

UCCE Master Food Preservers of Amador/Calaveras County 12200B Airport Road Jackson, Ca 95642 209-223-6482 https://ucanr.edu/site/uc-master-food-preservers-central-sierra



All Things Strawberry!

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 1 ½ teaspoons 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 illnesses 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.

Recipes

Strawberry Shrub

Yield: about 1³/₄ cups

A shrub is a vinegar-based beverage. As sour flavors stimulate salivation more than other flavors, having a wet mouth helps you feel more hydrated, even once you've stopped drinking the beverage. For this reason, sour-tasting beverages are more thirst quenching.

A common "formula" for shrub is a ratio of 1:1:1 fruit/sugar/vinegar (equal parts of fruit, sugar and vinegar). Another basic ratio is 2:1:1 fruit/sugar/vinegar (2 parts of fruit, one part sugar, and one part vinegar).

Shrub ingredients:

Produce - Use produce at its peak of freshness for best taste. Frozen berries can be used with good results. Wash all fruit and drain well. Discard any moldy produce.

Sweetener- White sugar or raw cane sugar works well in shrubs and provides the most clarity and neutral sweetness. Other sugars, such as brown, turbinado, maple, coconut, etc., can be used successfully, but keep in mind that each will bring its own flavor profile and may affect the color of the finished shrub. Other sweeteners such as honey, molasses, and maple syrup may also be used, however these sweeteners can be strongly flavored. Honey in particular is sweeter than sugar and can make liquids cloudy, so use restraint and adjust to taste.

Vinegar - White distilled vinegar has a harsh taste and is not recommended for shrubs, but most other vinegars will work. Choose your vinegar to complement the type of fruit you're using for your shrub. If you perform the initial vinegar infusion outside of the refrigerator, be sure to choose a vinegar with at least 5% acidity.

Ingredients:

2 cups of strawberries, washed and cut into chunks (you can use strawberry tops after removing the green stem) 1 cup white sugar

1 cup red wine vinegar

- 1. Mix prepared strawberries and sugar together in a large, clean jar with a lid. Add vinegar. Mix together.
- 2. Place the lid on the jar and let sit out at room temperature for 24 hours, allowing the strawberries to macerate.
- 3. After 24 hours, using a fine-mesh stainless steel or plastic strainer, strain out strawberries, and then strain shrub again through a paper coffee filter to increase clarity. Reserve strawberries as these can be eaten, used to top yogurt or ice cream or put in a cobbler.
- 4. Store shrub in the refrigerator for up to 1 year. Always check your shrub before consuming it, and if there are any signs of mold, or if the shrub starts to look bubbly, cloudy or slimy, throw it away. When in doubt, throw it out.

To serve: In a glass with ice, add 1/8 - 1/4 cup (or to your taste) shrub and fill with still or sparkling water.

Sources: foodwaste_libraries_2024Apr.pdf

<u>https://ucanr.edu/search/all?keys=San+Mateo+San+Francisco+counties</u> <u>https://ucanr.edu/sites/default/files/2019-11/315888.pdf</u> Shrubs and Switchels, UC Master Food Preservers of El Dorado County

Strawberry Jam

Yield: about eight 8-ounce jars (half pints)

7 cups granulated sugar 8 cups whole strawberries (approximately)

