

80 Hudson Vinegar Hill-DUMBO Brooklyn

TheCaseSolutions.com



Variables

Dependent- Deterioration of the eggshell
 Independent- Type of vinegar
 Control- The egg

Purpose of this experiment

Which of the three vinegars- white, apple cider and balsamic, which one will deteriorate the eggshell in the least amount of time. We each choose vinegar to test.

Hypothesis

If we soaked an egg in vinegar then the white vinegar will be quicker

Vinegars

White vinegar: It is a clear liquid solution, which is composed of about 5% acetic acid.

Apple cider vinegar: Fermented juice of crushed apples. It is tangy, but not as acidic.

Balsamic Vinegar: Vinegar that has been reduced in a wooden barrel. It is aged from about 12-25 years.

Materials

- Three cups
- Three eggs
- White vinegar
- Balsamic vinegar
- Apple cider vinegar
- Broomed straw
- Weigh not necessary
- B.L.U.E. sticks



Conclusion

In the science experiment "Eggs and Vinegar", the results came out as white vinegar being the most effective in dissolving the egg shell in the least amount of time (15 hours). Apple cider vinegar came in second with twenty hours, and balsamic with twenty one hours. These results confirmed the original hypothesis that white vinegar would dissolve the eggshell the fastest. Although all steps were followed correctly, some mistakes could have been made. The egg size could have been different with each type of vinegar. The eggs could not be checked every single hour, and because of this the results could be off. The shell may have disintegrated before the time each tester went to check the egg. Besides these few problems, the results in this experiment are accurate. In this lab, the scientists learned that of these three vinegar types, apple cider and balsamic are extremely close in their egg dissolving capabilities, but white vinegar took 5-6 hours less than the others.

Procedure

- Given materials**
- Put egg in cup
 - Fill 1/3 with white vinegar (and egg is covered)
 - Repeat steps 2-3 with apple cider and balsamic
 - Mark the dishes with straw wrap
 - Check every 5 hours
 - Take pictures
 - Write down any important observations
 - Keep in mind shell is completely disintegrated
 - Record the exact amount of time it took

Results

Vinegar Type	Time	Observations
White	15 hrs	Eggshell was gone. It turned this powder
Apple Cider	20 hrs	Eggshell was gone and it had the same color as the apple cider
Balsamic	21 hrs	The egg looked like a lot of the vinegar. The shell was gone and it turned black

80 Hudson Vinegar Hill-DUMBO Brooklyn

TheCaseSolutions.com

Variables

80 Hudson Vinegar Hill-DUMBO Brooklyn

TheCaseSolutions.com



Variables

Dependent- Deterioration of the eggshell
Independent- Type of vinegar
Control- The egg

Purpose of this experiment

Which of the three vinegars- white, apple cider and balsamic, which one will deteriorate the eggshell in the least amount of time. We each choose vinegar to test.

Hypothesis

If we soaked an egg in vinegar then the white vinegar will be quicker

Vinegars

White vinegar: It is the least acidic, which is comprised of about 5% acetic acid.

Apple cider vinegar: Fermented juice of crushed apples. Stronger, but not as acidic.

Balsamic Vinegar: Vinegar that has been reduced in a wooden barrel. It's aged from about 12-25 years.

Procedure

Option materials

- Put egg in cup
- Fill 8.5 with white vinegar (best egg to use)
- Repeat steps 2-3 with apple cider and balsamic
- Refresh vinegar with same swap
- Check every 5 hours
- Take pictures
- Write down any important observations
- Keep in cool dark in completely disintegrated
- Record the amount of time it took.

Materials

- Three cups
- Three eggs
- White vinegar
- Balsamic vinegar
- Apple cider vinegar
- Paper towel
- Soap not necessary
- Salt & sticks



Conclusion

In the science experiment "Eggs and Vinegar", the results came out as white vinegar being the most effective in dissolving the egg shell in the least amount of time (15 hours). Apple cider vinegar came in second with twenty hours, and balsamic with twenty one hours. These results confirmed the original hypothesis that white vinegar would dissolve the eggshell the fastest. Although all steps were followed correctly, some mistakes could have been made. The egg size could have been different with each type of vinegar. The eggs could not be checked every single hour, and because of this the results could be off. The shell may have disintegrated before the time each tester went to check the egg. Besides these few problems, the results in this experiment are accurate. In this lab, the scientists learned that of these three vinegar types, apple cider and balsamic are extremely close in their egg dissolving capabilities, but white vinegar took 5-6 hours less than the others.

Results

Vinegar Type	Time	Observations
White	15 hrs	Eggshell was gone. It turned this powder
Apple Cider	20 hrs	Eggshell was gone and it turned the same color as the apple cider
Balsamic	21 hrs	The egg looked like a lot of the vinegar. The shell was gone and it turned black

Purpose of this experiment

Which of the three vinegars- white, apple cider and balsamic. Which one will disintegrate the eggshell in the least amount of time. We each chose a vinegar to test.

Hypothesis

If we soaked an egg in vinegar then the white vinegar will be quicker