



University of California
Agriculture and Natural Resources

UCCE Master Food Preserver Program
Sacramento County

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

*Sacramento County Master Food Preservers
Monthly Wednesday Night Demonstration
January 19, 2022
Citrus, Avocado, and the Super Bowl*



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

ORANGE MARMALADE.....	2
PRESERVED LEMONS	3
THE BEST MOROCCAN CHICKEN TAGINE.....	4
DRYING CITRUS PEEL TO USE LATER	7
CANDIED LEMON PEEL USING A DEHYDRATOR.....	8
FREEZING AVOCADOES.....	9
Avocado Sauce	10
Avocado and Banana Smoothie	11
MARGARITA MIX.....	12
CITRUS SALT	13
CITRUS CUMIN SALT.....	13
CHIPOTLE LIME SALT	14
LEMON, PARSLEY AND GARLIC SALT	14
ATMOSPHERIC STEAM CANNING PROCESS.....	16
PRESSURE CANNING PROCESS – QUICK STEPS	17
JUICER INSTRUCTIONS.....	18

--No endorsement of any product/company listing within this document is intended, nor is criticism implied of similar products/companies not included.

--The University of California, Division of Agriculture and Natural Resources (UC ANR) prohibits discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer- related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, status as a protected veteran or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service. UC ANR policy prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment. UC ANR policy also prohibits retaliation against a person who assists someone with a complaint of discrimination or harassment, or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to any of its programs or activities. UC ANR is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment and/or participation in any of its programs or activities without regard to race, color, religion, sex, national origin, disability, age or protected veteran status. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to: John I. Sims, Affirmative Action Compliance Officer and Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1397. Email: jsims@ucanr.edu. Website: http://ucanr.edu/sites/anrstaff/Diversity/Affirmative_Action/

ORANGE MARMALADE

Source: www.freshpreserving.com/blog?cid=orange-marmalade

Preserving Method: Water Bath Canning

Makes about 6 (8 oz) half-pint jars

Traditional orange marmalade made easier with the addition of Ball® RealFruit™ Liquid Pectin

You will need

4 oranges

2 lemons

1/8 tsp. baking soda

1-1/2 cups water

1 3-oz pouch Ball® RealFruit™ Liquid Fruit Pectin

1/2 tsp. butter or margarine, optional

5 cups sugar

Directions

1. Prepare boiling water canner. Heat jars in simmering water until ready for use. Do not boil. Wash lids in warm soapy water and set bands aside.
2. Remove peel from oranges and lemons. Scrape off and discard the white pith. Thinly slice peels and place in a 6-to-8-quart saucepan with baking soda and water. Simmer 20 minutes, covered.
3. Remove any membrane from orange and lemon pulp. Chop fruit, reserving juice (there should be about 3 cups fruit). Add fruit and juice to peel mixture. Simmer 10 minutes, covered.
4. Combine prepared fruit with sugar in a 6-to-8-quart saucepan. Add up to 1/2 tsp. butter or margarine to reduce foaming, if desired. Bring mixture to a full rolling boil over high heat that cannot be stirred down, stirring frequently.
5. Add pectin, immediately squeezing entire contents from pouch. Continue hard boil for 1 minute, stirring constantly. Remove from heat. Skim foam if necessary.
6. Ladle hot jam into a hot jar leaving a ¼ inch headspace. Remove air bubbles. Wipe jar rim. Center lid on jar and apply band, adjust to fingertip tight. Place jar in boiling water canner. Repeat until all jars are filled.
7. Process jars 10 minutes, adjusting for altitude. Turn off heat, remove lid, let jars stand 5 minutes. Remove jars and cool 12-24 hours. Check lids for seal, they should not flex when center is pressed.