4 Tablespoons bottled lemon juice

6 Tablespoons Ball® Classic Fruit Pectin, or 1 box of Pectin

- 1. Place 8 clean 8-ounce jars on a rack in a boiling-water canner or steam canner. (You can also use a large, deep saucepan or stockpot that is at least 3 inches deeper than the height of the jars.) For the boiling-water canner, fill the jars and canner with cool water that reaches the top of the jars. With steam canner, fill the container below the rack and set the jars on it. Cover and bring water to a simmer over medium heat. Do not boil.
- 2. Prepare 8 two-piece closures. Wash lids and bands in hot, soapy water. Rinse them under hot water, dry and set aside until ready to use.
- 3. Measure sugar into a bowl and set aside. (Sugar is added to the boiling jam all at once, so measuring it ahead of time prevents errors in quantities and eliminates cooking delays.)
- 4. In a colander placed over a sink, wash strawberries in cool running water. Drain thoroughly and, using a strawberry huller or the rounded end of a potato peeler, remove hulls.
- 5. In a glass pie plate or flat-bottomed bowl, place a single layer of strawberries. Using a potato masher, crush berries and transfer to a 1-cup liquid measure. As you accumulate each cup, transfer crushed berries to a large, deep stainless-steel saucepan. Repeat until you have 5 cups of crushed strawberries.
- 6. Add bottled lemon juice to crushed strawberries in saucepan. Whisk in pectin until dissolved. Bring to a full rolling boil over high heat, stirring frequently. Add sugar all at once and, stirring constantly, return to a full rolling boil that cannot be stirred down. Boil hard, stirring constantly, for 1 minute. Remove from heat and, using a large slotted metal spoon, skim off foam. (Tip: to reduce foaming, add up to ½ teaspoon butter or margarine to the recipe before cooking.)
- 7. Fill one jar at a time. Remove jar from canner, emptying hot water back into boiling-water canner. (Do not dry jar.) Place jar on a tray or towel-covered counter and place a canning funnel in it. Ladle hot jam into hot jar, leaving ¼-inch headspace. Slide a nonmetallic utensil, such as a rubber spatula, down between the jam and the inside of jar two or three times to release air bubbles. Adjust headspace, if necessary, by adding hot jam. With a clean damp cloth or paper towel, wipe jar rim and threads to remove any food residue. Center lid on jar. Place band on jar and, with your fingers, screw band down evenly and firmly, just until resistance is met, then increase to fingertip-tight. Do not over-tighten or use any tools to apply band. Return jar to canner rack and repeat until all jam is used.
- 8. When all jars are filled, lower rack into boiling-water or steam canner and ensure jars in boiling-water canner are completely covered by at least 1 inch of hot water. Cover canner and bring water to a full rolling boil over high heat. Process (continue boiling rapidly) for 10 minutes at 0-1,000 feet, 15 minutes at 1,001-3,000 feet, 20 minutes at 3,001-6,000 feet, and 25 minutes above 6,000 feet elevation, starting timer only when water reaches a full rolling boil.
- 9. At the end of the processing time, turn heat off. For boiling-water canner, remove lid and wait 5 minutes; for steam canner, wait 2-3 minutes, then remove lid. Remove jars, without tilting. Place jars upright on a towel in a draft-free place and let cool, undisturbed, for 24 hours.
- 10. After 24 hours, check lids for seal. Remove bands and press down on the center of each lid with your finger. Sealed lids will be concave (they'll curve downward) and will show no movement when pressed. Jars that haven't sealed properly must be refrigerated immediately or reprocessed. Rinse and dry bands. Wipe jars and, if desired, loosely reapply bands. Label jars and store in a cool, dry, dark place.

Vanilla Strawberry Jam: Add half a vanilla bean, split in half lengthwise, to the crushed strawberries. Cook as directed and remove vanilla bean before ladling jam into jars. The resulting jam will be enhanced with subtle yet distinct vanilla overtones.

Strawberry Balsamic Jam: Reduce the lemon juice to 1 Tablespoon and add 3 Tablespoons good-quality balsamic vinegar. Balsamic vinegar accents the strawberry flavor and gives the jam a robust taste.

Lemony Strawberry Jam: Add the grated zest of 1 large lemon to the crushed strawberries. **Peppered Strawberry Jam:** Stir ¹/₂ teaspoon freshly ground black pepper into the cooked jam just before

ladling it into the jars. Pepper accents and complements strawberries' sweet flavor. Be sure to use freshly ground pepper, which delivers a fresher-quality flavor.

