

Using Boiling Water Canners

Most boiling water canners are made of aluminum, stainless steel, or porcelain-covered steel. Boiling water canners have fitted lids and removable racks that are either perforated or shaped wire racks. The canner must be deep enough so that at least one inch of briskly boiling water will be over the tops of jars during processing. Some boiling water canners do not have completely flat bottoms; these will not work well on smooth top ranges. The canner bottom should also be fairly flat for use on electric burners. Either a flat or ridged bottom may be

used on a gas burner. To ensure uniform processing of all jars with an electric range, the canner should be no more than 4 inches wider in diameter than the element on which it is heated. (When centered on the burner or element, the canner should not extend over the edge of the burner or element by more than 2 inches on any side.) Before canning on a smooth top range, check the range manufacturer's advice on suitability for canning and recommended maximum canner size for specific burners.

Foods to Preserve in a Boiling Water Canner

Acid foods including:

- **Fruit and Fruit products** (apples, applesauce, cherries, grape juice, peaches, pears, jams, jellies, preserves, etc.)
- **Tomato and most Tomato products** (juice, sauce, ketchup, salsa, etc.) *Most need some extra acid - citric acid or bottled lemon juice - added to them!*
- **Fermented/Pickled products** (sauerkraut, dill pickles, pickled beets, etc.)

All steps in preparing, cooking and canning foods need to be followed. Processing times are different for each food or combination of foods. When we add ingredients or change proportions of ingredients, we may need different processing times. Acidity of a food determines if it can be processed in a boiling water or if it

needs a pressure canning. Acidity and thickness of the food changes the time needed in either process.

When recipes are altered, or you add just a little more of this, the acidity is changed! And the time given may not be adequate to stop the growth of bacteria, molds and yeasts.

Source: National Center for Home Food Preservation. <http://nchfp.uga.edu>

Revised 2022, Larvick



More information on canning methods from Nebraska Extension on the web:

<https://food.unl.edu/article/canning-basics>

Boiling Water Canners



Before starting, wash your hands for 20 seconds with soap and warm water.

Also, have clean counters, sinks, equipment, and utensils.

1. **Before you start** preparing your food, place canner rack in the bottom of a boiling water canner. **Fill the canner** half full with clean warm water for a canner load of pint jars. For other sizes and numbers of jars, you will need to adjust the amount of water so it will be 1 to 2 inches over the top of the filled jars.
2. Center the canner over the burner and **preheat the water to 140°F for raw packed foods and to 180°F for hot packed foods.** You can begin preparing food for your jars while this water is preheating.



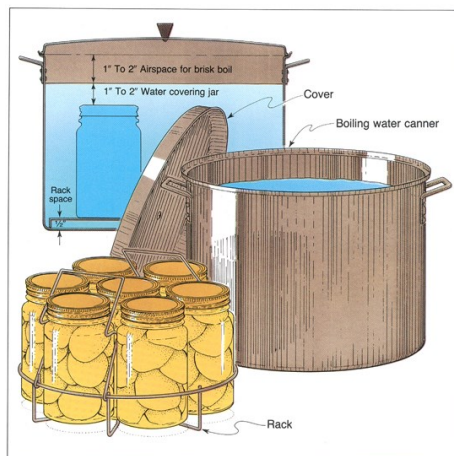
The University of Nebraska does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

3. **Load filled jars, fitted with lids and ring bands, into the canner one at a time, using a jar lifter.** When moving jars with a jar lifter, make sure the jar lifter is securely positioned below the neck of the jar (below the ring band of the lid). Keep the jar upright at all times. Tilting the jar could cause food to spill into the sealing area of the lid.



If you have a shaped wire rack that has handles to hold it on the canner sides, above the water in the canner, you can load jars onto the rack in the raised position and then use the handles to lower the rack with jars into the water.

4. Add more boiling water, if needed, so the **water level is at least one inch above the jar tops.** Pour the water around the jars and not directly onto them. For process times over 30 minutes, the water level should be 2 inches above the jars. *Remember to adjust your processing time based on your elevation.*
5. Turn the heat setting to its highest position, cover the canner with its lid and **heat until the water boils vigorously.**
6. Set a **timer (after the water is boiling) for the total minutes** required for processing the food.
7. **Keep the canner covered for the process time.** The heat setting may be lowered as long as a gentle but complete boil is maintained for the entire process time.



8. Add more *boiling* water during the process, if needed, to **keep the water level above the jar tops.** Pour the water around the jars and not directly onto them.

If the water stops boiling at any time during the process, turn the heat on its highest setting, bring the water back to a vigorous boil, and begin the timing of the process over using the total original process time.

9. When the jars have been processed in boiling water for the recommended time, turn off the heat and remove the canner lid. **Wait 5 minutes before removing jars** to allow the canner contents to settle. *This waiting period is not required for safety of the food when using USDA or University of Georgia processing times.*
10. Using a jar lifter, remove the jars one at a time, **being careful not to tilt the jars.** Carefully **place them directly onto a towel** or cake cooling rack, leaving at least one inch of space between the jars during cooling. Avoid placing the jars on a cold surface or in a cold draft.



11. Let the jars **sit undisturbed** while they cool, from 12 to 24 hours. **Do not tighten ring bands** on the lids or push down on the center of the flat metal lid until the jar is completely cooled.
12. All jars should be properly sealed which can be checked by the lid curving inward.
13. **Remove ring bands** from sealed jars. Put any unsealed jars in the refrigerator and use first.
14. **Wipe down sealed jars** with sudsy water to remove any residue.
15. Label jars, with product name and date. Store in a cool, dry place out of direct light. Best if used within 1 year.