Dietary iron makes healthy bodies

Key points

- Iron is an essential mineral your body needs to stay healthy.
- You get your iron from the food you eat.
- Haem iron, from animal-based foods like red meat, poultry, and fish, is easier to absorb than non-haem iron, from plant-based food like beans, lentils, spinach and fortified grains, but large amounts can increase the risk of some serious diseases.
- Some people have a higher risk of low iron levels.

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Why you need iron

Iron is an essential nutrient your body needs to stay healthy. Iron helps your red blood cells carry oxygen from your lungs to your tissues, skin and muscles. You need iron to build a

healthy immune system and have the energy you need to live a healthy life.

Signs of low iron

If you have low iron levels, you might experience:

- dizziness
- headaches
- loss of appetite
- poor exercise performance
- shortness of breath
- tiredness
- weakness

How dietary iron works

Dietary iron is the iron you get from the food you eat. Your body can’t make iron. That's why it's important to eat iron-rich foods to give your body the iron it needs.

Iron absorption

Your body needs iron every day, and the best way for your body to get iron is to absorb it from the food you eat.

In most cases, your body can regulate itself to absorb the right amount of iron it needs.

As your iron levels get lower, your body gets better at absorbing iron and excreting less.

Types of dietary iron

There are 2 types of dietary iron:

- haem iron
- non-haem iron

Haem iron comes from animal-based food and is easy for the body to absorb.

While haem iron is easy to absorb, eating a diet high in haem iron can increase your risk of heart disease and bowel cancer.

Non-haem iron comes from plant-based food and isn’t as easy for the body to absorb.

Although non-haem iron is a little harder to absorb, it’s easier for the body to regulate its intake. This means your body can choose to absorb more or less of this type of iron, depending on what it needs.

Find out how plant-based foods can help you meet your iron needs

Iron deficiency

There are 3 stages of low iron levels:

- iron depletion
- iron deficiency
- iron deficiency anaemia

Iron deficiency is one of the most common micronutrient deficiencies. It can happen if your body doesn’t absorb enough iron from your daily diet.

If you're worried about your iron levels, speak to your doctor. A GP can check your iron with a simple blood test.

Iron overload

Iron overload, or haemochromatosis, is a hereditary condition. It causes people to absorb and store too much iron in their body.

Usually, your body can safely store excess iron. But people with haemochromatosis can be at risk of organ damage and type 2 diabetes if they store too much iron.

If you have haemochromatosis, talk to your doctor about managing your iron levels.

Sources of dietary iron

Many people think dietary iron only comes from red meat. Yet there are many iron-rich foods, including other animal-based, plant-based and iron-fortified foods.

But some sources of dietary iron are better absorbed than others and can have a more positive impact on overall health.

Haem iron comes from animal-based foods and is easy for your body to absorb. But a diet high in these foods can lead to an increased risk of cardiovascular disease and colorectal cancer.

In contrast, non-haem iron comes from plant-based foods and is a little harder to absorb. But it doesn't have the associated risks of disease as high intakes of haem iron food sources.

Foods with non-haem iron are a valuable source of dietary iron and should be part of a healthy and well-balanced diet. In fact, most of the iron in the Australian diet comes from plant-based foods. Even for meat-eaters.

Foods high in iron

These iron-rich foods can help your body get the iron it needs:

- almonds
- amaranth
- baked beans
- cashews
- eggs
- dried apricots
- dried beans and lentils
- fish
- iron-fortified cereals
- leafy green vegetables
- legumes
- oats
- poultry
- quinoa
- red meat
- seeds
- tempeh
- tofu
- wholegrain bread and cereals

Read food labels to find out how much iron is in your food. You can also search for the iron levels of foods in the Australian Food Composition Database.

To make sure your body gets the iron it needs, eat a balanced diet of iron-rich foods with a higher proportion of plant-based than animal-based foods.

Eating to increase iron absorption

What you eat, and how you eat it, can make a big difference to how much iron your body absorbs.