Source: Ball Complete Book of Home Preserving 2015/2020 editions

Low Sugar Strawberry Jam

Yield: about eight 8-ounce jars (half pints)

12 cups strawberries, crushed to make 6 cups crushed strawberries 4 cups sugar

1 package SURE-JELL for Less or No Sugar Needed Premium Fruit Pectin

- 1. Use dry measuring cup to measure exact amount of prepared fruit into large saucepan.
- 2. Measure exact amount of sugar into large bowl. (Do not reduce the sugar in recipe since that will result in set failures.)
- 3. Combine ¼ cup sugar from measured amount and I package of pectin in a small bowl. Stir into fruit. Add ½ teaspoon butter or margarine to reduce foaming if desired.
- 4. Bring mixture to a full rolling boil (a boil that doesn't stop bubbling when stirred) on high heat, stirring constantly.
- 5. Stir in remaining sugar. Return to full rolling boil and boil exactly 1 minute, stirring constantly. Remove from heat. Skim off any foam with metal spoon.
- 6. 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.
- 7. For boiling-water canner, place jars on elevated rack and lower into canner. (Water must cover jars by 1 to 2 inches. Add boiling water, if needed.) For steam canner, place jars on rack. Cover, bring water to gentle boil. Process 10 minutes, adjusting processing time for altitude (10 minutes at 0-1,000 feet, 15 minutes at 1,001-3,000 feet, 20 minutes at 3,001-6,000 feet, and 25 minutes above 6,000 feet elevation), starting timer only when water reaches a full rolling boil.
- 8. At the end of the processing time, turn heat off. For boiling-water canner, remove lid and wait 5 minutes; for steam canner, wait 2-3 minutes, then remove lid. Remove jars, without tilting. Place jars upright on a towel in a draft-free place and let cool, undisturbed, for 24 hours.
- 9. After 24 hours, check lids for seal. Remove bands and press down on the center of each lid with your finger. Sealed lids will be concave (they'll curve downward) and will show no movement when pressed. Jars that haven't sealed properly must be refrigerated immediately or reprocessed. Rinse and dry bands. Wipe jars and, if desired, loosely reapply bands. Label jars and store in a cool, dry, dark place.
- 10. Store in cool, dry, dark place up to 1 year. Refrigerate opened jams up to 3 weeks.

Source: SURE-JELL insert in package

Yield: about 5 half-pint jars

3 cups crushed strawberries (about 3 pounds whole strawberries)
2 tablespoons bottled lemon juice
3 ¹/₂ tablespoons Ball Classic Pectin
2 ¹/₂ cups sugar
¹/₄ cup minced fresh basil

- 1. Wash strawberries under cold running water; drain. Remove stem and cap from strawberries. Crush strawberries one layer at a time using a potato masher. Wash and dry basil leaves; mince.
- 2. Combine strawberries, pectin, and lemon juice in a large saucepan, stirring to blend in pectin. Bring mixture to a boil over medium-high heat. Add sugar, stirring until sugar dissolves. Bring mixture to a rolling boil that cannot be stirred down. Boil hard for I minute, stirring constantly. Remove from heat. Add basil and stir. Skim off foam if necessary.
- Ladle hot jam into a hot jar, leaving ¼ inch headspace. Remove air bubbles. Clean jar rim. Center lid on jar and adjust band to fingertip-tight. Place jar on the rack in boiling water canner containing simmering water (180°F) or atmospheric steam canner. Repeat until all jars are filled.
- 4. Process jars 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. When finished processing for boiling water canner, turn off heat, remove lid and wait 5 minutes; for atmospheric 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 Book Guide to Preserving, 38th edition, 2024

Strawberry and Other Berry Fruit Roll-Ups

Roll-ups is the modern name for traditional fruit "leathers." Strawberries make flavorful fruit leather, and by following the same process you can make fruit leathers from other berries as well.

