

## Iron-rich meal ideas

Following are examples of **everyday foods and meal ideas**, which include both iron-rich foods, such as meat and fish, and those which help us **use the iron more effectively**, eg vitamin C-filled fruit juice with toast.

- Breakfast** **mg iron**
- Bowl of iron-fortified cereal, such as cornflakes with milk, topped with vitamin C-rich fruit, eg kiwifruit — 3.2mg
  - 2 slices wholemeal toast with peanut butter and a glass of fruit juice — 2.2mg

**Tip: Drink tea or coffee when you wake up rather than with breakfast, as tea and coffee reduce iron absorption from foods such as cereal and bread.**

### Lunch

- Filled wholemeal roll with lean beef, lettuce, tomato and beetroot — 4.6mg
- Pita filled with lean lamb, lettuce, tomato and avocado — 4.8mg
- Jacket potato filled with chilli con carne (or baked beans), topped with cheese and served with salad — 4.9mg
- Egg sandwich using wholemeal bread, with tomato and parsley — 2.5mg

**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

- Lean beef casserole with potatoes, pumpkin and broccoli — 5.1mg
- Meatballs in a tomato-based sauce with pasta — 6.0mg
- Lean lamb stir-fry with broccoli, capsicum and noodles, topped with sesame seeds — 5.0mg
- Boil-up with brisket, kumara, potato and silverbeet — 5.2mg
- Lean beef mince and red kidney beans, wrapped in a tortilla with salad and salsa — 6.6mg
- Pizza topped with tuna and capsicum, with a lettuce and watercress salad — 3.7mg

**Tip: Fruit desserts such as fresh fruit salad, stewed dried fruit or fruit crumble, 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:

- Liver paté on 2 wholemeal sesame crackers (1.8mg)
- 1 slice of wholemeal bread and marmite (2.8mg)
- Large handful / ¼ cup raw nuts, such as: pistachios (2.2 mg), cashews (1.9mg), almonds (1.6mg), Brazils (1.1mg), walnuts (1.0mg)
- Tablespoon of raw or toasted seeds or nuts, such as: pumpkin seeds (1.5mg), sunflower seeds (0.7mg), pine nuts (0.9mg)
- 10 dried apricots (1.1mg)



## Iron-rich recipe for babies, toddlers and families: Meaty hot pot

### Ingredients - Serves 4

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

### Method

In a large casserole dish, mix together the meat, beans, kumara, carrots, onion and tomato purée (if using). Stir the water into the casserole and mix. Cover and cook at 180°C for ½ hour. Remove the casserole from the oven, top with sliced potatoes, brush with oil. Return to the oven, uncovered for 1 hour. Serve with seasonal vegetables.

**\*Babies 4-7 months:** At this age, leave out the tomato purée. Purée the cooked meal, or mash with a fork and serve with mashed potato slices and mashed vegetables.

**Babies 8-9 months:** Chop up the large pieces of cooked meat and mash the vegetables roughly with a fork.

## Iron-rich recipe for all the family: Cottage beef and pasta

### Ingredients - Serves 4-6

- 500g lean beef or lamb mince
- 1 onion, peeled and chopped
- 1 tsp minced garlic
- 3 stalks celery, finely chopped
- 1 tsp each dried basil and oregano
- 400g can peeled tomatoes in juice
- ¼ cup liquid beef stock
- 4-6 cups of your favourite cooked pasta shapes
- ¾ cup grated cheese

### Method

Preheat the oven to 190°C. Cook onion in a little oil in a frying pan on low heat for 5 minutes. Add garlic and cook for 1 minute. Set aside. Add mince to the pan and cook until brown. Return the onion and garlic to the pan with the celery and dried herbs, tomatoes in their juice and beef stock. Cover and simmer gently for about 30 minutes, stirring occasionally.

Pour the mince into a baking dish and mix in cooked pasta. Cover with grated cheese. Bake at 190°C for about 30 minutes until well coloured on top.



**Thousands**  
of New Zealanders  
aren't getting enough iron.



Are **YOU** one of them?

