

Title : Bubble Trouble

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Research Question

Do all liquids work or do only some liquids work?

Facts About My Topic

- 1. Juice balls are also called Ooho
- 2. It can reduce the usage of plastic bottles
- 3. It can eliminate the pollution in small or large areas of water
- 4. It can reduce the usage of plastic bottles
- 5. When u bite into the Ooho will pop in your mouth

Hypothesis

- I think that the juices are going to do better than the sodas because if it you make the juice balls with soda it might pop because of the carbon dioxide gas that it in the soda .

Materials List

1. 60 cc plastic syringe
2. Cold tap water
3. Liquid measuring cups
4. Bowl
5. Digital scale
6. 1/8 tsp.
7. Wax paper (1 sheet)
8. Blender, large or small
9. Small cup or bowl
10. Spoons (at least 9)
11. Plastic wrap
12. Timer
13. pH test strips or pH test paper, with a range of at least pH 2–8.
14. Liquids that you
15. Graph paper (1 or 2 sheets) with lines that are 1 mm or 2 mm apart
16. Optional: Camera
17. Lab notebook
18. Food Chemicals :
19. Sodium alginate (2 grams)
20. Calcium chloride (2 grams)

Procedures

1. Prepare the graph for measuring , draw a data table and chill your liquids of chose
2. Make your calcium chloride / bubble solution and Sodium alginate / food solution { TAKE THE COLD DRINKS OUT OF FRIDGE FOR THE FOOD SOLUTION}
- a3. Dip your Ph strips in the food solution , also suck up a small amount of the solution in the 60 cc syringe
4. Set a timer for a 1 minute , when the drop the food solution in the bubble solution , after 1 minute take it out of bubble solution
5. place plastic wrap on a the graph paper and the surface that u are working on. Also stand the graph paper behind the Ooho{ **! used a ruler** }
6. Repeat two more times so that you have measured a total of three balls (MAKE SURE YOU WRITE DOWN YOUR DATA IN YOUR NOTEBOOK)
7. From your data table , calculate the average diameter then record these numbers on a other data table
8. Find out what the difference is , then your done

Independent / dependent variables for my experiment

- INDEPENDENT VARIABLE: The independent variable for this experiment is the bubble solution
- DEPENDENT VARIABLE: The dependent variable for this experiment is the food solution

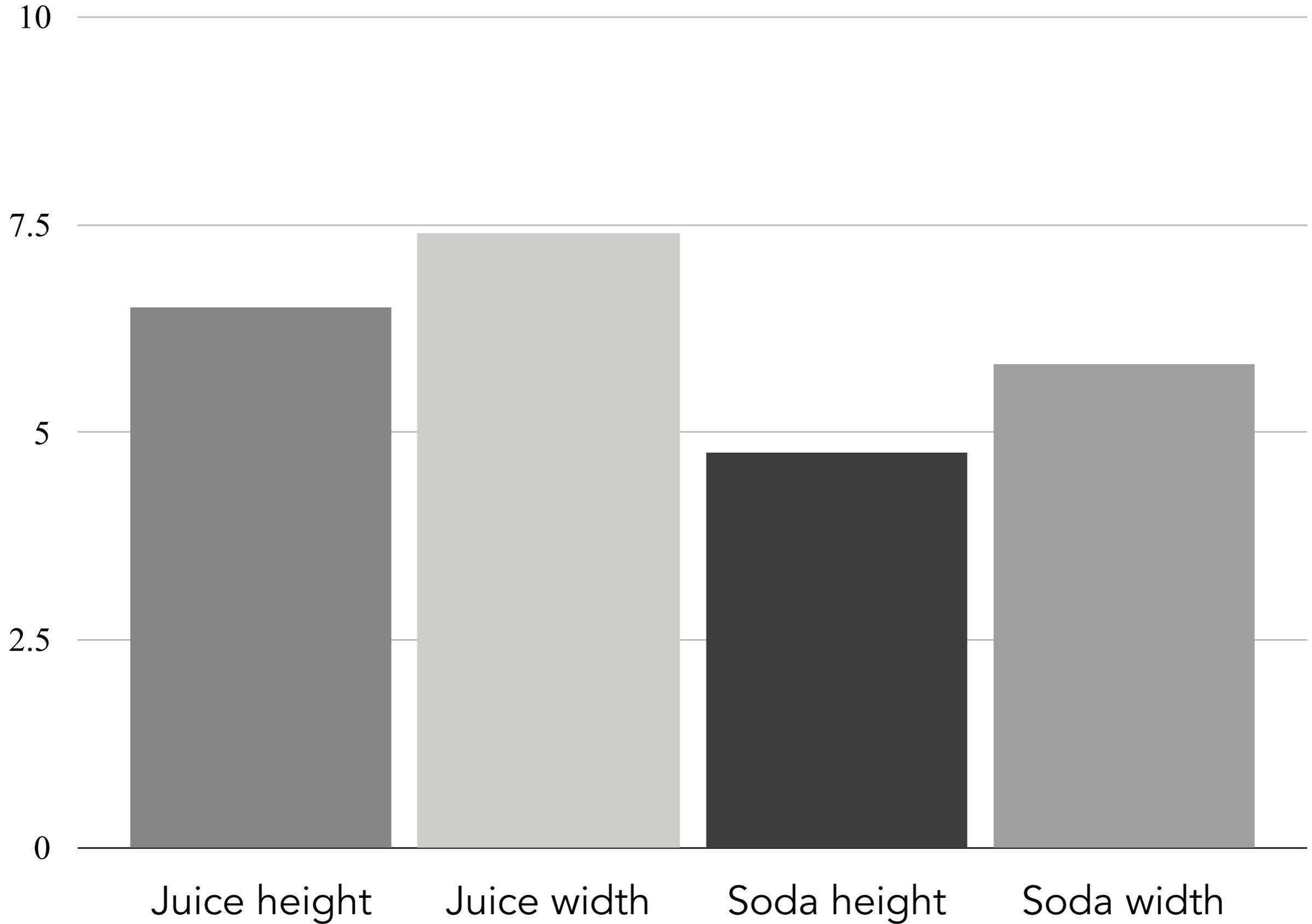
Ooho Measurements

Soda

Juices

Cola	Sprite	Orange	Pepsi	Lemona de	Green Tea	Bai Coconut	Snapple
Average	Average	Average	Average	Average	Average	Average	Average
H-5Mm W-5Mm	H-5Mm W-3Mm	H-8Mm W-6Mm	H-5.3M m W-5Mm	H-6Mm W-6.3M m	H-7Mm W-9Mm	H-6Mm W-6Mm	H-7Mm W-8.3M m

Graph



Results/Data Analysis

- ▶ The soda balls popped open but I figured out that if u let it set for a few minutes it didn't pop .
- ▶ The juice balls got hard to the point that it breaks , Even if I left it for 60 seconds
- ▶ So the total result is that both had some liquids that didn't work

Conclusion

- ❏ My hypothesis/goal for this project was to find out which liquids don't work as well
- ❏ My hypothesis goal was supported because I know that the juice will work better because soda has carbon dioxide in it , which makes it bubble when u first open it .
- ❏ The data shows that the juice has a bigger average then the soda
- ❏ If I were to do this project again, I would try a different recipes also I would use a scale instead of measuring spoon
- ❏ It is important that people know more about this topic because it can help with the pollution that goes into the ocean , in which makes other species die out , Ooho can replace plastic bottles and glass bottles so we can keep our animals alive longer .

ANY QUESTIONS?