**UC Master Food Preservers Online Program** 

## Preserving Persimmons II: Refrigeration and Canning, December 5, 2024



# MISS THE FIRST PROGRAM?

## Preserving Persimmons I: Freezing and Drying

Date: 11-14-2024

Covered identifying types and ripeness of persimmons, freezing, dehydrating fruit leathers and slices, and drying whole Hachiya "hoshigaki"

Persimmons I recording available at: https://www.youtube.com/watch?v= eBVyeLzrOwY

Persimmons II recording will be at: https://mfp.ucanr.edu/Events/Past
Online Events/

Photo credit: M. Hsieh, 2024

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### 1. Refrigerated Persimmon Chutney

Source: Adapted from *Saveur*, Persimmon Chutney, <a href="https://www.saveur.com/article/Recipes/Persimmon-Chutney/">https://www.saveur.com/article/Recipes/Persimmon-Chutney/</a>

- 1. Prepare and measure all Ingredients:
  - 3 lb. firm Fuyu persimmons, peeled, seeded and finely chopped
  - 1 lb. Bartlett or Anjou pears, finely chopped
  - 1 small red onion, finely chopped
  - 1"-piece ginger, peeled and grated

#### (ingredients continue on next page)

(chutney ingredients, continued)

- 1/2 cup raisins
- 2/3 cup brown sugar
- 1/3 cup honey
- 1/2 cup apple cider vinegar
- 1/2 cup white wine
- 3 Tbsp. lemon juice
- 1 Tbsp. mustard seeds
- 1 Tbsp. coriander seeds
- ¼ tsp. garam masala
- ½ tsp. curry powder
- ½ tsp. red pepper flakes
- kosher salt, to taste



Photo credit: D. Davis, 2024

- 2. Combine all ingredients in a 6-qt. pot and bring to a boil over medium-high heat; reduce to a simmer and cook, stirring often, until chutney is thick and syrupy, about 1 hour and 15 minutes.
- 3. Sterilize canning jar(s) by boiling in water for at least 10 minutes. (For every additional 1000 feet above sea level, add one minute.) Keep warm in the water until use. Wash lids in warm, soapy water.
- 4. Because there is no tested approved recipe for processing persimmon chutney for safe shelf-stable storage, store finished chutney in the refrigerator and use within two months for best quality. Freezing in appropriate containers will extend quality time.



Photo credit: D. Davis, 2024

#### 2. Persimmon Jams

#### Low-Sugar Persimmon Jam

Adapted from: https://pomonapectin.com/persimmon-jam/ Makes 5 cups

#### Ingredients

- 4 cups pureed or mashed persimmon pulp (see step #3)
- ½ teaspoon ground cinnamon optional
- 4 teaspoons calcium water (see step #1)
- ½ cup lemon juice bottled
- ½ cup up to 1 cup honey or ¾ cup up to 2 cups sugar
- 2 teaspoons Pomona's Pectin mixed with sweetener



Instructions 1. Before you begin, prepare calcium water. To do this, combine ½ teaspoon calcium powder (in the small packet in your box of Pomona's pectin) with ½ cup water in a small, clear jar with a lid. Shake well. Extra calcium water should be stored in the refrigerator for future use.

- 2. Wash jars, lids, and bands. Place jars in canner, fill canner 2/3 full with water, bring to a boil. Turn off heat, cover, and keep jars in hot canner water until ready to use. Place lids in water in a small sauce pan; cover and heat to a low boil. Turn off heat and keep lids in hot water until ready to use.
- 3. Remove calyx from 5 to 6 large, fully ripe Hachiya persimmons or about 8 average size Fuyu persimmons. For Hachiyas, scoop out pulp and puree it. Don't use the peel. For Fuyus, peel, chop, and mash or peel, chop, and puree. If Fuyus are too firm to mash or puree, then peel, chop, and put the pieces in a sauce pan with a little water. Simmer until soft, then mash or puree.
- 4. Measure 4 cups of mashed or pureed pulp into sauce pan.
- 5. Add calcium water and lemon juice, and mix well.
- 6. Measure sugar or room temperature honey into a bowl. Thoroughly mix pectin powder into sweetener. Set aside.
- 7. Bring fruit mixture to a full boil. Add pectin-sweetener mixture, stirring vigorously for 1 to 2 minutes to dissolve the pectin while the jam comes back up to a boil. Once the jam returns to a full boil, remove it from the heat.
- 8. Fill hot jars to 1/4" of top. Wipe rims clean. Screw on 2-piece lids. Put filled jars in boiling water to cover. Boil 10 minutes (add 1 minute more for every 1,000 ft. above sea level). Remove from water. Let jars cool. Check seals; lids should be sucked down. Eat within 1 year. Lasts 3 weeks once opened.

