

Two Jars, One Number

Fermented cherry tomatoes with garlic and shallots, and a 3% hot sauce mash, started the same afternoon from the same late-summer garden.

Both ferments use the same 3% salt. What changes is what goes on the scale. For the tomatoes, weigh the water and make a brine. For the hot sauce, weigh the vegetables and salt the mash. Once you have that, you can salt any vegetable ferment without a recipe.

Recipe	Fermented Cherry Tomatoes with Garlic and Shallots
Recipe	3% Fermented Hot Sauce Mash
Fact sheet	Ways to Use Fermented Cherry Tomatoes

$$\text{Brine: water weight} \times 0.03 \quad \cdot \quad \text{Mash: vegetable weight} \times 0.03$$

Fermented Cherry Tomatoes with Garlic and Shallots

A 3% brine, a week on the counter, and a jar of tangy, gently fizzy tomatoes, sweet with shallot and full of garlic, for the refrigerator.

Serve them straight from the jar, add them to a cheese board, toss them into salads, pile them onto sandwiches, or spoon them over eggs and warm crusty bread.

Choosing Tomatoes

Firm, just ripe, no splits or soft spots. Overripe tomatoes turn to mush and split even with the prick. This is the most common way the ferment goes wrong, and it is decided at the bowl, not the jar.

Ingredients

	Quart jar	Half-gallon jar
Cherry or grape tomatoes, washed, stems off	1½ to 2 lb	3 to 4 lb
Garlic cloves, peeled	4 to 6	8 to 10
Shallot, peeled and sliced (or a few slices of red onion)	1	2
Fresh dill, basil, oregano, or thyme, optional	1 to 2 sprigs	3 to 4 sprigs
Bay leaf, optional	1	2
Whole black peppercorns, optional	½ tsp	1 tsp
3% brine, made	3 cups	6 cups

A packed quart takes about 2 cups of brine and a half-gallon about 4. Make the extra and pour off what you do not need. Standing at the sink with a half-covered jar is worse than wasting a cup of salt water.

Equipment

- Clean wide-mouth quart or half-gallon jar
- Fermentation weight or fermentation spring
- Airlock lid, pickle pipe, or regular jar lid
- Kitchen scale
- Small bowl or measuring cup for the brine
- Plate or shallow tray to catch bubbling brine

The 3% Brine

Weigh the water, then add 3% of that weight in salt. Use non-chlorinated water and non-iodized salt. Fine sea salt, pickling salt, or kosher salt all work when measured by weight.

On water: leaving tap water out overnight, or boiling and cooling it, drives off chlorine but not chloramine, and you cannot tell which your town uses by looking. Filtered or spring water is the safe default.

$$\text{Water weight} \times 0.03 = \text{salt needed}$$

Water	Salt for a 3% brine
1 cup / 240 g	7 g
2 cups / 480 g	14 g
3 cups / 720 g	22 g
1 quart / 946 g	28 g
1/2 gallon / 1,892 g	57 g

Instructions

- 1 Prepare the tomatoes.** Wash and stem them. Prick each tomato once with a clean toothpick, wooden skewer, or the tip of a paring knife. One small hole is enough. It lets the brine reach the flesh and keeps the tomatoes from splitting with a great deal of enthusiasm during fermentation.
- 2 Make the brine.** Measure enough non-chlorinated water to cover the tomatoes once packed. Weigh it in grams and calculate 3% of that weight in salt. For 480 g of water, $480 \times 0.03 = 14$ g salt. Stir until the salt dissolves completely.
- 3 Fill the jar.** Garlic, shallot, herbs, bay leaf, and peppercorns go in the bottom of a clean wide-mouth jar. Add the pricked tomatoes, packing gently without crushing.
- 4 Add the brine.** Pour the brine over the tomatoes until they are completely covered. Leave about 1 inch of headspace.
- 5 Weight the tomatoes.** Set a fermentation weight or spring over the tomatoes. Every tomato, herb, garlic clove, slice of shallot, and stray bit of seasoning stays below the brine. Tomatoes love to float, and floating tomatoes are looking for trouble.
- 6 Ferment.** Attach an airlock lid, pickle pipe, or regular lid. Set the jar on a plate out of direct sunlight. The sweet spot is 65 to 75°F. Cherry tomatoes carry a lot of sugar and move fast, so in a warm kitchen start tasting on day 3, in a cool one around day 4 or 5. Depending on your kitchen and how much tang you like, they are usually ready in 4 to 10 days. With a regular lid, loosen it briefly once a day during active fermentation to release pressure, then check that the tomatoes are still under the brine before closing it.
- 7 Refrigerate.** When the tomatoes taste pleasantly tangy and lightly fizzy, swap the fermentation lid for a regular lid and move the jar to the refrigerator. Store the tomatoes in their brine. They keep 2 to 3 months cold, and the texture softens the longer they sit, so the first month is the best month.