PRESERVED LEMONS

Source: adapted from Ball Complete Book of Home Preserving

Yield: 1 quart jar

10 lemons

1/2 cup pickling or canning salt, divided

4 bay leaves

4 cinnamon sticks (each about 4 inches/10 cm)

1 tsp whole black peppercorns (optional)

1. Prepare jar and lid. For this recipe, the jar needs to be sterilized prior to packing. To sterilize, boil jar in water for 10 minutes. (If you live above 1000 feet in elevation, add 1 minute of boiling time for every additional 1000 feet.)
2. Wash the lemons in warm water, scrubbing well to remove any dirt and wax, and dry well, using paper towels. Cut a thin (1/8 inch) slice off the stem end. From stem end, cut each lemon into quarters, without cutting through the bottom end and leaving it intact.
3. Sprinkle 1 Tbsp pickling salt over the bottom of sterilized jar. Working over a bowl, pack 1 heaping Tbsp salt into each lemon before placing in the jar, stem end up. When 3 lemons have been salted and packed, slip bay leaves and cinnamon sticks against sides of the jar and add peppercorns, if using. Repeat with remaining lemons and salt. (Number of lemons that will fit in the jar is variable, depending on the size of the lemons.) Cover with the remaining salt.
4. Fill jar with lemon juice leaving 1/2-inch headspace, by squeezing an additional lemon, if necessary. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
5. Place jar in a dark, cool cupboard for 2 weeks, shaking every day to distribute the salt. After 2 weeks, the lemons are ready to use. Remove pulp and membrane, using only the peel. Rinse peels under water to remove excess salt and dry with a paper towel. Store preserved lemons (peels) in the refrigerator.

Variation: If you prefer, you can cut the lemons into quarters. In a large bowl, combine lemon quarters with salt and toss to mix. Fill the jar halfway, add the bay leaves, cinnamon sticks and peppercorns, if using, then continue until the jar is filled, pushing the lemons well down to squeeze in as many as possible.

Variation: Other **dried** spices/**dried** spice combinations may be substituted (2 teaspoons per quart) based on your flavor preferences. Other **dried** spice ideas are: cardamom pods, coriander seeds, juniper berries, celery seed, whole allspice, cloves.

THE BEST MOROCCAN CHICKEN TAGINE

Source: <https://www.thespruceeats.com/chicken-tagine-with-preserved-lemons-olives-2394715>

Prep: 25 minutes

Cook: 90 minutes

Marinate and Rest Time: 3 hours 15 minutes

Total: 5 hours 10 minutes

Servings: 4 to 6 servings

A classic dish, this [Moroccan chicken recipe](#) uses preserved lemons, olives, and onions. It can be cooked in an authentic [tagine](#) or roasted in the oven, depending on your preference, and what equipment you have at your disposal. Either way, you'll enjoy a delicious meal that is sure to please everyone at the dinner table.

This recipe includes a number of traditional Moroccan ingredients, such as [preserved lemons](#) (which you can make yourself or purchase in specialty shops or online), smen, a kind of preserved butter, and the Moroccan spice blend [ras el hanout](#). Since the olives, lemons, and smen are salty, don't be too liberal with the salt in this recipe—1/2 teaspoon or less. Just taste; you'll know.

To the unfamiliar, [tagine](#) can be a little confusing, because it's both the name of the dish, and the vessel in which the dish is cooked. Typically made of clay or ceramic, the tagine is used in northern African cuisine, and it is distinguished by its wide, circular base and a cone-shaped top. The tagine functions like a slow cooker in a sense, and the cone shape functions as a way to return moisture to the base of the tagine, creating a moist and flavorful dish.

Moroccan tradition is to eat directly from the tagine, using [Moroccan bread](#) to scoop up the chicken and sauce. Belgian fries (*patate frite*) often top the chicken, though you can use your favorite French fries. Serving rice on the side also helps you soak up the tasty juices.

