2018 EDITION



Iron deficiency (low iron levels in your body)

Iron deficiency means you don't have enough iron in your body. Iron is a mineral you usually get from the food you eat. Iron gets stored in different parts of your body so your body including your brain can use the iron when needed.

Why do I need iron?

Everyone needs iron to be physically and mentally healthy. Iron helps:

- by carrying oxygen in your red blood cells from your lungs to your whole body
- · your body to fight infections
- your body to turn the food you eat into energy
- your body to grow and develop normally.

What happens if I don't have enough iron?

If the iron stored in your body gets low, you may:

- · feel you haven't got any energy
- get infections often.

Really low iron levels can lead to something called irondeficiency anaemia (you say a neem eea) where you have fewer red blood cells.

Who is most at risk of iron deficiency?

Women and teenage girls

Pregnant women need more than double their usual amount of iron. Women and teenage girls lose iron when they have their periods. Breastfeeding women need more iron

Babies and young children

Babies and young children need iron so their bodies and brains grow normally. If babies and young children don't get enough iron their brains don't develop normally which means those babies and children will have problems learning. In New Zealand 25% of children under the age of three years have anaemia. Children at greatest risk of anaemia are:

- children between 6 months and 2 years
- babies who were not normal weight when they were born and then put on a lot of weight
- babies who are given cow's milk rather than breast milk or baby formula with iron in it.

Babies should not have cow's milk until they are over 12 months. Cow's milk is not a good source of iron and can cause stomach upsets with some bleeding in the baby's stomach and more iron loss. Preschoolers should not drink tea as it stops iron being absorbed.

Teenagers

Young people grow a lot and need good quality food so they get enough iron and energy. Some teenagers don't eat enough food high in iron. Teenagers can also lose iron when they sweat a lot when playing sport or similar activities.

Vegetarians and vegans

It is harder to get iron from plants than from meat. So vegetarians and vegans may not get all the iron their body needs. Vegetarians and vegans need to get their doctor to check their iron levels. Dietitians can help vegetarians and vegans make sure they eat enough iron.

Athletes

Some athletes may not be eating a wide range of foods high in iron. Because the athletes are exercising and sweating so much they may be losing more iron than they are getting from their food.

People on low calorie diets

People who are on restricted diets may not be eating enough food high in iron to build their iron levels.

What are the signs of low iron levels?

You may not have any symptoms. Some people feel like they don't have any energy. Sometimes the skin or inside their mouth can look pale.

If you have anaemia you may:

- feel really tired
- · not be able to do physical activities
- feel breathless
- find it hard to concentrate
- · find it hard to learn
- have headaches
- get more infections
- be irritable and grumpy.

Other people may get heart pain or angina because their heart has to work harder.

How can I find out what my iron levels are?

You will need to have a blood test to check if you have low iron levels or anaemia.

Usually low iron levels are treated by taking iron supplements and/or changes to your diet.

You may need more tests to check for any health conditions that might be causing your low iron levels. If you have other health conditions your doctor will talk to you about treating these.

You may also need to have regular blood tests.



Patient information – Iron deficiency



How do I build my iron levels?

There are two ways you can do this – with iron supplements and by eating food high in iron.

Iron supplements

Iron supplements are usually tablets. If you need a lot of additional iron your doctor may give you an injection. Iron supplements can make your poo go black and you may get indigestion, constipation, runny poos or feel like you are going to be sick. If this happens tell your doctor – you might need a different tablet. Vitamin C also helps you absorb the iron in the tablets. A few people can store too much iron, so talk to your doctor before you start taking iron supplements.

Like all medicines iron supplements should be stored out of reach of children.

Supplements for infants and young children

Breast milk contains enough iron for babies until they are six months of age. From six to eight months of age babies need meat or cereals with iron in them (check the label). Babies who are not breastfed should have formula with iron in it (check the label) until 12 months old.

Make sure your child's diet has a wide variety of foods high in iron. Your child may need a liquid iron supplement if they have low levels of iron.

Eating food high in iron

Meat and fish – beef, lamb (especially kidneys and liver), veal, pork, poultry, mussels, oysters, sardines and tuna. Iron from these foods is called haem (you say heem) iron and is more easily absorbed into your body.

Fruits and vegetables – dried fruits such as prunes, figs, raisins, currants, peaches, and prune and blackberry juice, greens (spinach, silverbeet, lettuce), beans and peas, pumpkin and sweet potatoes. Iron from these is called non-haem iron. You need to eat a lot more of these foods to get enough iron.

Grains – oatmeal, breakfast cereals with iron added to them (check the label) and whole-grain breads.

Try and get iron from different foods – your body absorbs only a small amount of iron at a time, so you need to eat a lot of foods high in iron every day.

To get the most out of foods high in iron remember:

- eat foods rich in vitamin C (citrus fruits, leafy green vegetables) with your meal to help iron absorption
- don't drink milk or tea around meal times or when taking iron tablets as these drinks can stop iron from being absorbed.

How much iron should I eat each day?

These are the recommended daily amounts of iron

1–3 years	9 mg
4–8 years	10 mg
9–13 years	8 mg
14–18 years	11 mg (boys), 15 mg (girls)
19–50 years	8 mg (men), 18 mg (women)
50+ years	8 mg (men), 8 mg (women)

Iron content of 100g of common foods

lamb kidneys	(haem iron) 12mg
lean beef steak	(haem iron) 4.3mg
chicken breast	(haem iron) 1.9mg
tofu	(non-haem iron) 5.4mg
baked beans	(non-haem iron) 1.9mg
spinach	(non-haem iron) 1.3mg

For more information about the iron content of foods, go to www.nutritionfoundation.org.nz/nutrition-facts/minerals/iron

What if low iron levels aren't treated?

You can feel sicker and sicker, particularly if there is a reason for your low iron levels, such as stomach bleeding and it is not being treated. Remember if children don't have enough iron, their bodies and brains don't develop normally and the children can have problems learning. If babies with low iron levels don't get treated, the babies can have developmental and learning difficulties.

Additional information

Talk to Plunket or your Well Child Tamariki Ora provider about when to start solids with babies and the sorts of foods you can give babies (Plunketline 0800 933 922).

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