

SOURDOUGH AND BAKING

Wheat sourdough starter

Start a sourdough culture with flour and water using King Arthur Baking's method. Consistent rising after feeding is the best sign that it is ready to use.

Recipe author: King Arthur Test Kitchen · King Arthur Baking



TIME

5 days and 50 minutes; allow longer if needed

MAKES

A starter to keep and feed for regular baking

Method: Fermenting flour and water with regular feeds

Season and ingredients: Year-round

Storage: Once it reliably doubles after feeding, follow King Arthur Baking's maintenance guide: feed daily at room temperature or weekly when kept in the fridge.

Ingredients

- To begin: 50 g whole wheat flour and 50 g cool water
- For each feed: 50 g unbleached all-purpose flour and 50 g water, added to 50 g retained starter

Weigh the flour, water and starter.

Equipment

- Kitchen scales, spoon and a glass, ceramic, stainless steel or food-grade plastic container, about 475-950 ml in capacity (½-1 US quart).

Instructions

1. Day 1: mix

Mix the whole wheat flour and water thoroughly. Cover loosely and leave for 24 hours in a warm spot, at about 21°C (70°F).

2. Day 2: feed

Keep 50 g starter and discard the rest. Mix in 50 g water and 50 g all-purpose flour. Cover and leave for 24 hours.

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A stylized, handwritten signature of Natalia Horbach in black ink.

Sources and history on the Fermentarnia website
fermentarnia.com



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3. **Days 3-5: feed twice daily**

Feed roughly every 12 hours. At each feed, retain 50 g starter, discard the rest and mix in 50 g water and 50 g all-purpose flour. Cover again.

4. **Check it is ready**

The starter should at least double within 6-8 hours of feeding, be full of bubbles and smell pleasantly tangy. If it does not, continue feeding every 12 hours on day 6, day 7 and beyond as needed.

Tips

Use cool water in a warm home and lukewarm water in a cool home.

The first batch can also be made with 50 g whole grain rye flour.

The author updated this recipe in February 2026; it now starts with 50 g flour and 50 g water.

How to serve

Use for baking once it reliably doubles after feeding.

Under the microscope

A living culture fed with flour

A sourdough starter is a mixed community of yeasts and bacteria. Gas production makes it rise, while acids and other fermentation products contribute flavour. Feeding supplies fresh flour. A reliable rise after feeding is more useful for judging baking readiness than one bubble or a fixed number of days.

