



WHY DOES THE CAKE GROW WHILE BAKING?

EASY
▶ MEDIUM ◀
HARD



YOU'LL NEED:

1 balloon, 1 funnel, 1 pack of baking powder, 1 bottle, 3 tablespoons of vinegar



TRY THIS!

1. Put about 2 tablespoons of vinegar into the bottle



2. Funnel the baking powder into the balloon.



3. Carefully put the balloon over the bottleneck. The balloon with the baking powder should hang down the side of the bottle.



4. Now raise the balloon, so the baking powder will fall into the bottle with the vinegar, and watch what happens.

WHAT HAPPENS?

In the bottle, the mixture starts foaming, and many air bubbles form. The balloon inflates and grows larger. After some time, the foaming in the bottle gets less, and the balloon stops growing as well.

WHY IS THAT?

Vinegar is a so-called acid, baking powder a so-called base, which is the opposite of an acid. When you combine the two, their chemical reaction is strong. During it, a gas is formed, called carbone dioxide (CO_2). This gas forms the air bubbles you can see, and it inflates the balloon.

WHAT DO I NEED THIS FOR?

While baking the gas CO_2 is formed too. The heat makes the baking powder disintegrate. The CO_2 puts lots of little airpockets into the cake. Therefore, the cake grows larger and becomes nice and fluffy.

BY THE WAY:

Did you know that baking powder was already invented more than 150 years ago?

