# FACTSHEET

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# Ways to boost iron intake for babies, toddlers and children

This information, with its food examples, is intended for educational purposes only and does not constitute SCHN/JHCH endorsement of any branded food product.

#### 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, growth and fighting infections. Children who do not eat enough iron-containing foods may become tired, faint, pale, disinterested in play and may complain of headaches and often have small appetites. These can be symptoms of iron deficiency anaemia, where the body's iron stores have fallen too low. To maintain blood iron levels it is recommended that you eat a variety of foods that contain iron every day.

#### What are the best sources of iron?

Animal foods, such as red meat, fish, chicken pork and liver are the best sources of iron and are most easily absorbed by the body.

Iron from other sources, such as vegetables and cereals, are not as easily absorbed but are still important.

Animal foods (haem iron) include:

- Lean red meats such as beef, lamb and veal
- Turkey, chicken, pork (including ham), fish, tuna, salmon, mussels and shellfish
- Offal meats such as liver and kidney
- Eggs

Plant foods (non-haem iron) include:

- Tempeh, tofu
- Iron-fortified breakfast cereals (check the label to see if iron is added). e.g. WeetBix<sup>™</sup>, Farex<sup>™</sup>, Cerelac<sup>™</sup>
- Grains e.g. amaranth, quinoa
- Wholemeal/wholegrain breads, also some white bread brands have iron added check the labels
- Legumes e.g. lentils, baked beans, soybeans, kidney beans, chickpeas
- Leafy green vegetables e.g. spinach, parsley, broccoli
- Dried fruit e.g. apricots, sultanas
- Peanut butter and nuts (whole nuts are not recommended for children under five)
- Milo® or Ovaltine® for older children
- Tahini and hommus
- Seeds, e.g. sesame seeds

#### Making the most of iron

#### Vitamin C foods help iron absorption

Iron from all foods is absorbed better if eaten with a food containing vitamin C such as: citrus (orange, lemon, lime, mandarin), kiwifruit, pineapple, berries, tomato, capsicum, parsley, broccoli.

#### Calcium can decrease absorption

Large quantities of dairy products may interfere with the absorption of iron and may also decrease your child's appetite for food. A child over 12 months of age should be having no more than 500ml of milk each day to meet their calcium requirements.







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Tea and coffee decrease iron absorption and should not be given to young children.

#### What causes iron deficiency?

- Solid foods that contain iron should be given to babies from around 6 months of age. Introducing iron rich solids later than this can put babies at risk of iron deficiency.
- Breast milk or formula should be the main drink until 12 months of age. Giving infants under 12 months cows milk instead of formula as a drink can also put them at risk of iron deficiency.
- There are other less common causes for iron deficiency that your doctor can investigate if necessary.

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

### How do I make sure that 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.
- Pureed meats, chicken, fish, eggs and legumes are appropriate for babies from about 6 months of age. Pureed green leafy vegetables may be offered.

#### 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.

#### Around 7 months to 8-9 months – soft lumps

- Finely chopped cooked meat served with mashed vegetables.
- Mashed beef mince sauce and pasta.
- Mashed baked beans, scrambled egg, tuna or peanut butter with wholemeal toast.

#### Around 8-9 months to 12 months – finger foods

- Strips of meat, chicken or fish.
- Boiled egg or omelette with wholemeal toast fingers.
- Wholemeal toast and peanut butter.
- Cut up meat, tuna or lentil patties served with tomato sauce or salad/vegetables (e.g. cherry tomatoes, broccoli).
- Tender slow-cooked meat.
- Slices of tofu.

## What iron rich meals are best to feed my young child?

- Wholegrain cereal (e.g. WeetBix™), milk and fruit
- Peanut butter or baked beans on 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)
- Slow-cooked meat and vegetables
- Lentil patties or lentil soup
- Minestrone soup with 4 bean mix
- Omelette with tomato
- Mild beef curry
- Shepherd's pie
- Beef or chicken burgers on a wholemeal bun

#### Iron for older children

Iron requirements are higher during adolescence. Girls have higher needs than boys. It is important to continue to include iron-rich foods at each meal during teenage years, for example: iron-rich cereal at breakfast, high iron filling on wholegrain sandwich for lunch, and meat with dinner.

Iron requirements are even higher during pregnancy. Please discuss with your doctor.

#### What if my child does not eat meat or fish?

If your family is following a vegetarian diet, a well planned menu will make sure 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.

See also factsheet on vegetarian eating.

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.

#### **Key points**

- Start solid foods, containing iron, from around 6 months of age.
- Breast milk or infant formula should be your baby's main drink until 12 months of age.
- Include Vitamin C rich foods to help the absorption of iron.
- Iron requirements are higher during adolescence.
- Vegetarian diets can be balanced to make sure your child receives appropriate nutrition.
- Consult an Accredited Practising Dietitian (APD) if you are still concerned about your child's iron intake.

#### Acknowledgment:

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