



Fabulous Fall Fruits

Food Safety Basics

Wash Hands Frequently

- Personal cleanliness is a must. Wash your hands thoroughly and frequently. *E. Coli* resides in the human nose and intestines. Wash your hands if you rub your nose, or if you wipe your face or skin.
- Bandage any cuts or burns on hands before handling food, or use disposable gloves.

Avoid Cross Contamination

- Rinse all fresh fruits and vegetables well under running water before preparing or eating them.
- ALWAYS wash your hands, knives, cutting boards, and food preparation surfaces well with soapy water before and after any contact with raw meat, fish, or poultry.
- Run sponges through the dishwasher several times a week. Change dishcloths daily.
- Use paper towels to mop up spilled juices from meat, fish or poultry.
- Use a disinfecting solution of 1½ teaspoons of chlorine bleach to 1 pint of water. Dispense with a spray bottle to disinfect countertops, cutting surfaces, sinks, etc. Make a new solution weekly.

When in doubt, throw it out!

- Never taste food that looks or smells strange to see if it can still be used.
- Most bacteria that cause food borne illness are odorless, colorless, and tasteless.

Prevent botulism by following a reputable recipe

- There must be a minimum, uniform level of acid throughout the mixed product to prevent the growth of botulinum bacteria.
- Use a current recipe from one of the sources listed at the end of this publication. Grandma's recipe may not use the correct proportions of water and vinegar, or may have assumed a higher level of acidity in the vinegar.

Canning Basics

Canning Processes

- Use an **atmospheric steam canner** or a **boiling water canner** for high acid foods: fruits, pickled and fermented products, jams and jellies.
- Use a **pressure canner** for low acid foods: meats, vegetables, beans and seafood.

Why two different processes? Low acid foods must be pressure canned because *Clostridium botulinum*, the bacteria that causes botulism, is a spore former. When conditions are not favorable for the organism to grow (high acidity, oxygen, dryness, and low/high heat.), the bacterial cell forms a protective structure called a spore. It takes a higher temperature than boiling to destroy the spores: 240° - 250°F. If you do not destroy the spores in low acid canned foods they will germinate and produce fatal toxins in the food when it is stored on the shelf. High acid foods have enough acidity to destroy spores.

The USDA does not recommend the open kettle method of canning because it does not prevent all risks of spoilage. (Open kettle canning is putting hot food in hot jars, sealing it with a lid and then not processing it in a canner.)

Raw-Pack vs. Hot-Pack Methods

Filling jars with raw, unheated food prior to heat processing is called the raw-pack method. The preferred method, filling jars with preheated, hot food prior to heat processing, is called the hot-pack method. Benefits include a tighter pack and, because food expels air when heated, less float.

Jars

Check jars, lids and bands for high quality. Wash jars, lids and bands in hot, soapy water. Rinse well. Dry bands. Heat home canning jars in hot water, not boiling, until ready for use. Fill a large saucepan or stockpot half-way with water. You may also place them in your canner. Place jars in water (filling jars with water from the saucepan will prevent flotation). Bring to a simmer over medium heat. Keep jars hot until ready for use. You may also use a dishwasher to wash and heat jars. Keeping jars hot prevents them from breaking when hot food is added. Leave lids and bands at room temperature for easy handling.

Headspace

Headspace is the completely empty space left in the jar underneath the lid and above the food. Headspace allows for food to expand during canning without being forced out from under the lid during processing. Recommended amounts also allow for good vacuums to be formed for holding lids in place and good food quality to be maintained during storage.

Recipes**Apple Maple Jam**

Yield about 8 half-pints

3 quarts chopped apples (about 6 pounds, 1/2-inch pieces)	1/2 teaspoon allspice
6 cups sugar	1/2 teaspoon nutmeg
1 teaspoon cinnamon	1/4 teaspoon cloves
	1 cup maple syrup