What to Expect

- The brine may turn cloudy. That is normal.
- Small bubbles and gentle fizzing mean it is working.
- The tomatoes soften slightly and lose some of their fresh-picked color.
- A thin, flat white film on the surface can appear, most often on sweet ferments like this one. Skim it off, then push everything back under the brine.
- Finished tomatoes smell fresh, pleasantly sour, and garlicky, with a little sweetness from the shallot.

When to Discard

Discard the ferment if it smells rotten, becomes slimy, or grows fuzzy mold. A clean jar, the right salt, and everything kept under the brine go a long way toward a happy ferment.

Five Ways to Use Them

- On a cheese or charcuterie board
- Spooned over scrambled eggs or breakfast hash
- Tossed into green, pasta, grain, or bean salads
- In place of fresh tomato on a sandwich, with cheese, herbs, and olive oil
- Chopped and folded into softened butter or cream cheese for a quick spread

The full list, including the brine, is on the [Ways to Use Fermented Cherry Tomatoes](#) sheet.

Batch Notes

Tomato variety

Jar size

Garlic, shallot or onion, and herbs used

Water used

Salt added

Date started

Date refrigerated

Flavor notes

3% Fermented Hot Sauce Mash

Fresh peppers, tomatoes, garlic, and onion, salted by weight and left to ferment. Then blended into a hot sauce as smooth, rustic, mild, or fiery as your harvest allows.

The 3% Mash Formula

For a mash, salt is measured by the weight of the prepared vegetables, not the water. The vegetables make their own liquid.

Prepared vegetable weight × 0.03 = salt needed

Prepared vegetables	Salt for a 3% mash
1 pound / 454 g	14 g
2 pounds / 907 g	27 g
3 pounds / 1,361 g	41 g
4 pounds / 1,814 g	54 g
5 pounds / 2,268 g	68 g
1 kilogram / 1,000 g	30 g

A kitchen scale gives the best results. Fine sea salt, pickling salt, or kosher salt all work when measured by weight.

Ingredients

- Fresh hot peppers, one variety or a mix
- Fresh tomatoes
- Onion
- Fresh garlic cloves
- Non-iodized salt, 3% of the prepared vegetable weight
- Optional: distilled white vinegar or apple cider vinegar, for blending after fermentation

Equipment

- Kitchen scale
- Food processor or sharp knife
- Clean wide-mouth glass jar
- Fermentation weight
- Airlock lid or regular jar lid
- Clean spoon, tamper, or fermentation tool
- Plate or tray beneath the jar

Make the Mash

- 1 Prepare the vegetables.** Stem the peppers and trim away any bruised or damaged spots. Roughly chop the peppers, tomatoes, onion, and garlic. Leave the seeds in for a hotter sauce or remove some for a milder one. Wear gloves, especially with very hot varieties. Pepper hands are no joke.
- 2 Weigh the prepared vegetables.** Set a large bowl on the scale and tare it to zero. Add all of the peppers, tomatoes, onion, and garlic. Write down the total weight in grams.
- 3 Calculate the salt.** Multiply the vegetable weight by 0.03. If the vegetables weigh 1,500 g, $1,500 \times 0.03 = 45$ g salt. Sprinkle it evenly over the vegetables.
- 4 Process into a coarse mash.** Pulse the salted vegetables in a food processor until finely chopped, wet, and juicy. Stop before it becomes a smooth puree. Aim for a coarse salsa texture.

- 5 **Pack the jar.** Spoon the mash into a very clean wide-mouth jar, pressing down firmly after every few spoonfuls with a clean spoon or tamper. This removes trapped air and brings the juices to the surface. Leave 1½ to 2 inches of headspace. The mash gets lively.
- 6 **Keep the mash below the liquid.** Set a fermentation weight over the mash. If there is not enough liquid after several hours, make a small amount of 3% brine and add only enough to cover the surface: 1 cup / 240 g non-chlorinated water with 7 g non-iodized salt.
- 7 **Ferment.** Attach the airlock lid. Set the jar on a plate out of direct sunlight at a comfortable room temperature. Ferment for at least 2 weeks and begin tasting then. For a deeper flavor, allow 3 to 4 weeks.
- 8 **Check the ferment.** Bubbling in the first several days is normal and welcome. With a regular lid, open it briefly once a day during active fermentation to release pressure, then press the mash back under the liquid with a clean utensil before closing.

Finish the Hot Sauce

When the mash smells bright, pleasantly sour, and peppery, it is ready.

- 1 **Blend.** Transfer the fermented mash to a blender and blend until smooth.
- 2 **Thin.** Add a little of the fermented liquid, distilled white vinegar, apple cider vinegar, or a combination until the sauce is the thickness you like.
- 3 **Taste and adjust.** A little more vinegar for brightness, or leave it thicker for a rustic table sauce.
- 4 **Strain, if you like.** Pass it through a fine-mesh sieve for a thinner, pourable sauce.
- 5 **Bottle and refrigerate.** Transfer to clean jars or bottles and keep cold.

