

# Gummy bear osmosis lab report assignment



**ASSIGN  
BUSTER**

Tiffany Parker Mr... Taylor Biology 6th period 2/12/15 Gummy Bear Osmosis

Lab Report Purpose: The purpose of this lab is to measure the amount of Osmosis in different types of solutions and to see how a cell would react in different types of solutions. Hypothesis: My hypothesis for this experiment is that the Gummy bear will absorb more of the plain tap and sugar water and the salt water will shrink the gummy Procedure: Materials- 3 clear cups, one spoon, 3 gummy bears, timer, tap water, salt, sugar, ruler, and beaker Fill one cup of tap water, one cup of tap water and salt, and one cup with tap water and sugar.

Measure the 3 different gummies height, width and weight balance before putting them into the solutions. Put a different gummy bear in each of the solutions. Time for about 24 hours then remove each one with a spoon carefully. Now measure their height, width and weight balance again. Data Collection: BEFORE Salt water gummy Sugar water gummy Tap water gummy Height CM Width LLC Weight balance g AFTER 1. CM CM CM . CM 2. CM leg 3. G Representing Data: Conclusion: My data clearly shows the differences between the height, width, ND weight balance before and after the lab. Also that the salt water gummy height was the only one to decrease, while the Tap water gummy increased the most (CM). I think the Tap water increased the gummies size the most because it's easier for the gummy bear to soak in plain tap water than sugar water because the gummy already has the sugars in it.

The salt water gummy shrunk because salt soaks up water and other substances. The sugar water gummy barely increased because I think the gummy already has sugar in it so I really just absorbed a bit of the water. I

would like to point out not only did the gummy shrink in the salt water but I also was very sticky unlike the tap water which was a little slimy and the sugary water gummy felt a like sticky but not that bad.

The Weight balance of the gummy bears can most accurately show you how the different solutions affect the gummy bear (cell) because the any substance can change the height and change the width yet it could still be the same weight yet if you look at the weight you can determine that the gummy bear (cell) if is a different height and width. In this lab diffusion can be taken place just as cells o, the gummy take in the solutions and eventually the solution will escape if not kept in solution.

The lab is using the gummy bears to show how cells work because cells can take in more and less concentrated solutions just as gummy bears do but it leaves a different appearance depending on the solution. In conclusion my hypothesis was partly correct, the gummy did absorb more tap water and the salt water did decrease the size of the gummy but, the sugar water gummy did not increase as much I thought it would have, it absorbed very very little so it didn't change any appearance much at all.