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 is happening?

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.