#### Atmospheric Steam Canning Process "Steam Canning" vs. Boiling Water Canning Process

Many canners prefer using atmospheric steam canners over canning in boiling water because steam canning requires less water—and therefore also weight and energy. However, steam canning requires a dedicated, bulky atmospheric steam canner, while boiling water canning requires only a sufficiently large pot.

Atmospheric steam canning may be used for almost any research-tested recipe developed for boiling water canning, using the same processing time. The one exception is when the prescribed processing time exceeds 45 minutes, because that may exhaust the water capacity of the steam canner. Atmospheric canners may be used with recipes approved for half-pint, pint, or quart jars.

#### **Atmospheric Steam Canning Process**

- 1. Add enough water to the base of the canner to cover the rack. (Follow manufacturer recommendations.)
- 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. Heat jars prior to filling with hot liquid (raw or hot pack). Do not allow the jars to cool before filling.
- 4. Load filled jars, fitted with lids, onto the canner rack and place the lid on the canner base.
- 5. 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.
- 6. 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).
- 7. 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.
- 8. 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. Never use a steam canner for processing times over 45 minutes. If a canner boils dry, the food is considered under-processed and therefore potentially unsafe.
- 9. 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.
- 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.

#### **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 scanner 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.



Photo credit: H. Yee, 2024

#### **Full-Sugar Persimmon Jam**

Adapted from: <a href="https://www.kraftheinz.com/sure-jell/recipes/506314-mcp-persimmon-jam">https://www.kraftheinz.com/sure-jell/recipes/506314-mcp-persimmon-jam</a>
Makes 8 servings

#### Ingredients

- 3 cups prepared fruit (5 to 6 medium fully ripe persimmons)
- 1 cup water
- ½ cup fresh lemon juice
- 1 box MCP Pectin (modified citrus pectin from the makers of Sure-Jell®)
- ½ tsp butter or margarine
- 6 cups sugar, measured into separate bowl

#### Instructions

- 1. Bring boiling-water canner, half full with water, to simmer. Wash jars and screw bands in hot soapy water; rinse with warm water. Pour boiling water over flat lids in saucepan off the heat. Let stand in hot water until ready to use. Drain jars well before filling.
- 2. Remove stems from persimmons. Scoop out pulp and puree. Do not use peels. Measure exactly 3 cups prepared fruit into 6- or 8-qt. saucepot. Add water and lemon juice.
- 3. Stir pectin into prepared fruit in saucepot. Add butter to reduce foaming. Bring mixture to full rolling boil (a boil that doesn't stop bubbling when stirred) on high heat, stirring constantly. Stir in sugar. Return to full rolling boil and boil exactly 4 min., stirring constantly. Remove from heat. Skim off any foam with metal spoon.
- 4. Ladle immediately into prepared jars, filling to within 1/4 inch of tops. Wipe jar rims and threads. Cover with two-piece lids. Screw bands tightly. Place jars on elevated rack in canner. Lower rack into canner. (Water must cover jars by 1 to 2 inches. Add boiling water, if necessary.) Cover; bring water to gentle boil. Process 10 min.
- 5. Remove jars and place upright on towel to cool completely. After jars cool, check seals by pressing middles of lids with finger. (If lids spring back, lids are not sealed and refrigeration is necessary.)

## 3. Fuyu Refrigerator Pickles

Source: Powers-Hammond, L. & McCurdy, S. (2018). Fundamentals of consumer food safety and preservation: Master Handbook (California ed.) Washington State University Extension and University of California Agriculture & Natural Resources.

These quick and easy pickles should be made with firm, non-astringent persimmons, like the Fuyu or Jiro. These have the same bright orange color as Hachiya persimmons, but are squat and round with a flat bottom. This type of "sweet" persimmon is non-astringent, so it can be eaten when firm, like an apple, peeled or unpeeled. A bit underripe is better than soft, if you want a crisp pickle.

A "refrigerator pickle" is produced by acidification or fermentation, is not heat processed, and must be stored in the refrigerator. Vinegars retard pathogen growth, but because the final product is not sterilized through a canning process, it is not shelf stable.

Refrigeration does allow substitution of vinegars, as long as they are at least 5% acidity. Read labels carefully, and do not use home-fermented vinegars of unknown acidity. Cider vinegar pairs well with fruit; white vinegar showcases color better. Rice wine vinegar and red or white wine vinegars offer different flavor profiles, but contain proteins that may be prone to earlier spoilage. Sugar helps preserve the firmness of the fruit, but is not essential for safety. You may also vary spices to taste.

