

# Gummy Bear Osmosis

with UT Women in Natural Sciences

Learn about osmosis by observing how water moves in and out of gummy bears! In this experiment, you will compare the sizes of gummy bears that were soaked in tap water and salt water to determine what makes water move!

## Materials:

- 2 bowls
- Water
- Salt
- Different colored gummy bears

## Procedure:

1. Boil a cup of water and slowly add salt until no more salt will dissolve in the boiling water (remember to be careful when dealing with hot liquids!).
2. Cool the water in the refrigerator.
3. Once it is cooled, fill one bowl full of salt water. Fill the other bowl with tap water.
4. Pick out a few gummy bears of roughly equal size and place an equal amount in each of the two bowls. To help visualize this, we recommend putting the gummy bears of the same color in one bowl and filling the other bowl with gummy bears of another color.
5. Let the gummy bears soak for several hours (we suggest starting this in the evening and then looking at them the next day) and make predictions about what will happen to the gummy bears in each bowl.
6. Check on your gummy bears the next day and see if your predictions were correct!

## **Results/Explanation:**

Osmosis is the process through which really salty or sugary solutions mix with non-salty or non-sugary solutions to become balanced. The gummy bears are full of sugar so when they are placed in tap water, the water moves into the gummy bear to try to balance out with the sugar and that's why the gummy bear grew! In the bowl of saltwater, we tried to balance the salt in the water with the amount of sugar in the gummy bear so a little bit of water moved into the gummy bear but not as much as the plain water!