



Iron

The Body's Gold

Why do we need iron?

Iron is a mineral essential for good health and well-being. It helps carry oxygen to the brain and muscles, keeping us physically and mentally strong.

Who needs most?

- Infants, children and teenagers because they are growing rapidly
- Pregnant women
- Girls and women who have periods, due to regular monthly blood loss
- Athletes and very active people

If we don't have enough iron in our blood, we:

- feel tired
- have difficulty concentrating
- find it harder to learn
- feel cold
- are less able to fight infection

Children in particular may suffer long-term learning or development problems if they are iron deficient.

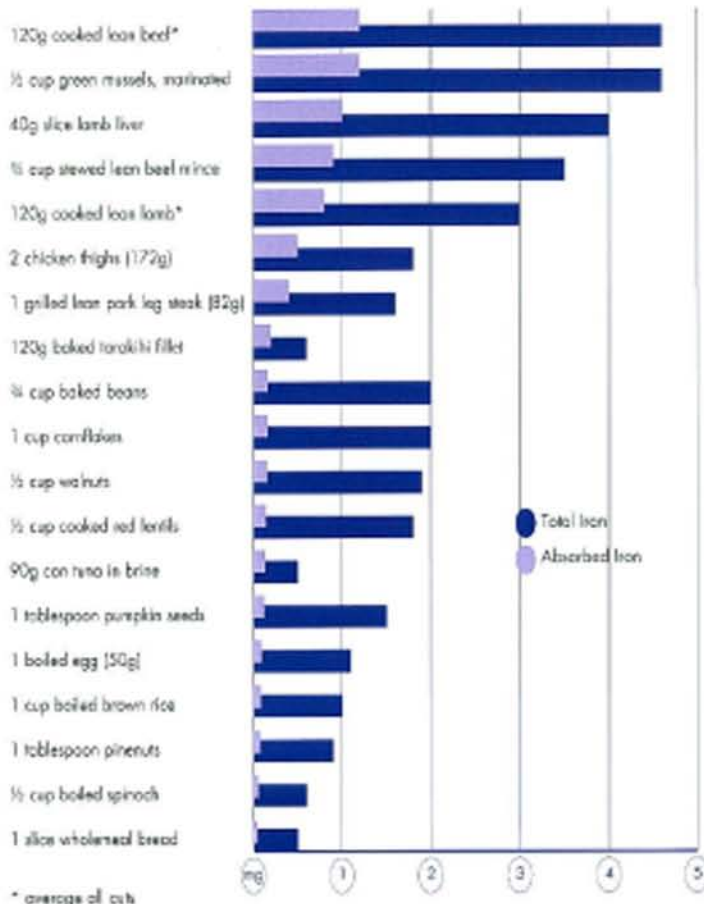
Iron: Where is it?

Iron is found in a number of foods, including red meat. In general, the redder the meat, the higher the iron content. But not all iron is the same. Iron is found in two forms: haem and non-haem.

Haem iron foods – beef, lamb, liver, pork, poultry, seafood

Non-haem iron foods – vegetables, bread, breakfast cereals, beans and lentils, eggs, nuts, fruit

The body absorbs haem iron more easily, with about a quarter being used, whereas only about 5% of non-haem iron is absorbed.



Red meat can help increase absorption, boosting the use of non-haem iron by up to four times. Vitamin C has a similar effect. Eating a combination of foods high in both haem and non-haem iron will ensure an iron-rich diet.



How much iron do we need?

	mg iron per day
Babies (7 - 12 months)	11
Children (1 - 13 years)	8 - 10
Girls (14 - 18 years)	15
Boys (14 - 18 years)	11
Women (19 - 50 years)	18
Pregnant women	27
Breastfeeding women	9 - 10
Women (over 50 years)	8
Men (over 19 years)	8

But what does this mean in terms of food? Here are some examples of everyday meals, which include both iron-rich foods, such as meat and fish, and those which help us use the iron more effectively, e.g. vitamin C-filled fruit juice with toast.

