Royal United Hospitals Bath MHS **NHS Foundation Trust**



Iron in Children's Diets

Child Health Information

Iron is an important mineral in a child's diet. It is not uncommon for the foods which children eat to be low in iron. This leaflet gives ideas about how to increase the iron in your child's diet.



Why is iron important?

Iron is needed to make red blood cells which carry oxygen around the body. It also plays an important role in brain development, in fighting infections and for growth.

It is not uncommon for children, particularly toddlers, to become low in iron. Children who do not eat enough iron containing foods may become tired, faint, pale, uninterested in play, may complain of headaches and often have small appetites. If the level of iron stores in the body falls anaemia may result.

Low iron can be diagnosed on blood tests looking for low iron stores ('ferritin'), smaller red blood cells than normal ('microcytosis') or anaemia (low haemoglobin).

Low iron is most commonly due to insufficient amounts of iron in the diet. Occasionally it can be due to other causes so your doctor may suggest further tests.

What can be done about low iron?

If the iron results on your child's blood test are very low it may be recommended that your child has iron medicine as syrup or tablets. These are usually given for 8 weeks or more. Sometimes a repeat blood test is needed to show that the levels have improved.

Even if iron medicine is prescribed it is important to ensure that the diet contains enough iron to make sure that iron levels do not fall again in future.

What are the best foods for iron?

There are two types of iron found in foods. The iron in meat, chicken and fish (haem iron) is better absorbed than the non-haem iron from plant sources. Vitamin C from fruit can help nonhaem iron to be absorbed. Try to include at least 2 or 3 iron rich foods every day.

A vegetarian diet can provide enough iron from but it is a bit harder to do. If your child does not eat meat you should include plenty of breakfast cereals, lentils, dhal, chickpeas, hummus and other pulses, fruit and green leafy vegetables and, if the diet can include these, eggs or oily fish.

Foods which are a good source of iron include:

Meat/Fish based Iron:

- Red meats such as beef, lamb and pork.
- Offal meats such as liver and kidney. (Liver is a good source of iron but should be limited to once per week because it contains high amounts of vitamin A)
- Chicken or turkey, particularly dark meat from legs and thighs.
- Fish (oily fish is best eg salmon, mackerel, sardines) and shellfish.
- Pate or fish paste.

Non-meat sources include:

- Iron-fortified breakfast cereals (check the label to see if iron is added).
- Wholemeal/wholegrain breads and cereals.
- Dried peas, beans and legumes eg. lentils, baked beans, soybeans, kidney beans and tofu.
- Leafy green vegetables eg. spinach, kale, broccoli, watercress.
- Eggs (mainly in the yolk)
- Dried fruit eg apricots
- Peanut butter and nuts (whole nuts are not recommended for children under five because of choking risk).
- Ovaltine[®], Horlicks[®] or similar fortified drinks
- Hummus and tahini.

Additional Tips:

Vitamin C in vegetables, fruit or fruit juice helps the body to absorb iron, especially from nonmeat foods.

Do not let your child drink tea with meals because this reduces the absorption of iron from foods.

Drinking large amounts of milk can mean children do not eat a healthy balanced diet and may not get enough iron from food. After their first birthday about three 120mls (4oz) cups of milk per day is usually enough.

Ideas for iron rich meals and snacks:

- Spaghetti Bolognaise
- Chilli con carne and rice
- Peanut butter sandwich with a small salad
- Liver pate on toast.
- Hummus and pitta bread with cherry tomatoes
- Baked beans on toast and half a glass of diluted fruit juice
- Bowl of breakfast cereal with milk and half a glass of diluted orange juice.
- Dried apricots
- A slice of fruit cake or dark ginger cake/gingerbread with diluted fruit juice.
- Two slices of malt bread with a glass of diluted fruit juice
- Hummus with raw vegetables.

Further Information

The British Dietetic Association has further information about all aspects of nutrition and diets http://www.bda.uk.com/foodfacts/