4145 Branch Center Road
Sacramento, CA 95827-3823
(916) 875-6913 Office
(916) 875-6233 Fax
Email: sacmfp@ucanr.edu
Website: ucanr.edu/mfpsac

University of California
Agriculture and Natural Resources

UCCE Master Food Preserver Program
Sacramento County

Sacramento County Master Food Preservers
Monthly Wednesday Night Demonstration
October 20, 2021
Fall Fruit

***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.

Table of Contents

APPLES ARE PEAKING; CHOOSE THE BEST PRESERVATION METHOD
Source: https://nchfp.uga.edu/tips/fall/apples.html

Did you know that once an apple tree begins to bear fruit, it will do so for a century? Today, there are over 2,500 varieties of apples grown in the United States. Fall weather brings the best fresh apples in bushels.

While we are in a season of peak apple production in many states, you might consider preserving some specialties that will add variety to menus throughout the year. Apples can be dried, made into applesauce or apple butter, or even made into a delicious apple pear jam. Apples do not make the highest quality canned or frozen slices, but they can be preserved by those methods, also.

Whether you are buying apples by visiting the nearby orchard, the grocery store or market, or even picking apples from your own backyard, choose the preservation method that is best for your apple variety. Varieties that are good for freezing include: Golden Delicious, Rome Beauty, Stayman, Jonathan and Granny Smith. Varieties that are good for making applesauce and apple butter include: Golden Delicious, Rome Beauty, Stayman, Jonathan, Gravenstein and McIntosh. Red Delicious apples are best eaten fresh. They do not freeze or cook well.

When selecting your apples, remember that their flavor is best when they are at the peak of maturity. To judge the maturity of apples, do not go by size. Different varieties have different typical diameters. Choose apples that are free of defects, such as bruises, skin breaks and decayed spots. Little brown spots appearing solely on the skin of the apple, called “russeting,” does not affect quality. Beware and on the lookout for browning or broken skins that are evidence of actual spoilage such as rotting or mold. Also look for firm (hard) apples since soft apples tend to have a mealy texture and overripe flavor.

If making applesauce, apple butter or dried slices with your apples, use them as soon as possible after harvest. If any apples must be stored, keep them in a cool, dark place. They should not be tightly covered or wrapped up; a perforated plastic or open paper bag, basket or wooden crate are good choices. If kept in the refrigerator, apples should be placed in the humidifier compartment or in a plastic bag with several holes punched in it (or in a zipper-type vegetable bag). This prevents loss of moisture and crispness. Apples should not be placed close to foods with strong odors since the odor may be picked up by the apples.

Here are some options to prepare for and choose from in preserving your apples:

Making and canning a flavorful applesauce:
http://www.uga.edu/nchfp/how/can_02/applesauce.html

Making and canning a tasty, robust apple butter:
http://www.uga.edu/nchfp/how/can_02/apple_butter.html

For those who want a no-sugar added apple butter:
(ours was developed for sucralose as a sweetener)
http://nchfp.uga.edu/how/can_02/apple_butter_reduced.html

Drying apple slices or rings:
http://www.uga.edu/nchfp/publications/uga/uga_dry_fruit.pdf

Combining the best of fall fruits in tasty pear-apple jam:
http://www.uga.edu/nchfp/how/can_07/pear_apple_jam.html

Making old-fashioned, pretty crabapple jelly:
http://www.uga.edu/nchfp/how/can_07/crabapple_jelly.html

Canning fun, cinnamon-flavored spiced apple rings:
http://www.uga.edu/nchfp/how/can_02/apple_rings_spiced.html

Canning a special, spicy gift quality apple chutney:
http://www.uga.edu/nchfp/how/can_06/apple_chutney.html

And if you like the option of a spicy pickled profile, also check out this apple relish:
http://nchfp.uga.edu/how/can_06/harvest_apple_relish.htm

And, for all those extra apple slices to save for pies and desserts later in the year, freezing:
http://www.uga.edu/nchfp/how/freeze/apple.html

Additional ideas and preservation methods are available from the National Center for Home Food Preservation at the University of Georgia, www.homefoodpreservation.com.