Your pickles will keep longer if you store them in sterilized jars; canning jars are made to withstand the heat of boiling. Vary the size of your jars depending on how quickly you will consume the pickles. These recipes make enough pickling liquid for approximately one pound of persimmons (3-5, depending on size) in a pint pickling jar, or two one cup



Photo credit: M. Hsieh, 2024

jars. If needed, use additional vinegar to top off any jars, and, of course, eat any fruit that doesn't fit! Kept refrigerated, the pickles will last several weeks, getting sourer and softer with time. You can use the soaking vinegar in drinks or cooking.

#### **Spicy Persimmon Pickles**

Adapted from Whole Foods, Quick Persimmon Pickles, <a href="https://www.wholefoodsmarket.com/recipes/quick-persimmon-pickles">https://www.wholefoodsmarket.com/recipes/quick-persimmon-pickles</a>
Sources: <a href="https://www.wholefoodsmarket.com/recipes/quick-persimmon-pickles">www.clemson.edu/extension/food/food2market/documents/ph of common foods.pdf</a>

These pickles add a bit of zesty ginger and hot chili spice to the sweet, crunchy Fuyu persimmon. These are tasty in salads, on cheese boards, and as a side to salmon.

1. Sterilize canning jar(s) by boiling in water for at least 10 minutes. (For every additional 1000 feet above sea level, add one minute.) Keep warm in the water until use. Wash lids in warm, soapy water.

- 2. Peel, core, and remove any seeds from enough firm persimmons to fill your jar(s). Slice into rounds or wedges.
- 3. In a saucepan, bring to a boil, stirring until sugar dissolves:
  - <sup>2</sup>/<sub>3</sub> cup apple cider vinegar or rice vinegar
  - 1/3 cup water
  - 3 Tablespoons sugar
  - 1 one-inch piece of fresh ginger, sliced
  - 1/4 teaspoon crushed red chili flakes or one whole chili pepper per jar (optional)
- 4. Put sliced persimmons in jar; pour hot vinegar mixture over. Distribute the spices if making more than one jar.
- 5. Cover and refrigerate for at least one day before eating. Keeps up to a month in refrigerator.



Photo credit: M. Hsieh, 2024

#### **Asian Flavors Pickled Persimmons**

Adapted from Chef Rachel Yang's Quick Pickled Persimmons, Seattle Magazine, Nov. 12, 2013, https://seattlemag.com/food-and-culture/chef-rachel-yangs-quick-pickled-persimmons/

Chef Yang suggests serving these distinctively flavored pickles with kale slaw and roasted duck.

- 1. Sterilize canning jars by boiling in water for at least 10 minutes. (Add one minute for every additional 1000 feet above sea level). Keep warm in the water until use.
- 2. Peel, core, and slice into 3/8" rounds enough Fuyu or other non-astringent persimmons to fill your jar(s). Remove any seeds.
- 3. In a saucepan, bring to a boil, stirring until sugar dissolves:

- 2/3 cup rice wine vinegar
- 1/3 cup water
- ¼ cup sugar
- 1 small piece of fresh ginger, sliced
- 1 small cinnamon stick (about 1" per jar)
- 1 star anise (a few "petals" per jar)
- 4. Pack persimmons in jar(s); pour hot vinegar mixture over. Distribute the spices if making more than one jar.
- 5. Cover tightly and refrigerate at least one day before eating. Keeps up to a month in refrigerator.

### 4. Refrigerated Persimmon-Flavored Vinegars

Adapted from So Easy to Preserve, 6th Edition, page 187-190.

- 1-2 cups of ripe Hachiya pulp or Fuyu mash for every pint of vinegar
- Apple cider vinegar, or any commercial vinegar of 5% or greater acidity
- 1. Wash, core, peel, and coarsely chop or mash persimmons.
- 2. Heat vinegar under just under boiling, 190°F-195°F.
- 3. Combine vinegar and fruit mash in sterilized jars or bottles. Seal tightly and store 1-4 weeks in a cool, dark, place or the refrigerator. Begin tasting after a week.
- 4. When it tastes ready, strain out the pulp using a sieve or several layers of a "nut bag." Store the vinegar in a sterilized, tightly capped bottle or jar. Lasts several weeks, or months if refrigerated.

#### Persimmon Shrub (drinkable vinegar-based syrup)

Adapted from Persimmon Shrub for Cocktails and Sodas, (2015 January 5) Food52, https://food52.com/recipes/32801-persimmon-shrub-for-cocktails-sodas

- persimmon-flavored vinegar (above)
- cane sugar
- 1. Combine 3 parts vinegar with 2 parts sugar in a sauce pan. Bring to a boil, stirring to dissolve the sugar; remove from heat.
- 2. Store in a clean, sterilized jar or bottle. Tightly seal and store in the refrigerator up to three months. Blend a tablespoon or more into seltzer or soda waters, or your favorite beverages.



Photo credit: M. Hsieh, 2024