Preparation of the Puree

- 1. Cut fruit into chunks and place in the top of a double boiler. Cover and steam for 15-20 minutes or until the fruit is soft and a thermometer placed in the fruit mixture registers 160°F, or cook the cut-up fruit in a glass casserole in the microwave on full power for 6 to 8 minutes per two cups of fruit, stirring every 2 minutes. The purpose of heating the puree to 160°F is to kill bacteria such as *E. coli* that if present might survive the drying process. It also stops the maturing action of enzymes in the fruit and speeds the drying process (*Kendall and Sofos, 2012*).
- 2. Puree fruit in a blender with ¹/₈ teaspoon ascorbic acid crystals or 2 teaspoons bottled lemon juice per 2 cups of fruit to protect the color and help destroy bacteria during drying (*Andress and Harrison, 2020*).
- 3. The puree may be sweetened with 1 to 2 tablespoons of sugar, corn syrup, or honey per 2 cups of fruit. Sweeteners are optional. Adding a sweetener will make the leather tacky and the sugar may crystallize if stored for several months.
- 4. Because strawberries have a high moisture content, you can mix the strawberry puree with applesauce for quicker drying. This is a necessity if using very soft berries such as raspberries. Equal parts berry puree and applesauce work well, but you can experiment with proportions to your liking

Preparation of the Trays

- 1. Spray a cookie sheet with vegetable spray or line with plastic wrap or non-stick foil. Tape the plastic wrap in place on the baking sheet.
- 2. Do not use waxed paper or regular foil as it will stick, and you will have paper or foil in your leather.
- 3. Spread the fruit puree over the pan to a depth of $\frac{1}{8}$ to $\frac{1}{4}$ inch. Spreading the puree over a large area of the pan makes it possible to cut long strips. However, you can reduce the drying time by spreading smaller rectangles. It is even possible to make small circles of leather for individual servings.

Dehydrating

- 1. Dry in an oven or dehydrator at 140°F to 145°F. If the oven temperature gets too hot, turn the oven off for a short time to reduce the temperature.
- 2. Let the oven door open a crack (about the thickness of a wooden spoon) so evaporated moisture can escape.
- 3. The leather will take 4 to 10 hours to dry.
- 4. Dried fruit leather will be translucent and slightly tacky to the touch. No indentations should remain when lightly touched and it will peel easily from the pan.
- 5. Remove from the pan while still warm.

Storage

- 1. Roll the leather in plastic wrap or waxed paper.
- 2. Store as one piece or cut into 1-inch strips.
- 3. Make sure the leather is completely dry before storing in an air-tight container.
- 4. It will retain good quality for up to one year in the freezer, several months in the refrigerator, or one to two months at room temperature.

Uses of Fruit Leathers

When fruits are dried, the removal of moisture concentrates the flavor and caloric value. The same is true when the fruit is in the form of a leather. Fruit roll-ups taste sweet without additional sugar and are a good source of energy. Use as snacks (children of all ages love them) or include with hiking or camping supplies.

Sources: Kendall, E.L. & Harrison, J.A. (2020). So Easy to Preserve, University of Georgia Cooperative Extension; Kendall, P. & Sofos, J. (2012, May). Leathers and Jerkies Fact Sheet No. 9.311. Colorado State University Extension

How to Freeze Dry Strawberries

Supplies Needed

- Freeze Dryer
- Cutting Board
- Trays
- Parchment Paper/Silicone mats
- Mason Jars/Mylar bags
- Oxygen Absorbers
- Labels and Marking Pen
- Fresh or Frozen Strawberries

- 1. Wash and dry strawberries
- 2. Slice the fruit to $\frac{1}{4}$ inch
- 3. Line trays with parchment paper or use silicone mats
- 4. Place strawberries on freeze dryer paper/mats
- 5. Repeat until you have all the trays covered. You can stack your fruit no deeper than tray
- 6. Place the trays into the freezer to pre-freeze (optional)
- 7. Place trays in freeze dryer and start machine

How to Tell If Freeze Dried Strawberries Are Done

Freeze dried strawberries need to be completely dry and feel brittle to the touch. Check your berries by choosing the thickest piece and breaking it open to ensure it is freeze dried thoroughly. If not, place it back in the freeze drier for a few more hours until completely dry.