APPLESAUCE

Source: https://nchfp.uga.edu/how/can_02/applesauce.html

Quantity: An average of 21 pounds is needed per canner load of 7 quarts; an average of 13½ pounds is needed per canner load of 9 pints. A bushel weighs 48 pounds and yields 14 to 19 quarts of sauce – an average of 3 pounds per quart.

Quality: Select apples that are sweet, juicy and crisp. For a tart flavor, add 1 to 2 pounds of tart apples to each 3 pounds of sweeter fruit.

Please read Using Pressure Canners and Using Boiling Water Canners before beginning. If this is your first time canning, it is recommended that you read Principles of Home Canning.

Procedure: Wash, peel, and core apples. If desired, slice apples into water containing ascorbic acid to prevent browning. Placed drained slices in an 8- to 10-quart pot. Add ½ cup water. Stirring occasionally to prevent burning, heat quickly until tender (5 to 20 minutes, depending on maturity and variety). Press through a sieve or food mill, or skip the pressing step if you prefer chunk-style sauce. Sauce may be packed without sugar. If desired, add 1/8 cup sugar per quart of sauce. Taste and add more, if preferred. Reheat sauce to boiling. Fill jars with hot sauce, leaving ½-inch headspace. Adjust lids and process.

Processing directions for canning applesauce in a boiling-water, a dial, or a weighted-gauge canner are given in Table 1, Table 2, and Table 3.

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

		Process Time at Altitudes of			
Style of Pack	**Quart Size**	**0 - 1,000 ft**	**1,001 - 3,000 ft**	**3,001 - 6,000 ft**	**Above 6,000 ft**
Hot	Pints	**15 min**	20	20	25
	Quarts	**20**	25	30	35

Table 2. Process Times for **Applesauce** in a Dial-Gauge Pressure Canner.

			Canner Pressure (PSI) at Altitudes of			
Style of Pack	**Jar Size**	**Process Time (Min)**	**0 - 2,000 ft**	**2,001 - 4,000 ft**	**4,001 - 6,000 ft**	**6,001 - 8,000 ft**
Hot	Pints	8	**6 lb**	7 lb	8 lb	9 lb
	Quarts	10	**6**	7	8	9

Table 3. Process Times for **Applesauce** in a Weighted-Gauge Pressure Cannner.

			Canner Pressure (PSI) at Altitudes of	
Style of Pack	**Jar Size**	**Process Time (Min)**	**0 - 1,000 ft**	**Above 1,000 ft**
Hot	Pints	8	**5 lb**	10 lb
	Quarts	10	**5**	10

APPLESAUCE

Source: https://www.freshpreserving.com/blog?cid=apple-sauce

Preserving Method: Water-Bath-Canning

Makes about 6 Pint Jars or 3 Quart Jars

Try Ball®'s family favorite Applesauce, packed with real apples and lots of love. This homemade recipe is one both the kids and mom can enjoy because it is all natural and packed with delicious, fresh flavor, never any preservatives. This recipe is great solo or with some homemade cookies for a special treat!

You will need

- 7 1/2 to 10 1/2 pounds apples (about 22 to 32 medium)
- Ball® Fruit-Fresh® Produce Protector
- 1 to 1 1/2 cups water
- 1 3/4 cups to 2 1/2 cups sugar (optional)
- 3 Tbsp of bottled lemon juice

Directions

1. Wash apples under cold running water; drain. Remove stem and blossom ends. Peel if desired. Cut into quarters. Treat with Fruit-Fresh to prevent darkening.
2. Drain apple quarters. Combine apples and water in a large saucepan. Cook over medium heat until soft, stirring to prevent sticking. Remove from heat. Purée mixture using an electric food strainer or food mill to remove peels and seeds. Return apple pulp to saucepan. Add sugar, if desired, and lemon juice stirring until dissolved. Bring applesauce to a boil (212°F), stirring to prevent sticking. Maintain temperature at a boil while filling jars.
3. Ladle hot applesauce into a hot jar, leaving ½-inch headspace. 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.
4. 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 pint or quart jars 20 minutes. Turn off heat and remove cover. Let jars cool 5 minutes. Remove jars from canner; do not retighten bands if loose. Cool 12 hours. Test seals. Label and store jars.
5. Chunky Apple Sauce: Coarsely crush half of the cooked apples and purée the other half; combine mixtures. Process as for apple sauce.