Ingredients

- 1 to 2 [preserved lemons](#), quartered and seeds removed
- 1 whole chicken, cut into pieces, skin removed, back discarded or reserved for another use
- 2 large white or yellow onions, finely chopped
- 2 to 3 cloves garlic, minced
- 1 small handful fresh cilantro, chopped
- 1 small handful fresh parsley, chopped
- 2 teaspoons powdered ginger
- 1 teaspoon black pepper
- 1 teaspoon [turmeric](#) (or 1/4 teaspoon Moroccan yellow colorant)
- 1/2 teaspoon salt, or to taste
- 1/4 teaspoon saffron threads, crumbled, optional
- 1 teaspoon [smen](#), optional
- 1/4 to 1/2 teaspoon ras el hanout, optional
- 1/3 cup olive oil
- 2 handfuls pitted [olives](#) (green or red, or mixed)
- 1/4 cup water, approximately, if using a tagine

Steps to Make It

Marinate the Chicken

1. Gather the ingredients.
2. Remove the flesh from the preserved lemons and chop the flesh finely. Reserve rind for cooking.
3. Add the lemon flesh to a bowl along with the chicken, onion, garlic, cilantro, parsley, ginger, pepper, turmeric, and salt. If using, add the saffron, ras el hanout, and smen. Mix well.
4. If time allows, let the chicken marinate in the refrigerator for several hours or overnight. Cook in either a tagine or in the oven. (See below for more information on both methods.)

Cooking in a Tagine

1. Add enough of the olive oil to the [tagine](#) to coat the bottom.
2. Arrange the marinated chicken in the tagine, flesh-side down, and distribute the onions all around.
3. Add the olives and reserved rind of the preserved lemons, and drizzle the remaining olive oil over the chicken.
4. Add the water to the tagine, cover, and place on a heat diffuser over medium-low heat. Give the tagine time to reach a simmer without peaking. If you don't hear the tagine simmering within 20 minutes, slightly increase the heat, and then use the lowest heat setting required for maintaining a gentle—not rapid—simmer.
5. Allow the chicken to cook undisturbed for 80 to 90 minutes, and then turn the chicken over so it's flesh-side up. Cover the tagine again, and allow the chicken to finish cooking until very tender (about 45 minutes to 1 hour).
6. Turn off the heat, and let the tagine cool for about 10 to 15 minutes before serving. Enjoy.

Cooking in the Oven

1. Preheat oven to 425 F/220 C. Add enough of the olive oil to a large baking dish so it coats the bottom.
2. Add the sliced onions and garlic from the marinade.
3. Then place the marinated chicken on top.
4. Add the olives and reserved rind of the preserved lemons on top and drizzle the chicken with the remaining olive oil.
5. Bake the chicken uncovered for 45 minutes to 1 hour, or until the chicken is light golden brown, basting occasionally.
6. Reduce the heat to 350 F/180 C and continue baking for another 20 to 30 minutes or longer. The chicken should be deeply browned and the juices should run clear.
7. Remove the chicken from the oven and let it rest for 10 to 15 minutes before serving. Enjoy.

Tips

- For either method, you can cut a whole chicken into either halves or individual pieces prior to marinating. The pieces may fit better in a tagine; the halves are easier to handle in the oven and can be cut after cooking.
- You'll get more flavor if you start marinating the chicken [with the Moroccan spices](#) the night before.
- The cooking times may vary depending on the size of your chicken. In the tagine, 2 1/2 hours allows the tagine to be brought to a slow simmer so it doesn't dry out.
- Check that [the internal temperature](#) of the chicken is between 165 and 175 F.

DRYING CITRUS PEEL TO USE LATER

source: https://www.canr.msu.edu/news/drying_citrus_peel_to_use_later

Try drying citrus peel to get the most out of citrus fruits this winter.

During the winter months citrus fruits are in abundance, why not dry some of those flavorful peels? The peels of citron, grapefruit, kumquat, lime, lemon, tangelo, and tangerine can be dried. Citron is a yellow-green lumpy looking subtropical fruit similar to a lemon. It is harvested for its peel, which is candied and used in fruit cake.

