

# Appetite for Knowledge



## UNSAFE HOME CANNING PRACTICES

Some things are great to pass down through the generations. Grandma's county fair purple ribbon apple pie filling recipe is something to cherish. Some of her preservation techniques should, however, be left in the past.

I have seen many unsafe food preservation recipes on Internet sites, in media, and in many cookbooks. Home canned food can be safe or unsafe depending on how it is preserved. Preserve your food safely by using research-based preserving methods.

### SAFE PRACTICES

Make sure your canning recipes following the latest guidelines. They should be based on or compatible with current guidelines. Depending on the type of food, ALL canning must now be canned in a boiling water canner (high acid foods) or a pressure canner (low acid foods). Significant changes in guidelines have been made that are critical to the safety of some processes. These included changes in canning tomatoes, pickles, and meat processing.

When canning foods, it is important to know your local altitude. Your altitude determines the amount

of pressure (pressure canner) or time (boiling-water canner) for your food. In Wyoming, the altitude ranges in elevation from 3,100 feet to 13,800 feet above sea level.



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Using the process time for canning food at sea level may result in spoilage if you live at altitudes of 1,000 feet or more. Water boils at lower temperatures as altitude increases. Lower boiling temperatures are less effective for killing bacteria. Increasing the process time or canner pressure compensates for lower boiling temperatures. Therefore, when canning, select the proper processing time or canner pressure for the altitude where you live. If you do not know the altitude, contact your local county Extension educator.

There are five safe methods for preserving food safely at home: water bath canning, pressure canning, steam canning, freezing, and dehydrating. New research on steam canning states that an atmospheric steam canner is safe to use for preserving high-acid foods such as fruit, pickles, and acidified tomatoes. Steam canning uses a covered, shallow pan and rack to circulate steam around filled jars. Steam in this type of canner is not pressurized. Steam canners should never be used for low-acid foods, such as vegetables and meats, which need to be pressure canned to be safe.

## **UNSAFE PRACTICES**

Unfortunately, there are also several unsafe canning methods. Let's look at five unsafe canning methods:

**Oven:** This technique involves “baking” your filled jars of food in the oven, instead of water bath processing or pressure canning them. The food does not get hot enough to kill bacteria and mold spores. This leaves

room for botulism to form – one of the most significant concerns of home canning. Oven canning is not a recommend process!

**Dishwasher:** Processing canned foods during a dishwasher cycle can be dangerous. There is no way to control the temperature or processing time in a dishwasher. The temperature of the water during the cleaning and rinsing cycle is far below that required to kill harmful microorganisms. Thus, the product will be under-processed and unsafe to eat. Don't try this!

**Open Kettle:** The open-kettle method involves placing hot cooked food in jars and sealing with no further heat treatment. The reason open kettle canning is no longer recommended is that the food is not heated adequately to destroy the spoilage organisms, molds, and yeasts that can enter the jar while you are filling the jar, and it does not produce a strong seal on the jar. This method is not safe!

**Microwave:** A microwave oven cannot be used for home canning. Microwaved food may reach 212°F but heating is not uniform. Different microwave ovens have different heating properties and there are no standards for controlling internal temperatures of any canned product. Do not use a microwave oven for home canning!

**Solar:** This involves putting food into jars, sealing them, and then cooking them in a solar oven. The temperatures don't get hot enough, and the cooking is also uneven. Not safe, not reliable!



## HELPFUL RESOURCES

Do not use food preservation books or recipes dated before 1994 because the processing times are outdated and unsafe. Consider using the Complete Guide to Home Canning by the USDA or So Easy to Preserve book from the University of Georgia. Credible websites include the National Center for Home Food Preservation, Ball [freshpreserving.com](https://www.freshpreserving.com), or University Extension resources and websites.



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Make sure your canning techniques are up to date. Just because it seals doesn't mean it's safe! University of Wyoming Extension encourages safe home food canning methods using only research-based information.

### Sources

- Ball, [freshpreserving.com](https://www.freshpreserving.com)
- National Center for Home Food Preservation, *So Easy to Preserve*
- USDA, *Complete Guide to Home Canning*



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