

UCCE Master Food Preserver Program of Amador/Calaveras County

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Frozen Delights Granitas, Sorbet, Ice Cream, Sherbet, and Sauces

The quality of food is judged by wholesomeness, its nutritional value, and our expectations of its color, flavor, odor, and texture. The quality of preserved food varies greatly and depends mostly on the quality of the fresh food and preservation methods. High quality preserved foods are free from microbial spoilage and toxins, are pleasing to eat, and are reasonably nutritious.

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 teaspoon 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 <u>does not</u> recommend the open kettle canning method 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.

Fun Ice Cream Facts

Ice cream is a frozen dessert, typically made from milk or cream and flavored with a sweetener, either sugar or an alternative, and a spice, such as cocoa or vanilla, or with fruit such as strawberries or peaches. But how did this delicious treat come to be? And how is it made? Let's take a look at the history and science of ice cream.

The earliest forms of ice cream can be traced back to ancient China, where people enjoyed frozen mixtures of fruit, honey, and ice. Marco Polo brought some recipes from his travels to Europe, where Italian cooks refined them into water and milk ices. The earliest forms of ice cream were not very similar to what we eat today. They were more like iced drinks or frozen milk concoctions that were enjoyed by ancient kings and emperors in Asia and Europe.

In the 17th century, ice cream became popular in France, thanks to a Sicilian chef who opened a café in Paris and sold ices and sherbets. He was followed by Tortoni, who invented cream ices, which contained eggs and cream. Ice cream became more popular in France and Italy, where it was served as a delicacy to the wealthy and the noble. It was made with cream, sugar, and various flavors, such as fruit, chocolate, or coffee.

Ice cream crossed the Atlantic Ocean with the colonists, who enjoyed it as a rare delicacy. The first ice cream parlor opened in New York in 1790, and soon ice cream became a favorite treat for Americans. Many presidents, including George Washington, Thomas Jefferson, and Abraham Lincoln, were known to be ice cream fans. Ice cream also spread to other parts of the world, where different cultures created their own versions of the frozen dessert, such as kulfi in India, gelato in Italy, and mochi in Japan. Each one has its own unique texture and taste.

The invention of refrigeration and the Industrial Revolution made ice cream more accessible and affordable to the masses. New variations and flavors emerged, such as frozen custard, frozen yogurt, and non-dairy alternatives. Today, ice cream is one of the most popular desserts in the world, with thousands of flavors and variations to choose from. It is a versatile and delicious treat that can be enjoyed by itself or with other desserts, such as cake, pie, or brownies.

To make ice cream, a mixture of liquid and dry ingredients is heated, pasteurized, homogenized, and then frozen while being churned to create a smooth and creamy texture. The churning also incorporates air, which makes ice cream softer and lighter. Ice cream should be stored at very low temperatures to prevent it from melting and refreezing, which can ruin its texture and flavor. To enjoy ice cream at its best, consume it within a month of purchase.

Source: www.icecream.com

American Ice Cream

President George Washington spent about \$200 for ice cream in the summer of 1790, according to the records of a shopkeeper in Manhattan. Today, that would be equivalent to about \$5,000 in ice cream purchases. President Thomas Jefferson loved ice cream so much that he adapted recipes brought back from France for ice cream, one of which is said to have been an 18-step procedure for something similar to a Baked Alaska. His personal recipe for vanilla ice cream is even in the Library of Congress!

What is the difference between ice cream and gelato?

Many of us think gelato is just the Italian word for ice cream—and it is, but it's also much more. Gelato may have a richer texture than standard ice cream, but that's actually not because it has richer ingredients. Rather than cream and egg yolks, it's made with regular old milk.

That doesn't seem to make a lot of sense until you consider what happens to gelato during the churning process. Consider the reference of a glass of milk versus a bowl of whipped cream. When you blow bubbles in a glass of milk, they pop fairly quickly. However, whipped cream holds its light and fluffy shape for hours at a time. It's the fat in cream that allows it to hold air, as compared with the lack of fat in milk. When a gelato base is churned, it doesn't have much air whipped into it. This gives it a very dense texture, which has a richer mouth feel.

American ice cream, on the other hand, is usually made with more cream than milk. Because of the higher fat content, up to 50% of the volume of ice cream consists of air that has been churned into it. (Think about that when you purchase your next scoop of ice cream—50% of what you're buying is air.)