[Michigan State University Extension](#) recommends washing, rinsing, and sanitizing any cutting boards, equipment, utensils, and work areas before preparing any food to lessen the possibility of cross-contamination.

How to dry orange peel

1. Select brightly colored fruits. When selecting an orange for its peel, choose a thick-skinned navel orange peel over a thin-skinned Valencia orange. The Navel orange peel will dry better.
2. Rinse the fruit thoroughly.
3. Remove the outer 1/16 to 1/8-inch of the peel. Do not use any of the bitter white pith. The white pith will become even more bitter when dried and ruins the flavor of the peel.
4. To dry the peel in an electric food dehydrator, place the peel in a single layer on the drying trays. Place parchment paper or wax paper on the drying trays so the peel does not fall through the openings in the tray.
5. The pieces should not touch or overlap because this will slow down the drying process. The estimated drying time is about eight to twelve hours. The time it takes the fruit peel to dry will depend upon the initial moisture content of the peel and the type of food dehydrator used.
6. To test the peel for dryness, cut the peel to look for any visible moisture. Also, try to squeeze any moisture out of the peel. When the peel is bent in half, it should not stick to itself. Allow the peel to cool for 30 to 60 minutes or until completely cool before packaging for storage.

By taking advantage of the abundance of citrus fruits during the winter, it is possible to have dry orange peels or other citrus peels for recipes all year round. It takes just a little time and energy.

CANDIED LEMON PEEL USING A DEHYDRATOR

Steps as shown in the Candied Lemon Peel slideshow

By Sacramento County UCCE Master Food Preservers, February 17, 2021

1. Clean lemons to remove dirt.
2. Juice lemon and remove pulp.
3. Cut peel to 1/4" thick slices.
4. Weigh the peel to estimate the amount of sugar that is needed. Use 50% of the weight of the peel or adjust to your liking (sugar is used in step 8, but you need to weight the peel before immersing it in water).
5. Soak the peel in cold water for 1-2 hrs to lessen the bitter taste in the peel.
6. Bring water and lemon peel to a boil, drain water.
7. Repeat the boiling process with fresh cold water:
 - a. 2 x for orange
 - b. 3 x for lemon
 - c. 5 x for grapefruit
8. Drain the liquid, add sugar, and simmer the peel for 20 minutes.
9. Turn off the heat, and let the peel soak in syrup for a few hours.
10. Drain the syrup.
11. Dehydrate the peel at 135° for 5 to 6 hours.
12. Peel is done when it is dry, but pliable.

FREEZING AVOCADOES

Freezing avocados is a great way to save avocados that you won't be able to use before they are too ripe. It's not a good choice for ready to use avocados that you can eat up in time. The texture of avocados changes when they are frozen.

1. Wash your avocados with warm water and a drop of dish soap, rinse them well, and pat them dry. This helps prevent the spread of food-borne illness. You should do this before cutting into an avocado regardless of how you will use it.
2. Use a sharp knife to cut each avocado in half. Use a spoon to scoop out the pit and discard.
3. Use your spoon to scoop out each half of the avocado and transfer to a zip-top bag. Alternatively, run a knife gently along the inside of the avocado (don't poke through the skin-you'll cut yourself) and slice it up in the skin. Then use a spoon to remove the slices.
4. Squeeze about a teaspoon of freshly-squeezed lemon or lime juice into each bag. This will help prevent the avocado from browning.
5. Place the zip-top bags into the freezer for up to 2 months.
6. Defrost in the refrigerator before using (unless you want to put the frozen avocado into a smoothie).

You can also freeze chunks of avocado the same way. Or mash up the avocado and stir in about a teaspoon of lemon or lime juice. Chunks take longer than mashed avocado to thaw completely.

Frozen avocados are best used in guacamole or other avocado sauces where the texture is less important. They are a great addition to smoothies.

Avocado Sauce

Source: Food.com

Makes about a cup (8oz.)