How to Store Freeze Dried Strawberries

Once your strawberries are freeze dried, remove them from the freeze dryer right away and place them in a glass jar with lid and oxygen absorber or mylar bag with an oxygen absorber. Label the jar/bag with the date and contents, and store at room temperature, away from light or moisture, until ready to use. You may also use a jar sealer to seal each jar. You can reseal the jars after each opening. This will prolong the shelf life of your strawberries.

How to Rehydrate Freeze Dried Strawberries

Freeze dried strawberries can be eaten as is or they may be rehydrated to 2 parts water to 1 part strawberry.

Source: Harvest Right

Dehydrating Strawberries at Home

Wash and drain strawberries. No pretreatment is necessary. Estimated drying time in a dehydrator: 24-36 hours.

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

Freezing Strawberries

Preparation – Select fully ripe, firm berries with a deep red color. Discard immature and defective fruit. Wash and remove caps.

Whole Berries Syrup Pack – Put berries into containers and cover with cold 50 percent syrup, leaving headspace. Seal and freeze.

Whole Berries Sugar Pack – Add $\frac{3}{4}$ cup sugar to 1 quart (1 $\frac{1}{3}$ pounds) strawberries and mix thoroughly. Stir until most of the sugar is dissolved or let stand for 15 minutes. Put into containers, leaving headspace. Seal and freeze.

Sliced or Crushed – Prepare for packing as for whole strawberries, then slice or crush partially or completely. To 1 quart ($1 \frac{1}{3}$ pounds) berries add $\frac{3}{4}$ cup sugar, mix thoroughly. Stir until most of the sugar is dissolved or let stand for 15 minutes. Pack into containers, leaving headspace. Seal and freeze.

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 20

Strawberry Lemon Marmalade

¹/₄ cup thinly sliced lemon peel water4 cups crushed hulled strawberries Yield: about seven 8-ounce jars (half-pints)

1 tablespoon bottled lemon juice 6 tablespoons powdered pectin 6 cups granulated sugar

- 1. Prepare boiling water or steam canner, jars and lids.
- 2. In a large stainless steel sauce pan, combine lemon peel and water to cover. Bring to a boil over medium high heat and boil for 5 minutes, until peel is softened. Drain and discard liquid.
- 3. Add strawberries and lemon juice to peel, and mix well. Whisk in pectin until dissolved. Bring to a boil over high heat, stirring constantly. Add sugar all at once and return to a full rolling boil, stirring constantly. Boil hard, stirring constantly, for 1 minute. Remove from heat and skim off foam.
- 4. Ladle hot marmalade into hot jars, leaving ¹/₄-inch head space. Remove air bubbles and adjust headspace, if necessary, by adding hot marmalade. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to finger tight.
- 5. Place jars into canner with simmering water; for boiling water canner, ensure jars are completely covered by at least 1 to 2 inches of water. For steam canner, place jars on rack. Cover and bring canner to boil; process 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 above 6,000 feet elevation, starting timer only when water reaches a full rolling boil.
- 6. At the end of the processing time, turn heat off. For boiling-water canner, remove lid and wait 5 minutes; for steam canner, wait 2-3 minutes, then remove lid. Remove jars, without tilting. Place jars upright on a towel in a draft-free place and let cool, undisturbed, for 24 hours.
- 7. After 24 hours, check lids for seal. Remove bands and press down on the center of each lid with your finger. Sealed lids will be concave (they'll curve downward) and will show no movement when pressed. Jars that haven't sealed properly must be refrigerated immediately or reprocessed. Rinse and dry bands. Wipe jars and, if desired, loosely reapply bands. Label jars and store in a cool, dry, dark place.

