

CANNING WITHOUT CONFUSION

A Beginner's Guide to Preserving Food in Jars



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INTRODUCTION

If you're holding this book, there's a good chance you've seen a picture of a shelf full of beautiful jars and thought, *"I want to do that."*

- Maybe you have a garden that produces more tomatoes than your family can eat in one week.
- Maybe you found a great deal on a bushel of peaches.
- Maybe you simply like the idea of having good food waiting in the pantry instead of making another trip to the grocery store.
- Or, maybe you want your children to learn the valuable skill of canning, but you don't feel confident enough to teach it. Don't worry! In this book you will learn everything you need to know about canning.

A quick note: this book is the work of two women—Stacy and Jordan—so we usually write as “we.” When the text switches to “I,” it's Jordan sharing her personal experience.

Canning can seem more complicated than it actually is—until you understand what's happening and why you're performing each step.

At its most basic, canning is a method of preserving food by putting it into jars and processing those jars with heat.

The goal is to create an environment where microorganisms that cause spoilage—and, more importantly, microorganisms that can make food dangerous—cannot grow. Proper processing also helps preserve the food's quality by addressing things like enzymes, oxygen, and moisture.

But let's clear up one misconception right from the beginning:

Canning is not simply putting food in a jar and making it seal.

Canning Is A Science

Safe canning depends on several components working together:

- the food you're canning
- the food's acidity level
- the canning method
- the processing time
- the temperature or pressure reached during processing
- and even your elevation.

That may sound like a lot, but it will all make sense and feel much more manageable by the time you finish reading this book.

You'll learn why some foods are processed in a boiling-water canner while others require a pressure canner. You'll learn why processing times aren't negotiable and why seemingly small details—like jar size or headspace—are part of the bigger picture.

Once you understand the *why* behind the process, canning becomes much less intimidating. What initially looks like a long list of rules starts to become a series of steps that makes sense.

You Can Be Confident

The goal of this book is for you to walk away feeling confident in your ability to can safely, be comfortable with the process, and be excited to start filling your own pantry with food you've made yourself.

Canning is more than a preservation technique. It is incredibly satisfying to take fresh food—whether it came from your garden, a farmers market, or a great grocery-store sale—and turn it into something that will be waiting for you months from now.

One of the things I love most about canning: you're not just preserving today's harvest; you're making tomorrow's meals easier!

CANNING SAFETY



CHAPTER 1

How Canning Keeps Food Safe

Before we talk about canners, jars, or anything else, it helps to understand what we're actually trying to accomplish when we can food. Because, at its heart, canning is a battle against spoilage.

Fresh food is wonderfully alive. It contains water, enzymes, nutrients, and all the things that make it delicious—and, unfortunately, all the things that make it vulnerable to spoilage, too.

Several factors are responsible for spoilage, including:

- microorganisms
- enzymes
- oxygen
- and moisture.

Understanding these four players gives us a much better picture of how canning works.

Microorganisms

Some microorganisms are harmless while others are useful. Others cause food to spoil, and some can make us sick.

Microorganisms multiply rapidly when they have the conditions they need to grow. Fresh foods provide many of those conditions: moisture, nutrients—

and, depending on the food and environment, a suitable temperature and amount of oxygen.

You can't simply wash all of these microorganisms away. Washing fresh food reduces the number of microorganisms on its surface, but it doesn't eliminate them. That's why safe canning relies on the entire preservation process rather than simply starting with a clean jar and clean food.

When we process filled jars, we're using heat to control the microorganisms that can cause food to spoil or become unsafe. But the amount of heat required—and how long the food needs to be exposed to that heat—depends on the food and the canning process.

A boiling-water canner surrounds jars with water at the boiling point. A pressure canner allows jars to reach temperatures higher than the boiling point of water, which is necessary for processing low-acid foods. (We will discuss this topic further in a future chapter.)

Processing time matters just as much as temperature. The food needs to receive the appropriate heat treatment for the specified amount of time.

Enzymes

Enzymes are naturally present in food. They are responsible for many of the changes that happen to fruits and vegetables as they ripen and eventually deteriorate.

You've probably seen this happen without giving it much thought.

Cut an apple and leave it on the counter, and it begins to brown. Leave fresh produce sitting around long enough, and its color, texture, flavor, and nutritional quality change.

Heat can help control these enzymes, which is why it is a critical part of the canning process.

Oxygen

Oxygen is another contributor to food deterioration.

Exposure to oxygen can affect the color, flavor, and quality of food. It also plays a role in the growth of some microorganisms.

Proper canning helps remove oxygen from the jar during processing. As a jar cools, a vacuum forms inside, drawing the lid tightly against the rim and creating the seal. That seal helps prevent air and microorganisms from getting back into the jar after processing.

The seal alone does not make the food safe. The food must first receive the correct heat treatment. The seal then helps protect the processed food from the environment outside the jar.

Moisture

Most fresh foods contain a great deal of water. That's one of the reasons they are so perishable.

Microorganisms need moisture to grow, and fresh foods provide plenty of it. Canning doesn't simply remove all the water from food—instead, it uses heat and other controlled conditions to make the food safe for storage at normal room temperatures despite the moisture.

Putting It All Together

When we can food, we're not trying to eliminate every possible cause of spoilage individually. We're using a carefully designed process that addresses several of them at once.

