Bendy bones

What you'll need:

- Two bones (e.g. chicken drumsticks)
- Vinegar
- A jam jar or bowl with a lid

How you do it:

1. Soak one of the bones in vinegar for 1 week.
2. Remove the bone from the vinegar using gloves and rinse well.
3. Try to bend the normal bone and then try to bend the bone which has been soaked in vinegar – how do they compare?

How does it work?

Normally bones are strong, they do not break easily and they do not bend. This is because they contain a very hard substance called calcium carbonate, which is made from calcium, carbon and oxygen. When bones are placed in vinegar, the calcium carbonate and the vinegar react and produce a gas called carbon dioxide. Can you see small bubbles on the surface of the bone in vinegar? This is the carbon dioxide being produced. Without calcium carbonate the bones become much softer - that's why we can bend them.

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

Scan the QR code to watch a video

We get the calcium we need for strong bones from our food. Can you guess which food has the most calcium?

Food

Most calcium

Least calcium