Growing Gummies

<u>Materials</u>

Gummy bears*
2 bowls
Salt
Water

*If you don't have gummy bears you can use any gummy candy or raisins







Children's Services Council Healthy: Safe. Strong.

Students will learn about osmosis with a squishy science experiment!

3rd - 5th Grade

What to do

First, fill one of the bowls with hot water. Always be careful working with hot water and have an adult help you. Now mix in a little bit of salt until it dissolves. Repeat until no more salt will dissolve. Set it aside to cool. When the hot water has cooled down to room temperature, fill another bowl with plain water.

Next, drop 1 or 2 gummy bears into each bowl of water - make sure you know which bowl is the salt water and which is the plain water. Take one more gummy bear and set it aside. We will use this as a comparison to see if the gummy bears in the water have changed at all. Put your bowls of water somewhere where they won't get spilled or knocked over for a few hours and then come back and check on the gummy bears. What happened? Leave them in the water and check back in a few more hours.

What's going on with those gummies?

When you dissolve something like salt in water it makes a **solution**. The amount of stuff dissolved in the solution is called the **concentration**. Water will sometimes flow from a solution with a lower concentration to one with a higher concentration. This process is called **osmosis**. When the gummy bear sits in the water for a long time, some of the water flows into the gummy bear because of osmosis. This makes the gummy bear swell and get bigger. The gummy bear in the salt water doesn't get as big because the concentration is higher which means less water flows into the gummy bear through osmosis.

Check out this <u>worksheet</u> for a better look at osmosis in action!