

Are you ready to uncover the fascinating world of gummy bears and how they behave with water? In our Gummy Bear Osmosis Experiment, we'll discover a super cool process called osmosis. We'll place gummy bears in two different liquids - plain water and salty water - and see what happens!

Materials

- Gummy Bears
- Two bowls
- Water

Science Behind the Experiment

The gummy bear osmosis experiment demonstrates the principles of osmosis, which is the movement of water through a semipermeable membrane from an area of lower solute concentration to an area of higher solute concentration.

When you place a gummy bear in plain water, which has a lower solute concentration than the gummy bear, osmosis occurs. The gummy bear's semi-permeable membrane allows water molecules to pass through, but not the larger sugar molecules present in the gummy bear.

On the other hand, when you place a gummy bear in saltwater, the saltwater has a higher solute concentration than the gummy bear. In this case, water molecules move from inside the gummy bear to the saltwater and the gummy bear becomes smaller.

Step 1: Gather Materials

Gather the materials you'll need for the experiment. You'll need gummy bears, two small bowls or cups, and water.

Step 2: Prepare the setup

Place one gummy bear in each bowl or cup. Fill one bowl with plain water and the other with a solution of saltwater (mix water and salt together).

Step 3: Wait and Observe

Let the gummy bears sit in the water and saltwater for several hours or overnight. During this time, the gummy bears will absorb the water through osmosis.

Step 4: Compare the Results

After the waiting period, take out the gummy bears and compare them. Observe any changes in size, texture, or appearance between the gummy bear in plain water and the one in saltwater. Discuss your findings and learn about osmosis!