Iron in your diet

Why is iron important?
Iron is important because it helps your body to make haemoglobin. Haemoglobin, or ‘Hb’, is the protein found in red blood cells that carries oxygen around your body and gives blood its red colour.

What can happen if I have low iron levels?
If the level of iron in your body falls, your red blood cells may not contain enough haemoglobin. At first, you may not notice any difference. However, if the amount of haemoglobin falls further, you may start to feel tired. If the shortage of haemoglobin is more severe, you may feel unusually weak or breathless.

This is called anaemia. There are different types of anaemia, but the most common type is caused by a shortage of iron, called Iron Deficiency Anaemia. Getting enough iron will help your body to work more efficiently and may speed up your recovery following an operation.

Where does iron come from?
You can usually get enough iron from a balanced diet as it is found in a variety of foods. In the UK the main sources of iron in our diet come from cereal, cereal products, meat, meat based foods and vegetables. We need a regular supply of iron in our diet as it is not easily absorbed by the body.

What causes low iron levels?
If you do not eat enough foods containing iron, your iron levels may be low. Vegans and vegetarians need to take particular care to ensure that they get enough iron in their diet as it is less easily absorbed by the body from sources other than meat.

Sometimes blood loss, for example during an operation, will result in a loss of iron. Girls and women who have heavy periods are more at risk of low iron levels because of their monthly blood loss. Pregnancy can also cause women to have low iron levels. Young children can also sometimes have low iron levels. Please speak to a healthcare professional if you have any questions or concerns about your baby or child.
Which foods are good sources of iron?
A varied and balanced diet should provide an adequate iron intake. The following foods are particularly good sources of iron:

- Lean red meat
- Turkey and chicken
- Liver is rich in iron, but it is NOT recommended for pregnant women because of its high Vitamin A content
- Fish, particularly oily fish which can be frozen or canned (such as mackerel, sardines and pilchards)

**Note:** Although eating fish is a good source of vitamins and minerals, during pregnancy or breast feeding you should avoid eating some types of fish and limit the amount you eat of others. More information is available on the NHS Choices website at: [http://www.nhs.uk/Conditions/pregnancy-and-baby/pages/foods-to-avoid-pregnant.aspx](http://www.nhs.uk/Conditions/pregnancy-and-baby/pages/foods-to-avoid-pregnant.aspx)

- Eggs
- Breakfast cereals – some cereals have been ‘fortified’ with iron
- Pulses and beans – in particular canned baked beans, chickpeas and lentils
- Nuts (including peanut butter) and seeds
- Brown rice
- Tofu
- Bread, especially wholemeal or brown bread
- Leafy green vegetables, especially curly kale and broccoli
- Dried fruit in particular dried apricots, raisins and prunes.

**What if I am vegetarian or vegan?**
Although iron from sources other than meat is more difficult for the body to absorb, if you are following a well balanced diet you should be able to get enough iron in your diet. Your healthcare professional can give you further advice, and if needed, you can be referred to a dietician.
What can I do to boost my iron levels?

• Try to eat a well-balanced diet, especially if you are pregnant or if you are waiting for an operation

• Vitamin C (sometimes called ascorbic acid) may help the body to absorb iron. To get the most iron from the food you eat, have Vitamin C rich foods with meals; for example, fresh vegetables or fruit, or drinks such as fresh orange juice.

A note about tea! Tea may reduce the absorption of iron from foods. Avoid drinking tea directly before, after or with meals and only drink tea in between meals.

If you know you have had low iron levels in the past, tell your healthcare professional so they can arrange a blood test if necessary to check your haemoglobin and iron level.

**Correcting a shortage of iron may reduce the chances of you needing a blood transfusion.**

Do I need to take iron tablets?

Most people should be able to get all the iron they need by eating a varied and balanced diet and should not need to take iron supplements or iron tablets. If the level of iron in your body is very low your doctor may recommend you take a tablet containing iron.

• Iron tablets should only be taken if your doctor has advised you to do so.

• Iron tablets can cause constipation or nausea (feeling sick) in some people. Speak to your healthcare professional if you experience any side effects; an alternative treatment may be available. These side effects should settle down over time, although you may be advised to take the tablets with food or shortly after eating to help minimise side effects, if they are severe. You may also be advised to take less tablets, if you are finding the side effects difficult to cope with.
Additional Information
As a precautionary measure to reduce the risk of transmitting variant Creutzfeldt-Jakob Disease (vCJD), people who have received a transfusion of blood or any blood component since 1980 are currently unable to donate blood or blood components.

If you are interested in finding out more about Anaemia please ask your healthcare professional for a copy of our leaflet ‘Anaemia – patient information’.

You may also find the following websites useful:

**NHS Choices:**
www.nhs.uk/Conditions/Blood-transfusion/Pages/Introduction.aspx

**NHS Blood and Transplant – Blood Website**
www.nhsbt.nhs.uk/what-we-do/blood-transfusion/

We would welcome your feedback and comments on this leaflet. You can contact us in the following ways:

**By post to:**
Customer Services, NHS Blood and Transplant,
Part Academic Block – Level 2, John Radcliffe Hospital,
Headley Way, Headington, Oxford OX3 9BQ

**By email to:** nhsbt.customerservice@nhsbt.nhs.uk

**Or by phone:** 01865 381010

This leaflet was prepared by NHS Blood and Transplant in collaboration with the National Blood Transfusion Committee. Further supplies can be obtained by accessing https://hospital.nhsbtleaflets.co.uk

Individual copies of this leaflet can be obtained by calling 01865 381010.
NHS Blood and Transplant

NHS Blood and Transplant (NHSBT) is a Special Health Authority within the NHS and provides the blood that patients receive. In order to plan for future blood demands, information about which patients receive blood needs to be gathered. We may ask a hospital or GP to provide limited medical information on a sample of patients who have received blood transfusions.

Any information that is passed on to NHSBT is held securely and the rights of these patients are protected under the Data Protection Act (1998).

For more information
Visit nhsbt.nhs.uk
Email enquiries@nhsbt.nhs.uk
Call 0300 123 23 23