The air whipped into gelato or ice cream is called the overrun. Gelato has almost no overrun and ice cream can have up to 100% overrun. Yet despite the economic benefits of selling ice cream, many chefs prefer gelato. But that doesn't mean it's more popular with the masses.

Just take a quick look in the ice cream aisle of your grocery store to see just how many more types of ice cream you'll find than flavors of gelato. Because gelato has less fat than ice cream, the flavors of gelato are typically stronger. When fat coats the tongue, it interferes with your taste buds' ability to truly taste the flavor of your ice cream. Additionally, gelato is traditionally made with natural ingredients like fresh strawberry puree, whereas strawberry ice cream is often made with a combination of artificial strawberry flavor and real strawberries.

What about the different styles of American ice cream?

Have you ever looked closely at the label on your favorite ice cream? U.S. law classifies ice creams by their percentage of milk fat content.

- Super Premium has the most fat—between 14% and 18% and can have as low as 20% overrun. This is because it is traditionally made with more cream or in the French style of ice cream—custard made with egg yolks. You're most likely to find this style in small, handmade batches at a local ice cream shop or a high-end restaurant.
- **Premium** usually has 11% to 15% fat and around 60% to 90% overrun. Examples of premium ice cream are the more expensive gourmet or specialty pints found in your grocery store. (By the way, the pint, quart or gallon-sized containers of ice cream are called "hard-packed" ice cream.)
- Regular ice cream is much less dense. It has 10% to 11% fat and a lot more air, upwards of 90% to 100% overrun. These are the basic flavors made by larger manufacturers, such as chocolate, vanilla, strawberry and mint chocolate chip.
- **Economy** contains exactly 10% fat, which is the minimum USDA standard, and has 95% to 100% overrun. Anything with less than 10% fat cannot be considered ice cream, without being labeled "light." Essentially, this is the least expensive variety of ice cream available.

And as for frozen custard, Philly-style and soft serve...?

• Frozen custard, sometimes called French-style ice cream, is made of a cooked custard base that incorporates eggs. It is significantly richer than ice creams made without eggs, which is also reflected in its premium price.

• **Philadelphia-style** ice cream is made without eggs, which is the standard or regular ice cream in certain regions of the U.S.

• **Soft serve** is molecularly similar to regular ice cream, but is served at a higher temperature that allows it to be extruded into a soft swirl, and gives is a lighter, softer texture. Soft serve also has a lower fat content but a much higher overrun, which also attributes to its super light and creamy texture. Fun fact: its warmer temperature actually allows your taste buds to taste the ice cream better.

So Where Do Sherbet and Sorbet Come In?

- **Sorbet** is made from water and fruit puree or juice. It contains no milk, cream or eggs, and is one of the oldest forms of frozen desserts known. Records of frozen sorbet-like desserts date back to the ancient Romans and Chinese, where they were made with snow, fresh fruit pulp and sweetened with honey.
- **Sherbet** is not quite ice cream and not quite sorbet. It is made with fruit and water, but also has the addition of dairy—usually milk or buttermilk. This gives it a slightly creamier texture than sorbet, as well as a lighter, pastel color. By law, sherbet must have less than 2% fat in it.

Let's Not Forget About Frozen Yogurt

With shops found all over the country, frozen yogurt is the U.S.'s extremely popular attempt at making ice cream healthier. However, the marketing is quite misleading. While yogurt is certainly healthier than cream, the sweeteners added to frozen yogurt often cancel out the health benefits. Not to mention that the healthy bacteria found in yogurt is killed when frozen, so there go those probiotic benefits. One item worth noting is that yogurt has a higher freezing and melting point than milk. So on an extremely hot day, that yogurt will melt very quickly!

Source: www.ice.edu/blog/scoop-getting-know-ice-cream

Food Safety and Ice Cream

We all know that ice cream brings joy to everyone; ice cream is fun, and it can also be safe with a bit of diligence on our parts. There are 3 major categories of risks in the production of any food product; each of these can pose real risks:

- Extraneous contamination includes any physical objects that should not be in food.
- *Pathogens* include Listeria, Salmonella, and other microbial contaminations that can cause illness. We may not think of these as 'common' in frozen products, but there have been a number of recalls, illnesses, and even deaths in recent years. Most pathogens can survive freezing and some like Listeria will grow under refrigerated conditions. The key defenses here are pasteurization, proper storage temperatures, and keeping everything which touches the product clean and sanitized.
- Allergens: Many people have food allergies and sometimes their reactions can be life threatening. The allergens of concern are milk, peanuts, tree nuts, eggs, fish, crustacean shellfish, wheat, soy, and sesame. Control of allergen risks centers on making sure people know what is in the product and ensuring there is no unintended cross contamination from one product to another (e.g. separate utensils, complete cleaning between a product with an allergen and ones without, separation of ingredients, ...)

