

TRY THIS OUT!

Growing Gummies

After sugar, the main ingredient in gummy bears is gelatin. If you've ever made Jell-O®, you've seen gelatin in action. This super-easy experiment shows another interesting thing that gelatin can do.



What you'll need



gummy bears



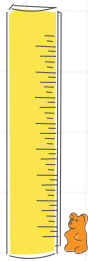
water



cup or bowl

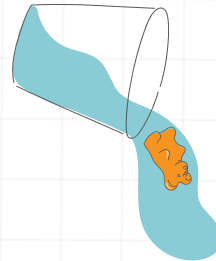


ruler



Step 1

Measure a gummy bear and record the height.



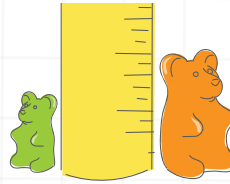
Step 3

Gently pour out the water. Be careful, the gummy bear will be fragile.



Step 2

Place the gummy bear in a cup of water. Let it sit overnight.



Step 4

Measure the gummy bear again and record the height.

WHAT'S GOING ON?

The polymer chains in gelatin are all tangled up and cross-linked to each other. The way these chains are twisted together creates tiny pockets where liquid can be trapped. When you put your gummy bear into the water, the water moved into these pockets, making the bear swell up. Gelatin can absorb a lot of water—up to 10 times its weight!

HEIGHT

before water

after water

tinker!

Use a kitchen scale to weigh the gummy bear before and after to figure out how much water is absorbed.