



Let's Preserve Newsletter

Lancaster County

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June – July 2005

Dear Food Preserver,

We find it exciting to watch plants grow in our gardens. In spite of the recent dry spell, leaf lettuce has provided daily salads, the snap beans look promising, and the first kohlrabi is ready for cutting.

We also find it exciting to meet you and share with you food preservation experiences. We are making an effort to meet more of you through community events such as the recent Family Farm Days, dial gauge testing at local stores, and speaking to groups and organizations in your communities. Conversations with you help us identify issues to include in this newsletter. If you want to continue to receive the *Let's Preserve* newsletter, you must return the enclosed renewal form, if you have not already done so, by July 30th.

We invite you to join us for a food preservation workshop. The pressure canner workshop in June was well received. We look forward to meeting more of you at future workshops, which are listed in this newsletter.

May all your preservation efforts be successful.

Nancy R. Wiker
 Extension Educator – FCS
 Penn State Cooperative Extension

Martha Zepp
 Food Preservation Consultant
 Penn State Cooperative Extension

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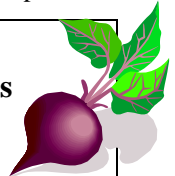
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Featured Food of the Month – Red Beets

The red beets in my garden are beginning to mature. My favorite method of preserving them is pickling. Later, when I open a jar, I usually add a few hard cooked eggs to make the best ever red beet eggs.

Pickled Beets

3 quarts peeled, cooked, beets (about 24 small)*
2 cups sugar
2 sticks cinnamon
1 tablespoon whole allspice or whole cloves
1 ½ teaspoons salt
3 ½ cups vinegar
1 ½ cups water

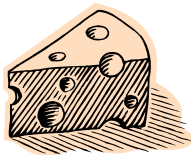
Combine all ingredients except beets in a large saucepot. Bring mixture to a boil: reduce heat. Simmer 15 minutes. Remove cinnamon sticks. Pack beets into hot jars, leaving ¼ inch headspace. Ladle hot liquid over beets, leaving ¼ inch headspace. Remove air bubbles. Adjust two-piece caps. Process pints and quarts 30 minutes in a boiling-water canner. Yield: about 6 pints. Source: Ball Blue Book

**To prepare beets, trim off beet tops, leaving 1 inch of stem and roots to prevent bleeding of color. Wash thoroughly. Sort for size. Cover similar sizes together with boiling water and cook until tender (about 25 to 30 minutes). Drain and discard liquid. Do not use the cooking liquid for the water in the recipe. Cool beets. Trim off roots and stems and slip off skins. Beets may be sliced or chunked instead of using whole. Place spices in a spice bag for easy removal. The USDA recipe simmers the beets in the hot liquid 5 minutes before packing into jars.*

June is Dairy Month

Freezing Cheese

Hard or semi-hard cheeses freeze better than soft cheeses. The cheeses that freeze the best are brick, Camembert, Cheddar, Edam, dry curd farmer's cheese, Gouda, Mozzarella, Muenster, Parmesan, Provolone, Romano, and Swiss. Cream cheese, creamed cottage cheese, and ricotta cheese do not freeze well because of their high moisture content.



To freeze cheese, cut and wrap pieces of less than one pound and not more than one inch thick, or grate and freeze in freezer-weight bags

or rigid freezer containers. Vacuum packaging helps prevent drying out. Before using, thaw the cheese in the refrigerator.

Cheese has a tendency to dry out and become crumbly and mealy when frozen but will retain its flavor. Frozen moisture in the cheese may cause a mottled color. Thawed cheese is best used in cooking or crumbled or shredded in salads or as toppings for casseroles.

What Happens to Frozen Milk?

When milk is frozen, the water in the milk rises to the surface and forms ice. The water and milk solids do not remix well after thawing. This creates a change in the flavor and appearance of the milk making the thawed product more suitable for cooking and baking than for drinking. Separation will be even more noticeable in frozen buttermilk.



