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University of California
Agriculture and Natural Resources

UCCE Master Food Preserver Program
Sacramento County

*Sacramento County Master Food Preservers
Monthly Wednesday Night Demonstration
July 20, 2022
Red, White and Blue*



Resources:

- Please visit the National Center for Home Food Preservation at <http://nchfp.uga.edu> for detailed information about research-based methods of home food preservation.
- UC ANR Catalog (<http://anrcatalog.ucanr.edu>)

Should you need assistance or require special accommodations for any of our educational programs, please contact us at 916-875-6913.

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QUICK PICKLED RED ONIONS

Source: <https://madison.ces.ncsu.edu/2020/08/quick-pickled-red-onions/>

Ingredients

1 red onion ~ halved and thinly sliced
1/2 cup apple cider vinegar
1/4 cup fresh or bottled lime juice 1/8-1/4 cup sugar
1/2 Tablespoon sea salt Pinch of Red Pepper Flakes

Directions

1. Wash your hands
2. Add sliced onions to a medium boil. Pour boiling water over onions to completely cover and count to 10...this process softens the onions, helping them to absorb the pickling liquid.
3. Drain onions and place in a pint-size jar.
4. Heat vinegar, lime juice, sugar, chili flakes, and salt in a small saucepan over medium saucepan until salt and sugar are dissolved, about 3 minutes.
5. Taste for sweetness; add more sugar if desired.
6. Pour vinegar mixture over onions.
7. Allow to stand at room temperature until cooled. Cover with a lid and refrigerate up to 2 weeks.

BEET OR RED RELISH

Source: Ball Blue Book, Guide to Preserving, 2014

Yield: about 10 half-pint jars

1 quart copped cooked beets (about 12 medium)
1 quart chopped cabbage (about 1 small head)
1 1/2 cups sugar
1 cup chopped onion (about 1 large)
1 cup chopped red bell pepper (about 1 large)
1 tablespoon prepared horseradish
1 tablespoon Ball Salt for Pickling & Preserving
3 cups vinegar, 5% acidity
Ball Pickle Crisp (optional)

PREP Wash beets, cabbage, and red bell pepper under cold running water; drain. Trim stem and tap roots on beets to about 2 inches in length. Boil trimmed, unpeeled beets in water to cover until they give slightly when pierced with a fork. Allow beets to cool. Remove stems and tap roots from beets, peel beets, Chop beets; measure 1 quart chopped beets. Cut cabbage in half and remove core. Slice cabbage into 1-inch wedges. Coarsely chop cabbage wedges. Measure 1 quart chopped cabbage. Please onion and chop. Measure 1 cup chopped onion. Remove stem and seeds from red pepper. Chop pepper; measure 1 cup chopped pepper.

COOK Combine all ingredients, except Pickle Crisp, in a large saucepan. Bring mixture to a simmer (180°F); simmer 10 minutes, stirring to prevent sticking. Bring mixture to a boil.

FILL Pack hot relish into a hot jar, leaving 1/2-inch headspace. Add 1/16 teaspoon Pickle Crisp to half-pint jar, if desired. Remove air bubbles. Clean jar rim. Center lid on jar and adjust band to fingertip-tight. Place jar on the rack elevated over simmering water (180°F) in boiling-water canner. Repeat until all jars are filled.

PROCESS Lower the rack into simmering water. Water must cover jars by 1 inch. Adjust heat to medium-high, cover canner and bring water to a rolling boil. Process half-pint jars 15 minutes. Turn off heat and remove cover. Let jars cool 5 minutes. Remove jars from canner; do not retighten band if loose. Cool 12 hours. Check seals. Label and store jars.

SPIRITED CHERRIES

Source: Ball Complete Book of Home Preserving

Makes about seven 8-ounce jars

1 cup granulated sugar

2 cups water

5 cups cherries with pits, washed and drained

Per Jar

1 tbsp rum, brandy or vodka

or

1 ½ tsp Kirsch, cherry brandy or amaretto liqueur

1. Prepare canner, jars and lids.
2. In a large stainless-steel saucepan, over medium-high heat, combine sugar and water. Bring to a boil, stirring to dissolve sugar. Add cherries, stirring constantly, and return to a boil. Reduce heat and boil gently for 5 minutes.
3. Using a slotted spoon, pack cherries into hot jars to within a generous 1/2 inch of top of jar and add the rum or spirit of your choice. Ladle hot syrup into jar to cover cherries, leaving ½ inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot syrup. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase fingertip-tight.
4. Place jars in canner, ensuring they are completely covered with water. Bring to a boil and process 10 minutes. Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

TIP: If you prefer to pit your cherries before preserving them, use 7 1/2 cups unpitted cherries in the recipe.