Source: www.idfa.org

Recipes

Homemade Vanilla Ice Cream Yield: 5 quarts

4 eggs 7 cups milk 2½ tablespoons vanilla

2½ cups sugar 3 cups whipping cream ½ teaspoon salt

1. Beat eggs until light. Add sugar gradually, beating until thick. Add 3 cups of the milk. Heat until thickened. Add remaining ingredients; mix well.

- 2. Pour into 5-quart freezer can. (If using electric freezer, follow manufacturer's directions.) Adjust dasher and cover.
- 3. Pack 6 parts crushed ice and 1 part rock salt around can. Continue to add more ice and salt to maintain level. Freeze according to directions for your freezer.
 - Peppermint: Add 2 tablespoons peppermint extract. As mixture begins to freeze, add 15 crushed peppermint candy rounds and (optional) 10 drops of red food coloring.
 - Chocolate Swirl: Remove dasher from ice cream and swirl 2 cups chocolate syrup through ice cream.
 - Strawberry: Omit vanilla. When partially frozen, add 2 cups sweetened crushed fresh strawberries. Complete freezing.

Source: University of Arkansas Division of Agriculture

Easy No-churn Ice Cream

2 cups whipping cream 1 can sweetened condensed milk 1 teaspoon vanilla

- 1. Whip a 2-cup carton of whipping cream so it's stiff.
- 2. Fold in sweetened condensed milk and vanilla.
- 3. Optional additions: about 1 cup mashed fruit such as peaches or strawberries, cappuccino powder combined with raspberries, chopped cherries and semi-sweet chocolate bar, caramel sauce and chopped pecans!
- 4. Freeze in a shallow baking pan for a few hours, then scoop and store it in a covered freezer container.

Source: Fran Rupley's personal recipe

Vanilla Frozen Custard Ice Cream

Protect yourself from the danger of possible Salmonella infection by avoiding the use of raw eggs in homemade ice cream!

Custard base: Ice cream:

6 eggs 2 cups whipping cream
3/4 cup sugar 1 teaspoon vanilla
2 to 3 tablespoons honey crushed ice
1/4 teaspoon salt rock salt

2 cups milk

- 1. Beat eggs, sugar, honey and salt in medium heavy saucepan until blended; stir in milk. Cook over low heat, stirring constantly, until mixture is just thick enough to coat a metal spoon with a thin film and temperature reaches 160°F, about 15 minutes. *Do not allow to boil.* Remove from heat.
- 2. Cool quickly: set pan in larger pan of ice water; stir occasionally and gently for a few minutes to hasten cooling. Press piece of plastic wrap onto surface of custard. Refrigerate until thoroughly chilled, at least 1 hour.
- 3. Pour chilled custard, whipping cream and vanilla into 1-gallon ice cream freezer can. Freeze according to manufacturer's directions, using 6 parts crushed ice to 1 part rock salt. Transfer to freezer containers, allowing head space for expansion; freeze until firm.

Tips: Serve with cut-up fresh fruit or your favorite ice cream topping. This basic custard can be varied with flavorings and stir-ins of your choice. For stir-ins, use pureed fruit, mini chips, and other small pieces. Source: University of Nebraska Extension

Avocado Ice Cream Yield: 4-6 servings

 $2\frac{1}{2}$ cups whipping cream 1 teaspoon vanilla 1-14-ounce can sweetened condensed milk Pinch of salt

4 medium avocados

- 1. In a mixing bowl, whip the heavy cream until it's at stiff peaks.
- 2. Scoop out avocados and add with sweetened condensed milk to a food processor, puree to a smooth and creamy avocado mixture.
- 3. Slowly add the avocado mixture to the whipped cream in the mixer, add vanilla and salt.
- 4. Spray a loaf pan or a container that readily fits in the freezer with pan spray and pour the ice cream base into the container.
- 5. Allow to freeze overnight for best product, or a minimum of 8 hours.