FRUIT LEATHERS

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 140ºF. 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.

APPLE CHIPS

Source: Excalibur, Preserve It Naturally, The Complete Guide to Food Dehydration

Apple rings make a delicious snack. Easy to make, too!

Prep: 10 mins

Dehydrate: 6 hours

Ingredients: 20 Apples

Directions:

1. Peel apples, if desired.
2. Remove core
3. Cut into rings, about 1/4-inch thick. A mechanical peeler works well for this.
4. To prevent browning, dip apple rings in lemon juice or an ascorbic acid solution. Drain the apples well.
5. Place on drying trays in your dehydrator. Dry at 130F for 5 to 6 hours.

APPLE SCRAP JELLY

Source: Adapted from freshpreserving.com and the National Center for Home Food Preservation, 2019

Yield: about 6 half-pints

4-1/2 cups apple juice prepared from apple peels and cores
5 cups sugar
1 box powdered pectin

To make juice: Place peels and cores into a pan. Add up to 1 cup of cold water per pound of fruit. Boil on high heat; stir to prevent scorching. Reduce heat, simmer for 15 minutes. Do not overcook; excess boiling destroys the pectin, flavor and color. Pour everything into a damp jelly bag and suspend the bag to drain the juice. Clear jelly comes from juice dripped through a jelly bag without pressing or squeezing. If a fruit press is used to extract the juice, restrain the juice through a jelly bag.

1. Sterilize canning jars by boiling for 10 minutes at altitudes of less than 1,000 feet. At higher elevations, boil jars 1 additional minute for each additional 1,000 feet elevation.
2. Pour juice into a large saucepan. Stir in pectin and bring to a full rolling boil over high heat, stirring constantly.
3. Add sugar, stirring to dissolve. Return to a boil over high heat; boil hard 1 minute, stirring constantly. Remove from heat. Skim foam.
4. Ladle hot jelly into hot, sterile jars, leaving 1/4-inch headspace. Wipe rims with a dampened clean paper towel; adjust two-piece metal canning lids.
5. Process 5 minutes in boiling-water or atmospheric steam canner, adding 1 additional minute per 1,000 feet above sea level.

Note: If unsterile jars are used, the filled jars should be processed 10 minutes.

PUMPKIN - Canning

Source: So Easy to Preserve

Pumpkins should have a hard rind and stingless, mature pulp. They should be ideal for cooking fresh. Small pumpkins (sugar or pie pumpkins) make better products.

Hot Pack – Wash pumpkins and remove seeds. Cut into 1-inch slices and peel. Cut flesh into 1-inch cubes. Add to a saucepot of boiling water, boil for 2 minutes.
CAUTION: Do not mash or puree.

Pack hot cubes into hot jars, leaving 1-inch headspace. Fill jar to 1-inch from top with boiling hot cooking liquid. Remove air bubbles. Wipe jar rims. Adjust lids and process.

Process in a Dialed Gauge Pressure canner at 11 pounds pressure or in a Weighted Gauge Pressure Canner at 10 pounds pressure:

Pints……..55 minutes
Quarts……..90 minutes

PUMPKIN - Freezing

Source: So Easy to Preserve

Preparation – Select full-colored mature pumpkin with fine texture. Wash, cut into cooking-size sections and remove seeds.
Cook until soft in boiling water, in steam, in a pressure cooker or in an oven. Remove pulp from rind and mash. To cool, place pan containing pumpkin in cold water and stir occasionally. Package, leaving 1/2-inch headspace. Seal and freeze.