## Why do we need iron?

Iron is a mineral **essential for good health and wellbeing**. It helps carry oxygen to the brain and muscles, keeping us physically and mentally strong, and helps us make energy and fight infections. **Every cell in the body needs iron.**

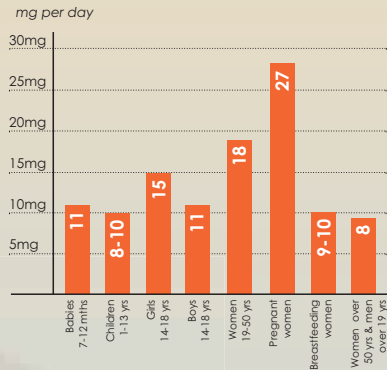
## Who needs most iron?

There are certain times when iron is particularly important. People who have higher iron needs include:

- **Infants, children** and **teenagers** because they are growing rapidly.
- **Pregnant women** for increased blood levels and to build baby's iron stores.
- **Girls and women** who have periods, due to regular monthly blood loss.
- **Athletes** and very **active people**.
- People on **restricted or fad diets**.



## How much iron do we need each day?



## Could you be short of iron?

The symptoms of iron deficiency are commonly associated with a 'busy lifestyle' or 'a bug'. If you can tick any of the boxes **you may be short of iron**.

- |   |  |
|---|--|
| <input type="checkbox"/> Feel tired or lethargic    | <input type="checkbox"/> Feel the cold     |
| <input type="checkbox"/> Often irritable or grumpy  | <input type="checkbox"/> Tired easily      |
| <input type="checkbox"/> Suffer frequent infections | <input type="checkbox"/> Can't concentrate |

**Thousands** of New Zealand **babies, teenage girls, pregnant women** and **athletes** are short of iron.

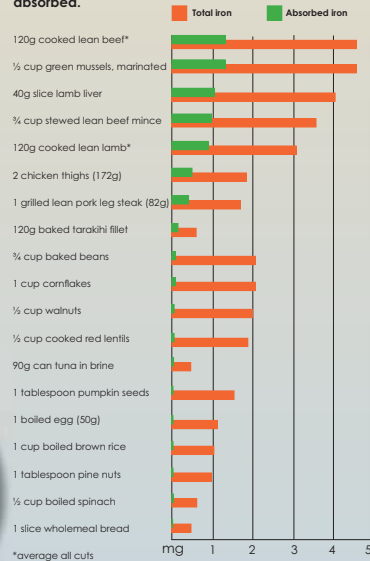


## Iron: where is it?

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, kidney, pork, poultry, seafood.
- Non-haem iron foods:** bread, breakfast cereals, beans and lentils, eggs, nuts, fruit and vegetables.

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



## How can I absorb more iron?

Red meat can help to 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**.

For example, eating just 120g of lean beef steak provides the same amount of iron as a massive 3kg of spinach. This provides **over a third** of a woman's daily iron needs.



120g lean beef steak



3kg spinach

Your body can use about **25%** of the iron in red meat, but only about **5%** of the iron in spinach.

## Restricted diets

Those who exclude meat from their meals rely on the less well-used non-haem sources of iron. As a result, the New Zealand Ministry of Health suggests vegetarians and vegans need about 80% more iron in their diet than those eating meat. Including foods containing vitamin C in each meal increases the amount of iron used by the body, ie having a glass of orange juice with an iron-fortified breakfast cereal. Avoiding tea with meals is particularly important for non-meat eaters.

## Babies and toddlers

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.



For more information about iron and health, and/or recipes please contact: **Beef + Lamb New Zealand**, freephone 0800 733 466, [www.beef+lambnz.co.nz](http://www.beef+lambnz.co.nz), or find us on Facebook for more recipes and value tips: [www.facebook.com/newzealandbeefandlamb](https://www.facebook.com/newzealandbeefandlamb). For specific information about babies and toddlers, ask for the leaflets 'Is your baby getting enough iron?', 'Iron for toddlers' and 'Easy iron-rich meals for babies and toddlers'.

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