Iron-rich meal ideas

Breakfast	mg iron
• Bowl of iron-fortified cereal, such as cornflakes, and milk, topped with vitamin C-rich fruit, e.g. kiwifruit	3.2
• 2 slices wholemeal toast with peanut butter and a glass of fruit juice	2.2
Tip: Enjoy a cup of tea or coffee when you first wake up, rather than with your breakfast, as tea and coffee reduce iron absorption from foods such as cereal and toast.	
Lunch	mg iron
• Filled wholemeal roll with lean beef, lettuce, tomato and beetroot	4.6
• Egg sandwich, using wholemeal bread, with tomato and watercress	2.6
• Pita filled with lean lamb, lettuce, tomato and avocado	4.8
• Jacket potato filled with chili con carne (or baked beans), topped with cheese and served with lettuce, cucumber and tomato	4.9
Tip: Including meat and fish increases the absorption of non-haem iron from bread and vegetables. Add fresh fruit or fruit juice to maximise iron absorption.	
Dinner	mg iron
• Lean beef casserole with potatoes, pumpkin and broccoli	5.1
• Meatballs in a tomato-based sauce with pasta	6.0
• Lean lamb stir-fry with broccoli, capsicum and noodles, topped with sesame seeds	5.0
• Boil-up with brisket, kumara, potato and silverbeet	5.2
• Lean beef mince and red kidney beans, wrapped in a tortilla with lettuce, tomato and salsa	6.6
• Pizza topped with tuna and capsicum, served with a lettuce and watercress salad	3.7

Tip: Fruit desserts such as fresh fruit salad, stewed dried fruit or fruit crumble will help to increase both the iron content and absorption from the meal.

Snacks

Snacks can be useful iron-fillers too. Here are some ideas to boost your iron intake further:

	mg iron
• Liver pâté on 2 wholemeal and sesame crackers	1.8
• 1 slice of wholemeal bread and marmite	2.8
• Large handful / ¼ cup raw nuts, such as:	
Pistachios	2.2
Cashews	1.9
Almonds	1.6
Brazils	1.1
Walnuts	1.0
• Tablespoon of raw or toasted seeds/nuts, such as:	
Pumpkin seeds	1.5
Sunflower seeds	0.7
Pine nuts	0.9
• 10 dried apricots	1.1

Iron-rich meals for baby

Babies and toddlers need lots of iron because they are growing so rapidly. By around six months of age a baby's iron stores are beginning to run out. Solid foods are gradually introduced. These should include good sources of easily absorbed iron, such as purées of lean meat and liver, as well as vegetables and fruit. Try this Meaty Hot Pot recipe, which is suitable for the whole family.

Meaty Hot Pot

Suitable from 6 months

- 500g diced beef or lamb
- casserole meat such as beef chuck, blade steak or boneless lamb
- 420g can baked beans
- ½ small swede (or kumara), peeled and cubed
- 2 carrots, peeled and chopped
- 1 onion, peeled and chopped
- 2 Tbsp tomato purée*
- 1½ cups water
- 2 large potatoes, peeled and thinly sliced
- 1 tsp oil



In a large casserole dish, mix together the meat, beans, swede or kumara, carrots, onion and tomato purée. Stir the water into the casserole mix. Cover and cook at 180°C for ½ hour.

Remove the casserole from the oven and top with sliced potatoes, brushed with oil. Return to the oven, uncovered for 1 hour. Serve with seasonal vegetables.

***6-7 months - at this age, leave out the tomato purée. Purée the meat mixture or mash with a fork and serve with mashed potato slices and mashed vegetables.**

8-9 months - chop up the large pieces of meat and mash the vegetables roughly with a fork.

For more information, ask for the leaflets 'Is your baby getting enough iron?' and 'Easy Iron-rich meals for babies and toddlers'. Freephone 0800 733 466.

For more information about iron and health, and/or recipes please contact:

Beef and Lamb New Zealand, PO Box 33-648, Takapuna, Auckland 0740. Freephone 0800 733 466, or visit www.beeflambnz.co.nz

Health problems may result from an inadequate diet (including iron deficiency). They may also have a medical basis unrelated to diet. The information on this sheet is only general and is not to be taken as a substitute for medical advice in relation to specific symptoms or health concerns.

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