

Answers to Common Canning Questions

Denise Brochetti
Assistant Professor -
Nutrition

Q. Can I use my own recipes when I can foods like salsa and soups?

A. You must use only up-to-date recipes (published in 1990 or after) that have been scientifically tested to be sure that all harmful microorganisms will be destroyed during the canning process. Microorganisms are found naturally on fresh foods. Many cause foods to spoil, but some cause foodborne illness.

When you are canning, do not change any ingredients in the recipes and follow the directions carefully. You can find scientifically tested recipes in reliable sources, such as the *USDA Complete Guide to Home Canning* or the National Center for Home Food Preservation web site (www.uga.edu/ncfhp). If you cannot find a recipe for the food you want to can, consider freezing the food as that is a safe alternative.



Q. If my recipe does not call for processing the food, do I need to process it anyway?

A. Yes, do not rely on old canning recipes that do not call for processing or those that call for processing in an oven, steam canner or open kettle. You must use canning procedures that will keep the food safe. When canning high-acid foods, such as fruits, pickles, jellies and jams, you can process them in a boiling water bath canner. When canning low-acid vegetables (e.g., corn and beans), meats, fish and poultry, you must process them in a pressure canner. The bacterium *Clostridium botulinum* can grow in improperly canned low-acid foods. This bacterium causes botulism, a deadly form of foodborne illness, so be sure to use the correct canning method for the food you want to can.



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Q. Do I need to sterilize jars before canning?

A. You do not need to sterilize jars if they will be processed in a pressure canner or if they will be processed in a boiling water bath canner for at least 10 minutes. If the jars are processed in a boiling water bath canner for less than 10 minutes, you will need to sterilize them first by boiling in hot water for 10 minutes before you fill them with food.

Q. Can I reuse jars, lids and bands?

A. Do not reuse jars with nicks, cracks or chips, especially around the top sealing edge, as these jars will break under pressure and heat. Use only jars that use two-piece, self-sealing metal lids. Do not reuse the lids as they will not form a tight vacuum seal. Screw bands are reusable only if they are not bent, dented or rusted. At the beginning of each canning season, check the jars, lids and bands that you have to determine what you need to buy.

Q. Why did my jars break in the canner?

A. Jars can break for several reasons. Commercial jars are not manufactured for home canning, so they can break during the canning process. Regular and wide-mouth Mason-type, threaded, home-canning jars with self-sealing lids are recommended, and they can be reused many times if handled carefully. Jars with cracks and chips will break too.



Jars will break if you put them directly on the bottom of a canner instead of on a rack or if you put hot food into the jars when they are cold. Also, jars will break if they contain raw or unheated food and you place them directly into boiling water in the canner.

Q. Why did my jars of food lose liquid?

A. Jars can lose liquid because you did not cover them with 1 to 2 inches of water in the canner

or because you packed the food in the jars too tightly. Jars will lose liquid if you do not work out air bubbles from the jars before processing. Some starchy foods will absorb more of the liquid during the canning process too. Loss of liquid is not a sign of spoilage, but do not open the jars and add liquid because that will cause the food to spoil. If you lost half the liquid or more, refrigerate the jars and eat the food within two to three days.



Q. Why is the liquid in the jars cloudy?

A. Sometimes a cloudy liquid indicates that the food is spoiled, so recheck your canning recipe to be sure that it is from a current and reliable source and that you followed the recommended processing method, time and temperature. However, sometimes a cloudy liquid comes from starch in over-mature, starchy vegetables (e.g., corn) or from minerals present in soft water. Fillers (anti-caking agents) in table salt also can cause clouding, so use pure refined salt when possible.



Q. Why did the food I canned turn color?

A. Enzymes can cause food near the top of the jar to turn a dark color. You may not have processed the food long enough to inactivate the enzymes, so recheck your recipe. Dark color near the top will occur if you did not use enough liquid or syrup to cover the food or if you did not remove air bubbles before sealing the jar. Sugar in corn will caramelize, and corn will turn brown if processed at a temperature that was too high. Minerals, such as iron, zinc and copper, in cooking utensils or water can cause various color changes in food, and immature and over-mature produce can change color during the canning process too.

Q. How do I test jars to make sure they are sealed correctly?

A. After cooling jars for 12 to 24 hours, remove the screw bands and test seals in one of the following ways. First, press the middle of the lid with a finger. If the lid springs up when you release your finger, the lid is not sealed. Or, tap the lid with the bottom of a teaspoon and if it makes a dull sound, the lid is not sealed. If food is in contact with the underside of the lid, it will cause a dull sound too. If the jar is sealed correctly, it will make a ringing, high-pitched sound. Finally, hold the jar at eye level and look across the lid. If the lid is concave (curved down slightly in the center), it is sealed, but if it is either flat or bulging, it is not sealed.

Q. Can I reprocess food if the lid did not seal?

A. You can reprocess food when the lid does not seal, but only if you detect it within 24 hours of the time you processed it. Start by removing the lid and checking the jar sealing surface for any nicks. Change jars in the case of nicks, and then add a new treated lid. Reprocess it using the same processing time that you used initially. If it has been longer than 24 hours since you first processed it, the food will not be safe to eat, so throw it out. Reasons for jars not sealing include nicks and cracks in jars, failure to follow lid manufacturer's directions for closing, using rusty bands, reusing self-sealing metal lids and leaving food particles or fat from food on jar rims. Be sure to wipe rims with a clean, damp cloth before closing. Insufficient headspace in the jars also can cause seal failures.



Q. There is mold growing in the jars of food I canned. Can I scrape it off and eat the food?

A. Do not eat home-canned food that has mold growing on it. Throw it out. Mold can change the acidity of the food, making it less acidic. Bacteria are more likely to grow in low-acid foods, especially the very harmful *Clostridium botulinum* bacterium that causes botulism. You can salvage some jams and jellies because the

sugar in these products helps prevent the growth of *Clostridium botulinum*. Remove the mold on the surface plus at least ½ inch of the product underneath it. If there is extensive mold growth, throw out the jam or jelly. Do not eat it.

Q. Why did my home-canned food spoil?

A. A number of things can cause home-canned food to spoil. To prevent spoilage, start with the best quality food and then process it quickly and correctly, because bruised and insect-damaged food contains microorganisms that cause spoilage. Use canning recipes from current and reliable sources, and follow the recommended processing methods, times and temperatures. Do not overfill jars, and do not change ingredients in a recipe because it has been scientifically tested for safety and quality. Use supplies and equipment that are in good working order, or have them repaired or replaced before you start to can.



Q. How long can I keep home-canned food?

A. You will need to use it within a year because the quality will deteriorate. Food safety experts recommend that you do not use most home-canned foods after one year and less with some foods. Be sure you have the right storage place. If the temperature is too hot, the food will lose its quality. If it is too cold, the food will freeze and the jars will burst.

A grid of 12 small charts arranged in 3 rows and 4 columns. Each chart shows temperature ranges for different types of home-canned foods. The charts are color-coded with red and white backgrounds. The first row shows 'Fruit and Vegetable Jams, Jellies, and Butters', 'Fruit and Vegetable Spreads', 'Fruit and Vegetable Cakes', and 'Fruit and Vegetable Cakes'. The second row shows 'Fruit and Vegetable Cakes', 'Fruit and Vegetable Cakes', 'Fruit and Vegetable Cakes', and 'Fruit and Vegetable Cakes'. The third row shows 'Fruit and Vegetable Cakes', 'Fruit and Vegetable Cakes', 'Fruit and Vegetable Cakes', and 'Fruit and Vegetable Cakes'.

Dampness will corrode metal lids and break seals causing spoilage, so store food in a cool, dry place at temperatures between 50° and 70° F. If you do not have enough storage space for all the food you want to can, freeze some of it as this will help you preserve as much of it as possible.

Sources

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DENISE BROCHETTI, Ph.D., R.N., is assistant professor - nutrition, University of Arkansas Division of Agriculture, Little Rock.

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