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"The first wealth is health."
— Ralph Waldo Emerson

IRONING OUT THE facts

Iron is an important part of a healthy diet for all women, men and children. Are you getting enough each day? By Kristen Beck



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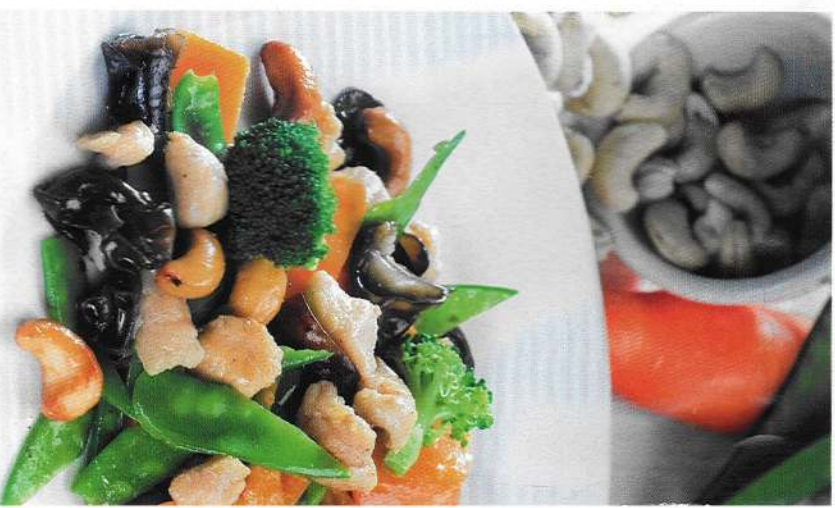
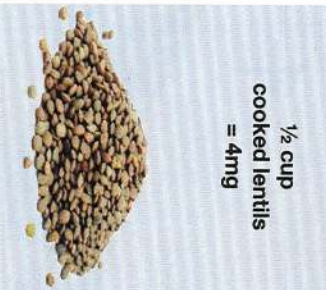
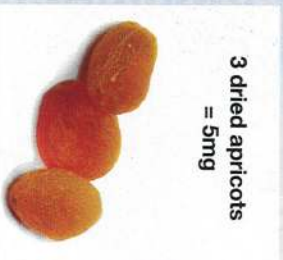
What does iron do?

Iron is involved in pretty much every energy-producing chemical reaction in the body. The link between iron and health has been known for centuries. In 4000 B.C., Persian sailors used iron supplements to compensate for the iron from blood loss during battles. Today the World Health Organisation considers iron deficiency to be the number one nutritional deficiency globally. Almost two-thirds of the iron in our body is used in the production of haemoglobin (carries oxygen in the blood), which is essential for energy production, optimal metabolism and immune function. The body also uses iron to create myoglobin (carries oxygen into and around muscles) and in thousands of biochemical reactions.

RDI and iron rich foods

	RDI (Recommended Dietary Intake)	Iron rich foods	approx mg per serve
Women 19-50 years	18mg	Cashew nuts (1/2 cup)	4.7mg
Women 50+ years	8mg	Oatbran cereal (1 cup)	15mg
Teenage Girls	15mg	Beef/lamb, lean, 100g	3mg
Teenage Boys	11mg	Turkey, lean, 100g cooked	2.5mg
Men	8mg	Fish, 100g cooked	1mg
Children	8-10mg	Egg, 1 large	1mg

Ways to get the iron that you need



When do you need to increase your iron intake?

Everybody needs iron, but pregnant women, infants and toddlers require the most. Teenage girls, women experiencing heavy menstruation, athletes and very active individuals are especially prone to iron deficiency. Regular exercise increases the body's need for iron by increasing red blood cell production and iron is lost in perspiration.

Meat vs. Vegetarian sources of iron

Iron in foods is in two forms: haem iron (from animal foods – particularly meat) and non-haem iron (from plant foods). Haem iron is absorbed much more effectively than non-haem iron (haem iron 30% versus non haem 2--10%). All types of meat, poultry and fish are valuable sources of dietary iron. This does not, however mean that vegetarians are forever doomed to iron deficiency. Naturally iron-rich plant foods include oat bran, spinach and kidney beans. Many breakfast cereals and grain products (including breads) are fortified with iron and are an important source of iron in Australian women's diets.

Vegetarians can boost the efficiency of non-haem iron absorption by consuming vitamin C rich foods in the same meal. While vitamin C may boost iron absorption, other naturally occurring nutrients such as phytic acids (in grains), oxalic acids (in green leafy vegetables), calcium (in dairy and calcium supplements) and polyphenols (in tea and coffee) can all reduce your body's ability to absorb non-haem iron.



If you are a meat eater, eating a medium serving of lean red meat (about 300g) twice per week should normally provide you with all the iron you need. The vegetarian equivalent could be 1-cup of cooked lentils, baked beans or tofu.

Tips to help you reach your iron requirements

Anaemia and iron deficiency

A deficiency of iron means that, over time, less oxygen is delivered to the body cells, causing tiredness, lethargy and impaired physical and mental performance. Iron deficiency normally progresses in three stages.

- 1 The first stage is iron depletion, where haemoglobin (blood) levels are normal, but the body's stored iron levels are very low. This stage is usually symptomless.
- 2 The second stage is iron deficiency, where both stored iron and haemoglobin levels have dropped below normal and you may experience symptoms including fatigue.
- 3 The third (and most serious) stage is iron deficiency anaemia, where haemoglobin levels are so low that the blood is unable to deliver enough oxygen to the cells. Symptoms include a very pale appearance, breathlessness, fatigue as well as impaired immune function.

The World Health Organisation estimates that as many as 80% of the world's population may be iron deficient, while 30% may have iron deficiency anaemia.



Tips for boosting iron intake

- Liver is an especially rich source of iron however pregnant women should avoid liver because it also contains very high levels of vitamin A.
- Avoid or limit tea and coffee, especially around mealtimes as it can reduce iron absorption.
- Many iron supplements can cause constipation. Be sure to increase fibre-rich foods and water in your diet to manage this.