A Quick Trick

Heavy cream, also known as whipping cream, does not whip to a good volume after freezing and thawing. It can be used for cooking. If you need to freeze heavy cream, add sugar and whip the cream before freezing. Drop by dollops onto a cookie sheet and freeze until firm. Place the frozen dollops in a flat, rigid container separating layers with waxed paper or foil to seal and store in the freezer up to 2 months. To use, place on top of the dessert just before serving.

What Does "Acidity" Mean?

The acidity of a food determines the method of processing used to can the food. High acid foods can be safely processed in a boiling water bath. Low acid foods must be processed in a pressure canner. Because most foods contain some acid, it can be confusing to determine which method to use.

Just remember that most fruits (except figs, papaya, and melons) are high acid foods and that vegetables (except acidified tomatoes) and

meats are low acid foods. The measure determining whether a food is high or low acid is its pH value. Ironically a high acid food has a lower pH than a low acid food. The dividing line between high and low acid foods is a pH of 4.6. Tomatoes fall right at that dividing line which is why the USDA recommends increasing the acidity of tomatoes and tomato products by adding 2 tablespoons bottled lemon juice to each quart jar. (One-half teaspoon citric acid crystals could be added instead of the lemon juice.)

Adding vinegar, as in pickled products, increases the acidity level of vegetables making it possible to safely process them in a boiling water bath. Always use a research tested recipe (such as USDA or Ball) to insure that the acidity level is high enough and the processing time and method are correct to prevent growth of food spoilage organisms.

High acidity reduces bacterial activity of canned food stored at room temperature. In a low acid environment, the higher temperatures found in pressure canning are needed to kill the bacterial spores that cause botulism.

Acidity is not a safety factor in freezing food because most bacteria won't grow at such low temperatures.

Warnings: Don't Use These Methods

“New” is Old—and Not Safe

Recently I was asked if I'd heard about this “new” method of processing canned goods in the oven. Actually I was able to tell the questioner that it was an old method—I've seen references to oven canning that go back seventy years—and that it is very risky. Canning jars may shatter at high oven temperatures. Glass is sensitive to sudden temperature changes. Hot air is not efficient in heat treating foods; dry heat is very slow in penetrating into jars of food resulting in under processing. The temperature outside a jar does not equate to food temperature; there is no certainty that harmful spoilage organisms will be killed. Don't take

the chance of food spoilage or hurting yourself with broken jars.

Another “New” Method to Avoid

I'm still seeing steam canners for sale locally. Be aware that a steam canner is not a steam pressure canner. A steam canner simply surrounds the jars with steam—the temperature can't go above 212°F in the absence of pressure. Because the temperature is uneven, it is not even a safe method to process high acid food.

Open Kettle

This method that our grandparents used is no longer recommended. Open kettle canning involves heating the food to boiling and pouring it into hot jars, adding lids and bands, and waiting for lids to pop. Without further appropriate processing, bacteria can grow causing food poisoning. Yeasts and molds that enter the jars before the lids are in place can cause spoilage.

How Long Do You Process?

Compare Times:

How Long Do You Process These Foods?

These are the USDA recommended processing times for quarts of some common foods in the Boiling Water Bath.

| Food | Type of Pack | Minutes |
|-----------------------------|---------------------|----------------|
| Apple or Grape Juice | Hot | 5 |
| Applesauce | Hot | 20 |
| Cherries | Hot | 20 |
| Cherries | Raw | 25 |
| Peaches, Pears, or Apricots | Hot | 25 |
| Peaches, Pears, or Apricots | Raw | 30 |
| Plums | Hot or Raw | 25 |
| Tomatoes, crushed | Hot | 45 |
| Tomatoes, no added liquid | Raw | 85 |
| Tomatoes in tomato juice | Raw | 85 |
| Tomato juice | Hot | 40 |

Cherries

Both sweet and sour cherries can be canned. Directions are the same. Select bright, uniformly-colored cherries that are mature. They should be ideal for eating fresh or cooking. Pits may be removed if desired. To prevent stem end discoloration, treat pitted cherries by placing them in a solution made by adding one teaspoon ascorbic acid or 3000 mg. ascorbic acid (Vitamin C tablets crushed) to one gallon of water. A commercial ascorbic acid mixture such as Fruit Fresh® can be used by following the directions on the label. Hold the cherries in one of these solutions until you are ready to pack them into jars. Then drain well.