Heat controls microorganisms and enzymes. Removing air and forming a vacuum helps protect the food after processing. The food's acidity, density, preparation, processing time, temperature, and other conditions all contribute to how the process works.

That's why canning isn't simply a matter of putting food into a jar and heating it until the lid seals.

CANNING RECIPES



CHAPTER 9

Water Bath Canning Recipes

You've learned how water bath canning works. Now it's time to put that knowledge into practice!

In this chapter, we've included recipes that are especially useful for someone learning to can. These are the kinds of recipes that let you practice the basic skills you've already learned while making foods you'll actually want to keep in your pantry.

You'll find a variety of products from jam and pickles to relish and fruit syrup. Some are simple and straightforward, while others give you a little more practice with preparation, packing jars, and working with different types of foods.

Each recipe is written to walk you through the process from beginning to end. And remember, the recipe is part of the safety process.

Canning isn't a place to improvise—at least not as a beginner. Ingredients, proportions, headspace, jar size, processing method, and processing time all work together. Follow the recipe as written, including any altitude adjustments.

Please note that the artwork on the following pages may not show the headspace level and other nuances exactly right. The illustrations are for representative and sequence-of-events purposes only.



DILL PICKLE Spears

MAKES ABOUT 16 PINTS

If your garden is overflowing with cucumbers, this is a great way to turn them into crisp, garlicky dill pickles. We're using fresh cucumbers, a simple vinegar brine, and a few classic pickle seasonings.

INGREDIENTS



BRINE

- 3 quarts 5% acidity vinegar
- ½ cup sugar
- 1 cup canning salt
- 4 quarts water



FOR EACH PINT

- ½ teaspoon minced garlic
- 1 teaspoon mustard seed
- 1 tablespoon dried dill or 2–3 sprigs fresh dill



About 16–20 fresh cucumbers—enough to fill about 16 pint jars.

WANT CRISPIER PICKLES? YOU HAVE OPTIONS.



FRESH

Cut and can freshly picked cucumbers, ideally within 24 hours.



ICE BATH

Cut the cucumbers, cover with very cold water and ice, and refrigerate overnight.



PICKLE CRISP

Use a commercial pickle-crisp product according to its package directions.



PREPARE THE BRINE

1 COMBINE

Vinegar + sugar + canning salt + water.



2 HEAT

Bring the brine to a boil.



3 KEEP HOT

Have the boiling brine ready when you're ready to fill the jars.



PREPARE THE CUCUMBERS

1 WASH

Wash the cucumbers well.



2 TRIM

Cut off both ends of each cucumber.



3 CUT INTO SPEARS

Cut the cucumbers lengthwise into spears.



WHY IT MATTERS

Cut off both ends of the cucumber. The blossom end can contain enzymes that contribute to softer or bitter pickles.



PREPARE YOUR JARS



KEEP JARS HOT UNTIL YOU'RE READY TO FILL THEM.

You'll be adding boiling brine, so cold jars aren't what we want here.



FILL, PROCESS & COOL

FILL THE JARS

1 PACK THE CUCUMBERS

Pack cucumber spears tightly into the hot pint jars, keeping them upright as much as possible.

WHY?

Packing tightly helps keep the spears from floating when the brine is added.



2 ADD THE SEASONINGS



½ teaspoon minced garlic



1 teaspoon mustard seed



1 tablespoon dried dill
or 2–3 sprigs fresh dill

Add seasonings directly to each jar.

3 ADD THE BRINE

Pour boiling brine over the cucumbers.



½-INCH HEADSPACE



4 REMOVE AIR BUBBLES

Run a non-metallic tool down the side of the jar to release air bubbles.



Even when jars are packed tightly, make it a habit to debubble.

5 CHECK HEADSPACE

After debubbling, check and adjust to ½-inch headspace if needed.



WIPE • LID • RING

1 WIPE

Wipe jar rims with a clean, damp cloth. This removes any food particles or stickiness (remember, the brine has sugar) and helps ensure a good seal.



2 LID

Place a clean, new lid on each jar.



3 RING

Screw on the ring fingertip tight—tighten to resistance, then give it just a slight additional turn.

DON'T CRANK IT DOWN!



Rings do not need to be new, but they should be clean.



PROCESS THE PICKLES

WATER BATH PROCESSING

1 LOAD

Place jars into the canner.



2 CHECK WATER

Water should cover the jars by at least 1 inch.



3 COVER & BOIL

Put the lid on and bring the water to a rolling boil.



4 START THE TIMER

Once the water reaches a rolling boil, process for the time below.



PROCESSING TIME (PINT JARS)

ALTITUDE	PROCESSING TIME
0 – 1,000 ft	10 minutes
1,001 – 6,000 ft	15 minutes
Above 6,000 ft	20 minutes

Maintain a full rolling boil for the entire processing time.

REMOVE & COOL



2 KEEP UPRIGHT

Keep jars upright. Try not to tilt them.



3 COOL

Place jars on a towel or cooling rack in a spot where they can remain undisturbed.



4 CHECK SEAL

After 12–24 hours, check seals.



LET THEM REST: Let jars sit undisturbed for 12–24 hours to cool and form their seals.



YOU DID IT!

Hearing those little pops as the jars cool? That's the sound of success! One of the best sounds in the kitchen.

Sample

End of Preview