

## Iron

### Functions Of Iron

Iron has many important functions. In red blood cells, iron combines with protein to form haemoglobin - the red pigment that carries oxygen in the blood. A lack of iron limits the production of haemoglobin and hence the amount of oxygen delivered to body cells. All cells require oxygen for survival.

In muscle cells, another iron-containing protein, myoglobin, provides oxygen for muscular activity. Muscles tire quickly if oxygen is limited.

Note: A lack of folic acid, vitamin B12 or zinc will reduce the actual number of red blood cells produced. This can also lead to anaemia.

### Iron Requirements

The recommended dietary intake for iron per day is:

Infants:	0 - 6mths-breast fed	0.5mg
	Bottle fed	3.0mg
	7-12mths	9.0mg
Children:	1-11yrs	6-8mg
Adolescents:	12-18yrs	10-13mg
Men:		7.0mg
Women:	Menstruating	12-16mg
	Pregnancy (2nd/3rd trimester)	22-36mg
	Breast-feeding	12-16mg
	Post-menopausal	5-7mg

An iron supplement is recommended: during pregnancy; for women with a heavy menstrual cycle; and for people with diagnosed anaemia. Dieters may benefit from a general multi-vitamin and mineral supplement that contains small amounts of iron.

Note: Excess iron can be toxic. Keep out of the reach of children.

### Iron Absorption

The iron figures take into account the varying availability of iron from food. On average, only 10% of iron in plant foods is absorbed, and some 20% of iron in animal foods.

Iron absorption is enhanced by:

- ⇒ Vitamin C containing foods eaten with the meal.
- ⇒ Small amounts of meat, poultry or fish aids absorption of iron in vegetables.

Iron absorption is inhibited by:

- ⇒ Tannins in tea - iron absorption can be halved. Avoid drinking tea within 1 hour after a meal.
- ⇒ Excessive bran fibre and calcium supplements.
- ⇒ Antacids containing sodium bicarbonate.