1. Wash apples under cold running water; drain. Core and peel apples. Chop apples into 1/2-inch pieces; measure 3 quarts chopped apples.
2. Combine all ingredients in a large saucepan. Bring mixture to a boil over medium-high heat, stirring until sugar dissolves.
3. Bring mixture to a rolling boil that cannot be stirred down. Boil rapidly to gelling point (8 degrees F. over boiling point at your elevation), stirring to prevent sticking.
4. Remove from heat, skim off foam if necessary.
5. Ladle hot jam into hot jars, leaving 1/4-inch headspace. Remove air bubbles. Wipe rims with a dampened, clean paper towel; adjust two-piece metal canning lids.
6. Process in a boiling water or atmospheric steam canner for 10 minutes at 0-1000 feet elevation; 15 minutes at 1,001-3,000 feet; 20 minutes at 3,001-6,000 feet; 25 minutes at 6,001-8,000 feet; and 30 minutes at 8,001-10,000 feet.
7. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *Ball Blue Guide to Preserving*, 2014

Spiced Apple Rings

Yield about 8 or 9 pint jars

12 pounds firm, tart apples (maximum diameter 2-1/2 inches)	1-1/4 cups white vinegar (5%)
12 cups sugar	3 tablespoons whole cloves
6 cups water	3/4 cup red hot cinnamon candies or 8 cinnamon sticks and 1 teaspoon red food coloring (optional)

1. Wash apples. To prevent discoloration, peel and core one apple at a time. Immediately cut crosswise into 1/2-inch rings and immerse in an anti-darkening solution (1 teaspoon or 3,000 mg ascorbic acid (Vitamin C) in 1 gallon water. If using tablets, crush thoroughly before adding the water or for commercial ascorbic acid mixture, read the label on the container for the amount to use). Hold the fruit in one of these solutions until you're ready to pack the fruit. Then drain fruit well.
2. To make flavored syrup, combine sugar, water, vinegar, cloves, cinnamon candies (or cinnamon sticks and food coloring) in a 6-quart saucepan. Heat to a boil, stirring constantly. Simmer 3 minutes.
3. Remove apples from anti-darkening solution and drain well. Add to hot syrup and cook 5 minutes.
4. Fill half-pint or pint jars (preferably wide-mouth) with apple rings, leaving 1/2-inch headspace. Fill jars to 1/2-inch from top with hot syrup. Remove air bubbles. Wipe jar rims with clean, dampened paper towel. Adjust lids.
5. Process 10 minutes in a boiling water or atmospheric steam canner at 0-1,000-foot elevation; 15 minutes at 1,001-3,000 feet; 20 minutes at 3,001-6,000 feet; 25 minutes at 6,001-8,000 feet; and 30 minutes at 8,001-10,000 feet.
6. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *So Easy to Preserve*, 2014

Applesauce with Variations

Yield about 8 pint jars or 4 quart jars

12 pounds apples, peeled, cored, and quartered

Water

3 cups granulated sugar (optional)

4 tablespoons bottled lemon juice

1. Wash apples. To prevent discoloration, peel, core, quarter, and immerse in an anti-darkening solution (1 teaspoon or 3,000 mg ascorbic acid (Vitamin C) and 1 gallon water. If using tablets, crush thoroughly before adding the water or commercial ascorbic acid mixture. Read the label on the container for the amount to use).
2. Drain apples well. In a large stainless steel saucepan, combine apples with just enough water to prevent sticking. Bring to a boil over medium-high heat. Reduce heat and boil gently, stirring occasionally, for 5 to 20 minutes, until apples are tender (time will depend upon the variety of apple and its maturity). Remove from heat and let cool slightly, about 5 minutes.
3. Working in batches, transfer apples to a food mill or a food processor fitted with a metal blade and puree until smooth.
4. Return apple puree to saucepan. Add sugar, if using, and lemon juice; bring to a boil over medium-high heat, stirring frequently to prevent sticking. Maintain a gentle boil over low heat while filling jars.
5. Ladle hot applesauce into hot jars, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot applesauce. Wipe rim with a clean, dampened paper towel. Adjust two-piece metal canning lids.
6. Process both pint and quart jars in a boiling water or atmosphere steam canner for 20 minutes at 0-1,000 feet elevation; 25 minutes at 1,001-3,000 feet; 30 minutes at 3,001-6,000 feet; 35 minutes at 6,001-8,000 feet; and 40 minutes at 8,001-10,000 feet.
7. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Variations

Spiced Applesauce: In Step 4, add 4 teaspoons ground spices, such as cinnamon, nutmeg, or allspice, to the sauce with the sugar and lemon juice.

