## **Chapter 1**

# Everything You've Wanted to Know about Canning and Preserving, but Didn't Know Who to Ask

### In This Chapter

- ▶ Discovering the world of canning and preserving
- ▶ Understanding the *why*s and *how*s of canning and preserving
- ▶ Preparing yourself for safely canning and preserving your foods
- ▶ Becoming a successful food canner and preserver

ver the years, because of our busy lifestyles and the convenience of refrigeration and supermarkets, the art of canning and preserving has declined and almost been forgotten. But today, many people have a renewed interest in learning these arts. In the pages that follow, I introduce you to the ancient and modern-day techniques that will help you can and preserve with ease.

Producing canned and preserved food in your kitchen is fun and easy. You'll have no doubts about preparing safe home-canned and -preserved food after you discover what each method does, which method is best for different foods, the rules for the technique you choose, and safe food-handling techniques.

In this chapter, I give you an overview of the four canning and preserving techniques I present in this book: water-bath canning, pressure canning, freezing, and drying.

If you're new to canning and preserving, don't be overwhelmed or scared off by the rules. I walk you through easy, step-by-step instructions for each technique. After you understand the basic procedures for a method, like waterbath canning, it's just a matter of concentrating on preparing your recipe.

# Knowing the Benefits of Canning and Preserving Your Own Food

One of life's luxuries is offering fresh-tasting, home-canned food to your family and friends throughout the year. Home-canning and -preserving instantly rewards your efforts when you follow the proper steps for handling and processing your food. As you complete each step, you'll observe your food making the transformation from fresh fruit, like strawberries, into a rich, red, delicious jam.

### What is canning and preserving?

Canning and preserving are methods used for protecting food from spoilage so it may be used at a later time. Some preserving methods, like drying, date back to ancient times. Canning is the most popular preserving method used today. The most commonly canned foods are jam, jelly, fruit spreads, vegetables, and tomato sauce.



Put by or putting up are terms that describe canning years ago, before there was refrigeration. They meant, "Save something perishable for use later when you'll need it."

### Who is canning today?

Although home-canning has skipped one or two generations, one thing is for sure: It's on the rise. Men and women of all ages practice the art of home-canning. It no longer matters whether you live in the country or in the city or if you grow your own food. Fresh ingredients are available just about everywhere.



Exact statistics regarding home-canning vary, but according to the largest manufacturer of home-canning products, Alltrista, approximately one out of four households in the United States cans food. Today, most home-canned products are used in the home where they're produced.

### Why would you want to can?

Do you love fresh ingredients? Do you enjoy specialty foods from gourmet stores but dislike the high prices? Does working in the kitchen and handling food provide you with a sense of relaxation? Do you like to know what goes into your food? If you've answered "yes" to one of these questions and you're willing to spend the time, then canning and preserving are for you.

#### Chapter 1: Everything You've Wanted to Know about Canning and Preserving

Home-canning is a safe and economical way to preserve large or small quantities of high-quality food. Taking the time to select your recipe, choosing and preparing your food, and packaging and processing it for safety is fulfilling and a source of pride for you, the home-canner.

# Meeting Your Techniques: Canning, Freezing, and Drying

The techniques I discuss in this book are safe for home use and produce superior results when you follow all the steps for each method. You compromise the quality and safety of your food if you make your own rules. An example of this is shortening your processing period or not timing it correctly. Either of these adjustments can cause food spoilage because the food doesn't heat long enough to destroy all of the microorganisms in it.



Review the basic techniques for your type of food preserving before you begin — and if you're already familiar with the techniques, review them annually just to refresh your memory. You'll experience fewer interruptions in your food-preserving process.

### About canning food

Don't let anyone tell you that home-canning is complicated and unsafe. It's simply not true. Canning is the process of applying heat to food that's sealed in a jar to destroy any microorganisms that can cause food spoilage.

Although you may hear of many canning methods, only two are approved by the United States Department of Agriculture (USDA). These are water-bath canning and pressure canning.

- ✓ Water-bath canning: This method uses a large kettle of boiling water. Filled jars are submerged in the water and heated to an internal temperature of 212 degrees for a specific period of time. Use this method for processing high-acid foods, such as fruit, items made from fruit, pickles, pickled food, and tomatoes. Chapter 4 explains this method in detail.
- ✓ Pressure canning: Pressure canning uses a large kettle that produces steam in a locked compartment. The filled jars in the kettle reach an internal temperature of 240 degrees under a specific pressure (stated in pounds) that's measured with a dial gauge or weighted gauge on the pressure-canner cover. Use a pressure canner for processing vegetables and other low-acid foods, such as meat, poultry, and fish. For more information about pressure canning, see Chapter 9.



