Extracting Iron from Breakfast Cereal

All the iron in your body would be enough to make 2 small nails!

Iron facts

- Iron is essential to produce energy.
- It carries oxygen in the red blood cells around our bodies.
- It increases the solubility of oxygen in blood so that our bodies can power our metabolism.
- It gives blood its characteristic red colour.

Iron deficiency

Not enough iron in our bodies leads to fewer red blood cells and a condition called anaemia. Symptoms include fatigue, paleness, lack of endurance, cold hands and increased susceptibility to infection. Athletes must ensure they have plenty of iron in their diet to maintain peak performance.

Sources of iron

- Red meat (the richest source);
- Fortified cereals;
- Nuts and seeds;
- Dried fruit (apricots, peaches, raisins and prunes);
- Dried beans;
- Dark green leafy vegetables.

To fortify foods such as breakfast cereals, iron is added in the reduced form and is converted to the active ionic form (Fe^{2+}) by stomach acid. When mushed up, the iron in cereal can be extracted with a magnet.