



Preserve It Fresh, Preserve It Safe

Local Edition

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Storing Canning Equipment

With frost on the pumpkin, many home food preservers are storing canning equipment until spring. Take time now to maintain your equipment. You will be glad you did next year when you see those first signs of vegetables in the garden and fruits beginning to ripen.

- Pressure canners—clean the vent and safety value. Remove the gasket. Clean well and check for wear and cracks. Buy replacement parts if needed.
- Clean darkened surfaces of aluminum canners by boiling a mixture of 1 tablespoon cream of tarter and 1 gallon of water.
- Store canners with crumpled paper towels or newspaper to absorb moisture. Place lids upside down for air circulation.
- Examine empty jars for damage. Wash and dry jars and rings completely before storing.

Preserving Nuts



Nuts store very well by properly drying and storing in airtight containers in a cool location.

Refrigerated (at 32-45°F) nuts will maintain quality for one year and frozen

(at 0°F) nuts will maintain quality for 1, 2, or even 3 years depending on the type of nut. It is no longer recommended to can dry nuts. This is due to risk of condensation from the canning process leading to bacterial growth. A better option is to vacuum pack dry, shelled nuts.

The Chemistry of Pumpkin Spice Flavor

Pumpkin spice is everywhere from coffee to body butter. But don't expect any real pumpkin. Pumpkin spice products suggest traditional pumpkin pie. The spices cinnamon, nutmeg, ginger, clove or allspice are what gives pumpkin its flavor. But natural spices are difficult to replicate for flavor consistency.

The traditional spice mixture contains about 340 flavor compounds such as eugenol for cloves, terpenes for nutmeg, and zingiberene for ginger. Maillard reaction products caramelize the mixture into a tasty food product.

Thus, the complex world of flavor chemistry gives you the latest food craze.

Fall Canning Tips

At this writing, gardens may still be producing, so here are some end-of-summer tips for food preservation.

- Do not can tomatoes from frost-killed or dead vines. Their pH maybe higher than 4.6. Eat or freeze them for later use.
- As fall approaches, those end of season unripe tomatoes are still usable. Be sure to pick them before a frost or freeze, if canning them. So, when canning them they still require acidification.
- Can pumpkin or other winter squash varieties safely in cubes. Do not mash or puree ay winter squash for canning. Freeze mashed winter squash for later use.
- Apples are here! Preserve them by canning, drying for freezing them.

Do Home Canned Foods Need to be Heated?

When ready to use home canned foods, should they be heated prior to consumption? This explanation is from the *USDA Complete Guide to Home Canning*:

Low-acid and tomato foods not canned according to the recommendations in this publication or according to other USDA-endorsed recommendations should be boiled as above, in a saucepan before consuming, even if you detect no signs of spoilage. This does not serve as a recommendation for consuming foods known to be significantly under processed according to current standards and recommended methods. It is not a guarantee that all possible defects and hazards with other methods can be overcome by this boiling process. All low-acid foods canned according to the approved recommendations may be eaten without boiling them when you are sure of all the following:

- Food was processed in a pressure canner.
- Pressure canner gauge was accurate.
- Up-to-date researched process times and pressures were used for the size of jar, style of pack, and kinds of food being canned.
- The process time and pressure recommended at your altitude was followed.
- Jar lid is firmly sealed and concave.
- Nothing has leaked from jar.
- No liquid spurts out when jar is opened.
- No unnatural or “off” odors can be detected.

What is Botulism?

Botulism occurs when the bacterium *Clostridium botulinum* is present. It is a serious illness that can lead to paralysis and possibly death. Foodborne botulism is one of three kinds of botulism can affect many people.

Botulinum toxins A, B, E and F cause illness in humans. *C. botulinum* grows in low oxygen conditions, such as in canned low acid food. Outbreaks have occurred in canned foods such as asparagus, green beans, beets and corn. The most recent outbreaks involved canned chili products and green beans. Home canned foods have also been sources of botulism outbreaks. To prevent botulism in home canned food, use USDA recommendations to can food safely. Low acid foods such as vegetables and meats must be pressure canned so the food reaches 240°F which kills *C. botulinum*.

Botulism symptoms include:

- Double vision, blurred vision, drooping eyelids
- Slurred speech
- Difficulty swallowing, dry mouth
- Muscle weakness

If untreated, paralysis can occur in the arms, legs, trunk and respiratory muscles. Symptoms typically appear within 18 to 36 hours after eating contaminated food. Symptoms can occur as late as 10 days after consumption.

Botulism is treatable, but those who survive may have fatigue and shortness of breath for years. Severe cases may require a breathing machine and intensive medical care.

Source: www.cdc.gov

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