### **Canning methods to avoid**

Older canning methods are unreliable and, for that reason, aren't used or recommended today for home-canning. Occasionally, these methods are "revived" as being faster and easier than water-bath or pressure canning, but using any of the following methods is like playing Russian roulette with your food safety. Just because your grandmother used one of the following methods doesn't make it safe to use today. If you see instructions that require you to use any of the following methods, do yourself a favor and pass by that recipe.

- Oven method: In this method, filled jars are placed in a hot oven. The method is unsafe because your food's internal temperature most likely won't become hot enough to destroy microorganisms and other bacteria that cause spoilage. There's just no guarantee that the food in the jars will reach the temperature you set your oven at. There's also a chance that your jars may explode from the sudden temperature change when your oven door is opened.
- Open-kettle method: In this method, food is cooked in an open pot and transferred to sterilized jars. The two-piece caps are quickly added in hopes of sealing the jars as the food cools. This process produces a low vacuum seal that may be broken as gas from spoiling food builds up in the jar. This occurs because your food isn't heated to

- destroy microorganisms. There's also a chance your food may become contaminated when transferring it into the jars.
- Steam method: This method uses a shallow, covered pan with a rack in the bottom. After the filled jars are placed in the pan, steam circulates around the jars. This method is unsafe because the jars aren't evenly heated and the steam isn't pressurized to superheat the food and destroy microorganisms. Don't confuse this method with pressure canning.
- Microwave oven: All microwave ovens heat differently. Because of this, there's no way to set standards for processing times that achieve a high temperature to penetrate the jars and destroy microorganisms that cause food spoilage.
- Dishwasher: This is another appliance where you can't control the temperature. A dishwasher is inadequate for sterilizing filled or unfilled jars because the temperature in the unit isn't constant.
- Aspirin: Don't laugh at this, but at one time, aspirin was used as a substitute for heat processing. It does contain a germicidal agent that acts as a preservative, but this agent doesn't destroy the enzyme that causes deterioration in food and causes food spoilage.

In both of these methods, your filled jars of food are heated to a high temperature that destroys microorganisms and produces an airtight, vacuum seal. Produce a safe product by using the correct method for your type of food, following your recipe instructions to the letter, and completing each processing step.



Don't confuse a pressure canner with a pressure cooker, which is used to cook food fast.

#### Chapter 1: Everything You've Wanted to Know about Canning and Preserving

### About freezing food

Food for freezing must be absolutely fresh. The quality won't get better just because you throw it in the freezer. Properly packaging food in freezer paper or freezer containers prevents any deterioration in its quality. Damage occurs when your food comes in contact with the dry air of a freezer. Preserve the flavor, texture, color, and nutritive value of your food by quickly freezing it at a temperature of 0 degrees or lower.

### About drying food

Drying is the oldest method known for preserving food. This process removes moisture from your food by exposing it to a low temperature. Good air circulation assists in evenly drying the food.

An electric dehydrator is the best and most efficient unit for drying, or dehydrating, food. This specialty appliance produces a steady flow of air with an evenly regulated temperature. You can also dry food in your oven or by using the heat of the sun, but your results will be inferior to food dried in a dehydrator.

# Finding Out What's Involved in Successful Canning and Preserving

Canning and preserving methods are simple and safe, and they produce food that's nutritious, delicious, and just plain satisfying to your taste buds. Becoming a successful food preserver takes time, effort, and knowledge of the rules. Follow these tips for achieving success as a home canner and preserver:

- ✓ Start with the freshest, best products available. Preserving doesn't improve food quality. If you put garbage in, you get garbage out.
- ✓ Know the rules and techniques for your canning or preserving method before you start your work. Don't try to learn a technique during or after you've started your processing.
- ✓ Work in short sessions to prevent fatigue and potential mistakes. Process no more than two items in one day.
- Stay up-to-date on new or revised guidelines for your preserving method.

### $m{12}$ Part I: Getting Started $\_$

- ✓ Use the correct processing method and processing time to destroy microorganisms.
- ✓ **Know the elevation you're working at.** Adjust your processing time or pressure when you're at an altitude over 1,000 feet above sea level.
- ✓ Put together a plan before you start your preserving session. Have the proper equipment and correct ingredients on hand to prevent last-minute shortages and inconvenient breaks.

In addition to the previous tips, read your recipe more than once. Make a list of what you'll need and check off items as you gather them. Get out your equipment and make sure everything you need is present and accounted for. If you're using a pressure canner or an electric dehydrator, test out the equipment to ensure everything's working properly.



Use recipes from reliable sources or ones that you've made successfully. Follow your recipe to the letter. Don't substitute ingredients, adjust quantities, or make up your own food combinations. Improvisation and safe food preservation aren't compatible.

Now you're ready to take your food to its final destination in the preservation process. Whether you choose canning, freezing, or drying, proceed down your canning and preserving road with confidence.