Source: Ball Complete Book of Home Preserving 2015/2020 editions

Berry Buttermilk Sherbet

Yield: 5 cups

2 cups fresh strawberries (or blackberries)1 cup granulated sugarPinch of kosher salt2 cups whole buttermilk1 teaspoon vanilla extract

- 1. Toss together strawberries, sugar, and salt in a large bowl. Let stand for 1 hour, stirring occasionally.
- 2. Transfer mixture to a blender or food processor, process until smooth. Press mixture through a fine mesh strainer into a large bowl. Discard solids.
- 3. Stir buttermilk, salt and vanilla into strained puree. Cover and chill until thoroughly cold, at least 4 hours.
- 4. Pour mixture into the freezer of an ice cream maker; freeze according to manufacturer's instructions.
- 5. Transfer to a freezer-safe container; cover and freeze at least 2 hours before serving.

Source: Southern Living Magazine

Strawberry Lemonade Concentrate

Yield: about 7 16-ounce jars (pints)

6 cups hulled strawberries 4 cups bottled lemon juice

- 6 cups granulated sugar
- 1. Prepare boiling-water or steam canner. Heat jars in simmering water until ready for use. Do not boil. Wash lids in warm soapy water and set bands aside.
- 2. Puree strawberries in a blender or food processor fitted with a metal blade, working in batches, until smooth. Transfer to a large stainless-steel saucepan as completed.
- 3. Add lemon juice and sugar to strawberry puree, stirring to combine. Heat to 190°F over medium-high heat, stirring occasionally. Do not boil. Remove from heat and skim off foam.
- 4. Ladle hot concentrate into a hot jar leaving a ¹/₄-inch headspace. Remove air bubbles. Wipe jar rim. Center lid on jar and apply band, adjust to fingertip tight.
- 5. Place jar in boiling-water or steam canner, and bring water to a rolling boil. Process pint jars 15 minutes, increasing the processing time by 1 minute for each 1,000 feet above sea level. Turn off heat and remove cover. Let jars cool 5 minutes.
- 6. Remove jars from canner; do not retighten bands if loose.
- 7. Cool 12-24 hours. Check lids for seal, they should not flex when center is processed.
- 8. To serve, mix one jar of concentrate with three cups of water.

Source: Ballmasonjars.com

Strawberry-Rhubarb Jelly with liquid per	ctin

½ pounds red stalks of rhubarb
 ¼ quarts ripe strawberries

6 cups sugar

Yield: about 7 8-ounce jars (half-pints)

1 pouch liquid pectin

- 1. Prepare juice: Wash and cut rhubarb into 1-inch pieces and blend or grind. Wash, stem and crush strawberries, one layer at a time, in a bowl or saucepan. Place both fruits in a jelly bag or four layers of cheesecloth and gently squeeze out the juice.
- 2. Prepare canner, jars, and lids. For altitudes 0-1,000 feet, sterilize jars.
- 3. Measure 3 ½ cups of juice into a large sauce pan. Add sugar, mix well. Bring to a boil over high heat, stirring constantly. Immediately stir in pectin. Bring to a full rolling boil and boil hard for 1 minute, stirring constantly. Remove from heat, quickly skim off foam.
- 4. Pour jelly immediately into hot canning jars, leaving ¹/₄-inch headspace. Wipe jar rims. Adjust lids.
- 5. Process in a steam or boiling water canner for 5 minutes at 0-1,000 feet; add 1 minute of processing time for each 1000 feet of additional altitude.

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

Uncooked Strawberry Jam from Fresh FruitYield: about 4 8-ounce jars (half-pints)1 ¾ cups crushed strawberries (about 1 quart)2 tablespoons bottled lemon juice4 cups sugar1 pouch liquid pectin

- 1. Measure 1 ³/₄ cups crushed strawberries. Place in an extra-large bowl.
- 2. Add sugar, mix well and let stand for 10 minutes.
- 3. Measure lemon juice into a small bowl. Add liquid pectin and stir well. Stir into fruit and continue stirring for 3 minutes.
- 4. Pour jam into freezer containers or canning jars, leaving ½-inch headspace. Cover container.
- 5. Let stand at room temperature until set (up to 24 hours.)
- 6. Freeze or refrigerate.

