

Food Safety & Preservation:

Pressure Canner Use and Care

SP 50-649, Revised March, 2013

Low acid foods (vegetables, meats, poultry and fish) must be processed in a pressure canner to kill the bacteria which cause botulism.

Pressure canners have been extensively redesigned in recent years. Models made before the 1970's were heavy-walled kettles with clamp-on or turn-on lids. They were fitted with a dial gauge, a vent port in the form of a petcock or counter weight, and a safety fuse. Most modern pressure canners are lightweight, thin-walled kettles and most have turn-on lids. They have a jar rack, gasket, dial or weighted gauge, an automatic vent/lock, a steam vent which is closed with a counterweight or weighted gauge, and a safety fuse.

Types of Canners

There are two types of pressure canners available commercially; those with dial gauges and those with weighted gauges. Most canners are designed to hold seven quarts or eight to nine pints. Some canners are tall enough to hold two layers of pints. The smaller pressure canners hold only 4 quarts.

Note: Pressure saucepans are no longer recommended for canning.

Pressure canners must hold 4 quart jars to be large enough to safely process low acid foods.

Weighted-gauge Canner

Weighted-gauge models exhaust tiny amounts of air and steam each time their gauge rocks or jiggles during processing. The sound of the weight rocking or jiggling indicates that the canner is maintaining the recommended pressure. The disadvantage of the weighted-gauge canner is that it cannot be corrected precisely for higher altitudes. A 15 pound weight must be used for processing at higher altitudes. This could result in overprocessing at altitudes requiring 12 to 14 pounds pressure.

Dial-gauge Canner

Dial-gauged models have a dial, which tells the pressure built up inside the canner. This gauge must be watched closely during processing and checked for accuracy once a year (more often if the canner is used frequently or dropped). Your county Extension Service office can tell you where to have the gauge checked in your area. If the dial is inaccurate by more than 2 pounds, it must be replaced.

Care of the Canner

Before each use, inspect the pressure canner. See that the petcock and safety valve are not blocked. Clean them several times a year with a pipe cleaner.

For canners with a gasket, be sure it fits tightly in the groove in the lid. Replace it if it is loose or becomes brittle and cracked. Keep gaskets clean between uses. Gaskets on older model canners may require a light coating of vegetable oil once per year.

Gaskets on newer model canners are pre-lubricated and should <u>not</u> be oiled. After each use, be sure to wash and thoroughly dry the canner before storage.

For canners without gaskets, be sure the lid is tightened evenly by alternately tightening the screws much the same way you tighten the screws when putting a tire on the car.

Using Pressure Canners (Note: Follow manufacturer's directions for use.)

- 1. Place 2-3 inches of hot water in the canner (more for longer processing times).
- 2. Arrange jars on a rack so steam can flow freely around each jar. If a double layer of pint jars is necessary, use an additional rack to separate the layers. Stagger the placement of the jars over the first group.
- 3. Fasten canner lid securely so no steam escapes around rim.
- 4. Watch for steam to escape steadily through the petcock. Then wait 10 minutes before closing petcock or placing weighted gauge on canner. This "exhausting" step is very important to remove all air from the canner. (Air which is trapped will prevent adequate heating of jars.) This step is needed even for those canners labeled "self-exhausting."
- 5. When the pressure reaches 10 pounds for weighted-gauge canner or 11 pounds for dialgauge canners, immediately set a timer for the required canning time.

When using a **weighted-gauge** pressure canner at altitudes above 1,000 feet, adjust for altitude by using 15 pounds pressure for the processing time recommended.

When using a *dial gauge* pressure canner at altitudes of 2,001-4,000 feet, adjust for altitude by using 12 pounds pressure; at 4,001-6,000 feet, use 13 pounds pressure.

- 6. Watch the canner continuously to be sure that pressure stays constant. If pressure fluctuates, regulate it immediately by adjusting the heat. Never open the petcock or remove the weight to adjust pressure. Fluctuating pressure may cause liquid to be drawn from the jars and cause some jars not to seal. Weighted gauge canners will either jiggle 2-3 times per minute or rock slowly continuously. Check your instruction manual.
- 7. At the end of the processing time, remove the canner from the heat. Do not cool the canner with water or cold towels. When pressure returns to zero, slowly open the petcock or remove the weighted gauge. Wait 10 minutes, then unfasten the cover and tilt the lid away from you to avoid steam burns. Immediately remove jars from the canner. If jars are allowed to stand in the closed warm canner, spoilage could occur and the lid could seal on to the canner.

Source: OSU Master Food Preserver Program

