



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences --particularly students of color and girls -- by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Learn about density! What do you think will happen when raisins are added to a cup of clear carbonated soda? Will they sink? Will they float? The results may surprise you, but you'll be rewarded with a sweet snack at the end.



Supplies Required:

- 2 clear cups
- Clear carbonated soda
- Water
- Raisins

Video

What is nucleation? <https://tinyurl.com/3fpct3tz>

Overview

Tiny bubbles of carbon dioxide in the soda attach to the uneven surface of the raisins. All of the little wrinkles on the raisins provide nucleation sites for the carbon dioxide bubbles. When enough bubbles attach to a raisin, it floats to the top of the cup as if it is wearing hundreds of tiny life preservers. Those bubbles pop at the surface and the raisin floats back down, ready to pick up more bubbles. This creates the effect that they are dancing in the cup!



Instructions

1. Pour soda into one of the cups and water into the other cup. The cup of water is your scientific control.
2. Add a few raisins to each cup one by one.
3. Observations How do the raisins in the cup of water compare with the raisins in the soda?
4. Now Try This! What other small objects do you think will dance in soda? Some ideas to try include beads, other dried fruit, corn kernels, lentil beans, and dried pasta.

Additional Resources

1. Learn more about carbonation! <https://tinyurl.com/46cxnz3d>
2. How Are Raisins Made? <https://tinyurl.com/sj9k3tzu>

Share It Out

Share on social media: Record a video or take a picture of your activity and post the results online using the hashtags:

#DancingRaisins
#ProjectExploration
#StemAtHome

Tag a friend and challenge them to do it, too!

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634



www.projectexploration.org