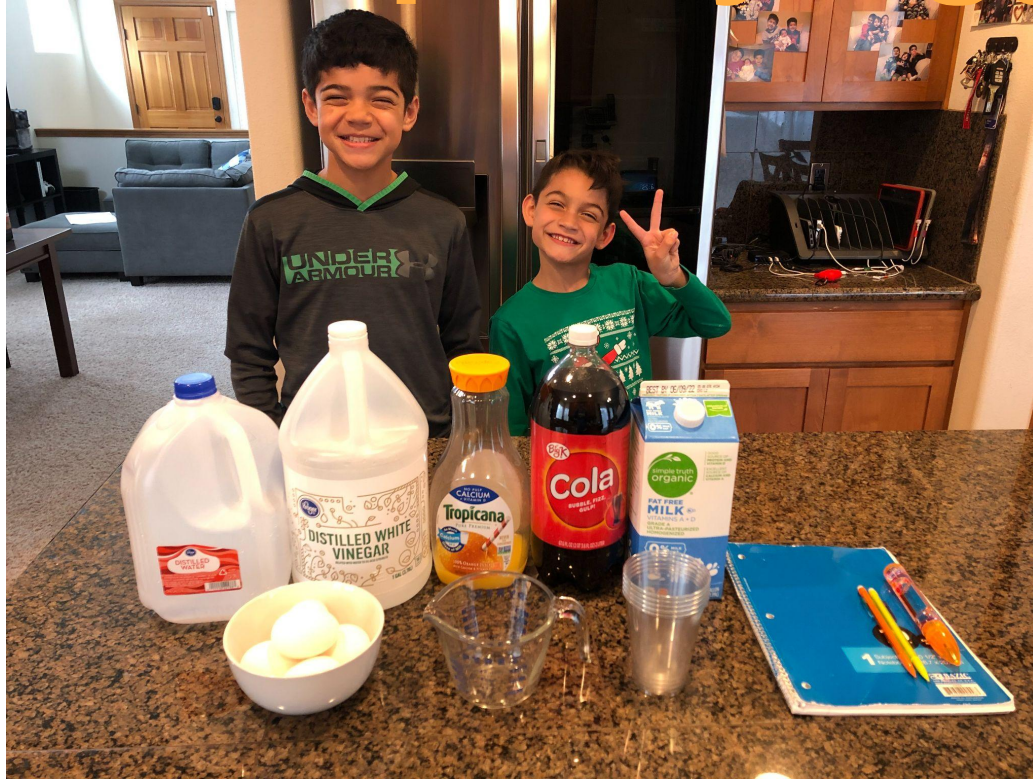


The Squishy Egg



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5th grade
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By Eli and Theo Ojerio

Big Question

Which liquid will make a hard boiled egg squishier?



Hypothesis

We think the Cola will make the hard boiled egg the squishiest because Cola is very fizzy.



Procedure

Materials

Milk	Orange Juice
Cola	White Vinegar
Distilled Water	Plastic Cups (5)
Measuring Cup	Hard Boiled Eggs (5)

Procedure Steps

1. Put 1 egg in each cup.
2. Label each cup with a letter to show which liquid will be added.
3. Add $\frac{1}{2}$ cup of each liquid into each cup.
4. Record observations in Data Table.
5. Put plastic cups into a fridge for 24 hours.
6. After 24 hours, replace liquid in cups with fresh liquid.
7. Record observations in Data Table.
8. Put plastic cups into fridge for another 24 hours.
9. Take eggs out of cups and dry them carefully.
10. Record observations in Data Table.

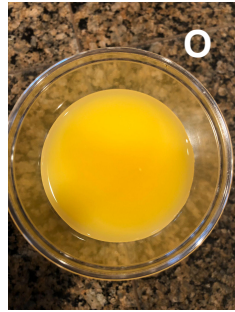
Results

Table 1

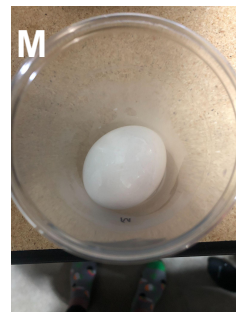
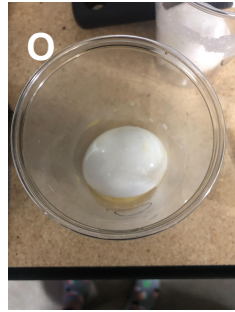
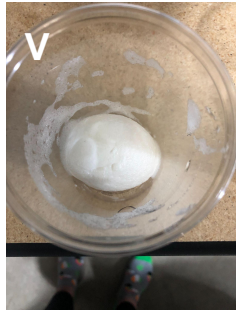
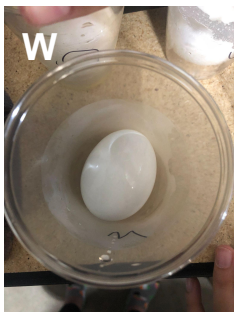
Liquid	Obs. - 0 hours	Obs. - 24 hours	Obs. - 48 hours
Distilled Water (W)	No bubbles	Egg is still hard, no squishiness	Egg is still hard, no squishiness
White vinegar (V)	Lots of bubbles	Egg is starting to get soft, feels squishy on the bottom, lots of bubbles	Egg is very squishy, especially on the bottom where there is an air bubble
Orange Juice (O)	No bubbles	Egg is still hard, no squishiness	Egg is still hard, no squishiness
Milk (M)	No bubbles	Egg is still hard, no squishiness	Egg is still hard, no squishiness
Cola (C)	Small amount of bubbles	Egg is brown, not squishy, no bubbles	Egg is brown and still hard, no squishiness

Pictures

Initial - 0 hours

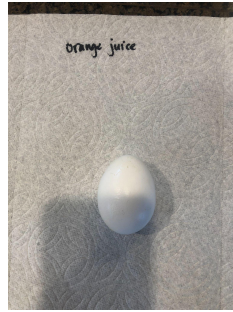
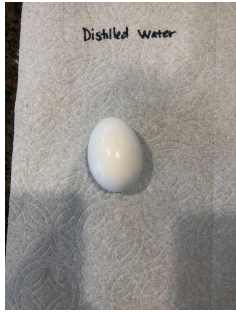


24 hours



Pictures

48 hours



Conclusions

We were trying to answer the question, “Which liquid would make a hard boiled egg squishier.” We tested five different liquids: distilled water, white vinegar, orange juice, milk, and cola. Our hypothesis was that the cola would make the hard boiled egg the squishiest because it is very fizzy. Our results show that the hard boiled egg in the white vinegar was the squishiest. The white vinegar egg has a lot of bubbles and after 48 hours was very squishy. The cola egg had a few bubbles and turned brown, but was still very hard. We think that the white vinegar worked the best because it is the strongest acid. We learned that egg shells are made up of a base (calcium carbonate), which will react with acids.

(<https://science.howstuffworks.com/innovation/science-questions/question231.htm>)

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THANK YOU!