

Checking your diet

A healthy diet is one that is full of variety. It gives the range of things we need, is low in fat and tastes delicious!

To make sure your diet contains enough iron follow the guide below.

Count the servings of foods you eat

Choose:

- 1 serve of high iron foods, and
- 1 serve of medium iron foods, and at least
- 5 serves of low iron foods each day.

Vegetarians should choose:

- 4 serves of medium iron foods, and at least 6 serves of
- low iron foods every day.

High iron foods – choose 1 serve a day:

examples – 100–150g (2½ slices) of lean roast beef or leg of lamb; 1 small rump steak; 100–150g beef mince or trim lamb; 1 slice cooked liver, 4 tbsp liver pate; 120–150g (1 cup) mussels.

Medium iron foods – choose 1 serve a day:

examples – 100–150g (2 slices) lean ham, lean pork, 1 small chicken breast (skin removed), 1–2 chicken drumsticks, 1 large fish fillet, 60g (⅓ can) tuna drained, 135g (¾ cup) beans/lentils, ¾ cup tofu, 1 cup pasta cooked.

Low iron foods – choose 5 serves a day:

examples 1 cup breakfast cereal, 1 slice bread or half a muffin or ½ bread roll, 1 cup rice cooked, 1 egg (medium), ½ cup green vegetables, 2 tbsp dried fruit, 1 tbsp nuts, 1 tbsp peanut butter or tahini.

In addition:

- Use low fat dairy products with plenty of fruit and vegetables for best nutrition.
- Orange juice and vitamin C rich foods such as tomatoes, kiwifruit, oranges, broccoli enhance iron absorption from food. Tea and coffee reduce the iron absorbed from foods, avoid these drinks with iron rich meals.

If you are dieting you will need to plan your meals carefully to get enough essential foods such as iron.

The Haemoglobin Test (finger prick test)

This test is done before you give each blood donation. It measures the concentration of haemoglobin in your blood to confirm it is in the range required for blood donors and for blood donations.

If the test shows your haemoglobin is low, further tests are done to confirm the result and also to check your iron levels. We will contact you with the results.

The haemoglobin test is not strictly a test for 'iron'. It will be abnormal if any type of anaemia is present. Iron deficiency is only one cause for anaemia.

What happens if my iron level is low?

A person with low iron stores will still feel normal. There is sufficient iron to meet daily needs and make red blood cells but there is not much iron held in reserve.

If iron stores have been used up, iron deficiency is present and the person may feel unusually tired.

If iron stores fall further there will not be enough iron to make red blood cells and iron deficiency anaemia will occur. Treatment is likely to be needed.

A Warning About Iron Tablets

- No-one should take iron tablets unless blood tests for iron stores show that iron deficiency is present. Iron tablets should only be taken if recommended by a Doctor, or a Nurse with training in iron treatment.

Multivitamin tablets that contain iron and herbal iron remedies are not included in this warning and are acceptable.

- About 1 person in 300 absorbs excessive amounts of iron and develops a serious problem from iron overload and must not take extra iron tablets of any type. A common symptom of this condition is tiredness!

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Iron and you

Why iron is important to blood donors

SAVE LIVES
GIVE BLOOD

Iron and blood donations

Iron is an important part of red blood cells. It is needed to make haemoglobin, the protein that carries oxygen around the body and gives blood its red colour.

After you give a blood donation your body will absorb more iron from foods and build up your iron stores again.

This leaflet provides information about iron, keeping good levels of iron in your body and how giving blood affects iron. It provides a guide on how many donations you can give each year.

Why do I need iron?

We need iron to:

- Make red blood cells
- Help provide energy in our tissues
- Provide iron stores that can be used when needed

Most of our iron is in haemoglobin in blood.

- A healthy person has about 2000 mg of iron in red blood cells.

A small amount of iron is present in all tissues in enzymes. It is essential for handling energy. Tissue iron is needed for physical and mental activity.

- About 150mg of the body's iron is tissue iron.

Some iron is held in reserves as stored iron. This iron is used anywhere in the body when needed.

- In a healthy person, the amount of stored iron varies widely from only a few mg to more than 1000mg.

How much iron do I need each day?

Everyone loses small amounts of iron each day and most women have regular losses in menstrual periods. This iron is replaced by iron from foods.

- Men and women need about 0.5–1 mg of iron each day from food to replace losses from skin and other tissues.
- Women need about another 0.5–2 mg of iron each day from food to replace iron lost in menstrual periods.
- After giving a blood donation you will need an additional 2–2.5 mg of iron each day for about the next 3 months to replace the iron stores used to make new red cells.
- Special iron needs exist in pregnancy and during the teenage years while growing rapidly in height. An additional 1.5–2.5mg iron is needed each day at these times.

How many blood donations can I give?

The minimum time needed between whole blood donations is 12 weeks (3 months). In practice this means a maximum of 4 whole blood donations per year. This will reduce the risk of developing iron deficiency.

In practice not all donors will be able to sustain this level of donation. The following guideline will assist you to decide how frequently you can safely donate.

- Anyone who in the past has not met the haemoglobin requirement for donation should aim to give at most 2 donations per year.
- Women who are having menstrual periods should aim to give at most 3 times per year.
- Women who have passed the menopause can usually safely give 3–4 times per year.
- Most men can usually give blood 4 times a year without problems.

The number of blood donations listed above is a guide for people who eat meat regularly.

What if I am a strict Vegetarian or eat meat only occasionally?

We recommend that the number of donations given each year is reduced.

- Men can give blood donations every 6 months.
- Women will usually be able to give blood donations at 6 to 12 month intervals.

Please discuss with our staff if you need more information. Herbal iron products may increase iron absorbed each day

Iron and Foods

Iron is obtained from food. The amount of iron obtained from different foods varies a lot depending on the type of food.

- Red meats are the best source of iron.
- White meats (pork and chicken) contain moderate amounts of iron and fish contains less iron.
- Some vegetables and cereals contain moderate amounts of iron but only small amounts can be absorbed. The iron is in a form that is not easily absorbed. Fruits contain very little iron.

A healthy person with normal iron levels will absorb about 10% of the iron present in food. This low level of iron uptake is a natural mechanism to avoid iron overload in the body.

If iron deficiency is present the amount of iron that can be obtained from food is increased up to a maximum of 25-35%.

More iron is absorbed if:

- a blood donation has been given recently, or
- a person has lost blood for any reason, or
- the body has very low iron stores, or
- iron deficiency is present