PICKLED EGGS

Source: https://nchfp.uga.edu/how/can_06/pickled_eggs.html

There are no home canning directions for pickled eggs. All of the following pickled egg recipes are for storage in the refrigerator. Pickled eggs should never be at room temperature except for serving time, when they should be limited to no more than 2 hours in the temperature danger zone of 40 to 140 degrees F.

Caution: Home pickled eggs stored at room temperature have caused botulism. For the report from the Centers for Disease Control and Prevention (CDC), see <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4934a2.htm> The Editorial Note in this report cautions against room temperature pickling and storage, also. The CDC further cautions that to reduce the risk for botulism when pickling, food items should be washed and cooked adequately, and utensils, containers, and other surfaces in contact with food, including cutting boards and hands, should be cleaned thoroughly with soap and warm water. Containers (e.g., jars and lids) in which pickling will occur should be sterilized (e.g., placed in boiling water for a prescribed period).

PICKLING TIPS

Pickled eggs are peeled, hard-cooked eggs in a solution consisting basically of vinegar, salt, spices, and perhaps other seasonings. Pickling solutions are heated to boiling, simmered for 5 minutes, and poured over the peeled eggs. Egg whites tend to be more tender if a boiling solution is used instead of room temperature solutions.

Eggs used for pickling should have clean, sound shells. Small or medium eggs are usually a good choice for pickling so the seasoning can penetrate into the egg. Fresh eggs are the best to use for pickling to ensure the highest quality possible since the eggs will be stored over a relatively long period of time. However, eggs at least a few days old will peel better after boiling.

Cooking and Peeling Eggs

According to the Georgia Egg Commission, the following method of hard-cooking facilitates peeling of ultra-fresh eggs. Make a pinhole in the large end of the egg, place the eggs in a single layer in a saucepan, and cover with cold water to an inch above the layer of eggs. Place a lid on the pan and bring eggs to a boil. Remove the pan of eggs from the burner, leaving the cover in place, and allow to sit for 15-18 minutes, adjusting time up or down 3 minutes for larger or smaller eggs. Immediately remove eggs from the pan of hot water with a slotted spoon to a bowl of ice water for one minute. In the meantime, bring hot water to simmering. After one minute in ice water remove eggs back to the simmering water for ten seconds. The ten second interval is important because this allows the shell to expand without expanding the rest of the egg. Peel immediately by cracking the shells of the egg all over. Roll each egg gently between hands to loosen the shell. Peel, starting at the large end of the egg. The peeling may take place under cold running water to help wash the shell off the egg and to minimize the shell breaking into the white.

Another cooking method when you are less concerned about peeling of ultra-fresh eggs is to make a pinhole in the large end of the egg, place the eggs in a single layer in a saucepan, and cover with cold water to an inch above the layer of eggs. Place a lid on the pan and bring eggs to a boil. Turn down the heat and simmer for 15 minutes. Place the eggs in cold water and when cool, remove shells. Crack the shell of the egg all over. Peel, starting at the large end of the egg. The peeling may take place under cold running water to help wash the shell off the egg.

Containers for the Eggs

The container used for the eggs should be one that can be closed or sealed tightly; glass canning jars work well. The eggs are to be completely covered with the pickling solution during storage. A quart-size canning jar will hold about one dozen medium sized eggs. For sterilizing glass jars, see [Sterilization of Empty Jars](#).

Storing Eggs

After making the eggs, the eggs require some time to season (i.e., pick up the flavors from the pickling brine). Keep them refrigerated at all times. If small eggs are used, 1 to 2 weeks are usually allowed for seasoning to occur. Medium or large eggs may require 2 to 4 weeks to become well seasoned. Use the eggs within 3 to 4 months for best quality.

RECIPES

Each of these recipes uses 12 peeled, hard-cooked eggs. The directions for each recipe are to bring all the ingredients except the eggs to a boil, reduce the heat and simmer for 5 minutes. Pack no more than one dozen peeled, hard-cooked eggs loosely into a warm, pre-sterilized quart jar (or other similar size container which can be closed tightly). There needs to be plenty of pickling solution, and enough to completely cover the eggs. Pour the hot pickling solution over the eggs in the jar, cover, and refrigerate immediately.

