

All about iron in food

for babies, toddlers and young children

This fact sheet provides you with information on iron and good food sources to ensure that your child is getting enough iron every day.

Some facts about iron

- > Low iron (iron deficiency) is very common in Australian children.
- > The iron stores that babies build up before birth, along with the iron they get from breast milk or formula, is all the iron they need for the first 6 months of life.
- > Premature or low birth weight babies may not have enough iron stores at birth and are at risk of iron deficiency.
- > By around 6 months of age, iron stores start to reduce and breast milk or formula no longer provides enough iron.

Why is iron important?

Iron is very important for the transport of oxygen around our bodies. It is also important for normal brain development and a healthy immune system.

If not treated, iron deficiency can affect growth, ability to fight infections and brain development. Some symptoms to watch out for are:

- > Tiredness
- > Irritability
- > Loss of appetite

However, not all children will show symptoms of iron deficiency.

What causes iron deficiency?

- > Solid foods that contain iron should be given to babies from around 6 months of age. Introducing solids later than this can put babies at risk of iron deficiency.
- > Giving young babies cows milk instead of formula as a drink can also put them at risk of iron deficiency. Breast milk or formula should be the main drink until 12 months of age.
- > If toddlers or children drink too much cows milk they may eat less food, this can lead to iron deficiency. For most toddlers a maximum of 500mls of milk each day is plenty.
- > There are other less common causes for iron deficiency that your doctor can investigate if necessary.

A simple blood test can show if your child has low iron levels. Speak to your doctor if you have concerns.

Iron supplements may be used to help build up iron stores - follow the advice from your doctor.

Which foods contain iron?

There are two main types of iron found in food:

Haem iron is found in animal foods. It is well absorbed by our bodies:

- > Beef, lamb, liver
- > Pork, chicken, turkey
- > Fish

Red meat is the best source of haem iron.

Non-haem iron is found mainly in plant foods. It is not absorbed as easily by our bodies. It is still an important source of iron.

- > Iron-fortified cereals (eg baby rice cereal, weetbix)
- > Regular wholegrain cereals (eg wholegrain bread)
- > Legumes (baked beans, kidney beans, chickpeas, lentils)
- > Eggs
- > Green leafy vegetables
- > Peanut paste and other nut pastes
- > Dried fruit
- > Nuts/seeds (cashews, almonds, sunflower, linseeds sesame/tahini, pine nuts)

Non-haem iron is better absorbed if eaten with meat or foods high in Vitamin C. Some good sources of Vitamin C include:

- > Oranges
- > Strawberries
- > Tomato
- > Broccoli
- > Capsicum

How do I ensure my baby is getting enough iron?

Introduce solids around six months:

Include iron fortified baby rice cereal as one of your baby's first solid foods.

Help the absorption of iron from legumes and iron fortified cereals by serving them with a source of Vitamin C eg baby rice cereal with fruit.

Pureed meats, chicken, fish and legumes are appropriate for babies from about 6 months of age.

Give appropriate milk feeds:

Breast milk or formula should be your child's main drink until 12 months. Small amounts of cows milk may be given on cereal, as custards and yoghurts and in cooking from 6 months of age. Cows milk should not be the main milk drink until after 12 months.

Note:

- > Tea and coffee affect iron absorption and should not be given to young children.
- > Unprocessed bran affects iron absorption and should not be given to children in large amounts.

What iron rich meals are best to feed my baby?

Around 6 months to 7 months - smooth foods

- > Iron fortified baby cereal and pureed fruit.
- > Cooked red meat or chicken pureed with boiled water until it is smooth.
- > Pureed green leafy vegetables.

Around 7 months to 8-9 months – soft lumps

- > Finely chopped cooked meat served with mashed vegetables.
- > Mashed beef mince sauce with well cooked finely chopped pasta.
- > Mashed baked beans with wholegrain toast.
- > Scrambled egg with wholegrain toast.

Around 8-9 months to 12 months – finger foods and firmer lumps

- > Strips of meat or well cooked chicken.
- > Boiled egg and wholemeal toast fingers.
- > Wholemeal toast and peanut paste.
- > Cut up meat patties served with tomato sauce or salsa.
- > Tender casseroled meat.
- > Slices of ham.

What iron rich meals are best to feed my toddler?

- > Wholegrain cereal (e.g. Weetbix), milk and fruit
- > Peanut butter on wholemeal bread
- > Baked beans in tomato sauce with wholegrain toast
- > Ham/tuna/egg sandwich with wholegrain bread
- > Tacos with mince meat and kidney beans
- > Spaghetti Bolognese (try using chicken or pork mince for a different flavour)
- > Casseroled meat and vegetables
- > Lentil patties or Lentil soup
- > Pea and Ham soup
- > Minestrone soup with 4 bean mix
- > Omelette with tomato
- > Mild beef curry
- > Shepherds pie
- > Beef or chicken burgers on a wholemeal bun

What if my child does not eat meat or fish?

If your family is following a vegetarian diet, the quality of your diet is all the more important. Iron is not the only nutrient at risk in a vegetarian diet. A well planned menu will ensure your child receives all the nutrients they need to grow, develop and stay healthy.

Include a wide variety of foods such as legumes (e.g. baked beans, lentils), fruit, vegetables, ground nuts and seeds, soy products, wholegrain breads and cereals.

An iron supplement may be necessary. Iron supplements should only be given as advised by your doctor or dietitian.

If you are concerned that your child may not be getting enough iron in their diet you may like to see your General Practitioner (GP), an Accredited Practising Dietitian (APD) or a Paediatrician (child doctor).

Key points

- > Start solid foods, containing iron, from around 6 months of age.
- > Breast milk or infant formula should be your baby's main milk drink until 12 months of age.
- > Provide a well balanced diet from all food groups.
- > Include Vitamin C rich foods to help the absorption of non-haem iron.
- > Do not give tea, coffee or large amounts of unprocessed bran to young children.
- > Consult an Accredited Practising Dietitian (APD) if you are still concerned about your child's iron intake.

More information

Children, Youth and Women's Health Service (CYWHS)

Telephone (08) 8303 1500
www.cyh.com

Parent Helpline

Telephone 1300 364 100

The Feeding Book - From breastfeeding to solids for babies and younger children

Dietitians Association of Australia (DAA)

www.daa.asn.au

Dietary Guidelines for Australian Children

www.nhmrc.gov.au/publications/synopses/n1syn.htm

Food product information contained in this resource was up to date at the time of revision. If you are not sure about a food, check with the manufacturer.

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Revised and printed March 2010.

