



Basics of Water Bath Canning



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Water bath canning is a home food preservation canning method approved by the U.S. Department of Agriculture. High-acid foods including most fruits, jams, jellies, pickled products, sauerkraut, preserves, salsa and acidified tomatoes can all be home canned using a water bath canner and a research-based recipe.

A water bath canner is a large, deep kettle that has a lid and a rack to hold jars.

Water bath canners are made of aluminum or porcelain-covered steel. They have removable perforated racks and fitted lids. The canner must be deep enough so that at least 1 inch of briskly boiling water will be over the tops of jars during processing. Some boiling-water canners do not have flat bottoms. A flat bottom must be used on an electric range. Either a flat or ridged bottom can 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 (National Center for Home Food Preservation, 2009).

Alternatively, you can use a big, covered stockpot deep enough to allow water to be 1 to 2 inches over the tops of the jars with room for a rolling boil. You can purchase a rack for holding jars wherever canning supplies are sold.



There are two methods of packing food into hot canning jars – raw pack and hot pack.

- **Raw pack:** Pack raw, thoroughly washed prepared food (that has been peeled, cut-up, pitted or prepared by another method) into clean, hot jars. Pack raw fruits and vegetables tightly because they will shrink during processing.
- **Hot pack:** Heat prepared food to boiling, simmer 2 to 5 minutes. Promptly pack food loosely into clean, hot jars, according to research-based recipe directions.

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Cover both raw- or hot-packed foods with boiling water, cooking liquid, syrup or juice. Follow a research-based recipe for when to use raw and hot pack options for canned foods.

Using a plastic spatula, bubble freer or wooden spoon, go around the inside of the jars to remove air bubbles. Leave the amount of headspace at the top of the jar according to directions from a research-based recipe.

As soon as the food is packed into jars, wipe the jar rims with a clean, damp cloth or paper towel. Put on the lid with the sealing compound next to the jar rim. Screw the band down, fingertip tight, so that it is on securely. Do not tighten too tight – there has to be enough “give” for air to escape from the jars during processing. Process foods promptly after tightening lids and rings on jars.

Steps for Successful Water Bath Canning

1. Fill canner half full with water; using a food thermometer, pre-heat water to 140 degrees F for raw pack and 180 degrees F for hot-packed foods.
2. Using a jar lifter, place jars filled with food on the rack in the canner. Lower canner rack down into the water. Water needs to be at least 1 to 2 inches above jars. If necessary, add boiling water to bring water to 1 to 2 inches over tops of jars. Do not pour boiling water directly on jars.
3. Place lid on canner.
4. When water comes to a rolling boil, start timing the process. Keep water at a gentle and steady boil for the entire processing time.
5. When processing time is up, turn off heat and remove canner lid. Using a jar lifter, remove the jars one at a time.
6. Place hot jars upright on a cooling rack or towel to cool. Leave space between jars for air to circulate, but keep them out of direct breeze – this can cause jars to break. Do not tighten ring bands on the lids or push down on the center of the flat metal lid.
7. Leave jars on counter to cool for 12 to 24 hours. After jars are cooled completely, check to be sure all lids have sealed. If the jars are not sealed, the food must be reprocessed in clean jars with new lids, or the unsealed jars must be refrigerated and the food eaten within two to three days or freeze the food.
8. Remove screw bands and check lids for secure seal. Wash, dry, label, date and store jars in a cool, dry place.

(National Center for Home Food Preservation, 2009)

References

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