Chunky Applesauce: In Step 4, coarsely crush half of the cooked apples and puree the remainder. Combine before adding the sugar.

Source: *Ball Complete Book of Home Preserving*, 2012

Apple Pie Filling (using ClearJel)

Makes about seven pint jars

12 cups sliced, peeled, cored apples, treated to prevent browning (see number 2 below)
2-3/4 cups granulated sugar
3/4 cup ClearJel
1-1/2 teaspoon ground cinnamon

1/2 teaspoon ground nutmeg
1-1/4 cups cold water
2-1/2 cups unsweetened apple juice
1/2 cup bottled lemon juice

1. Prepare canner, jars, and lids.
2. In a large pot of boiling water, working with 6 cups at a time, blanch apple slices for 1 minute. Remove with a slotted spoon and keep warm in a covered bowl.
3. In a large stainless steel saucepan, combine sugar, ClearJel, spices, water, and apple juice. Bring to a boil over medium-high heat, stirring constantly, and cook until mixture thickens and begins to bubble. Add lemon juice, return to a boil, and boil for 1 minute, stirring constantly. Remove from heat. Drain apple slices and immediately fold into hot mixture. Before processing, heat, stirring, until apples are heated through.
4. Ladle hot pie filling into hot jars, leaving 1-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot filling. Wipe rim with a clean, dampened paper towel. Adjust two-piece metal canning lids.
5. Process pints in boiling water or atmospheric steam canner for 25 minutes at 0-1,000 feet elevation; 30 minutes at 1,001-3,000 feet; 35 minutes at 3,001-6,000 feet; 40 minutes at 6,001-8,000 feet; and 45 minutes at 8,001-10,000 feet.
6. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: Ball Complete Book of Home Preserving, 2012

Pear and Mint Jelly

Makes about 6 half-pint jars

5 cups cored, chopped pears
1-1/2 cups apple cider vinegar
1 cup water
2 cups mint leaves and stems

1 package original fruit pectin
4 cups granulated sugar
Green food coloring, optional

1. In a large, deep stainless steel saucepan, combine pears, vinegar, and water. Bring to a boil; reduce heat to medium and simmer partly covered until pears are translucent. Add mint; crush pears with potato masher and simmer for 1 minute more. Cover and let stand 10 minutes. Spoon cooked fruit into a dampened cheesecloth-lined strainer or jelly bag suspended over a bowl. Let juice drip, undisturbed, for 2 hours or overnight. (Squeezing bag may cause cloudy jelly.)
2. Place 6 clean half-pint jars in boiling water or atmospheric steam canner. Keep jars hot until ready to use.
3. Measure sugar; set aside.
4. Measure 3 cups juice back into the saucepan. If necessary, add water to reach desired quantity. Whisk in original fruit pectin until dissolved.
5. Stirring frequently, bring mixture to a boil over high heat. Add sugar. Stirring constantly, return mixture to a full rolling boil that cannot be stirred down. Boil hard 1 minute. Remove from heat; skim foam. Stir in a few drops of green food coloring, if desired.
6. Quickly ladle hot jelly into a hot jar to within 1/4-inch of top of jar (headspace). Remove air bubbles and adjust headspace if required by adding more jelly. Wipe rim with clean, dampened paper towel. Adjust two-piece metal canning lids.
7. Process half-pints in boiling water or atmospheric steam canner for 10 minutes at 0-1,000 feet; 15 minutes at 1,001-3,000 feet; 20 minutes at 3,001-6,000 feet; 25 minutes at 6,001-8,000 feet; and 30 minutes at 8,001-10,000 feet.

8. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: www.bernardin.ca

Pear Lavender Freezer Jam

Makes about 5 half-pint jars

4 cups crushed, peeled, pitted pears (see number 2) 1 tablespoon minced lavender
3 tablespoons lemon juice 1 pouch freezer jam pectin
1-1/2 cups granulated sugar

1. Wash and rinse 5 freezer jars and lids or regular half-pint mason jars and metal two-piece lids.
2. Peel, pit, and crush pears, one layer at a time. In a large measuring bowl, combine 4 cups crushed pears, lemon juice, sugar, and lavender. Stir until sugar dissolves; let stand 10 minutes.
3. Gradually stir in contents of freezer jam pouch into fruit-sugar mixture until dissolved. Stir 3 minutes longer.
4. Ladle jam into jars, leaving 1/2-inch headspace. Wipe jar rims with clean, dampened paper towel removing any residue. Apply lids tightly. Let stand until thickened, about 30 minutes. Refrigerate up to 3 weeks; freeze up to 1 year, or serve right away.

