

Iron intake in pregnancy and beyond

Information for patients



Leeds
Maternity Care

Why is iron important?

Iron is an important mineral that helps maintain healthy blood. It is needed to form healthy red blood cells. Red blood cells are made up of haemoglobin- a protein that contains iron and carries oxygen around your body for both you and your baby.

Iron is also important for building and maintaining healthy muscles and for many of the body's functions and reactions.

What can happen if I have low iron?

In pregnancy, as your baby grows and develops, some people can become short of red blood cells, which is called anaemia.

Your midwife will offer to do blood tests at the start of pregnancy and again around 28 weeks of pregnancy. One of these tests is to find out whether you have anaemia. Your midwife will also check your ferritin levels at these times. Ferritin is a good indicator of how much iron is stored within your body. Low ferritin levels indicate that you have low iron levels (iron deficiency). Once iron levels drop, you will produce less haemoglobin, and this then leads to anaemia. You can therefore have low iron (ferritin) levels but still not be anaemic, although the likelihood is that you will eventually develop anaemia. For this reason, we will offer treatment with oral iron if you have symptoms, and you are found to have low ferritin levels but are still not anaemic.

Rarely anaemia can be due to other reasons, apart from iron deficiency, such as folate or vitamin B12 deficiency.

Having low iron can make people feel more tired and lacking in energy than usual

A lack of iron can cause other symptoms such as tiredness, restless legs, dietary cravings known as pica, brittle nails, hair loss, dizziness, headaches, paleness, shortness of breath and heart palpitations.

It is important to speak to your midwife or doctor if you have any of these symptoms so they can make sure you are treated promptly and can rule out other problems.

What causes low iron levels?

Low iron levels occur when iron intake is not enough to match the body's iron needs. This can occur for a number of reasons but the four main ones are:

- 1) Increased demand** – children, pregnant or breastfeeding people have higher iron requirements to fuel growth.
- 2) Increased losses** – blood loss will result in a loss of iron. Relevant examples include heavy periods and blood loss after birth.
- 3) Reduced iron absorption** – seen in some medical conditions such as coeliac disease, pernicious anaemia (difficulty absorbing B12 vitamin) or following some types of surgery.
- 4) Lack of iron in the diet**

How are low iron levels commonly treated?

If a blood test shows that you are low in iron, your doctor or midwife will advise you to consider taking an oral iron supplement once a day on an empty stomach with a glass of orange juice, wherever possible.

Iron supplements can cause some mild, but harmless, side effects, like stomach pain, constipation and darker coloured poo.

Please speak to your healthcare team if you experience side effects of iron supplements that may prevent you from completing the treatment. This will inform your healthcare provider to review the treatment options with you in a timely manner.

Untreated iron deficiency has been linked with a higher chance of postpartum depression, fatigue, premature birth, babies being born a lower birthweight than expected and breastfeeding problems.

Less frequently, iron deficiency is treated by giving an infusion of iron into a vein. More information can be found about this treatment in the leaflet entitled 'Ferinject IV' here:



<https://www.leedsth.nhs.uk/patients-visitors/patient-and-visitor-information/patient-information-leaflets/maternity>

If you have a pre-existing haemoglobinopathy condition (such as sickle cell anaemia, alpha or beta thalassaemia), having a history of anaemia can be more common. In these circumstances, your pregnancy care will include input from a haematology specialist who can advise if iron treatment is required. If you are a carrier of a Haemoglobinopathy,

it is important to discuss the importance of iron intake in your diet with your midwife or GP prior to receiving iron supplements as this can cause iron overload.

How can I increase my iron intake through my diet?

Most people are able to get all the iron they need by eating a healthy and balanced diet. A healthy diet can be achieved by following the principles of the Eat Well Guide:



The Eatwell Guide - NHS (www.nhs.uk)

<https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/>

The following foods are all good sources of iron:

- red meat, oily fish and eggs
- green leafy vegetables such as broccoli or spring greens
- beans, such as red kidney beans, black-eyed peas, baked beans and chickpeas
- soya beans and soya products, such as tofu
- nuts and dried fruit, such as dried apricots
- wholemeal bread and fortified breakfast cereals.

Some foods help the body to absorb iron and some foods and drinks can stop iron being absorbed well

Eating vitamin C rich foods with meals can help you to absorb the most iron from the food you eat. Some examples of vitamin C rich foods include the following fruits and vegetables:

- kiwi fruit
- oranges (including fresh juice as a drink)
- potatoes
- cauliflower
- dark green leafy vegetables such as broccoli, spinach, kale, brussels sprouts
- parsley

Drinking tea and coffee (including decaf versions) can reduce iron absorption in the body, especially drinking them with a meal. Cutting down on caffeine intake is healthier for pregnancy but avoiding drinking tea and coffee for an hour before or after meals can help too.

'Steaming' rather than 'boiling' green vegetables can help to reduce the amount of iron and other vitamins and minerals that are lost during cooking processes.

After Birth and Future Pregnancy Planning

Continuing to eat a healthy, balanced and iron-rich diet after birth will help you to recover better and help you to maintain a healthy diet into the future

Further information on planning for and being healthy for future pregnancies can be found through the Tommy's planning for pregnancy interactive tool:

Planning for Pregnancy | Tommy's (tommys.org)



<https://www.tommys.org/pregnancy-information/planning-pregnancy/planning-for-pregnancy-tool>

Further information:



- NHS: 'Vitamins, supplements and nutrients in pregnancy' resource
<https://www.nhs.uk/pregnancy/keeping-well/vitamins-supplements-and-nutrition/>



- Tommy's: 'Iron in Pregnancy' resource
<https://www.tommys.org/pregnancy-information/im-pregnant/nutrition-in-pregnancy/iron-pregnancy>



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