Bready Bubble Balloon

Bubbles are all around your house—in soapsuds, in soda, even in bread! Bubbles in the dough are what make bread rise, but what makes those bubbles?

**WHAT YOU’LL NEED**

- Packet of active dry yeast
- Table sugar (a few tablespoons)
- Plain warm water (NOT HOT!)
- Balloon (not inflated)
- Empty, clean plastic drink bottle with narrow opening

**WHAT TO DO**

1. Put 1 teaspoon of yeast and 3-4 teaspoons of sugar in the bottle. Add warm water up to the bottle neck. Put your finger over the bottle opening and shake the bottle a little. You’ll see the solution start bubbling.

2. Fit the balloon opening tightly over the bottle’s mouth. (You’ll get better results if you stretch the balloon a bit in advance.)
3. Place the bottle in a warm area (room temperature is OK).

4. Let the bottle sit for at least an hour, then check the balloon. Did anything change? Check again after 2 hours, 4 hours, 6 hours, 8 hours. What do you discover each time?

**DID YOU KNOW?**

Living yeast cells eat carbohydrates, like flour or table sugar, by breaking them down into simpler sugar molecules. This reaction gives off carbon dioxide (CO₂) gas—which blows up the balloon here. When bread dough with yeast is baked, CO₂ bubbles make the bread rise.