Source: www.bernardin.ca

Cinnamon Pears in Apple Juice

Makes 1 pint per 1 to 1-1/2 pounds pears

1 to 1-1/2 pounds pears (3 to 5 medium) per pint
1 cinnamon stick per pint
Unsweetened apple juice

1. Wash pears. Drain. Peel, core and cut into halves. If desired, treat with Fruit Fresh or lemon juice to prevent browning.
2. Cook pears in water one layer at a time until hot throughout.
3. Heat apple juice just to a boil.
4. Pack hot pears, cavity side down, into hot jars, leaving 1/2-inch headspace. Place 1 cinnamon stick in each jar. Ladle hot juice over pears, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace if required by adding more apple juice. Wipe jar with clean, dampened paper towel. Adjust two-piece metal canning lids.
5. Process pints in boiling water or atmospheric steam canner for 20 minutes at 0-1,000 feet; 25 minutes at 1,001-3,000 feet; 30 minutes at 3,001-6,000 feet; 35 minutes at 6,001-8,000 feet; and 40 minutes at 8,001-10,000 feet.
6. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: ballmasonjars.com

Ginger Pear Preserves

Makes about seven 8-ounce jars

5-1/2 cups finely chopped cored, peeled pears
Grated zest and juice of 3 limes
2-1/3 cups granulated sugar
1 tablespoon freshly-grated ginger

1. Prepare canner, jars, and lids.
2. In a large stainless steel saucepan, combine pears, lime zest and juice, sugar, and ginger root. Bring to a boil over medium heat, stirring to dissolve sugar. Boil, stirring frequently, until mixture reaches the gel stage (220 degrees F. or 8 degrees above the boiling water temperature at your altitude), about 15 minutes. Skim off foam.
3. Ladle hot preserves into hot jars, leaving 1/4-inch headspace. Remove air bubbles and adjust headspace, if required, by adding more preserves. Wipe rim using clean, dampened paper towel. Adjust two-piece metal canning lids.
4. Process jars in boiling water or atmospheric steam canner for 10 minutes at 0-1,000 feet; 15 minutes at 1,001-3,000 feet; 20 minutes at 3,001-6,000 feet; 25 minutes at 6,001-8,000 feet; or 30 minutes at 8,001-10,000 feet.
5. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dark, dry location.

Source: *Ball Complete Book of Home Preserving*, 2012

Whole Berry Cranberry Sauce

Makes about eight 8-ounce jars or four pint jars

4 cups granulated sugar
4 cups water

8 cups fresh cranberries
Grated zest of 1 large orange (optional)

1. Prepare canner, jars, and lids.
2. In a large stainless steel saucepan, combine sugar and water. Bring to a boil over high heat, stirring to dissolve sugar. Boil hard for 5 minutes. Add cranberries and return mixture to a boil. Reduce heat and boil gently, stirring occasionally until all berries burst and liquid begins to sheet from a metal spoon (about 15 minutes). Stir in orange zest, if using, during the last few minutes of cooking.
3. Ladle hot sauce into hot jars, leaving 1/4-inch headspace. Remove air bubbles and adjust headspace, if required, by adding more sauce. Wipe rim using clean, dampened paper towel. Adjust two-piece metal canning lids.
4. Process jars in boiling water or atmospheric steam canner for 15 minutes at 0-1,000 feet; 20 minutes at 1,001-3,000 feet; 25 minutes at 3,001-6,000 feet; 30 minutes at 6,001-8,000; or 35 minutes at 8,001-10,000 feet.
5. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *Ball Complete Book of Home Preserving*, 2012

Spicy Cranberry Salsa

Makes about 6 pint jars

6 cups chopped red onion
4 finely chopped large Serrano peppers*
1-1/2 cups water
1-1/2 cups cider vinegar (5%)
1 tablespoon canning salt

1-1/3 cups sugar
6 tablespoons clover honey
12 cups (2-3/4 pounds) rinsed, fresh, whole cranberries

***Caution: Wear plastic or rubber gloves when handling and cutting hot peppers or wash hands thoroughly with soap and water before touching your face or eyes.**

1. Wash and rinse 6 pint canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.
2. Combine all ingredients except cranberries in a large Dutch oven. Bring to a boil over high heat; reduce heat slightly and boil gently for 5 minutes.