- Avoid large amounts of calcium-rich foods and calcium supplements with your meals because they can reduce iron absorption.
- Avoid tea, coffee and red wine with meals because they can reduce iron absorption from foods.
- Eat foods containing vitamin C with your meals to help break down iron-rich foods for better absorption. Foods with vitamin C include citrus fruit, strawberries, kiwifruit, pawpaw, melon, green leafy vegetables, tomatoes, broccoli and capsicum.
- Eat meat and vegetables together to increase the amount of iron you absorb from your vegetables.

Iron-rich meal ideas

Try our delicious iron-packed menu to see how easy it is to get more iron into your daily diet.

Breakfast – option 1	**Bircher muesli** • Soak muesli and dried apricots in juice overnight. Top with yoghurt for a delicious high-iron breakfast.
Breakfast – option 2	**Eggs and avocado** • Poach 2 eggs and serve with avocado on toast. Top with green spinach and lime juice for a delightful iron-packed start to your day.
Lunch	**Falafels** • For an iron-intense lunch, make mixed bean and chickpea falafels. Serve them on a bed of quinoa and spinach with a dollop of mango chutney.
Afternoon snack	**Dried apricots** • Grab some dried apricots for a quick, iron-filled afternoon snack.

Dinner	**Stir-fry** • Finish your day with an iron-enriched dinner of stir-fried vegetables and kangaroo meat on brown rice. For a vegetarian option, swap the kangaroo for mixed beans, chickpeas or tofu.
Dessert	**Milo** • Add a final boost of iron with a yummy glass of Milo and milk. Warm or cold, whatever you prefer.

People most at risk of low iron

The amount of iron you need depends on your age and gender.

Low iron levels can happen for many reasons, including:

- eating foods low in dietary iron
- poor absorption of iron
- significant blood loss
- using more iron than usual during times of growth or exercise

Some people are more at risk of low iron levels.

Although people often think vegetarians have a higher risk of iron deficiency anaemia, most of the literature shows this isn't true. Vegetarians who eat a balanced, healthy diet usually aren't at any greater risk of low iron levels.

Those most at risk of low iron levels include:

- women
- athletes
- infants
- adolescents
- people aged over 75
- people who are pregnant
- people with some chronic health conditions

Women

Women are more likely to have an iron deficiency because they usually need a lot more iron than men, particularly during pregnancy. Women and teenage girls who menstruate are also at higher risk because of blood loss.

Athletes

Athletes often have low iron levels. This is because they need more iron for oxygen delivery and muscle recovery. An athlete might also have a restricted diet, which can be lower in iron.

Infancy, adolescence and pregnancy

People going through a stage of fast body growth need more iron. This means infants, adolescents and pregnant people can be at risk of low iron levels.

People aged over 75

People over 75 have a higher rate of iron deficiency anaemia than other Australians.

Chronic conditions

People who have conditions such as coeliac disease, Crohn's disease or ulcerative colitis are also at risk of low iron. These conditions can prevent the body from absorbing iron.

Iron supplements

If you have iron deficiency anaemia, your doctor might recommend you take an iron supplement. Iron supplements can have various side effects and may interfere with other medications. Always see your GP or an Accredited Practising Dietitian before taking an iron supplement.

When to see a dietitian



We recommend seeing an Accredited Practising Dietitian (APD) if you:

- are worried about how much iron you're getting from your food
- want to know how much iron you need at your stage of life
- need advice on how to get the right amount of iron into your diet
- want to know more about how your body uses iron from food

Accredited Practising Dietitians (APDs) are university-trained nutrition experts. They can help you with personalised, easy-to-follow and evidence-based advice.

APDs are Australia's most trusted dietetics professionals.

Find a dietitian

Top tips

- Eat many different types of iron-rich foods, including plant-based foods.
- Choose foods rich in vitamin C to eat with main meals because they increase iron absorption.
- Avoid tea, coffee and red wine with meals because they can reduce iron absorption from foods.
- See a dietitian for personalised advice on getting the iron you need from your diet.
- See your doctor if you're worried about your iron levels.

This health advice page was peer-reviewed by an Accredited Practising Dietitian (APD) in February 2022.