If cherries are canned unpitted, prick skins on opposite sides with a clean needle to prevent splitting. Cherries may be canned in water, apple juice, white grape juice or syrup. Sweet cherries are often canned in a light or very light syrup. A medium syrup is suggested for sour cherries. To make a very light syrup for a canner load of quarts, mix 1 ¼ cups of sugar in 10 ½ cups water and heat to dissolve; mix 2 ¼ cups sugar in 9 cups water to make a light syrup; or mix 3 ¾ cups sugar in 8 ¼ cups water to make a medium syrup.

To *hot pack*, place drained cherries in a large sauce pan and add ½ cup water, juice, or syrup to each quart of fruit. Bring to a boil. Pack cherries in hot jars, leaving ½-inch headspace. Fill jars to ½ inch from the top with hot liquid. Remove air bubbles. Wipe jar rims. Adjust lids. Process pints for 15 minutes or quarts for 20 minutes in a boiling water bath.

To *raw pack*, add ½ cup hot water, juice or syrup to each hot jar. Fill the jars to ½ inch from the top with drained cherries, shaking down gently as you fill. Add more hot liquid, leaving ½-inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids. Process pints or quarts 25 minutes in a boiling water bath.

Frozen Pie Filling

Preparing pie filling from seasonal fruits makes it possible to whip up a pie, bake a fruit crisp, or top a cheesecake.

- Use ascorbic acid or Fruit Fresh® to preserve color in uncooked filling.
- Use a freezer stable thickener such as tapioca or a modified food starch designed for freezing such as ThermFlo® or Instant Clear Jel®.
- Line a pie plate with foil and mold the filling to the shape of the pie plate.
- Cooking apples, apricots, cherries, peaches, nectarines, plums, rhubarb, and berries make good frozen fillings.

Frozen Cherry Pie Filling

8 cups tart cherries
2 ½ cups sugar
5 tablespoons cornstarch,*
minute tapioca, or ThermFlo®



Wash cherries; drain. Pit cherries. Combine sugar and cornstarch or other thickener. Stir in cherries; let stand until juices begin to flow, about 30 minutes. Cook over medium heat until mixture begins to thicken. Ladle pie filling into freezer jars or plastic freezer boxes**, leaving ½-inch headspace. Cool at room temperature, not to exceed 2 hours. Seal, label, and freeze. Makes about 4 pints. Adapted from Ball Blue Book

*Cornstarch and flour based products have a tendency to separate when they are frozen. ThermFlo®, a modified food starch available locally in some bulk food stores, works well as a thickener in this recipe. The consistency of the product after baking remains smooth.

**Pie filling can be ladled into a foil lined pie pan. When filling is frozen solid, remove from the pan, wrap, and freeze until ready to bake. To use, place the pan shaped frozen filling into a pastry lined pan and bake as usual allowing extra time for fruit to heat through. I also freeze this filling in foil lined casseroles to use as a cherry crisp or cobbler.

The thawed filling can be used as a topping for cheese cake or angel food cake. To use as a topping, thaw filling in the refrigerator.

Why Freeze Foods?

A freezer is usually more of a convenience than a savings. Make the most of your freezer:

1. Keep the freezer full. Otherwise you are cooling empty space. (Freeze cartons of water if necessary to reduce air space.)
2. Use and replace the food, don't just store it.
3. Buy food in quantity at special prices to freeze.
4. Cook and freeze in quantity.
5. Use older food first.

Energy Use and Labels

When shopping for a freezer or refrigerator-freezer combination, read the energy guide labels to find the most energy efficient appliance that best suits the needs of your family. Look for the lowest annual operating cost among freezers of similar size and defrost systems. The actual cost depends upon the amount of food stored in the freezer, the amount of frost built up in the freezer, the length of time the door is open while searching for food, and where the freezer is placed in the home. (University of Illinois Cooperative Extension)

Manual defrost freezers use the least energy but require the most time for maintenance. Cycle defrost models use an average of 17 percent more energy than manual models. Automatic defrost of both refrigerator and freezer sections uses 50 to 60 percent more energy than manual defrost. Consider a model with an energy-saving switch. Turning the switch off in winter and on in summer could save as much as 15 percent annual operating cost. (Source: Missouri University Cooperative Extension)

A chest type freezer loses less cold air when opened than an upright model usually making the chest type more economical to operate.

Freezing Mystery

A gentleman had been traveling during a time when the electricity was off for several days in many homes in his community. However, when he returned home, his electricity was working and everything in his freezer was frozen solid.

He proceeded to eat some food from the freezer and got sick. What happened? In this case, his electricity actually had been off for about a week, and then came back on. Everything in his freezer had thawed and been at unsafe temperatures for several days. The food froze again when the electricity returned, and he was unaware there were any food safety problems.

Solution: Store an ice cube or two in a sealed plastic bag or small container in the freezer; a sealed bag/container is important so the ice cube doesn't evaporate and disappear. If the ice cube has melted down from its original shape, you'll know the power was off for an extended period of time. (Source: Alice Henneman, University of Nebraska Cooperative Extension in Lancaster County, Nebraska)

Freezer Thermometers

Use a freezer thermometer to determine that your freezer is at the recommended 0°F or lower. Most refrigerator/freezer thermometers are either liquid-filled or bimetallic-coil thermometers. Liquid filled thermometers contain a colored liquid (usually an alcohol solution) inside the thermometer that expands and rises to indicate the temperature on a scale. Bimetallic-coil thermometers contain a coil made of two different metals with different rates of expansion that are bonded together. The bimetal element is coiled, fixed at one end, and attached to a pointer stem at the other end. As the temperature increases, the pointer will be rotated by the coiled bimetal element to indicate the temperature.

Bringing Dial Gauge Testing to You

Pressure canner dial gauges should be tested for accuracy each year. The new tester, which works like a bicycle pump, is mobile. We will be testing dial gauges at Stauffers' of Kissel Hill on July 22 and August 26 from 9:00—11:00 at Lititz and from 1:00 to 3:00 at Rohrerstown. Watch the paper for announcements of other testing locations. We will continue to test dial gauges at the cooperative extension office on Wednesdays from 10:00 –2:00.

Resources

So Easy to Preserve, 4th edition is a book from the National Center for Home Food Preservation, University of Georgia Cooperative Extension that includes all the USDA recommendations, processing times, and canning and freezing information based on the most recent research. Information in the book is available on the web at www.uga.edu/nchfp/. If you wish to have all the information available in one place, you can order the book from the web site or you can request an order form from the extension office. Cost of the book is \$15.00.



Food Preservation Workshops

Freezing Vegetables: Quality for Keeps

This workshop offers tips for improving the quality of the fresh vegetables that you preserve in your home freezer.



Methods of preventing toughness, spoilage, freezer burn, and evaporation will be addressed. Learn how to blanch vegetables, to choose packaging materials, to individually quick freeze, to use a freezer thermometer, to vacuum seal tomato sauce, and much, much more.

Date: Thursday, July 14, 2005

Times: 10:00 – 11:30 a.m. or
7:00-8:30 p.m.

Freezing Fruits and Convenience Products



Ever want to preserve cherries, peaches, apples, etc. but not want to heat the kitchen or take the time involved in home canning? Learn the options for freezing sweetened,

artificially sweetened, and unsweetened fruits to produce a quality product that can be used by itself or used in desserts.

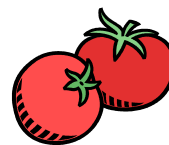
Also, learn to freeze pie fillings, pies, freezer jams, quick breads, combination dishes, soups, and dessert salads.

Date: Thursday, August 11, 2005

Times: 10:00-11:30 a.m. or
7:00-8:30 p.m.

Totally Tomatoes

Salsa, dried, juice or sauce –tomatoes are an easy to grow versatile food found in most gardens. Get an update on tomato preserving methods. Information will include the selection of tomatoes for preserving, making juice, salsa, canning, drying, and more.



Date: Wednesday, August 31, 2005

Time: 7:00-8:30 p.m. or

Date: Thursday, September 1, 2005

Time: 10:00-11:30 a.m.

3-C's: Chutneys, Chow-Chow, and Chowder



Use plentiful end of the season vegetables to make the 3 C's. Look for some unique ideas as you learn how to make relishes and soups that build on your canning and freezing skills.

Date: Tuesday, September 13, 2005

Times: 10:00-12:00 noon or
7:00-9:00 p.m.

Sauerkraut

Guest teacher: Debbie Hartman (Lebanon County Master Gardener)

Learn how to make sauerkraut safely without it spoiling.

Learn to choose the best cabbage for flavor and how to properly cut, layer, salt, and store the sauerkraut for successful fermentation.



Debbie also offers some unique ideas for using sauerkraut.

Date: Monday, October 24, 2005

Time: 7:00-8:30 p.m.

Winter Potpourri



Need some ideas for special occasions. Look for lemons and other citrus, jimaca, kiwi, and cranberries to be featured in this

workshop along with updates of pickles, relishes, pie fillings, jams and jellies. Invest a little time, be adventuresome, and create a variety of special treats for your family and to share with friends.

Date: Tuesday, November 8, 2005

Times: 10:00-12:00 noon or
7:00-9:00 p.m.

All food preservation classes will be held at the Farm and Home Center, 1383 Arcadia Road, Lancaster.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Nancy Wiker at 717-394-6851 in advance of your participation or visit.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Cooperative Extension is implied.

This publication is available in alternative media on request.

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Registration Form

Name

Address

| | | |
|------|-------|-----|
| City | State | Zip |
|------|-------|-----|

Daytime Phone Number

*Please register me for the following classes:
Each class fee is \$ 7.50. Registration costs cover materials and handouts.*

Freezing Vegetables: Quality for Keeps

___ July 14, 2005 10:00 – 11:30 a.m. \$ _____

___ July 14, 2005 7:00 – 8:30 p.m. \$ _____

Freezing Fruits and Convenience Products

___ August 11, 2005 10:00 – 11:30 a.m. \$ _____

___ August 11, 2005 7:00 – 8:30 p.m. \$ _____

Totally Tomatoes

___ August 31, 2005 7:00 – 8:30 p.m. \$ _____

___ September 1, 2005 10:00 – 11:30 a.m. \$ _____

3 C's: Chutneys, Chow-Chow, and Chowder

___ September 13, 2005 10:00 a.m. – noon \$ _____

___ September 13, 2005 7:00 – 9:00 p.m. \$ _____

Sauerkraut

___ October 24, 2005 7:00 – 8:30 p.m. \$ _____

Winter Potpourri

___ November 8, 2005 10:00 a.m. – noon \$ _____

___ November 8, 2005 7:00 – 9:00 p.m. \$ _____

TOTAL ENCLOSED \$ _____

To register: return form and check (made payable to "PSCE Program Fund")

**Lancaster County Cooperative Extension
1383 Arcadia Road, Room 1
Lancaster, PA 17601-3184**

___ check enclosed for workshop fees.

To charge Visa or Master Card (**circle one**): fill in the information below, signing on the line indicated. Please note: the address listed and the credit card billing address must match.

Signature

Card Holder's Name

E-mail address for receipt

Account Number

Expiration Date

Payment must accompany your registration.