



<b>Iron</b>	
<b>Description</b>	Iron is an essential trace mineral.
<b>Function</b>	Iron is essential for the formation of haemoglobin which is present in red blood cells. Haemoglobin is being formed in the body all the time and is the substance in red blood cells that transports oxygen around the body.
<b>Human Requirements</b>	EU RDA: 14mg
<b>Dietary Intake<sup>1</sup></b>	In the UK, the average adult diet provides: for men 13.2mg daily; for women, 10mg.
<b>Food Sources</b>	Liver, kidney, heart, red meat, beef, pork, canned pilchards/sardines, fish, shellfish, wholegrain cereals, eggs, spinach, chicken, leafy green vegetables, fortified breakfast cereals. Iron is most easily absorbed from animal sources. Vitamin C improves the absorption of iron from plant sources.
<b>Deficiency Symptoms</b>	Anaemia, concave and brittle nails, sore tongue, cracking in the corners of the mouth, increased susceptibility to infection. Also, tiredness, muscle fatigue, skin itching, dizziness, headache, insomnia, brittle hair and hair loss.
<b>Precautions / Contra-Indications</b>	Iron supplements should be avoided in conditions associated with iron overload (e.g. haemochromatosis, haemosiderosis, thalassaemia), and gastrointestinal disease, particularly inflammatory bowel disease, diverticulitis and peptic ulcer <sup>1</sup> . Overdose of iron is dangerous, particularly in young children. Safe Upper Level: 17mg <sup>2</sup>
<b>Pregnancy &amp; Breastfeeding</b>	Iron supplementation is not generally required in pregnancy, but iron status should be monitored.
<b>Adverse Effects<sup>1</sup></b>	Iron supplements may cause gastrointestinal irritation, nausea and constipation, which may lead to constipation, particularly in the elderly. Patients with inflammatory bowel disease may suffer exacerbation of diarrhoea. Liquid iron preparations may stain the teeth.
<b>Interactions<sup>1</sup></b>	Antacids, tetracyclines, calcium carbonate or calcium phosphate, and zinc may reduce the absorption of iron - give 2hours apart. Large doses of iron may increase requirement for vitamin E.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Mason, P. Dietary Supplements. Pharmaceutical Press, London, 2001.</li> <li>2. Expert Group on Vitamins and Minerals, 2003.</li> </ol>