## Growing Gummy Bear Experiment

By: Michelle Garcia


## In this experiment, I will..

- Place a $\mathbf{1 "}^{\prime \prime}$ inch tall gummy bear into a glass container filled with water.
- I will observe the gummy bear every 2 hours, within a 24 hour period.
- Any changes in the appearance of the gummy Bear will be recorded.



# What will happen to the Gummy Bear if it's soaked in water for a 24 hour time frame? 

Will it dissolve?
Will it lose its color?
Will it expand?

Will it shrink?
Will it disintegrate?

- The bottom of the gummy bear begins to turn translucent.
- Some bubbling occurs around the edge of the glass.


## Results after 2 hours elapsed time



## Results between 4th and 6th hours of submersion

- The gummy bear grew in size.
- It lost some of its purple color and is more translucent than before.
- The water is now entirely bubbly.


Results between the 8th and 10th hour

- I placed a 1" inch gummy bear beside the original gummy bear I started the experiment with..
- In comparison; it almost doubled in size!
- The gummy bear also lost a majority of its color.

- My observations during the 12th, 14th and 16th hour consisted of the same results.
- The gummy bear measured at 1 and $1 / 4$ inches in length during these time frames.
- It also expanded in width when compared to my 10th hour observation.


The results during the 18th \& 20th hour show..


- A growth of 2 centimeters in length.


Final results, after being removed from the water..


- The last 2 observations show no overall change in length ( $11 / 4$ inches)
- However, the texture of the gummy bear is far more jellylike.
- Lastly, the width of the gummy bear expanded one centimeter in length, when compared to the 20th hour findings.



## Side view image of final results



- As you can see, the gummy bear grew in all areas:length, width and depth.


## My ending results conclude..

- The gummy bear expanded in size due to the volume of water entering it and it being absorbed (scientific process known as, osmosis)
- The gelatin kept the gummy bear from dissolving completely but the consistency did change from that of sponginess to a jellylike substance.
- The colored dye within the gummy bear did dissolve completely.
- Overall, the gummy bear nearly doubled in size, when compared to its original counterpart.


## Scientific Gummy Bear Rap


https://youtu.be/HqKILm2MjkI

## Thank you!!