Red Beet Eggs

1 cup red beet juice (from canned beets)
1½ cups cider vinegar
1 teaspoon brown sugar
a few canned whole tiny red beets (or several slices of beets can be used)

Sweet And Sour Eggs

1½ cups pasteurized apple cider
½ cup cider vinegar
1 package (about 12 oz.) red cinnamon candy
1 tablespoon mixed pickling spice
2 tablespoons salt
1 teaspoon garlic salt

Dark And Spicy Eggs

1½ cups cider vinegar
½ cup water
1 tablespoon dark brown sugar
2 teaspoons granulated sugar
1 teaspoon mixed pickling spice
¼ teaspoon liquid smoke or hickory smoke salt
2 teaspoons salt

Cidered Eggs

1½ cups pasteurized sweet apple cider or apple juice
½ cup white vinegar
6 thin slices of onion
1½ teaspoons salt
1 teaspoon whole pickling spice
1 peeled garlic clove

Dilled Eggs

1½ cups white vinegar
1 cup water
¾ teaspoon dill weed
¼ teaspoon white pepper
3 teaspoons salt
¼ teaspoon mustard seed
½ teaspoon onion juice or minced onion
½ teaspoon minced garlic or 1 peeled garlic clove

Pineapple Pickled Eggs

1 can (12 oz.) unsweetened pineapple juice*
1½ cups white vinegar
2 medium onions, peeled and sliced
¼ cup sugar
1 teaspoon salt
1 teaspoon whole pickling spice
*If sweetened pineapple juice is used, omit sugar

Acknowledgements

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Peter Piper Picked A Peck of Pickled Eggs, Georgia Egg Commission (undated).

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Elizabeth L. Andress, Ph.D.

University of Georgia and National Center for Home Food Preservation.

How To Make Pickled Eggs

Source: <https://extension.illinois.edu/blogs/simply-nutritious-quick-and-delicious/2022-04-15-how-make-pickled-eggs>

Do you like hard boiled eggs? Do you like pickles? Then why not try pickled eggs? When there is an abundance of eggs and you're not sure what to do with them, pickling will help them last for several weeks. However, it's important to note that the only safe method for storing your pickled eggs is in the refrigerator. While you may come across recipes for canning eggs, or you spot a jar of pickled eggs for sale, there is no safe, research-tested method to canning eggs at home. In fact, Illinois has seen a case of botulism, a potentially deadly bacterium, due to homemade pickled eggs being stored at room temperature.

If you have a hankering for pickled eggs, follow the [National Center for Home Food Preservation's](#) research-based recipes and directions designed for refrigerator storage. Before you start, be sure to wash all countertops, utensils and hands with warm soapy water and sanitize your glass jars by boiling them in water for 10 minutes. Pickled eggs usually consist of peeled, hard-cooked eggs placed in a jar. Bring a brine of vinegar, salt and spices to a boil and simmer for five minutes before pouring over the eggs and covering with a lid. Immediately place in the refrigerator and allow 1-2 weeks for the brine to season the eggs. Use the eggs within 3 or 4 months. Have fun trying out different brining solutions. Beet juice from canned beets, turns the eggs a beautiful pink color and a sweet and sour egg can be achieved by using pasteurized apple cider and melted red cinnamon candies.

Dilled Eggs

1½ cups white vinegar
1 cup water
¾ teaspoon dill weed
¼ teaspoon white pepper
3 teaspoons salt
¼ teaspoon mustard seed
½ teaspoon onion juice or minced onion
½ teaspoon minced garlic or 1 peeled garlic clove
12 peeled, hard-cooked eggs

Bring all the ingredients except the eggs to a boil, reduce the heat and simmer for 5 minutes. Pack no more than one dozen peeled, hard-cooked eggs loosely into a warm, pre-sterilized quart jar (or other similar size container which can be closed tightly). Pour enough hot pickling solution to cover the eggs in the jar, cover, and refrigerate immediately. Use the eggs within 3 to 4 months for best quality.

Yield: 12 servings, 1 egg each

Source: [National Center for Home Food Preservation](#)

ABOUT THE AUTHOR: [Jenna Smith](#) is a Nutrition and Wellness Educator with University of Illinois Extension, serving Livingston, McLean, and Woodford Counties. Smith uses her experience as a registered dietitian nutritionist to deliver impactful information and cutting-edge programs to Livingston, McLean, and Woodford Counties and beyond.

This blog post originally appeared in the Pantagraph on April 6, 2022.

PICKLED HORSERADISH

Source: Ball Blue Book, Guide to Preserving, 2014

Yield: about 2 half-pint containers

3/4 pound horseradish root

1 cup vinegar, 5% acidity

1/2 teaspoon salt

1 ½ teaspoon Ball Fruit-Fresh Produce Protector

Wash horseradish root; drain. Peel and finely grated horseradish root. Combine 2 cups grated horseradish, vinegar, salt, and Fruit-Fresh in a bowl. Ladle pickled horseradish into plastic freezer jars or plastic freezer containers, leaving ½-inch headspace. Seal, label, and freeze.

Note: Pungency of horse radish root fades quickly. Prepare only the amount of pickled horseradish that will be used with three months.