This is the sauce that you often find on the chips and salsa bar at a Mexican restaurant or taqueria. It is thinner than guacamole and goes great with burritos, tacos, tamales, broiled fish or chicken, or even plain cottage cheese. If you want it to be really hot then level up on the jalapeño. For a milder sauce cut the jalapeño down until it's right. Leaving the seeds in the jalapeno will always add heat. Since you never know how hot a jalapeno is until you take a bite start with just a little.

Ingredients:

1 ripe avocado, or one frozen avocado

Juice from half a lime

1/2 teaspoon salt

1 jalapeno, stemmed, (seeded), and cut into pieces

2 tablespoons chopped cilantro

1/2 cup cold water

2 teaspoons olive oil, other cooking oils work as well, try sesame, canola, or avocado oil

1 Tablespoon roughly chopped onion

Directions:

1. Put the avocado, lime juice, salt, jalapeno, cilantro, water and olive oil in a food processor or blender. Puree until smooth.
2. Add the onion and pulse to roughly blend. Continue to pulse if you want a smoother sauce.
3. This will keep for about a week.

Avocado and Banana Smoothie

Makes 2, roughly 8 oz. smoothies

Ingredients:

1 large frozen or fresh banana, peeled and sliced

1/4 - 1/2 medium frozen avocado

1 scoop plain or vanilla protein powder (you can skip this if you don't have it)

1 large handful greens of choice (spinach, kale, rainbow chard), frozen greens work great here

3/4 - 1 cup milk – regular milk or unsweetened plain dairy-free milk (almond, rice, soy)

Optional add-ins:

- 1 Tbsp seed of choice (hemp, flax, sesame, sunflower, chia, etc.)
- 1/2 tsp adaptogen of choice (maca, ashwagandha, etc.)
- 1/2 cup sliced frozen (or fresh) cucumber or berries (organic when possible)

Directions:

1. Place all your ingredients in a blender or food processor.
2. Blend until smooth, scraping down the sides.
3. If smoothie is too thick add more milk (or plain yogurt). If too thin, add more banana or avocado.
4. Taste and adjust the flavor as needed.

Divide between serving glasses and enjoy!

MARGARITA MIX

Yield: 9-10 cups

Ingredients:

6 cups fresh squeezed and strained lime juice

6 cups sugar OR 3 cups honey

Directions:

1. Wash jars, lids, and bands. Place jars in boiling water bath canner, fill canner 2/3 full with water, bring to a boil. Or, if using a steam canner, fill with 2 to 3 inches of water and place jars on rack, bring to a boil. Turn off heat, cover, and keep jars in hot canner until ready to use.
2. Measure lime juice into sauce pan.
3. Measure sugar or room temperature honey and add to lime juice.
4. Bring juice mixture to a full boil.
5. Fill hot jars to 1/4 inch 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.
6. Let jars cool 12 – 24 hours. Check to make sure lids are sealed.

Use within 1 year. Lasts 3 weeks once opened.

Note: A steam canner can be used in lieu of a boiling water bath canner. Same processing time.

CITRUS SALT

Yield: about 1-1/4 cups

Ingredients:

- 1 cup flake salt or coarse salt
- 3 tablespoons citrus zest (any kind)

Procedure:

1. Mix salt and zest in a bowl; work zest into salt with your fingers to release oils and flavor.
2. Spread on a baking tray.
3. Air-dry until dried completely, 8 hours to overnight.
4. Keep airtight at room temperature for up to 2 months.

Note: Zest's color will fade over time, but this won't affect taste.