PUMPKIN - Drying

Source: So Easy to Preserve

Cut or break into pieces. Remove seeds and cavity pulp. Cut into 1-inch strips. Peel rind. Cut strips crosswise into pieces about 1/8-inch thick.

Steam (Minutes) 2 ½-3
Water (Minutes) 1
Estimated Drying Time Dehydrator (Hours)* 10-16

*Drying times vary depending on the initial moisture content of the product and the particular dehydrator being used. Drying time in a conventional oven could be up to twice as long, depending on air circulation.

PUMPKIN LEATHER

Source: So Easy to Preserve

2 cups of canned pumpkin or 2 cups of fresh pumpkin
1/2 cup honey
1/4 teaspoon cinnamon
1/8 teaspoon nutmeg
1/8 teaspoon powdered cloves

Blend ingredients well. Spread on tray or cookie sheet lined with plastic wrap. Dry at 140^0 F.

PUMPKIN SEEDS – Dehydrating

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

Drying seeds and roasting seeds are two different processes. To dry, carefully wash pumpkin seeds to remove the clinging fibrous pumpkin tissue. Pumpkin seeds can be dried in the sun, in a dehydrator at 115-120°F for 1 to 2 hours, or in an oven on warm for 3 to 4 hours. Stir them frequently to avoid scorching.

To roast, take dried pumpkin seeds, toss with oil and/or salt and roast in a preheated oven at 250°F for 10 to 15 minutes.

FREEZER SPICED PUMPKIN BUTTER

Source: https://freshpreserving.com/blog?cid=freezer-spiced-pumpkin-butter

Preserving Method: Freezing

Makes about 6 (8 oz) half pint jars

This comforting Autumn inspired pumpkin spiced spread is equally delicious on pancakes and waffles as it is on toast and muffins. Spread it between layers of your favorite cake or use it as a healthy substitute in baking.

You will need

- 1 (3 lb) pie pumpkin, peeled, seeded, and cubed or canned pumpkin cubes (about 10 cups)
- 1 cup apple juice
- 1/2 cup maple syrup
- 1-1/2 cups light brown sugar
- 2 Tbsp lemon juice
- 1/2 tsp vanilla extract
- 1 tsp ground cinnamon
- 1/2 tsp ground nutmeg
- 1/2 tsp ground ginger
- 1/2 tsp ground cardamom (optional)
- 6 (8oz) glass or plastic freezer jars

Directions

STIR maple syrup, brown sugar, vanilla, cinnamon, nutmeg, ginger, and cardamom in a bowl until well mixed. Set aside.
ADD pumpkin, apple and lemon juice to food processor or blender. Blend until smooth, about 30 seconds. Add pumpkin puree to mixture. Stir until well mixed.
LADLE pumpkin butter into half pint freezer jars leaving 1/2-inch headspace.
SERVE immediately, refrigerate up to three weeks or freeze up to one year.

PICKLED BUTTERNUT SQUASH

Source: Ball Complete Book of Home Preserving

Yield: about 4 pint jars

2 medium butternut squash (about 4 pounds)
1 1/2 tablespoons Ball Salt for Pickling & Preserving
1 cup sugar
2 cloves garlic
2 teaspoons fennel seeds
1/4 teaspoon black peppercorns
2 1/2 cups white wine vinegar
1/2 cup water
4 sprigs fresh thyme

PREP Wash butternut squash under cold running water. Remove stems and blossom ends from butternut squash. Peel squash. Cut squash in half lengthwise and remove seeds. Cut squash into 1-inch cubes. Combine squash and salt in a large bowl, tossing to coat squash evenly with salt. Let stand 2 hours. Rinse squash under cold running water, drain.

COOK Combine sugar, garlic, fennel seeds, black peppercorns, white wine vinegar, and water in a large saucepan. Bring mixture to a boil, stirring until sugar dissolves. Reduce heat to a simmer (180^0F); cover, and simmer 10 minutes. Remove garlic and discard.

