

Family Friendly Factsheet

Iron and Anaemia



Iron is an essential mineral for adults and children as it plays an essential role in the formation of hemoglobin, the oxygen-carrying component of red blood cells (RBCs). RBC's circulate throughout the body to deliver oxygen to all its cells. Without enough iron the body can't make enough RBCs and the body's tissues and organs won't get the oxygen they require to function. It's important for children and adolescents to get enough iron in their daily diet so their bodies can grow and repair.

Children require different amounts of iron at various ages:

- Breastfed infants get enough iron from their mothers until 4 to 6 months of age when iron-fortified cereals are introduced; formula-fed infants should be offered iron-fortified formula milk.
- Infants aged 6 - 12 months require 11 milligrams of iron every day which can be achieved by offering iron-fortified cereal in addition to breast milk or iron-fortified formula milk.
- Children aged 1 - 12 years need 10 milligrams of iron each day. This can be achieved by offering a well balanced diet containing iron rich foods offered with foods/drinks rich in vitamin C.
- Adolescent boys require 11 milligrams of iron a day and adolescent girls require 15 milligrams of iron every day, to make up for menstrual losses. Again, this can be achieved by offering a well balanced diet containing iron rich foods offered with foods/drinks rich in vitamin C.
- If your child is a keen sportsperson then their iron requirements may be higher than the 'average child' hence an iron rich diet is recommended.

Without sufficient Iron in their diet children can suffer tiredness, fatigue, low concentration, diminished educational attainment and anaemia. It is vital therefore that your child has plenty of iron in their diet, if you have any concerns about iron deficiency in your child please consult your child's doctor.

What is Anaemia?

Anaemia is a condition where you have too few red blood cells or not enough haemoglobin in the

blood. This can make you feel tired, breathless and prone to faints. All of these symptoms are generally a cause of lack of iron in the body which is called iron-deficiency anaemia.

What are the causes and how to avoid developing anaemia?

The causes are a lack of iron in the body. Iron is an important ingredient of hemoglobin. If there is a shortage or deficiency of iron in the body this causes the bone marrow (which makes red blood cells) to make smaller red blood cells which contain insufficient hemoglobin and iron. This results in the red blood cells carrying insufficient oxygen to the organs and tissues of the body.

In developed countries such as the UK, iron deficiency usually happens when there is not enough iron in the diet, or if the iron in the diet is not absorbed properly. It can also occur if too much iron is lost through blood loss (adolescent girls).

Forms of Iron

Iron comes in two forms. The most easily absorbed form of iron is found in meat and fish, particularly red meat known as haem iron. The second form of iron, non haem iron, which is not so easily absorbed, is found in plant foods such as green vegetables and bread. If you are eating a food which contains the latter form of iron which is less easily absorbed you should aim to eat it with a food or drink rich in vitamin C, (e.g. fruit juice, kiwi fruit, tomatoes) as this helps to increase absorption. It should also be noted that tea and coffee can reduce iron absorption so these should not be offered at meal times.

Iron rich foods!

Good examples of iron rich foods include: lean beef, lamb, pork, chicken and turkey, oily fish including sardines, pilchards, mackerel and tuna, fortified breakfast cereals, wholemeal foods, beans and pulses, eggs, soya, dried fruits (especially figs and apricots), nuts and green leafy vegetables. These should be included in your child's diet every day.