SPIRITED PEARS

Source: Ball Complete Book of Home Preserving

Makes about seven 8-ounce jars

1 cup granulated sugar

2 cups water

8 1/2 cups quartered peeled cored pears, treated to prevent browning and drained

Per Jar

1 tbsp rum, brandy or red wine

or

1 ½ tsp Kahlua, cognac or crème de menthe

1. Prepare canner, jars and lids.
2. In a large stainless-steel saucepan, over medium-high heat, combine sugar and water. Bring to a boil, stirring to dissolve sugar. Add pears, stirring constantly, and return to a boil. Reduce heat and boil gently for 5 minutes.
3. Using a slotted spoon, pack pears into hot jars to within a generous 1/2 inch of top of jar and add the rum or spirit of your choice. Ladle hot syrup into jar to cover pears, leaving ½ inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot syrup. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase fingertip-tight.
4. Place jars in canner, ensuring they are completely covered with water. Bring to a boil and process 20 minutes. Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

BLUEBERRY CITRUS CONSERVE

Source: Ball Complete Book of Home Preserving

Makes about four 8-ounce jars

- 4 cups granulated sugar
- 2 cups water
- 1 small lemon (unpeeled), seeded and thinly sliced
- 1/2 orange (unpeeled), seeded and thinly sliced
- 1/2 cup raisins
- 4 cups blueberries

1. Prepare canner, jars and lids.
2. In a large, deep stainless-steel saucepan, combine sugar and water. Bring to boil over high heat, stirring to dissolve sugar. Add lemon and orange slices and raisins. Reduce heat and boil gently for 5 minutes. Add blueberries, increase heat high and return to a boil. Boil hard, stirring constantly for 5 to 10 minutes, until mixture thickens. Remove from heat and test gel. If gel stage has been reached, skim off foam.
3. Ladle hot conserve into hot jars, leaving 1/4-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot conserve. Wipe rim. Center lid on jar. Screw bank down until resistance is met, then increase to fingertip-tight.
4. Place jars in canner, ensuring they are completely covered with water. Bring to boil and process for 15 minutes. Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

TIP: For best results, cut lemon and orange in half, then use a sharp knife to slice halves in to paper-thin slices.

BLUEBERRY NECTARINE FREEZER JAM

Source: Adapted from the Ball Blue Book (Lemony Blueberry-Nectarine Freezer Jam)

Makes about five 8-ounce jars

- 1 cup crushed blueberries
- 1 1/2 cups granulated sugar
- 1 pouch (1/59 oz/45 g) freezer jam pectin
- 3 cups finely chopped pitted peeled nectarines
- 1 tbsp grated lemon zest
- 1 tsp lemon juice

1. In a glass pie plate, heat blueberries in a microwave oven on High, stopping the microwave several times to stir and crush the berries, until the mixture reaches a boil, about 2 minutes.
2. In a medium bowl, combine sugar and pectin, stirring until well blended. Add blueberries, nectarines, lemon zest and juice. Stir for 3 minutes.
3. Ladle jam into plastic or glass freezer jars, leaving 1/2-inch headspace. Apply lids tightly. Let jam stand at room temperature until thickens, about 30 minutes. Serve immediately, if desired. For longer storage, refrigerate for up to 3 weeks or freeze for up to 1 year.

SPIRITED BLUEBERRIES

Source: Ball Complete Book of Home Preserving

Yield: Makes about seven 8-ounce jars

1 cup granulated sugar
2 cups water
12 cups blueberries, washed and drained

Per Jar

1 tbsp rum, brandy or vodka
or
1 ½ tsp Grand Marnier or another orange-flavored liqueur

1. Prepare canner, jars and lids.
2. In a large stainless-steel saucepan, over medium-high heat, combine sugar and water. Bring to a boil, stirring to dissolve sugar. Add blueberries, stirring constantly, and return to a boil. Reduce heat and boil gently for 5 minutes.
3. Using a slotted spoon, pack blueberries into hot jars to within a generous 1/2 inch of top of jar and add the rum or spirit of your choice. Ladle hot syrup into jar to cover blueberries, leaving ½ inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot syrup. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase fingertip-tight.
4. Place jars in canner, ensuring they are completely covered with water. Bring to a boil and process 15 minutes. Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

BLUEBERRIES (AIR FRYER DEHYDRATED)

Presenter: Amanda Connolly

Ingredients/Tools: Air Fryer

Air Fryer's extra rack (optional)

Air Fryer silicone mats (not an option in my opinion)

Blueberries

Pot or Electric Tea Kettle with boiling water

Strainer & Paper Towels & Bowl

Cooking Spoon or Spatula

Steps:

Wash the berries in the strainer

Check (crack) the blueberry skins by placing into simmering or boiling water. If you use a tea kettle, pour it over the top of berries in a bowl. Wait anywhere from 30-90 seconds, watch the berries for the skins to split before straining out of the water and then set onto paper towels to dry.

