



Baking Bread

Make fresh bread and explore the chemical action of yeast!

Activity Guide

Try This!

1. Dissolve yeast in warm water and set aside to proof.
2. Combine sugar, salt, shortening and egg in a large bowl. Mix with an electric mixer on low.
3. Add yeast mixture and stir in about 4 cups of flour. Mix on low.
4. Stir in remaining flour by hand, adding flour if needed to make a soft dough.
5. Cover dough with plastic wrap or a moist cloth and refrigerate. Punch down occasionally.
6. Preheat oven to 400 degrees, and shape dough into small loaves. Let rise until almost doubled in size.
7. Place loaves into mini-loaf pans or onto baking sheets.
8. Bake for 8-10 minutes.



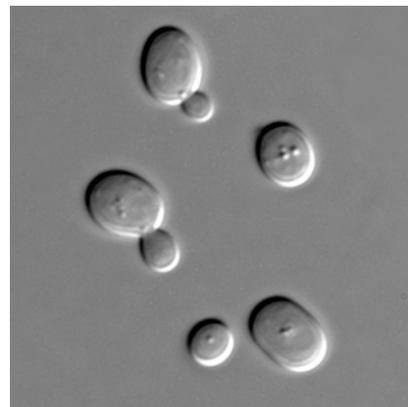
Recipe makes about two dozen mini-loaves.

What's Going On?

Yeast is a microbe (a single-celled fungi) that feeds on simple carbohydrates, such as sugar. As it feeds, yeast produces carbon dioxide (CO₂).

Yeast is an example of a *leavening agent*. When the bread rises and bakes, the carbon dioxide creates thousands of bubbles in the dough. This is what gives bread its airy texture and makes it rise.

Yeast is a living organism!



Learning Objectives

- Yeast is an example of a leavening agent. Leavening agents create a gas that separates and pushes apart proteins in the dough to make it rise.
- Yeast is a microbe that uses simple carbohydrates to produce carbon dioxide in a chemical reaction.

Materials

- Measuring teaspoon
- 4½ - 5 teaspoons active dry yeast
- 2 cups warm water
- ½ cup sugar
- 2 teaspoons salt
- ½ cup soft shortening (butter or margarine)
- 1 egg
- 6 ½ cups all purpose flour, plus extra as needed
- Small bowl
- Large bowl
- Electric mixer
- Plastic wrap or cloth dish towel
- Mini-loaf pans or baking sheets
- Oven

Credits

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