

SOY-FREE EDITION

Soy-Free Tempeh Starter Instructions

Create rich, nutty tempeh with your preferred beans using the same reliable preparation and culturing method.

**SOY-FREE TEMPEH
STARTER CULTURE**

— INSTRUCTIONS —

This flexible culture makes tasty, protein-rich tempeh without any soy: make with mung beans, black beans, garbanzos, or another type of bean.

THOUGHTFULLY SOURCED | **REAL FOOD. REAL RESULTS.** | **TRUSTED SINCE 2002** | **NOURISHING TRADITIONS**

At a glance: Prepare the beans, culture for 24-48 hours, then refrigerate for up to 10 days or freeze for up to 2 months.

Open the online instructions for interactive reminders and feedback.

What you need

Clean, dry equipment, your preferred dry beans, and accurate temperature checks give your Soy-Free Tempeh Starter the best beginning.



INGREDIENTS

- 1 packet Soy-Free Tempeh Starter Culture
- 2 cups dry beans of your choice
- 2 Tbsp distilled white or rice vinegar
- Fresh water for soaking and boiling

EQUIPMENT

- 6-8 quart pot
- Large bowl and colander
- Clean towel or hair dryer
- Food thermometer
- Vented container or perforated plastic bag
- Dehydrator, or insulated container and heating pad

Temperature matters: Measure inside the beans, not beside the container. During the first 12 hours, keep the beans at 85-91°F (29-33°C).

PART 1

Prepare the beans

Start the night before. De-hulling and drying thoroughly are the foundations of a firm, evenly cultured batch.

USING NON-DRY BEANS? Starting with dry beans is preferred. If you are not using dry beans, skip Steps 1-2 and begin with Step 3: Boil for 1 hour.

STEP 1

Soak 10-12 hours

Measure 2 cups of dry beans. Cover generously with fresh water and soak overnight for 10-12 hours. The beans may triple in size, so use a large pot and plenty of water.



Plan ahead: Begin in the evening and continue the next morning.

SET REMINDER ONLINE: 12-hour soak completion

STEP 2

Split, de-hull, and rinse

Massage the soaked beans with your hands until the beans are split. The loosened hulls will float to the top. Drain through a colander and rinse repeatedly until the hulls are removed.



Expect several rinses. Take your time; removing the hulls helps the culture bind the beans together.

STEP 3

Boil for 1 hour

Boil the de-hulled beans for 1 hour. When the hour is complete, discard the cooking water.



SET REMINDER ONLINE: 1-hour boil completion

STEP 4

Dry completely, then cool

Pat the beans with a clean towel or use a hair dryer on low heat. The beans must be dry to the touch. Transfer them to a dry bowl and cool to lukewarm, 95-98°F (35-37°C).



Before moving on: No surface water, no wet bowl, and the beans are within the target temperature range.

STEP 5

Add vinegar and starter

Mix in 2 Tbsp distilled white or rice vinegar. Add 1 entire packet of Soy-Free Tempeh Starter Culture and mix very well so the culture is distributed throughout the beans.



STEP 6

Pack in a thin, vented layer

Spread the beans in a layer 1/2 inch thick inside a vented container. A food-safe plastic bag with pinholes spaced 1 inch apart also works.



Airflow is essential: The vents allow oxygen in and release the heat created during fermentation.

Culture for 24-48 hours

Start the clock as soon as the inoculated beans enter the warm incubation setup. Some batches can take up to 4 days.



Keep the beans at 85-91°F for the first 12 hours. Place the thermometer probe in the beans, not beside them.

HOURS 0-12

Maintain steady warmth

Use a dehydrator. If using an insulated container, place a heating pad near the beans.

SET REMINDER ONLINE: 12-hour heat check

Watch the temperature and growth

Use the physical signs of fermentation together with the clock.

HOURS 12-24

Watch for self-heating

Fermentation should begin generating its own heat. When you notice the sudden temperature increase, move the beans to a cooling rack at room temperature or another setup that allows airflow.

HOURS 24-36

Look for white growth

White spores should begin covering the surface after about 24 hours and continue growing through the beans.

HOURS 36-48

Your tempeh is ready

The beans form a firm cake held together by white mycelium. A batch may take up to 4 days. Black spores around the air holes are okay.

SET REMINDER ONLINE: Choose a 24-hour growth, 36-hour doneness, or 48-hour final check

STORAGE

Store the finished tempeh

Transfer the finished tempeh to a sealed container.



UP TO 10 DAYS
in the refrigerator

UP TO 2 MONTHS
in the freezer

Is this normal?

Use the temperature and appearance cues to understand what your batch is doing.

The beans are heating themselves

That is expected after roughly 12 hours. Move them to a cooling rack or another room-temperature setup with good airflow when the temperature rises.

I see black spots near the air holes

That can be normal. Black spores may form around the ventilation holes and do not automatically mean the batch has failed.

The white growth has not covered everything at 24 hours

White growth begins around the 24-hour mark and continues through the beans. Confirm the temperature with the probe inside the beans and allow more time; some batches take up to 4 days.

How do I know it is finished?

The individual beans should be bound into a firm mass by white mycelium. The typical window is 36-48 hours, but the physical cue matters more than the clock.

YOUR EXPERIENCE MATTERS

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Explore more traditional soy-free bean and grain fermentation projects from Cultures for Health.



Fermented Sweet Rice

Make traditional tapai at home.



Chickpea Miso

A sweet, nutty soy-free miso.

Need a real person?

Send our team a photo plus your beans, temperature, and timing. We will help you understand what is happening.

Email info@culturesforhealth.com

Reminder timing and the Was this helpful form are interactive on the online instructions page.