrain cereals, meat, poultry and fish are good sources of dietary iron.
- Liver is an especially rich source of iron, but avoid liver if you are pregnant because of its high vitamin A content.
- Choose iron-fortified breakfast cereals and breads.
- If you are vegetarian and have no animal tissue in your diet, you may need almost twice as much dietary iron each day as non-vegetarians. Plant-based sources of iron include: dark green leafy vegetables such as broccoli, raisins, nuts, prunes, dried apricots, seeds, dried beans and peas, and iron-fortified cereals, breads and pastas.
- Vitamin C increases iron absorption, so eat more brightly coloured fruits and vegetables.
- Cut back on the amount of tea and coffee you drink, especially around mealtimes, since the tannins in tea and coffee bind to the iron and interfere with absorption.

Where to get help

- Your GP (doctor)
- **Dietitians Association of Australia** Tel. 1800 812 942
- **Victorian Poisons Information Centre** – 7 days a week, 24 hours a day – for advice about poisonings, suspected poisonings, bites and stings, mistakes with medicines and poisoning prevention advice, Tel. 13 11 26.

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