

Extracting Iron from Breakfast Cereal

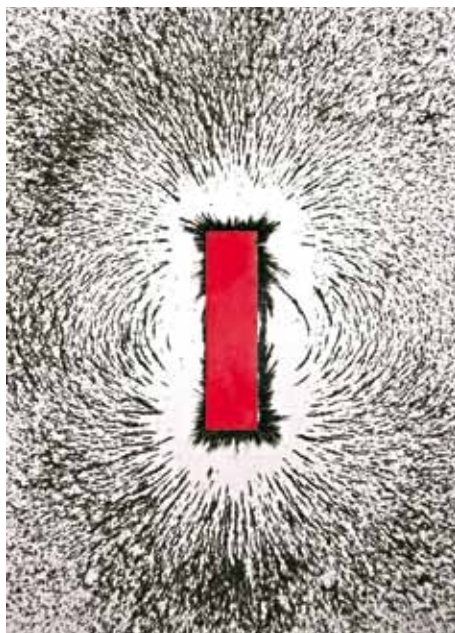
What you'll need:

- Breakfast cereal containing iron
- Water
- Mortar and pestle
- Beaker
- Strong magnet

How you do it:

1. Place a few flakes of cereal on a table or bench surface. Hold the magnet close to the flakes and see if they stick to the magnet or are moved by it.
2. Reduce the size of some dry flakes by crushing them to a fine powder using a pestle and mortar. Spread the resulting powder on a piece of paper.
3. Place a magnet under the paper and move the paper over the magnet. Observe any effect the magnet may be having on the movement of the powder.

Do **NOT** put the magnet in direct contact with or close to the powder without the paper in between.
4. With careful manoeuvring, it should be possible to separate out fine grey specks of iron from the rest of the powder.



How does it work?

Many breakfast cereals are fortified with iron particles as a mineral supplement. Iron is found in a very important component of your blood called haemoglobin. Haemoglobin is the compound in red blood cells that carries oxygen from your lungs around the body. It's the iron in haemoglobin that gives blood its red appearance. All the iron in your body would be enough to make 2 small nails!

As with all science experiments, make sure you have a responsible person supervise you at all times. And remember to have fun!