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

Strawberry Honey

8 cups strawberry juice*

4 cups sugar

- 1. *See next recipe for Strawberry Syrup for directions on preparing strawberry juice.
- 2. Sterilize canning jars. Wash and cap strawberries. Crush and add 1 cup water to 1 quart berries.
- 3. Cook slowly for 15 minutes, strain, measure and bring to a boil.
- 4. When it boils vigorously, add sugar. Boil rapidly until the consistency of honey.
- 5. Pour into hot jars, leaving ¹/₄-inch headspace.
- 6. Wipe jar rims and adjust lids. Process 5 minutes in a boiling-water or steam canner, adjusting for altitude (add 1 minute of processing time for each 1000 feet of additional altitude).

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

Strawberry Syrup

Yield: about 2 8-ounce jars (half-pints)

I ¹/₄ cups prepared strawberry juice (can also use blackberries, blueberries, raspberries)

1 ¹/₂ cups sugar

1/4 cup corn syrup

1 tablespoon bottled lemon juice

To Prepare Juice – Select table-ripe berries. Do not use underripe berries. Wash, cap, and remove stems. Crush berries and heat to a boil. Simmer 1 or 2 minutes. Extract juice:

- 1. Place fruit into a flat-bottomed saucepan and add cold water. For berries, use only enough water to prevent scorching. Crush soft fruits to start the flow of juice.
- 2. Bring to a boil on high heat. Stir to prevent scorching.
- 3. Reduce heat.
- 4. Berries need 10 minutes or less to cook until soft. (Note: juicy berries may be crushed and the juice extracted without heating.) Do not overcook; excess boiling will destroy the pectin flavor and color.
- 5. 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.
 *A jelly bag or suitable cloth is needed, when extracting juice for jelly. Firm, unbleached muslin or cotton flannel with the napped side turned in can be used. Four thicknesses of closely woven cheesecloth may be used. Jelly bags or cloths should be damp when extracting juice.

To Make Syrup – Sterilize canning jars. Combine ingredients in a saucepan. Bring to a rolling boil and boil one minute. Remove from heat and skim off foam. Pour into hot half-pint jars, leaving ¹/₄ inch headspace. Wipe jar rims and adjust lids. Process 10 minutes in a boiling-water or steam canner, adjusting for altitude (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 above 6,000 feet elevation).

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

Strawberry Flavored Vinegar

Getting Ready -- Only glass containers are recommended for your flavored vinegars. Use glass jars or bottles that are free of cracks or nicks and can be sealed with corks, screw-band tops or two-piece canning lids. Wash thoroughly in warm, soapy water and rinse well, then sterilize by completely immersing in a deep pot with a rack in the bottom in water that's 1-2 inches above their tops, and boiling for 10 minutes. Fill the jars with your vinegar while they are still warm.

Lids and Caps -- If using screw caps, wash in hot, soapy water, rinse and scald in boiling water. (To scald, follow manufacturer's directions, or place caps in a saucepan of warm water; heat to just below boiling and remove from heat. Leave caps in the hot water until ready to use.) If using corks, select new, pre-sterilized corks. Use tongs to dip corks in and out of boiling water 3 to 4 times. Prepare two-piece metal home canning jar lids according to manufacturer's directions for canning; allow enough headspace between the lid and the vinegar so there's no contact. Plastic storage screw caps made for canning jars are also now available and would work well for flavored vinegars.

Herbs – Allow 3 to 4 sprigs very fresh herbs per pint (2 cups) of vinegar. It's best to pick fresh herbs after the morning dew has dried, using only the best. Wash them gently, blot dry on paper towels, then dip them in a sanitizing bleach solution of 1 teaspoon household bleach to 6 cups water. Rinse thoroughly and pat dry with paper towels. Dried herbs may be substituted if necessary; allow 3 tablespoons per pint of vinegar.

Strawberries or other fruit – Thoroughly wash with clean water, and leave whole or halved. Popular herbs or spices to use with them are mint or cinnamon.

