

The Bouncy Egg Experiment

Items needed:

Egg

White vinegar (2 cups)

A glass or cup

A flashlight (optional)



Instructions:

- Gently place an egg into a glass.
- Cover the egg with vinegar. This should take about a cup of vinegar.
- Watch what happens. In just a few seconds, your egg will be covered in bubbles. The acetic acid in the vinegar is reacting with the calcium carbonate of the eggshell to create carbon dioxide, which makes the bubbles.
- Let your egg sit for 24 hours. You can check in on it from time to time. You'll be able to watch the shell slowly deteriorate.
- After 24 hours, pour off the vinegar and see how your egg feels. It will likely still need some more time. Cover it with more vinegar.
- Check your egg a few times over the next two days. My eggshell was completely gone after less than a day and a half, but others have said it takes three days or more.
- When the eggshell is completely gone, you should find that you can gently squeeze your egg. Now it's time to play!
- First, observe your egg. Can you see the yolk? Squeeze it gently and see if you can watch the yolk move around.
- If you have a flashlight, go someplace dark with your egg and your flashlight. See what happens when you shine your flashlight through the egg.
- Now, hold your egg about four inches above a table or counter and let it drop. It will bounce! Be careful, though, if you drop it from too high, it will SPLAT! If you want to go higher and higher until it does splat, bounce it onto a cookie sheet or large bowl to contain the egg mess.

If you enjoy this experiment, try changing a variable and seeing if you get different results. If you used white vinegar, what happens if you use cider vinegar? What if you try something like Coke or orange juice? Try with a new egg, and then keep an egg around for a few weeks and try with an old egg. Make guesses about what you think will happen.