Set air fryer to "dehydrate" and preheat at 140® F and time for 16 hours. Use the turn reminder if you need it.

Once it's preheated:

Place the silicone mat on the cook surface, place 1-2 layers of berries. Set rack above, place mat on rack and place berries on the second level. Close air fryer.

- You can do this without the mat but the mat will prevent the berries from dropping below the grate. Plus, if you want to do more berries, you can put another mat on the rack and have two layers drying at once.

As the dehydration runs, I recommend using a spoon or spatula to periodically move the berries to prevent excessive sticking and check for progress.

Every machine is a little different so you may finish this sooner or later than my experience with this method. Watch the food, it knows best!

BLUEBERRIES (DEHYDRATED)

Source: Excalibur, The Complete Guide to Food Dehydration

Step-by-Step

1. Wash blueberries and remove the stems.
2. Leaving the berries whole, place in a colander and dip in boiling water for 15 to 30 seconds to “check the skins”.
3. Dry at 135⁰F until leathery and crisp.

FRUIT LEATHER

Source: https://nchfp.uga.edu/how/dry/fruit_leathers.html

Fruit leathers are homemade fruit rolls. They are a tasty chewy, dried fruit product. Fruit leathers are made by pouring pureéd fruit onto a flat surface for drying. When dried, the fruit is pulled from the surface and rolled. It gets the name "leather" from the fact that when pureéd fruit is dried, it is shiny and has the texture of leather.

The advantages of making your own fruit leathers are to save money use less sugar and to mix fruit flavors. Leftover fruit pulp from making jelly can be blended and made into fruit rolls.

For the diabetic adult or child, fruit leathers made without sugar are a healthy choice for snacks or desserts. Individual fruit leathers should contain the amount of fruit allowed for the fruit exchange.

Directions follow for making fruit leathers. Fresh, frozen or drained canned fruit can be used. Leathers From Fresh Fruit

- Select ripe or slightly overripe fruit.
- Wash fresh fruit or berries in cool water. Remove peel, seeds and stem.
- Cut fruit into chunks. Use 2 cups of fruit for each 13" x 15" inch fruit leather. Pureé fruit until smooth.
- Add 2 teaspoons of lemon juice or 1/8 teaspoon ascorbic acid (375 mg) for each 2 cups light colored fruit to prevent darkening.
- Optional: To sweeten, add corn syrup, honey or sugar. Corn syrup or honey is best for longer storage because it prevents crystals. Sugar is fine for immediate use or short storage. Use ¼ to ½ cup sugar, corn syrup or honey for each 2 cups of fruit. Saccharin-based sweeteners could also be used to reduce tartness without adding calories. Aspartame sweeteners may lose sweetness during drying.

Leathers From Canned or Frozen Fruit

- Home preserved or store-bought canned or frozen fruit can be used.
- Drain fruit, save liquid.
- Use 1 pint of fruit for each 13" X 15" leather.
- Purée fruit until smooth. If thick, add liquid.
- Add 2 teaspoons of lemon juice or 1/8 teaspoon ascorbic acid (375 mg) for each 2 cups of light colored fruit to prevent darkening.
- Applesauce can be dried alone or added to any fresh fruit pureé as an extender. It decreases tartness and makes the leather smoother and more pliable.

Preparing the Trays

For drying in the oven a 13" X 15" cookie pan with edges works well. Line pan with plastic wrap being careful to smooth out wrinkles. Do not use waxed paper or aluminum foil.

To dry in a dehydrator, specially designed plastic sheets can be purchased or plastic trays can be lined with plastic wrap.

Pouring the Leather

Fruit leathers can be poured into a single large sheet (13" X 15") or into several smaller sizes. Spread pureé evenly, about 1/8-inch thick, onto drying tray. Avoid pouring pureé too close to the edge of the cookie sheet. The larger fruit leathers take longer to dry. Approximate drying times are 6 to 8 hours in a dehydrator, up to 18 hours in an oven and 1 to 2 days in the sun.

Drying the Leather

Dry fruit leathers at 140°F. Leather dries from the outside edge toward the center. Test for dryness by touching center of leather; no indentation should be evident. While warm, peel from plastic and roll, allow to cool and rewrap the roll in plastic. Cookie cutters can be used to cut out shapes that children will enjoy. Roll, and wrap in plastic.

Chances are the fruit leather will not last long enough for storage. If it does, it will keep up to 1 month at room temperature. For storage up to 1 year, place tightly wrapped rolls in the freezer.

Spices, Flavors and Garnishes

To add interest to your fruit leathers, spices, flavorings or garnishes can be added.

Spices to Try — Allspice, cinnamon, cloves, coriander, ginger, mace, mint, nutmeg or pumpkin pie spice. Use sparingly, start with 1/8 teaspoon for each 2 cups of pureé.