FILL Pack squash into hot jar, leaving 1/2-inch headspace. Add 1 sprig of thyme to pint jar. Ladle hot pickling liquid over squash, leaving 1/2-inch headspace. 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 (180^0F) 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 pint jar 10 minutes. Turn off heat and remove cover. Let jars cool 5 minutes. Remove jars from canner, do not retighten bands if loose. Cool 12 hours. Check seals. Label and store jars.

PEAR PORT COMPOTE

Source: Ball Complete Book of Home Preserving

Makes about five pint jars

1 cup dark raisins
1 cup golden raisins
1/2 cup coarsely chopped dried apricots
Grated zest and juice of 1 orange
Grated zest and juice of 1 lemon
1/2 cup lightly packed brown sugar
2 tsp ground cinnamon
2 tsp ground nutmeg
1/2 tsp ground ginger
1/4 tsp salt
10 cups coarsely chopped cored peeled pears (preferably Bartletts), treated to prevent browning and drain.
1 cup slivered blanched almonds (optional)
1/4 cup port wine

1. In a large stainless-steel saucepan, combine dark and golden raisins, apricots, orange zest and juice, lemon zest and juice, brown sugar, cinnamon, nutmeg, ginger and salt. Gently fold in pears and bring to a boil over medium-high heat, stirring occasionally. Reduce heat, cover and boil gently for 20 minutes, stirring occasionally. Uncover, increase heat to medium and cook, stirring frequently, until mixture thickens, about 15 minutes. Stir in almonds, if using, and port wine. Cook, stirring constantly, for 5 minutes.
2. Meanwhile, prepare canner, jars and lids.
3. Ladle hot compote into hot jars, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding compote. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
4. Place jars in canner, ensuring they are completely covered with water. Bring to a boil and process for 20 minutes. Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

PEAR (or PEACH) CHUTNEY

Source: Ball Blue Book, Guide to Preserving

Yields: about 7 pint jars

4 quarts finely chopped peaches or pears (about 20 medium)
2 to 3 cups brown sugar
1 cup light raisins
1 cup chopped onion (about 1 medium)
1/4 cup mustard seed
2 tablespoons ginger
2 teaspoons Ball salt for Pickling & Preserving
1 clove garlic (optional)
1 hot red pepper, finely chopped
1 quart plus 2 cup vinegar 5% acidity

PREP Wash peaches or pears and hot red pepper under cold running water, drain. To peel peaches, blanch in boiling water for 30 to 60 seconds. Immediately transfer to cold water. Slip off peel. Cut peaches in half lengthwise and remove pit and fibrous flesh. If making pear chutney, peel pears, then cut pears in half lengthwise and remove core. Finely chop peaches or pears. Measure 4 quarts chopped peaches or pears. Peel onion and chop. Peel garlic and mince, if desired. Removed stem from hot red pepper. Finely chop hot red pepper.

COOK Combine all ingredients in a large saucepan. Bring mixture to a simmer (180^0F), simmer until think, stirring to prevent sticking.

FILL Pack hot chutney into hot jar, leaving 1/2-inch headspace. 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 (180^0F) 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 pint jar 10 minutes. Turn off heat and remove cover. Let jars cool 5 minutes. Remove jars from canner, do not retighten bands if loose. Cool 12 hours. Check seals. Label and store jars.

NOTE: When cutting or seeding hot peppers, wear rubber gloves to prevent hands from being burned. For mile chutney, remove seeds and veins from hot peppers.

PEAR MINCEMEAT

Source: Ball Blue Book, Guide to Preserving

Yield: About 9 pint jars

7 pounds Bartlett pears (about 21 meduim)
1 lemon
2 pounds gold or dark raisins
6 3/4 cups sugar
1 tablespoon cloves
1 tablespoon cinnamon
1 tablespoon nutmeg
1 tablespoon allspice
1 teaspoon ginger
1 cup vinegar, 5% acidity

PREP Wash pears and lemon under cold running water, drain. Cut pears in half lengthwise and core. Coarsely chop pears. Cut lemon into quarter and remove seeds. Finely chop lemon, including peel, using a food processor or food grinder.

COOK Combine all ingredients in a large saucepan. Bring mixture to a boil over medium heat, stirring to prevent sticking. Reduce heat and simmer 30 minutes.