Vinegar – Several types of vinegar may be used, but not all give the same results. Distilled white vinegar has a sharp acidic taste by itself and is the best choice for delicately flavored herbs. Apple cider vinegar blends best with fruits. Wine and champagne vinegars are more expensive but more delicate in flavor; they work well with delicate herbs and lighter-flavored fruits. Wine and rice vinegars contain some protein that provides an excellent medium for bacterial growth if not handled and stored properly. For added safety, use only commercially produced vinegars.

Flavoring the Vinegar

- 1. Lightly bruise the berries and any fresh herbs. Place the prepared herbs, fruits and/or spices in the sterilized jars. Avoid over packing the jars; use 3 to 4 sprigs of fresh herbs or 3 tablespoons of dried herbs, and 1 to 2 cups of strawberries or other fruit. If using basil, ½ cup of coarsely chopped leaves may also be used.
- 2. Heat the vinegar to just below the boiling point or at least 190-195°F. Pour over the flavoring ingredients in jars, leaving a ¹/₄-inch headspace. Wipe rims of jars with a clean, damp cloth. Attach lids, corks or screw tops tightly. Let sit to cool undisturbed.
- 3. Store in a cool, dark place. Let sit undisturbed for 3 to 4 weeks to develop flavors. (It takes at least 10 days for most flavors to develop and 3 to 4 weeks for the greatest flavor to be extracted. To test for your preferred flavor, place a few drops of the vinegar on plain white bread and taste. If you like it, proceed with next step. If too strong, dilute with base vinegar.)

- 4. Strain the vinegar through a damp cheesecloth or coffee filter one or more times until the vinegar shows no cloudiness. Discard the fruit and herbs.
- 5. Prepare jars and lids as before for final bottling steps. Pour the strained vinegar into clean sterilized jars and cap tightly. A few clean berries or a washed and sanitized sprig of fresh herb may be added to the jars before closing, if desired.

Storing the Vinegar -- Store in a cool, dark place. Refrigeration is best for retaining freshness and flavors. Date the bottles or jars when opened. If properly prepared and bottled, flavored vinegars should keep for up to 3 months in cool storage. Fruit vinegars in particular may start to brown and change flavors noticeably after that. Refrigeration may extend the quality for 6 to 8 months. Always keep vinegar bottles tightly sealed. After 6 months, taste before using to be sure the flavor is still good.

Safety Concerns -- If a flavored vinegar ever has mold on or in it, or signs of fermentation such as bubbling, cloudiness, or sliminess, throw it away without using any of the vinegar for any purpose. Herbed and fruited vinegars are often displayed on sunny window sills and shelves as decorative room additions. If stored in this manner for more than a few weeks, these bottles should be considered as permanent decorations and not used in food preparation. Some harmful bacteria may survive and even multiply slowly in some vinegars. It is important to follow directions carefully, store flavored vinegars in the refrigerator or cool places, and work in a very clean area with sanitary utensils. Also be sure hands are very clean while you work!

Source: So Easy to Preserve, Cooperative Extension the University of Georgia 6th Edition, 2014

No endorsement of any product/company is intended, nor is criticism implied of similar products/companies that are not included.

Resources

See UCCE Master Food Preservers of Amador/Calaveras County "Core Canning Techniques" for more information on boiling water and atmospheric steam canning. This document is available on-line at http://ucanr.edu/csmfpclasses. National Center for Home Food Preservation: http://nchfp.uga.edu/ So Easy to Preserve, 6th Edition, September 2014 (University of Georgia) http://nchfp.uga.edu/ Ball Complete Book of Home Preserving, 2012, 2015, 2020 The All New Ball Book of Canning and Preserving, 2016, revised 2023. Cooperative Extension Offices (all 50 states) Package inserts included with name-brand pectins https://www.ballmasonjars.com/pectin-calculator.html https://hgic.clemson.edu/factsheet/strawberry-basics/ Dehydration basics: https://ucanr.edu/sites/camasterfoodpreservers/files/335543.pdf Freezing basics: https://ucanr.edu/sites/camasterfoodpreservers/files/335546.pdf

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at http://ucanr.edu/sites/anrstaff/files/192438.pdf). Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1318.

Notes: