



## Master Food Preservers San Joaquin County



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### Food Preservers

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Did You  
Know?

Our newsletter has hyperlinks to other useful websites. Click on the underlined words to open a page. It's as easy as that!

## Hello Winter!

The spring and summer months give us a plethora of fruits and vegetables to preserve when winter comes. So, I imagine you are enjoying the “fruits” of your labors from these past peak months. These winter months also provide us with plenty of activities in food preservation.

To begin with, survey your current canned inventory. Are some items near or beyond their highest quality timeframe? Remember when we train we use tried and tested methods to ensure the highest quality results. Along this point, items stored for more than 1 year should be examined for good quality.

I remember looking at some jars of beets I had. Those under 1 year had that deep purple color and looked delicious. Those I had more than 1 year had begun to lose their color, some even looked brown. It gave me an opportunity to clean out the pantry and keep the jars with the highest appearance of quality.

Cranberries and oranges are plentiful this time of year and the recipes for chutneys and marmalades can give you some winter preserving enjoyment. You can also use frozen juice concentrates and canned tomatoes for some interesting recipes. [This link will give you two items you might want to try.](#)

Have a great winter of home food preserving and remember: Preserve Today and Relish Tomorrow!  
Bill Loyko

## Congratulations Class of 2018!

In September 2018, 6 new Master Food Preservers completed the San Joaquin UC Master Food Preserver Training. We would like to congratulate Maricarmen (not pictured), Hannah, Diana, Kathy, Sherida and Colleen. Welcome to the Master Food Preserver family! If you are interested in becoming a UC Master Food Preserver, watch for 2019 training opportunities and announcements.



# Pickled Asparagus



## For six wide-mouth pint jars

- 10 pounds asparagus
- 6 large garlic cloves
- 4½ cups water
- 4½ cups white distilled vinegar (5%)
- 6 small hot peppers (optional)

## For seven 12-ounce jars

- 7 pounds asparagus
- 7 large garlic cloves
- 3 cups water
- 3 cups white distilled vine-

1. Wash and rinse canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.
2. Wash asparagus well, but gently, under running water. Cut stems from the bottom to leave spears with tips that fit into the canning jar with a little less than ½-inch headspace. Peel and wash garlic cloves. Place a garlic clove at the bottom of each jar, and tightly pack asparagus into jars with the blunt ends down.
3. In an 8-quart Dutch oven or saucepot, combine water, vinegar, hot peppers (optional), salt and dill seed. Bring to a boil. Place one hot pepper (if used) in each jar over asparagus spears. Pour boiling hot pickling brine over spears, leaving ½-inch headspace.
4. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened, clean paper towel; apply two-piece metal canning lids.
5. Process in a boiling water canner according to the recommendations in [Table 1](#). Let cool, undisturbed, for 12 to 24 hours and check for seals.

Allow pickled asparagus to sit in processed jars for 3 to 5 days before consumption for best flavor development.

**Table 1.** Recommended process time for **Pickled Asparagus** in a boiling-water canner.

		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Raw	12-ounce or Pints	10 min	15	20

# FAQ—Bottled vs. Fresh Lemon or Lime Juice

Canning recipes often call for lemon juice –bottled lemon juice to be exact! The reason for this is that bottled lemon or lime juice has been uniformly acidified so that it has a consistent and dependable acid level. Fresh lemons can vary in acidity based on: variety (Meyer lemons are very low in acid); where in the world the lemons have been grown; the weather during their growing season; how long they are in storage along the way, in the store, and in your fridge; storage conditions, etc. It is the acid level in recipes that make them safe to process in a boiling water or atmospheric steam canner. Do not substitute fresh lemon or lime juice in recipes calling for bottled lemon or lime juice. However, you may substitute bottled citrus juice in recipes that call for fresh.



Don't forget, bottled lemon juice has a best-before date. Keeping the product in the fridge should extend its best-before date greatly. Source: National Center for Home Food Preservation & Healthy Canning

# Cranberry Orange Chutney

[Recipe from the National Center for Home Food Preservation](#)

- 24 ounces fresh whole cranberries
- 2 cups chopped white onion
- 2 cups golden raisins
- 1½ cups white sugar
- 1½ cups packed brown sugar
- 2 cups white distilled vinegar (5%)
- 1 cup orange juice
- 4 teaspoons peeled, grated fresh ginger
- 3 sticks cinnamon

**Yield:** About 8 half-pint jars.

## Procedure:

1. Wash and rinse half-pint canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.
2. Rinse cranberries well. Combine all ingredients in a large Dutch oven. Bring to a boil over high heat; reduce heat and simmer gently for 15 minutes or until cranberries are tender. Stir often to prevent scorching. Remove cinnamon sticks and discard.
3. Fill the hot chutney into clean, hot half-pint jars, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened clean paper towel; apply two-piece metal canning lids.
4. Process in a boiling water canner according to the recommendations in [Table 1](#). Let cool, undisturbed, 12-24 hours and check for seals.



**Notes:** Other dried spices can be added to taste (for example, Cloves, dry mustard, cayenne pepper). Add or adjust spices during the simmering period. This product produces an almost jellied chutney due to the natural cranberry pectins.

**Table 1.** Recommended process time for **Cranberry Orange Chutney** in a boiling-water canner.

		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Half-pints	10 min	15	20

# What is Blanching?

Blanching (scalding vegetables in boiling water or steam for a short time) is a must for almost all vegetables to be frozen. It stops enzyme actions which can cause loss of flavor, color and texture.

Blanching cleanses the surface of dirt and organisms, brightens the color and helps retard loss of vitamins. It also wilts or softens vegetables and makes them easier to pack.

Blanching time is crucial and varies with the vegetable and size. Under-blanching stimulates the activity of enzymes and is worse than no blanching. Overblanching causes loss of flavor, color, vitamins and minerals.



For home freezing, the most satisfactory way to heat all vegetables is in boiling water. Read more about how to blanch vegetables, cooling and how long to blanch vegetables by [clicking here](#).

# Canning in Electric Multi-Cookers



A simple search of advertising flyers these days reveals any number of electric multi-cookers for sale. And with the recent winter holidays, maybe someone purchased you one of these units. The manufacturers are advertising canning features on these units. **Are these electric multi-cookers safe for canning? Unfortunately, the answer is 'No.'**

[The National Center for Home Food Preservation \(NCHFP\)](#) has a nice summary of the issue. The following is directly from their website.

## Should I can in my electric multi-cooker appliance?

Even if there are instructions for pressure canning in the manufacturer's directions, we do not support the use of the USDA canning processes in the electric, multi-cooker appliances now containing "canning" or "steam canning" buttons on their front panels. Our pressure process directions have not been developed for that type of appliance, and the canner being used does matter. Our recommendations were determined for stovetop pressure canners which hold four or more quart-size jars standing upright.

We do not know if proper thermal process development work has been done in order to justify the canning advice that is distributed with these pressure multi-cooker appliances. What we do know is that our canning processes are not recommended for use in electric pressure multi-cookers at this time.

Some of the major reasons we cannot recommend using electric multi-cookers for pressure canning:

1. Thermal process canning work relates the temperatures in the jars to the temperature inside the canner throughout the processing. No USDA thermal process work has been done with jars inside an electric pressure cooker, tracking the actual temperatures inside the jars throughout the process. It is ultimately the temperature and heat distribution inside the jars that matters for the destruction of microorganism in the food product. The position of jars in the canner and flow of steam around them also impacts the temperature in the jars. For example, there would be expected differences in jars piled together on their sides from those standing upright on the canner base.
2. What matters is temperature, not pressure. One manufacturer says its cooker reaches the pressure required for canning, that alone does not prove the food in the jars is heated throughout at the same rate as in the canner used for process development. A manufacturer should do process development work to document temperatures throughout the unit at a given pressure and throughout the whole process time. Just producing an interior pressure is not sufficient data for canning recommendations. For example, if air is mixed in the steam, the temperature is lower than the same pressure of pure steam. That's why a proper venting process is so important in pressure canning – to obtain a pure steam environment inside the canner. Also, one has to know how to make adjustments in pressure readings at higher altitudes. The same pressure and process time combination cannot be used at all altitudes.
3. In order to ensure the safety of the final product, the temperature in the canner must stay at minimum throughout the process time. Do power surges or drops with an electric canner cause the temperature to drop too low? How will you the user know if that happens with your cooker?

[Continued on page 5](#)

## Electric Multi-Cookers continued

4. One of the big concerns is that the USDA low-acid pressure process times rely on a combination of heat from the time the canner is coming to pressure, during the actual process time, and then during the early stages of cooling the canner and jars. Even after the heat is turned off under the canner, at the end of the recommended process time, the food remains at high enough temperatures for another period of time that can still contribute to killing of bacteria. This retained heat while the canner has to cool naturally to 0 pounds pressure before opening is used to advantage in calculating the total sterilizing value of the process to preserve some food quality. If anything is done to shorten the cooling period, including using a very small cooker, then the food could cool down more quickly, and be under-processed. (That is why we recommend using only pressure cookers that hold four or more quart-size jars.) Bacteria are not killed in the food only during the process time; the time it takes the canner to come up to pressure, the process time, and the cool-down time all matter. There is no way at this point in time to know exactly the percentage of contribution from cooling for each of the canning recommendations.

For more information about canning in pressure cookers, please read [Burning Issue: Canning in Pressure Cookers](#). February 22, 2018 National Center for Home Food Preservation

## Freezing Persimmons

Do you know the difference between a Fuyu and a Hachiya persimmon?

Hachiya persimmons: are heart or acorn-shaped, and can be quite astringent. These are the persimmons that should not be eaten until they're ripe, or even overripe, as their unripened taste can be extremely bitter and unappealing. Putting a Hachiya persimmon in a paper bag, or next to pears or bananas (which give off ethylene gas), will help it ripen quicker. When it's soft, or even feels a bit too soft, that's when you know it's time to eat! These are great for baking!



Fuyu Persimmons: The same color as Hachiya persimmons, Fuyu persimmons are usually squat and round, and look the most like orange tomatoes. This type of persimmon is much less astringent, which means it can be eaten even if it's not fully ripe. An unripened Fuyu is usually easy to cut, and is just as sweet as a ripe Hachiya.

**Preparation** – Select orange-colored, soft-ripe persimmons. Sort, wash, peel and cut into sections. Press fruit through a sieve to make a purée. For a better product, to each quart of purée add 1/8 teaspoon (375 mg) ascorbic acid. purée made from native varieties needs no sugar. purée made from cultivated varieties may be packed with or without sugar.

**Purée** – Pack unsweetened purée into containers. Leave headspace. Seal and freeze. Or, mix 1 cup sugar with each quart (2 pounds) of purée and pack into containers. Leave headspace. Seal and freeze.

# Making Your Own Sauerkraut

## Ingredients:

- 25 lbs cabbage
- 3/4 cup canning or pickling salt

**Quality:** For the best sauerkraut, use firm heads of fresh cabbage. Shred cabbage and start kraut between 24 and 48 hours after harvest.

**Procedure:** Work with about 5 pounds of cabbage at a time. Discard outer leaves. Rinse heads under cold running water and drain. Cut heads in quarters and remove cores. Shred or slice to a thickness of a quarter. Put cabbage in a suitable fermentation container, see "[Suitable Containers, Covers, and Weights for Fermenting Food](#)," and add 3 tablespoons of salt. Mix thoroughly, using clean hands. Pack firmly until salt draws juices from cabbage. Repeat shredding, salting, and packing until all cabbage is in the container. Be sure it is deep enough so that its rim is at least 4 or 5 inches above the cabbage. If juice does not cover cabbage, add boiled and cooled brine (1-1/2 tablespoons of salt per quart of water). Add plate and weights; cover container with a clean bath towel.



Sauerkraut fermentation can take place under variable temperature and time combinations. For obtaining a good quality sauerkraut at home, the USDA recommendation is to store at 70° to 75°F while fermenting. At temperatures between 70° and 75°F, kraut will be fully fermented in about 3 to 4 weeks; at 60° to 65°F, fermentation may take 5 to 6 weeks. At temperatures lower than 60°F, kraut may not ferment. Above 75°F, kraut may become soft. If you weigh the cabbage down with a brine-filled bag, do not disturb the crock until normal fermentation is completed (when bubbling ceases). If you use jars as weight, you will have to check the kraut 2 to 3 times each week and remove scum if it forms. Fully fermented kraut may be kept tightly covered in the refrigerator for several months or it may be canned as follows:

**Hot pack** – Bring kraut and liquid slowly to a boil in a large kettle, stirring frequently. Remove from heat and fill jars rather firmly with kraut and juices, leaving 1/2-inch headspace.

**Raw pack** – Fill jars firmly with kraut and cover with juices, leaving 1/2-inch headspace. Adjust lids and process according to the recommendations in [Table 1](#). **Yield:** About 9 quarts

**Table 1.** Recommended process time for **Sauerkraut** in a boiling-water canner.

Style of Pack	Jar Size	Process Time at Altitudes of			
		0 - 1,000 ft	1,001 - 3,000 ft	3,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	<b>10 min</b>	15	15	20
	Quarts	<b>15</b>	20	20	25
Raw	Pints	<b>20</b>	25	30	35
	Quarts	<b>25</b>	30	35	40

# Pretreating Fruits Before you Dry Them

## Pretreating Fruits

Pretreating light-colored fruits before drying is important for the quality and safety of the final product. Soaking the sliced fruit in an acidic solution preserves the color and texture of the dried fruits, and it increases the destruction of potentially harmful bacteria during drying. These treatment methods are courtesy of Colorado State University Extension.



## Acidic Solutions

**1. Ascorbic Acid Pretreatment:** Pure crystals of ascorbic acid (vitamin C) can be found at supermarkets and drug stores. Stir 2½ tablespoons of pure ascorbic acid crystals into 1 quart of cold water. This amount of solution treats about 10 quarts of cut fruit. For smaller batches, adjust proportions accordingly. Soak the fruit for 10 minutes, then remove it with a slotted spoon, drain it well and dehydrate it.

**2. Citric Acid Pretreatment:** Citric acid is available in the canning section of many supermarkets. Stir 1 teaspoon of citric acid into 1 quart of cold water. Add the fruit and allow it to soak for 10 minutes, then remove it with a slotted spoon, drain it well and dehydrate it.

**3. Lemon Juice Pretreatment:** Mix equal parts of lemon juice and cold water. Add the fruit and allow it to soak for 10 minutes, then remove it with a slotted spoon, drain it well and dehydrate it.

Read all about drying fruit by [clicking here](#).

## Coming Events

Classes are at the Cabral Ag Center from 10 am—2:00 pm. Cost is \$25.00. [Please register on our website.](#)

### January 19th If Life Gives You Lemons

If life gives you an abundance of lemons this season, then come to our hands-on workshop to learn how you can preserve them. You will make two one jar of lemon ginger marmalade and one jar of salt preserved lemons. In addition this workshop will be an opportunity to learn atmospheric steam canning which is faster and easier than the traditional water bath canning.

### February 16th The Pressure Is On!

Learn why pressure canning is the most important aspect of home food preservation, food safety, how to properly utilize a pressure canner and more in this 'make and take' class. Pressure canning opens up a world of canning broth, soups, meats, and vegetables that you can use throughout the year. In this workshop, we will make a stock and more.

### March 16th Fermentation

Our hands-on workshop will teach the basic principles of fermentation that will give you the confidence to try new recipes at home.

### Lodi Public Library Classes 201 W. Locust St, Lodi

Classes are free and are from 10-11:30 am. They will be combined classes taught by the UC Master Gardeners and the UC Master Food Preservers. **Please call 209-953-6100 to reserve your seat.**

**March 11:** Summer Vegetable Garden (Master Gardeners) & Growing and Freezing your Summer Fruits and Vegetables (Master Food Preservers)

**April 8:** All About Tomatoes (Master Gardeners) & Salsas and Preserving (Master Food Preservers)

# CHILL

Go **40°**  
or **BELOW**  
A 40-DEGREE REFRIGERATOR

Keep Home Refrigerator  
at 40°F or Below



Refrigerate Foods  
Within Two Hours



Thaw Foods Properly



**Temperatures of 40°F or below will slow the growth of foodborne bacteria, which can grow rapidly at warmer temperatures. It's important to chill foods promptly and properly to prevent the growth of harmful microbes.**

## Keep Home Refrigerator at 40°F or Below

- A constant home refrigerator temperature of **40°F or below** is one of the most effective ways to reduce the risk of foodborne illness and slow the growth of harmful bacteria.
- Use a **refrigerator thermometer** to ensure the temperature is consistently 40°F or below. Refrigerator thermometers are tools that stay in your refrigerator to display actual temperatures (separate from refrigerator dials).
- **Don't go too low:** As temperatures approach 32°F, ice crystals can form and lower the quality of foods.
- **Keep your refrigerator clean, too:** To prevent the spread of harmful bacteria, wipe spills immediately. Regularly clean the inside of your fridge with hot water and liquid soap, and dry with a clean cloth or paper towels.
- For more information on safe refrigeration temperatures, check out our **Go 40°F or Below fact sheet** and special brochures for **expecting mothers** and **seniors** at [fightbac.org](http://fightbac.org).

40°F



1. Follow thermometer manufacturer instructions for ideal placement.

2. Make sure the thermometer reads 40°F or below. Some events may cause temporary readings over 40°F, such as:

- Initial placement
- Door open for an extended time
- Hot foods recently placed inside
- Automatic defrost cycles: Check temperature as soon as it turns on, when it's at its highest temp.



## Partnership for Food Safety Education, 2016

We develop and promote effective education programs to reduce foodborne illness risk for consumers.

[FIGHTBAC.ORG](http://FIGHTBAC.ORG)

[@Fight\\_BAC](https://twitter.com/Fight_BAC)

## Refrigerate Foods Within Two Hours

- Refrigerate or freeze perishables, prepared foods and leftovers within **two hours** of purchase or use. If the temperature is 90° F or above, cut this time down to one hour.
- Separate large amounts of leftovers into **shallow containers** for quicker cooling.
- **Do not overstuff your refrigerator.** Cold air must circulate to keep food safe.
- **Know when to toss:** you can't tell by looking or smelling whether harmful bacteria have started growing in your leftovers or refrigerated foods. Check out the **Safe Storage Times** chart for storage guidelines of different foods.



### Hit the Road Cold

- When traveling, be aware that time, temperature and a cold source are key.
- Always use ice or ice packs. A full cooler will maintain cold temperatures longer than a partially filled one.
- For more information, check out our **Food Safety on the Move** fact sheet.

### Storage Times for the Refrigerator and Freezer

These short but safe time limits for home-refrigerated foods will keep them from spoiling or becoming dangerous to eat. The guidelines for freezer storage are for quality only. Frozen foods remain safe indefinitely.

CATEGORY	FOOD	REFRIGERATOR (perishable)	FREEZER (perishable)
Tubers	Eggs, duckies, bananas and macaroni salads	3-5 days	Does not freeze well
Hot dogs	Unopened package	1 month	1-2 months
	Unopened package	2 weeks	1-2 months
Lunchmeat	Open package or deli sliced	3-5 days	1-2 months
	Unopened package	2 weeks	1-2 months
Deli and sausage	Delis	7 days	1 month
	Sausages, corn — from chicken, turkey, pork, beef	1-2 days	1-2 months
Ham, sausage and other ground meats	Hamburgers, ground beef, turkey, veal, pork, lamb and mixtures of these	1-2 days	3-6 months
Fresh beef, veal, lamb and pork	Steaks	3-5 days	6-12 months
	Chops	3-5 days	6-12 months
	Roasts	3-5 days	6-12 months
Fresh poultry	Darkmeat, whole	1-2 days	1 year
	Darkmeat, halves	1-2 days	9 months
Soups and stews	Vegetable or meat salad	3-4 days	2-3 months
	Cooked meat or poultry	3-4 days	2-6 months
	Chicken, vegetables or pasta	3-4 days	1-3 months
Leftovers	Pasta	3-4 days	1-2 months

[Download and print this chart here.](#)

## Thaw Foods Properly

Never thaw food at room temperature – harmful bacteria can multiply rapidly at room temperature. Choose one of these options to thaw food safely:

- **Thaw food in a refrigerator.** This is the safest way to thaw meat, poultry and seafood. Place the frozen food on a plate or pan to catch any juices that may leak.
- **Thaw in cold water** if food will be cooked immediately. Replace the water every 30 minutes so the food continues to thaw in cool water.
- **Thaw in the microwave** if food will be cooked immediately. Follow the instructions in your owner's manual for thawing.
- If you don't have time to thaw food: It is safe to **cook foods from a frozen state**, but the cooking will be approximately **50 percent longer** than fully thawed meat or poultry. Use a food thermometer to ensure food is cooked to safe internal temperature.

THE FOUR WAYS TO FIGHT BAC!



Partnership for Food Safety Education, 2016

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