FILL Ladle hot mincemeat into a hot jar, leaving 1/2-inch headspace. 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 (180^0F) 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 pint jar 25 minutes. Turn off heat and remove cover. Let jars cool 5 minutes. Remove jars from canner, do not retighten bands if loose. Cool 12 hours. Check seals. Label and store jars.

TIP: Serve Pear Mincemeat as an accompaniment to roast pork or beef. Or try this side dish. Put a generous dollop of Pear Mincemeat into the cavity of halved acorn squash during the last 15 minutes of baking. Drizzle warm honey over acorn squash before serving.

CORNCOB JELLY with powdered pectin

Source: https://nchfp.uga.edu/how/can_07/corncob_jelly.html

To make corncob juice:

- 1 dozen medium-sized fresh red corncobs from field corn (cobs only)
- 2 quarts water

To make jelly:

- 3 cups corncob juice
- 1 (1¾ ounce) package powdered pectin*
- 3 cups sugar

Yield: About 4 half-pint jars

Please read Using Boiling Water Canners before beginning. If this is your first time canning, it is recommended that you read Principles of Home Canning.

Procedure:

To Prepare Juice - Wash the corncobs and cut into 4-inch lengths. Place in a large stockpot, add 2 quarts water or enough to cover, and bring to a boil. Reduce heat and boil slowly for 35 to 40 minutes. Strain the juice through a double layer of cheesecloth or a jelly bag. Allow juice to drip through the cloth, using a stand or colander; do not press or squeeze the bag or cloth.

To Make Jelly - Sterilize canning jars. Measure 3 cups of corncob juice into a large saucepot. (Water may be added if needed to make 3 cups liquid.) Stir in the pectin and bring to a boil. Add the sugar all at once, and bring the mixture back to a full roiling boil while stirring. Boil for 5 minutes. Remove from heat; skim off foam quickly. Pour hot jelly immediately into hot, sterile jars, leaving ¼-inch headspace. Wipe rims of jars with a dampened clean paper towel; adjust two-piece metal canning lids. Process in a Boiling Water Canner.

Table 1. Recommended process time for **Corncob Jelly** 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 or Pints	**5 min**	10	15

Additional Notes:

* For testing, SURE-JELL Premium Fruit Pectin was used.

1) This recipe does produce an acidic jelly as tested. (2) Instead of pre-sterilizing jars, you have the option of washing and rinsing jars in hot water and then keeping them hot until filling. Then the process time is increased and becomes 10 min. (0-1,000 ft), 15 min. (1,001-6,000 ft.) or 20 min. (above 6,000 ft).

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 a 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.

PRESSURE CANNING PROCESS – QUICK STEPS

1. Use reputable, research-based recipe.
2. Prep work area, food and jars.
3. Heat 2-3” canner water (not boiling).
   Hot Pack: 180^0F, Raw Pack: 140^0F
4. Jars in canner; lid on; weight off; high heat.
5. Vent 10 minutes.
6. Weight on.
7. Pressurize; lower heat to maintain pressure.
8. Start time; process, adjust heat as needed.
9. Ding! Timer off; heat off.
10. Wait until pressure drops to 0.
11. Weight off.
12. Cool 10 minutes more.
13. Lid off; jars out.
14. Cool jars, undisturbed 12-24 hours.
    Check seals; remove rings, clean jars.
15. Label and store sealed jars.
    Cool, dry, dark location.
    Use within 1 year for best quality.

