



# Food Preservation



## Selection, Use, and Care of Canning Equipment

### Canning Lids

More than 30 different brands of home canning lids are sold. Do not use any home canning closure that has not been scientifically proven. Don't use any questionable closure or technique recommended in newspapers, magazines, books, or write-in advertisements.



Do not reuse flat metal lids in home canning. Gasket materials are designed to soften sufficiently to provide an airtight seal and maintain a vacuum in the jar when in contact with the jar rim. Variations in the shape of jar tops may prevent an adequate seal when lids are reused.

Be sure all closures are perfect. Don't use any with dents or rust because these prevent airtight seals.

Wash all lids and bands. Metal lids with sealing compound may need to be boiled or held in boiling water for a few minutes; follow the manufacturer's directions.

### Glass Jars

Use only standard home canning jars. They are made to seal properly, to be durable with repeated use, and to be used safely in a steam pressure canner. The manufacturer's name is usually blown in the side of the jar.



Commercial jars, also known as packers' jars, are not made for home canning. They contain such products as coffee, mayonnaise, or peanut butter. Even though standard home canning lids may seem to fit these jars, the lids may not seal because the jar mouth is too small or the finish too irregular. The jar neck may be too shallow for a standard home canning band to hold the lid tightly against the jar.

In addition to sealing problems with commercial jars, they may also be dangerous. Most of them are made of thin glass and are not heat tempered, as regular home canning jars. When you open the canner, the jars may still be under pressure. The quick drop in temperature could cause the recycled jar to explode in your face.

Inspect jars for any cracks or chips before you use them because defects prevent airtight seals.

Wash glass jars in hot, soapy water and rinse well. You do not have to sterilize jars for most foods when using the boiling-water-bath method; with the pressure canner

method, all foods are safe to can without sterilizing the jars. The jars, as well as the food, are sterilized during processing.

You should sterilize jelly containers in boiling water for 10 minutes before using them. Then keep the containers hot—either in a slow oven or in hot water—until you use them. This will keep them from breaking when you fill them with hot jelly.

### Boiling-Water-Bath Canner

Water-bath canners are available on the market. But you can use any big metal container if it is deep enough for the water to cover the tops of the jars and there is enough space to boil freely. Allow 2 to 4 inches of water above the jar tops for brisk boiling. The canner must have a tight-fitting lid and a wire or wooden rack. If the rack has dividers, jars will not touch each other or fall against the sides of the canner during processing.



Fruits, tomatoes, pickled vegetables, relishes, jams, and preserves can be processed safely in a boiling-water-bath canner.

Put filled glass jars into the canner of hot or boiling water. For jams, preserves, and raw packed fruits or tomatoes, have water in the canner hot but not boiling. For pickles and hot packed fruits and tomatoes, have water boiling.

Add boiling water until it is an inch or two over the tops of the containers; don't pour boiling water directly on glass jars. Place cover on the canner.

For most foods, you start to count processing time when the water in the canner comes to a rolling boil. Processing methods for some pickles, such as fresh-pack dill pickles, are slightly different from the usual water-bath procedures. For these products, start to count the processing time as soon as you place the filled jars in the actively boiling water. Follow instructions carefully for the food you are canning.

Keep water boiling gently and steadily during the time recommended for each food. Add boiling water during processing if needed to keep the containers covered.

Remove jars from the canner immediately when processing time is up.

### Pressure Canners

Meat, fish, poultry, and all common vegetables except tomatoes should be canned in a steam-pressure canner. NEVER can these foods in a boiling-water-bath canner, an oven, a steamer without pressure, or an open kettle. The

pressure canner is the only method of home canning that will heat these foods enough to kill the dangerous bacterial spores of *Clostridium botulinum* within a reasonable time.

### **Essential Parts of Pressure Canners**

Covers of pressure canners are locked in place so that they cannot be lifted by steam. Most new canners have covers that slide into a locked position.

A gauge, whether a dial or a weight, is essential to control pressure. The weight type allows the pressure to rise to a definite point and then releases excess steam to keep the pressure from going higher. With both types, you must adjust the heat to keep the pressure steady.

Gaskets keep steam from leaking out around the cover. Replace the gasket when it becomes stretched or allows steam to escape.

Safety plugs go into action only if pressure or temperature becomes dangerously high. One type of plug melts when the pressure gets too high or the canner boils dry. Another type of plug is blown out by excessive pressure. Both types are replaceable.

Vents exhaust air from the canner and release steam as needed. A petcock, safety valve, or weight on the vent is used to control the escape of air or steam. Most new dial gauge canners have a weight on the vent.



### **Basic Steps in Using a Pressure Canner**

Put 2 or 3 inches of boiling water in the canner. The amount depends on the size and shape of the canner.

Place the rack in the canner. Set filled jars in the canner so that steam can flow around each container. Fasten the canner cover securely so that no steam can escape, except through the vent (petcock or weighted gauge opening).

Leave the petcock open or the weighted gauge off at the beginning of the heating time. Watch until steam flows steadily from the vent. Let it escape for 10 minutes or more to drive all the air from the canner. Then put on the weighted gauge or close the petcock.

Let the pressure rise to 10 pounds (240 °F). The moment this pressure is reached, start counting the processing time. Keep the pressure constant by adjusting the heat under the canner. Keep drafts from blowing on the canner.

Remove the canner from the heat as soon as the processing time is completed.

With glass jars, let the canner stand until the pressure is zero. Never try to rush the cooling by pouring cold water over the canner or setting it in water. Wait a minute or two after the pressure reaches zero; then slowly take off the weighted gauge or open the petcock. Open the cover and tilt the far side up so the steam escapes away from you. Take the jars from the canner.

### **Care of Pressure Canners**

Wash thoroughly after each use, but don't put the cover in water because this will damage a dial gauge and may cause vents to become clogged. Never run water over the dial gauge. Wipe the cover with a soapy cloth and then with a clean, damp one.

Clean the vent pipe by drawing a pipe cleaner or string through. Wash the gasket and replace it in the cover.

Store your canner carefully. Make sure it is clean and dry before you put it away at the end of the season. Crumple newspapers inside the canner to absorb moisture and odors. Some manufacturers recommend turning the cover upside down on the canner to prevent odors in the canner and to protect the valves and gauge.

### **Use of Pressure Canners**

Keep the manufacturer's instruction book that comes with your pressure canner. Reread the directions at the beginning of each canning season and follow them carefully. If you have lost the manufacturer's book, request a new one from the manufacturer. Give the model number and any other information you find on the canner.

Before canning season begins, put water in the canner and bring it up to pressure in the usual way to see that it is in good working order. Allow time for repairs, if needed. Have a dial gauge checked before the canning season, and also during the season if you use the canner often. Ask your county Extension agent, the manufacturer, or the dealer you bought the canner from about checking it.

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