

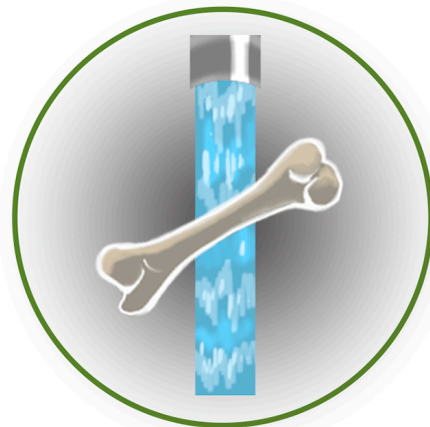
BEND A BONE WITH VINEGAR!

YOU WILL NEED:

- A jar large enough to fit a chicken bone
- A chicken bone – a leg or “drumstick” bone works best
- Vinegar

WHAT TO DO

1. Have a nice chicken dinner and save a bone. Leg bones work best.
2. Rinse off the bone in running water to remove any meat from the bone.
3. Notice how hard the bone is – gently try bending it. Like our bones, chicken bones have a mineral called calcium in them to make them hard.
4. Put the bone into the jar and cover the bone with vinegar. It might be a good idea to put the lid on the jar or cover it – let it sit for 3 days
5. After 3 days remove the bone. It should feel different. Now you can rinse it off and try bending it again. Is it really a rubber bone?



HOW DOES IT WORK?

So what happened? What is so special about vinegar that it can make a hard bone squishy? Vinegar is considered a mild acid, but it is strong enough to dissolve away the calcium in the bone. Once the calcium is dissolved, there is nothing to keep the bone hard – all that is left is the soft bone tissue. Now you know why your mom is always trying to get you to drink milk – the calcium in milk goes to our bones to make our bones stronger. With some effort and you can really get the bone to bend.

MAKE IT AN EXPERIMENT:

The project above is a DEMONSTRATION. To make it a true experiment, you can try to answer these questions:

1. Does the length of time the bone is in vinegar affect how much the bone bends?
2. Do smaller size bones become “bendy” sooner?
3. Do different types of vinegar affect how bendy bones become ?