JUICER

Source: http://www.oklahomagardening.okstate.edu/recipes/2019/juice-jelly/

Extracting Juice for Jelly

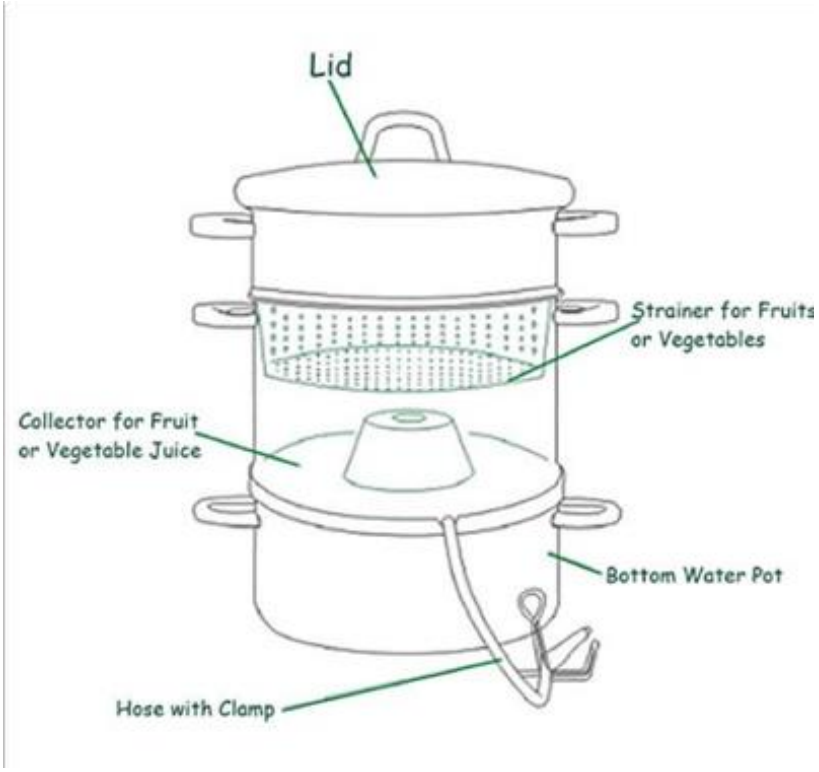
Preparing the Fruit

- Unless using added pectin, use 1/4 slightly under-ripe fruit and 3/4 just ripe fruit. If you're adding pectin, you can use all ripe fruit.
- Prepare fruit in small batches, enough for one recipe.
- Sort the fruit, discarding all damaged portions.
- Wash fruits, but do not remove skins or cores, since the pectin is more concentrated there. Cut into small pieces.
- Wash berries carefully to prevent loss of juice. Drain, remove caps and stems.

Extracting the Juice sing Traditional Methods

- Place fruit into a flat-bottomed saucepan and add cold water. For apples and other hard fruits, add up to 1 cup per pound of fruit. For berries and grapes, use only enough water to prevent scorching. Crush soft fruits to start the flow of juice.
- Bring to a boil on high heat. Stir to prevent scorching.
- Reduce heat.
- Grapes and berries need 10 minutes or less to cook until soft. Apples and other hard fruits may need 20 to 25 minutes, depending on the firmness of the fruit. Do not overcook; excess boiling will destroy the pectin, flavor and color.
- Pour everything into a damp jelly bag and suspend the bag to drain the juice. The clearest jelly comes from juice that has dripped through a jelly bag without pressing or squeezing.
- If a fruit press is used to extract the juice, the juice should be restrained through a jelly bag.

Extracting Juice using a Steam Juice Extractor



A steam juice extractor is a three-tier kettle that uses steam to cook fruits or vegetables to release their juice. The base level holds water which is heated and converted to steam which moves up through the funnel in the center of the middle level to the top level where the produce is placed. A lid keeps the steam around the food as it cooks. As the fruits and/or vegetables are heated they release their juices which drip through the colander like base of the top level and are collected in the center compartment. Most models have a clamped hose attached to the center level which can be opened to allow juice to be collected and used to make jelly, as a beverage or as a base for soup or stew.

An advantage of this system is that the juice extracted is clear which eliminates the need to strain it through layers of cheese cloth or a jelly bag. The juice can be processed using a boiling water canner or frozen if not made into jelly.

Steam juice extractors are available for $60 to $200.

Diagram of 11-Quart Stainless Steel Juicer Steamer, Fruit Vegetables Steamer For Food With Glass Lid Hose With Clamp Loop Handles, Perfect Home Kitchen Stainless Steel Cookware By WATERJOY