

<https://www.healthline.com/nutrition/yeast-substitute>

Yeast is an essential ingredient in many bread recipes, including dinner rolls, pizza dough, cinnamon rolls, and most loaf breads. It causes dough to rise, resulting in pillow-like soft bread.

For baking purposes, it's usually sold as instant or active dry yeast — a light brown powder composed of a yeast called *Saccharomyces cerevisiae*.

Dry yeast activates in the presence of water and sugar as it begins to eat and digest the sugar. This produces carbon dioxide bubbles that get trapped in dense dough. They then expand at room temperature or when exposed to heat, causing the dough to rise.

This rising process — known as leavening — results in larger, fluffier, and softer baked goods than those that don't rise, such as flatbreads and crackers.

You may wonder whether you can replicate this leavening process without yeast. Fortunately, several other ingredients replicate the action of yeast in baking.

Here are the 3 best substitutes for yeast.

1. Baking powder

Baking powder is a staple ingredient in a baker's pantry. It contains baking soda and an acid, usually cream of tartar.

Like yeast, baking powder acts as a leavening agent. It works in two ways:

1. Reacting with liquid. When moistened, the acid reacts with the baking soda to produce carbon dioxide bubbles.
2. Reacting with heat. When heated, these gas bubbles expand and cause the dough to rise.

Baking powder reacts immediately when exposed to liquid and heat. Thus, unlike when using yeast, using baking powder does not require additional rise time. For this reason, it's used to leaven quick types of bread like pancakes, cornbread, biscuits, and cakes.

In baked goods, you can replace yeast with an equal amount of baking powder. Just keep in mind that the leavening effects of baking powder will not be as distinct as those of yeast.

SUMMARY

Baking powder causes baked goods to rise rapidly, but not to the same extent as yeast. You can replace yeast with baking powder at a one-to-one ratio.

2. Baking soda and acid

You can also use baking soda combined with acid to replace yeast. Baking soda and acid work together to cause the same reactions as baking powder. However, using baking soda or acid separately will not make baked goods rise — you need to combine them for the reaction to occur.

Examples of acids to use alongside baking soda to replicate the leavening action of yeast include:

- lemon juice
- buttermilk
- milk and vinegar mixed in a one-to-one ratio
- cream of tartar

To substitute baking soda and acid for yeast in a recipe, replace half of the required amount of yeast with baking soda and the other half with acid.

For example, if a recipe calls for 2 teaspoons of yeast, simply use 1 teaspoon of baking soda and 1 teaspoon of an acid.

Like when using baking powder, using baking soda and acid does not require a rise time, and the leavening effects will not be as powerful as those of yeast.

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SUMMARY

Baking soda and acid cause the same reaction as baking powder does, resulting in a quick rise. To use it

in place of yeast, use 50% baking soda and 50% acid as a one-to-one replacement.

3. Sourdough starter

Sourdough starter contains naturally occurring yeast. It's made from flour and water and used to make sourdough bread, which boasts a slightly tangy flavor from the natural fermentation process of the yeast. Some sourdough starters are maintained for years, continually fermenting to provide a strong flavor and soft, chewy texture to artisan sourdough bread.

Fermentation by a sourdough starter works in the same way as instant yeast, forming bubbles of carbon dioxide in the dough to make it rise.

You can use 1 cup of sourdough starter to replace one 2-teaspoon package of yeast.

If your starter is thick, reduce the amount of flour in the recipe, and if your starter is thin, either reduce the amount of liquid or increase the amount of flour to achieve the correct texture. Using sourdough starter instead of yeast also requires about double the rise time.

How to make your own sourdough starter

Growing a sourdough starter takes a minimum of 5 days, but once you have one, it's easy to maintain and use. Here's what you'll need:

- at least 2 1/2 cups of all-purpose flour
- at least 2 1/2 cups of water

Here are the steps to make your own sourdough starter:

- Day 1: Combine 1/2 cup of flour and 1/2 cup of water in a large glass container and cover loosely with plastic wrap or a clean kitchen towel. Leave out at room temperature.
- Day 2: Feed the starter with 1/2 cup of flour and 1/2 cup of water and combine well. Cover loosely and leave at room temperature. By the end of day 2, you should see bubbles forming, which means the yeast is growing and fermenting the flour.
- Day 3: Repeat the steps in day 2. The mixture should smell yeasty and have a good amount of bubbles.
- Day 4: Repeat the steps in day 2. You should notice more bubbles, a stronger and more sour smell, and that it's growing in size.
- Day 5: Repeat the steps in day 2. Your sourdough starter should smell yeasty and have many bubbles. It's now ready to use.

To maintain your sourdough starter beyond day 5, store it in an airtight container in the refrigerator. Use or discard half of it every week, and feed it with another 1/2 cup of flour and 1/2 cup of water.

Sourdough starter with any contamination of fuzzy, white, or colored mold should be discarded.

Given that it takes a minimum of 5 days to produce a sourdough starter, this yeast substitute is best if you already have a sourdough starter on hand, or if you can wait 5 days before baking.

SUMMARY

You can use 1 cup of sourdough starter to replace 2 teaspoons of yeast. Still, you may need to adjust the amount of flour or liquid in the recipe and double the rise time. Making your own sourdough starter from scratch will take at least 5 days.

The bottom line

Yeast adds airiness, lightness, and chewiness to baked goods, but in a pinch, you can replace it with alternative ingredients.

Baking powder, as well as baking soda combined with an acid, react in liquid and heat to create bubbles and leaven baked goods. These yeast substitutes react quickly, so they don't require a rise time. However, they may not result in as distinct of a rising effect as yeast would.

Sourdough starter can also be used, with results comparable to those of yeast. However, sourdough starter needs approximately double the rise time and you will need to adjust ratios of liquid and flour based on the thickness of your starter.

Although none of these ingredients will completely replicate yeast in a recipe, they're great alternatives when you don't have any yeast on hand.

Other substitutes are mentioned on these websites:

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