Flavorings to Try — Almond extract, lemon juice, lemon peel, lime juice, lime peel, orange extract, orange juice, orange peel or vanilla extract. Use sparingly, try 1/8 to 1/4 teaspoon for each 2 cups of pureé.

Delicious Additions to Try — Shredded coconut, chopped dates, other dried chopped fruits, granola, miniature marshmallows, chopped nuts, chopped raisins, poppy seeds, sesame seeds or sunflower seeds.

Fillings to Try — Melted chocolate, softened cream cheese, cheese spreads, jam, preserves, marmalade, marshmallow cream or peanut butter. Spread one or more of these on the leather after it is dried and then roll. Store in refrigerator.

This document was extracted from "So Easy to Preserve", 6th ed. 2014. Bulletin 989, Cooperative Extension Service, The University of Georgia, Athens. Revised by Elizabeth L. Address. Ph.D. and Judy A. Harrison, Ph.D., Extension Foods Specialists.

LET'S PRESERVE FRUIT PIE FILLINGS

General

Tasty fruit fillings for pies, pastries and dessert toppings can be prepared at home. Clear Jel[®], a modified starch, produces excellent consistency even after fillings are canned and baked. Other household starches break down, resulting in a runny sauce.

There are two types of Clear Jel[®], *instant and regular*. “Instant” does not require heat to thicken. The product will thicken once the liquid is added. “Regular” must be heated. **When canning pie fillings, be sure to purchase the “regular” Clear Jel[®] product.** Clear Jel[®] is currently not available in grocery stores. Check the last page of this flyer for a local list and web sites. One pound of Clear Jel[®] equals about 3 cups.

Because the variety of fruit may alter the flavor of a fruit pie, prepare a single quart first. Adjust the sugar and spices in the recipe to suit your personal preferences. However, the amount of lemon juice should never be altered because it insures the safety and storage stability of the fillings.

When using frozen berries, select unsweetened fruit. If sugar has been added, rinse it off while the fruit is frozen. Collect, measure and use the juice from thawing fruit to partially replace the water specified in the recipe. Use ¼ cup Clear Jel[®] per quart or 1 ¾ cups for 7 quarts

Apple Pie Filling

<u>Ingredients</u>	<u>1 Quart</u>	<u>7 Quarts</u>
Blanched, sliced fresh apples	3 - 1/2 cups	6 quarts
Granulated sugar	1/2 cup	3 cups
Clear Jel®	1/4 cup	1-1/2 cups
Cinnamon	1/2 tsp.	1 tbsp.
Cold water	1/2 cup	2-1/2 cups
Apple juice	3/4 cup	5 cups
Bottled lemon juice	2 tbsp.	3/4 cup
Nutmeg (optional)	1/8 tsp.	1 tsp.

Quality: Use firm, crisp apples. If apples lack tartness, use an additional 1/4 cup of lemon juice for each 6 quarts of slices.

Yield: 1 quart or 7 quarts

Procedure: Wash, peel and core apples. Prepare slices 1/2-inch wide and place in water containing 1 teaspoon of ascorbic acid crystals or six, 500-mg vitamin C tablets or a commercial product in 1 gallon of water to prevent browning. Remove from the anti-darkening solution and drain well. To blanch the fruit, place 6 cups of apple slices at a time in 1 gallon of boiling water. Boil each batch 1 minute after the water returns to a boil. Drain and keep heated fruit in a covered bowl or pot. Combine sugar, Clear Jel® and cinnamon in a large kettle with water and apple juice. Stir and cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained apple slices, immediately fill jars with mixture, leaving 1-inch headspace. Adjust lids and process immediately.

Recommended processing time for Apple Pie Filling in a BOILING-WATER canner:

Process Time at Altitudes of:

Style of Pack	Jar Size	0-1,000 ft.	1,001-3,000 ft.	3,001-6,000 ft.
Hot	Pints or Quarts	25 min.	30 min	35 min

Blueberry Pie Filling

<u>Ingredients</u>	<u>1 Quart</u>	<u>7 Quarts</u>
Fresh or thawed blueberries	3-1/2 cups	6 quarts
Granulated sugar	¾ cup +2 tbsp.	6 cups
Clear Jel®	1/4 cup + 1 tbsp.	2-1/4 cups
Cold water	1 cup	7 cups
Bottled lemon juice	3 tbsp.	1/2 cups

Quality: Select fresh, ripe and firm blueberries. Unsweetened frozen blueberries may be used. If sugar has been added, rinse it off while fruit is still frozen. Collect, measure and use the juice from thawing fruit to partially replace the water specified in the recipe.

Yield: 1 quart or 7 quarts

Procedure: Wash and drain fresh blueberries. For fresh fruit, place 6 cups at a time in 1 gallon boiling water. Boil each batch 1 minute after the water returns to a boil. Drain and keep heated fruit in a covered bowl or pot. Combine sugar and Clear Jel® in a large kettle, and add water. Cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained berries, immediately fill jars with mixture, leaving 1-inch headspace. Adjust lids and process immediately.

Recommended process time for Blueberry Pie Filling in a BOILING-WATER canner:

Process Time at Altitudes of:

Style of Pack	Jar Size	0-1000 ft.	1,001-3,000 ft.	3,001-6,000 ft.
Hot	Pints or Quarts	30 min.	35 min.	40 min.

Cherry Pie Filling

<u>Ingredients</u>	<u>1 Quart</u>	<u>7 Quarts</u>
Fresh or thawed sour cherries	3-1/3 cups	6 quarts
Granulated sugar	1 cup	7 cups
Clear Jel®	1/4 cup + 1 tbsp.	1-3/4 cups
Cold water	1-1/3 cups	9-1/3 cups
Bottled lemon juice	1 tbsp. + 1 tsp.	1/2 cup
Cinnamon (optional)	1/8 tsp.	1 tsp.
Almond extract (optional)	1/4 tsp.	2 tsp.

Quality: Select fresh, very ripe and firm cherries. Unsweetened frozen cherries may be used. If sugar has been added, rinse it off while the fruit is still frozen. Collect, measure and use the juice from thawing fruit to partially replace the water specified in the recipe. Use 1/4 cup Clear Jel® per quart or 1 3/4 cups for 7 quarts.

Yield: 1 quart or 7 quarts

Procedure: Rinse and pit fresh cherries. To prevent stem end browning, hold pitted cherries in water containing 1 teaspoon of ascorbic acid crystals or six, 500-mg vitamin C tablets or a commercial product in 1 gallon of water. For fresh fruit, place 6 cups at a time in 1 gallon boiling water. Boil each batch 1 minute after the water returns to a boil. Drain and keep heated fruit in a covered bowl or pot. Combine sugar and Clear Jel® in a large kettle and add water. If desired, add cinnamon and almond extract. Stir mixture and cook over medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained cherries, immediately fill jars with mixture, leaving 1-inch headspace. Adjust lids and process immediately.

**Recommended process time for
Cherry Pie Filling in a BOILING-WATER canner:**

Process Time at Altitudes of :

Style of Pack	Jar Size	0-1,000 ft.	1,001-3,000 ft.	3,001-6000 ft.
Hot	Pints or Quarts	30 min.	35 min.	40 min.

Peach Pie Filling

<u>Ingredients</u>	<u>1 Quart</u>	<u>7 Quarts</u>
Sliced fresh peaches	3-1/2 cups	6 quarts
Granulated sugar	1 cup	7 cups
Clear Jel®	¼ cup + tbsp.	2 cups + 3 tbsp.
Cold water	¾ cup	5- ¼ cups
Bottled lemon juice	¼ cup	1-3/4 cups
Cinnamon (optional)	1/8 tsp.	1 tsp.
Almond extract (optional)	1/8 tsp.	1 tsp.

Quality: Select ripe, but firm fresh peaches.

Yield: 1 quart or 7 quarts

Procedure: Peel peaches. To loosen skins, submerge peaches in boiling water for approximately 30-60 seconds, and then place in cold water for 20 seconds. Slip off skins and prepare slices 1/2 – inch thick. Place slices in water containing ½ tsp. of ascorbic acid crystals or six, 500 milligram vitamin C tablets or commercial product in 1 gallon of water to prevent browning. For fresh fruit, place 6 cups at a time in 1 gallon boiling water. Boil each batch 1 minute after the water returns to a boil. Drain and keep heated fruit in a covered bowl or pot. Combine water, sugar, Clear Jel® and, if desired, cinnamon and/or almond extract in a large kettle. Stir mixture and cook over medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained peach slices, immediately fill jars with mixture, leaving 1-inch headspace. Adjust lids and process immediately.

**Recommended process time for
Peach Pie Filling in a BOILING-WATER canner:**

Process Time at Altitudes of:

Style of Pack	Jar Size	0-1,000 ft.	1,001-3,000 ft.	3,001-6,000 ft.
Hot	Pint or Quarts	30 min.	35 min.	40 min.

Procedure For Canning All Pie Fillings

Wash jars. Prepare lids according to manufacturer's instructions. Fill jars with fruit, leaving 1-inch headspace. Wipe sealing surface of jars with a clean, damp paper towel. Add lids, tighten screw bands and process.

To process in a boiling water canner, preheat canner half filled with water to boiling. Place jars into rack in canner. If needed, add water to a level of 1 inch above jars and cover. When water boils vigorously, lower heat to maintain a gentle boil and process for recommended time.

After processing is completed, remove jars from canner with a jar lifter and place them on a towel rack. Do not re-tighten screw bands. Air-cool jars 12 to 24 hours. Remove screw bands and check lid seals. A jar is sealed if the center of the lid is indented or concave. Wash, dry, label and store sealed jars in a clean, cool, dark place. Fillings are best if used within 1 year

You can prepare and can other fruit pie fillings besides the four listed in the handout. Those fruits that you can also prepare into fillings include:

Apricots, Nectarines, Pears, Plums, Prunes, Rhubarb — use directions for Peach Pie Filling.

Blackberry, Currant, Gooseberry, Huckleberry, Loganberry, Raspberry, Strawberry — use directions for Blueberry Pie Filling.

LOCAL SOURCES FOR CLEAR JEL® INCLUDE:

- Wenatchee Natural Foods, Wenatchee
- Okanogan River Food Co-op, Tonasket
- Bear Foods Wholesale, Chelan
- Main Street Market Natural Foods, Omak

CLEAR JEL® CAN ALSO BE PURCHASED ON-LINE FROM THESE SOURCES:

Sweet Celebrations: www.sweetc.com or call 1-800-328-6722

Kitchen Krafts: www.kitchenkrafts.com or call 1-800-776-0575

The Ingredient Store: www.theingredientstore.com or call 1-610-715-3501

****NOTE: 1 pound of Clear Jel® equals approximately 3 cups.****

Cooperating agencies: Washington State University, U.S. Department of Agriculture, and Chelan & Douglas Counties. Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension Office.

WSU Extension, P.O. Box 550, Waterville, WA 98858-0550 – Phone: (509) 745-8531 09/10

BOILING WATER CANNING PROCESS

1. Before you start preparing your food, fill the canner halfway with clean water. This is approximately the level needed for a canner load of pint jars. For other sizes and numbers of jars, adjust the amount of water in the canner so it will be 1 to 2 inches over the top of the filled jars.
2. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.
3. Fill, fit with lids, load onto the canner rack and use the handles to lower the rack into the water; or fill the canner with the rack in the bottom, one jar at a time, using a jar lifter. When using a jar lifter, make sure it is securely positioned below the neck of the jar (below the screw band of the lid). Keep the jar upright at all times. Tilting the jar could cause food to spill into the sealing area of the lid.
4. Add boiling water, if needed, so the water level is at least 1 inch above jar tops. Pour the water around the jars, not on them. For process times over 30 minutes, the water level should be at least 2 inches above the tops of the jars.
5. Turn heat to its highest position, cover the canner with its lid, and heat until the water in the canner boils vigorously.
6. Set the timer for the total minutes required for processing the food, adjusting for altitude.
7. Keep the canner covered and maintain a boil throughout the process schedule. The heat setting may be lowered a little as long as a complete boil is maintained for the entire process time. If the water stops boiling at any time during the process, bring the water back to a vigorous boil and begin the timing of the process over, from the beginning.
8. Add more boiling water, if needed, to keep the water level above the jars.
9. When the jars have boiled for the recommended time, turn off the heat and remove the canner lid. Wait no more than 5 minutes before removing jars.
10. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.



ATMOSPHERIC STEAM CANNING PROCESS

1. Use research tested recipe and processing time developed for a boiling water canner when using an atmospheric steam canner. An atmospheric steam canner may be used with recipes approved for half-pint, pint, or quart jars.
2. Add enough water to the base of the canner to cover the rack. (Follow manufacturer recommendations.)
3. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.
4. Heat jars prior to filling with hot liquid (raw or hot pack). Do not allow the jars to cool before filling.
5. Load filled jars, fitted with lids, onto the canner rack and place the lid on the canner base.
6. Turn heat to its highest position to boil the water until a steady column of steam (6-8 inches) appears from the vent hole(s) in the canner lid. Jars must be processed in pure steam environment.
7. If using a canner with a temperature sensor, begin processing time when the temperature marker is in the green zone for your altitude. If using a canner without a temperature sensor, begin processing time when a steady stream of steam is visible from the vent hole(s).
8. Set the timer for the total minutes required for processing the food, adjusting for altitude. Processing time must be limited to 45 minutes or less, including any modification for elevation. The processing time is limited by the amount of water in the canner base. When processing food, do not open the canner to add water.
9. Monitor the temperature sensor and/or steady stream of steam throughout the entire timed process. Regulate heat so that the canner maintains a temperature of 212°F. A canner that is boiling too vigorously can boil dry within 20 minutes. If a canner boils dry, the food is considered under-processed and therefore potentially unsafe.
10. At the end of the processing time, turn off the heat and wait 2 to 3 minutes. Carefully remove the lid, lifting the lid away from you.
11. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.