3. Add cranberries; reduce heat slightly and simmer mixture for 20 minutes, stirring occasionally to prevent scorching.
4. Fill the hot mixture into clean, hot pint jars, leaving 1/4-inch headspace. Leave saucepan over low heat while filling jars. Remove air bubbles and adjust headspace, if required, by adding more salsa. Wipe rims of jars with a clean, dampened paper towel. Adjust two piece metal canning lids.
5. Process jars in boiling water or atmospheric steam canner for 10 minutes at 0-1,000 feet; 15 minutes at 1,001-6,000 feet; 20 minutes above 6,001.
6. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *National Center for Home Food Preservation*

Cranberry-Orange Vinegar

Makes about ten 4-ounce jars or five 8-ounce jars

4 cups fresh cranberries, divided
1/2 cup water
4 whole cloves
2 cinnamon sticks broken into pieces

1 cup sugar
3 cups white wine vinegar (5%)
2 orange slices

1. Prepare canner, jars and lids.
2. Measure 1/2 cup cranberries and set aside. In a large stainless steel saucepan, combine remaining cranberries and water. Bring to a boil over medium-high heat. Reduce heat and boil gently, stirring frequently, until cranberries burst. Remove from heat and, using potato masher, lightly crush cranberries.
3. Meanwhile, tie cloves and cinnamon sticks in a square of cheesecloth, creating a spice bag. Set aside.
4. Line a strainer with several layers of cheesecloth and place over a glass measure. Strain juice without squeezing cheesecloth and measure 1 cup. Discard cheesecloth and residue. Transfer cranberry juice to a large stainless steel saucepan and add sugar and reserved spice bag. Cook over medium-high heat, stirring until sugar dissolves. Add reserved cranberries and vinegar. Bring to a boil over medium-high heat. Reduce heat, cover and heat gently until cranberries are heated through but haven't burst, about 10 minutes. Discard spice bag.
5. Place 1 orange slice into each hot jar. Ladle hot vinegar into hot jars, leaving 1/4 inch headspace. With a clean, dampened paper towel, wipe jar rim. Adjust two-piece metal canning lids.
6. Process jars in boiling water or atmospheric steam canner for 10 minutes at 0-1,000 feet; 15 minutes at 1,001-3,000 feet; 20 minutes at 3,001-6,000 feet; 25 minutes at 6,001-8,000 feet; or 30 minutes at 8,000-10,000 feet.
7. For boiling water canner, remove lid and wait 5 minutes; for steam canner wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *Ball Blue Guide to Preserving*

Cranberry Conserve

Makes about four 8-ounce jars

1 orange (unpeeled), seeded and finely chopped
2 cups water
4 cups cranberries

1/2 cup raisins
3 cups granulated sugar
1/2 cup chopped nuts

1. Prepare canner, jars, and lids.
2. In a large deep stainless steel saucepan, combine orange and water. Bring to a boil over high heat. Reduce heat, partially cover, and boil gently until peel is tender, about 5 minutes. Add cranberries, raisins, and sugar, stirring until sugar dissolves. Return to a boil over medium-high heat, stirring frequently. Boil hard, stirring frequently, until mixture thickens, 10 to 15 minutes. Stir in nuts and cook, stirring constantly, for 5 minutes

until mixture reaches gel stage (220 degrees F. or 8 degrees over boiling water temperature at your altitude).