Another drying option is to heat the oven to 200°F, insert the baking tray and turn off the oven. Let the tray sit in the oven overnight

CITRUS CUMIN SALT

Zest the entire lemon. Place the lemon zest in a small bowl. Add about 1 tsp coarse sea salt to the bowl. Then add in about 1/4 tsp cumin. Add more cumin to taste if you want a bolder flavor. Add a few pinches of black pepper. Using your finger, swirl the citrus cumin salt around in the bowl to combine. It's ok if it clumps up a bit – that is what it is supposed to do. You can actually taste a tiny bit of the salt to check the flavor. It should be sharp, bright and bold! Add more cumin to taste, if desired. Package in an airtight container.

CHIPOTLE LIME SALT

Yield: 1/4 cup

Ingredients:

1 tsp chipotle chili powder
2 limes
2 tablespoons flaky sea salt

Procedure:

Toss sea salt and chili powder on a baking sheet. Finely zest limes over. Bake in a 350o oven, stirring occasionally, until lime zest is dry, about 5 minutes.

Or, use a dehydrator set at 125° for 1 hour.

Let cool and then package in an airtight container.

LEMON, PARSLEY AND GARLIC SALT

Yield: Approximately one 4-oz. jar

Ingredients:

1-pound lemons (approx. 4 – 5 lemons)
1 bunch flat-leaf parsley
3 garlic cloves
2 Tbsp coarse sea salt

Procedure:

Using a rasp-style grater, remove the zest from the lemons. Wash the parsley well and strip the leaves from the stems (you don't have to be meticulous, but you want more leaves than stems).

Place the parsley on a large cutting board and chop roughly. Add the lemon zest and chop the two together until well combined. Add the garlic cloves and salt and continue to chop until the lemon zest, parsley, garlic and salt are well combined and chopped very finely.

Spread mixture on a plate and let dry for 48 hours at room temperature. When it no longer feels moist, scrape it into a jar and use as you would any other flavored salt.

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.



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°F, Raw Pack: 140°F
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 INSTRUCTIONS

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

Extracting Juice for Jelly

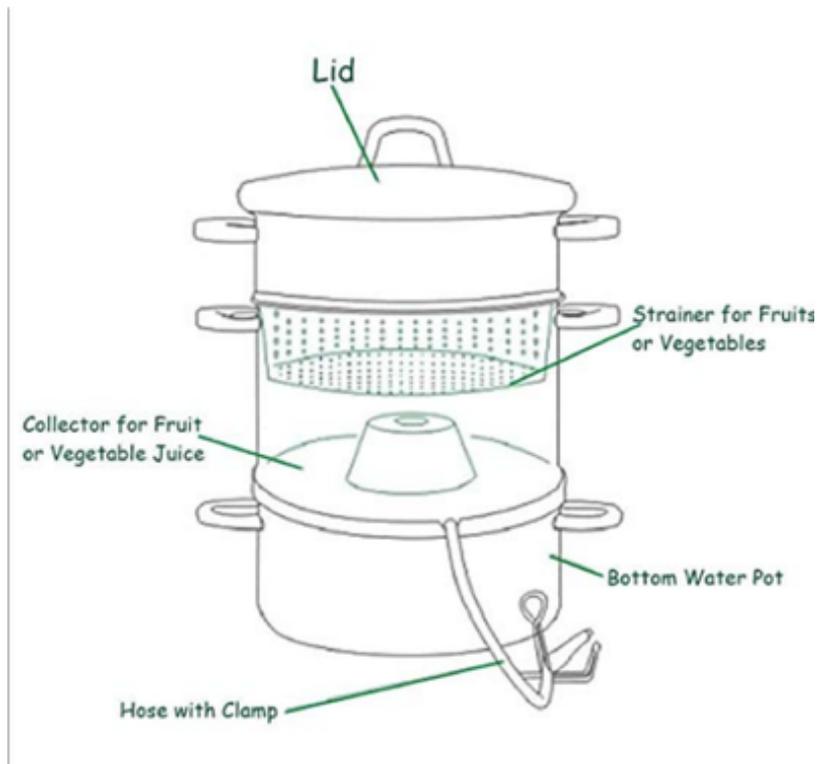
Preparing the Fruit

- 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 using 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