Fermentation Notes

- Keep the mash beneath the liquid and the rim of the jar clean.
- A pleasantly sour, peppery aroma is expected.
- White sediment at the bottom of the jar is normal.
- A thin, flat white film on the surface can appear. Remove it promptly, then press the mash back down under the liquid.
- A rotten smell, slime, or fuzzy mold means discard it.

Serving Ideas

- Eggs, breakfast hash, and biscuits
- Beans, soups, chili, and stews
- Tacos, burritos, nachos, and quesadillas
- Fried chicken, roasted chicken, and grilled meats
- Greens, cooked cabbage, collards, and roasted vegetables
- Marinades, barbecue sauce, dressings, and dips

Batch Notes

Pepper varieties used

Total prepared vegetable weight

Salt added

Date started

Date finished

Flavor notes

Ways to Use Fermented Cherry Tomatoes

Bright, garlicky, lightly salty, pleasantly tangy. Use them anywhere you want a little pop of acid and garden flavor. A tiny tomato, a pickle, and a very useful condiment rolled into one.

Straight From the Jar

- On a cheese board with crackers, cheddar, goat cheese, mozzarella, cured meats, olives, and fresh herbs
- As a snack or appetizer with toothpicks
- In a small bowl on the summer supper table beside grilled meats, corn, bread, and garden vegetables
- Spooned over cottage cheese, ricotta, whipped feta, cream cheese, or fresh mozzarella
- On an antipasto platter with marinated vegetables, olives, salami, and crusty bread

Breakfast

- Whole or halved over scrambled eggs, fried eggs, omelets, or frittatas
- In breakfast hash with potatoes, onions, sausage, bacon, or leftover vegetables
- With biscuits and eggs for a bright bite against a rich breakfast
- Chopped into egg salad or deviled egg filling
- On avocado toast with a fried egg and cracked black pepper

Sandwiches

- Sliced or smashed onto a BLT, turkey, ham, or veggie wrap
- In grilled cheese, paninis, melts, or quesadillas

Salads

- Halved into a simple green salad
- In cucumber, pasta, potato, or macaroni salad
- Stirred into white bean, black-eyed pea, chickpea, or lentil salad
- In grain bowls with rice, quinoa, farro, roasted vegetables, and cheese
- Chopped with fresh herbs, olive oil, and cucumbers for a quick summer salad

Cooked Dishes

- Chopped and stirred into pasta sauce just before serving
- Tossed with warm pasta, olive oil, garlic, basil, and Parmesan
- On pizza or flatbread for the last few minutes of baking, or scattered over the top after
- Stirred into soups, stews, beans, lentils, or chili near the end
- Folded into sautéed greens, cabbage, collards, roasted vegetables, or skillet corn
- Spooned over creamy grits, polenta, mashed potatoes, or butter beans
- Beside roasted chicken, pork chops, steak, sausage, grilled fish, or burgers

- In place of fresh tomato on burgers, chicken sandwiches, or sausage sandwiches
- Layered with pesto, mozzarella, and basil on fresh-milled sourdough
- Chopped into tuna, chicken, or egg salad

Use the Brine Too

The garlicky tomato brine is a seasoning. It is salty and tangy, so start small and taste as you go.

- A teaspoon or two in salad dressing
- A spoonful in potato, egg, tuna, or pasta salad
- A splash in soups, beans, tomato sauce, or braised greens near the end
- Mixed into mayonnaise, sour cream, Greek yogurt, or cream cheese for a dip or spread
- A little in a marinade for chicken, pork, fish, or vegetables
- In a Bloody Mary or savory mocktail

Quick Condiments

Fermented Tomato Relish

Chop the tomatoes with fresh basil or parsley, a little onion, black pepper, and olive oil. Spoon over grilled meat, fish, burgers, beans, or toasted bread.

Garden Salsa

Chop the tomatoes with fresh onion, cilantro, jalapeño or fermented hot peppers, lime juice, and a small spoonful of tomato brine. Serve with chips, tacos, burrito bowls, eggs, or grilled chicken.

Toasted Tomato Spread

Mash a few tomatoes onto toasted sourdough. Add olive oil, black pepper, basil, and goat cheese, ricotta, cream cheese, or mozzarella.

Fermented Tomato Butter

Finely chop or mash the tomatoes and fold them into softened butter with basil, chives, parsley, or black pepper. Spread on bread, biscuits, corn, grilled vegetables, steak, or roasted chicken.

Tomato Vinaigrette

Blend or mash the tomatoes with olive oil, a spoonful of brine, a little honey, black pepper, and fresh herbs. Taste before adding salt.

A Simple Favorite

Toast a thick slice of sourdough and spread it with whipped goat cheese, ricotta, or cream cheese. Top with halved fermented cherry tomatoes, torn basil, cracked black pepper, and a drizzle of olive oil.

Serve it with eggs for breakfast, beside soup for lunch, or cut it small for a garden-party appetizer.