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 with a clean, dampened paper towel. Adjust two-piece canning lids.
4. Process in boiling water or atmospheric steam canner for 15 minutes at 0-1,000 feet; 20 minutes at 1,001-3,000 feet; 25 minutes at 3,001-6,000 feet; 30 minutes at 6,001-8,000 feet; or 35 minutes at 8,001-10,000 feet.
5. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *Ball Complete Book of Home Preserving, 2012*

Apple-Cranberry Pie Filling

Makes about three 1-quart jars

10 cups peeled, cored and 1/2-inch thick sliced apples from about 5 pounds of mixed variety apples
2 cups fresh or frozen cranberries
1 cup water
2-1/2 cups apple cider or juice
2-1/2 cups sugar
2/3 cups ClearJel

Zest of 1 orange
1/8 teaspoon ground cloves
1/2 teaspoon ground nutmeg
1/2 teaspoon ground ginger
1 teaspoon cinnamon
Pinch of salt
1/4 cup bottled lemon juice

1. Combine apple slices, cranberries, and water in a large saucepan; bring to a low simmer over medium heat stirring constantly. Cook 10 minutes until apple slices become tender. Remove to a bowl. *
2. Combine sugar, ClearJel, orange zest and spices in same saucepan; stir in apple cider and any juices collected in bowl of apple-cranberry mixture. Bring to a boil over medium-high heat, stirring constantly, and cook until mixture thickens and begins to bubble. Add lemon juice and a pinch of salt; boil for 1 minute, stirring constantly. Remove from heat. Immediately fold apple slices and cranberries into hot mixture; heat, stirring, until apples are heated through. Remove from heat.

*To treat apple slices to prevent browning, apply Fruit-Fresh produce protector according to manufacturer's instructions or submerge cut apples in a mixture of 1/4 cup lemon juice and 4 cups water.

3. Process in boiling water canner or atmospheric steam canner for 25 minutes at 0-1,000 feet; 30 minutes at 1,001-3,000 feet; 35 minutes at 3,001-6,000 feet; 40 minutes at 6,001-8,000 feet; 45 minutes at 8,001-10,000 feet.
4. For boiling water canner, remove lid and wait 5 minutes; for steam canners, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-14 hours and check for seals. Remove rings, clean, and label jars. Store sealed jars in a cool, dry, dark location.

Source: *ballmasonjars.com*

Pear Mincemeat

Yields about 9 pint jars

7 pounds Bartlett pears (about 21 medium)
1 lemon
2 pounds golden or dark raisins
6-3/4 cups sugar
1 tablespoon ground cloves

1 tablespoon ground cinnamon
1 tablespoon nutmeg
1 tablespoon allspice
1 teaspoon ginger
1 cup vinegar (5% acidity)

1. Wash pears and lemon; drain. Cut pears in half lengthwise and core. Coarsely chop pears. Cut lemon into quarters, remove seeds, and finely chop (including the peel), using a food processor or food grinder.
2. 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.

3. Ladle hot mixture into a hot jar, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot filling. Wipe jar rims with a clean, dampened paper towel or cloth. Adjust two-piece metal canning lids.
4. Process pint jars in a boiling water or atmospheric steam canner for 25 minutes at 0-1,000 feet; 30 minutes at 1,001-3,000 feet; 35 minutes at 3,001-6,000 feet; 40 minutes at 6,001-8,000 feet; or 45 minutes at 8,001-10,000 feet.
5. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: *Adapted from Ball Blue Book, 2020*

Cranapple Leather

1 cup apples, chopped
1/2 cup cranberries, fresh or frozen
honey or sugar to taste

Puree apples in a blender with a small amount of water. Add cranberries and sweetener, if desired. Pour on silicone sheets or parchment paper covered dehydrator trays and dry at 135 degrees F. until leathery.

Source: *Preserve It Naturally, by Excalibur*

References :

- **Dehydration basics:** <https://ucanr.edu/sites/camasterfoodpreservers/files/335543.pdf>
- **Freezing basics:** <https://ucanr.edu/sites/camasterfoodpreservers/files/335541.pdf>
- **Core canning techniques:** <https://ucanr.edu/sites/camasterfoodpreservers/files/335546.pdf>
- National Center for Home Food Preservation, <http://nchfp.uga.edu/>
- Complete Guide to Home Canning. 2009. USDA Agricultural Information Bulletin 539. National Institute of Food and Agriculture. Available free online at http://nchfp.uga.edu/publications/publications_usda.html
- Ball Complete Book of Home Preserving, 2006
- The All New Ball Book of Canning and Preserving, 2016
- Ball Blue Book Guide to Preserving,
- So Easy to Preserve, 2014
- www.bernardin.ca

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