Source: The Ohio State University School of Health and Rehabilitation Sciences

Blackberry-Buttermilk Sherbet

Yield: 6 cups

2 cups fresh blackberries (or strawberries)
2 cups whole buttermilk
1 cup granulated sugar
1 teaspoon vanilla

Pinch of kosher salt

- 1. Toss together berries, sugar, and salt in a large bowl; let stand, stirring occasionally, 30 minutes to 1 hour.
- 2. Transfer mixture to a blender or a food processor; process until completely smooth, about 2 minutes. Press puree through a fine mesh strainer into a large bowl; discard solids.
- 3. Stir buttermilk and vanilla into strained berry puree. Cover and chill until thoroughly cold, about 4 hours. Pour mixture into the freezer container of a 4-quart ice cream maker, and freeze according to manufacturer's instructions.
- 4. Transfer to a freezer-safe container; cover and freeze 2 hours.

Source: www.southernliving.com/recipes/blackberry-buttermilk-sherbet

How To Make Granita with Any Fruit

Yield: 6 cups

4 cups cubed fruit, such as seedless watermelon, strawberries, or peaches (about 1½ pounds)

¹/₄ cup fresh lime juice (from 2 limes)

1/4 cup granulated sugar

1/8 teaspoon kosher salt

Yoghurt for serving (optional)

Optional sugared lime zest topping: 1/4 cup granulated sugar

1 tablespoon finely grated lime zest (from 1 lime)

½ teaspoon red pepper flakes

- 1. Combine the fruit, lime juice, sugar, and salt in a blender or food processor fitted with the blade attachment. Puree until smooth, about 1 minute.
- 2. Pour the puree into a 9x13-inch metal pan. The puree should be about ½-inch deep, although it's OK if the puree is deeper, it will just take longer to freeze. Freeze for 30 minutes.
- 3. Take the pan out of the freezer. The puree should have begun to freeze, especially around the edges and top. Scrape the mixture with a fork and return to the freezer. Repeat this process every 30 minutes for a total of 4 hours. The granita is done when the mixture is completely frozen and appears dry and flaky in texture.
- 4. Optional topping: Stir the sugar, lime zest, and pepper flakes together in a small bowl. Set aside until ready to serve.
- 5. Scoop the granita into bowls alone or with yoghurt. Top with sugared lime zest if using.

Tip: Granita can be made I week ahead and stored in freezer. Scrape again before serving.

Source: www.thekitchn.com

Easy Pineapple Sorbet

Yield: 8 servings

4½ cups fresh, ripe pineapple (1 large pineapple)

1 tablespoon fresh lime juice

Honey (optional)

1. Prep and cut the pineapple into cubes. Place the cubed pineapple onto a baking sheet lined with parchment paper, leaving space between the cubes. Freeze the pineapple for 3 to 4 hours or overnight, until completely frozen.

- 2. Place the frozen pineapple into the bowl of a food processor and that for 10 or 15 minutes, or until softened. Pulse until the pineapple becomes crumbly. Add the lime juice and pulse again. Add a little warm water if needed until the mixture becomes more fluid, but not slushy. Or, thaw the mixture until it has a soft-serve texture. Taste and add honey, if desired, to sweeten. If the mixture becomes too slushy, freeze for 30 to 60 minutes to solidify.
- 3. Serve immediately, or store in the freezer in an airtight container for up to 2 weeks.

Source: Costo Connection, www.asweetpeachef.com

Summertime Sorbet *This sorbet is super easy to make and can be customized to your favorite fruit flavor.*

3 cups fruit

2 tablespoons honey

1 teaspoon lemon juice

- 1. Rinse fruit with cool running water and chop/dice as needed. Place fruit in a single layer on a cookie sheet and freeze for at least 2 hours or overnight.
- 2. Add frozen fruit, honey, and lemon juice to a blender or food processor; process mixture until smooth. Add up to ½ cup water if necessary to thin out.

Source: North Dakota State University Extension

Mango Sorbet Yield: 6 servings

2 mangos, peeled and pit removed Juice of ½ lemon Pinch of salt

½ cup orange juice ½ cup honey (optional) Mint sprigs, for garnish

- 1. Line a freezer-safe dish, such as a loaf pan, with plastic wrap.
- 2. Add all ingredients except mint to a blender or food processor; blend until smooth and creamy. Pour mixture into the lined container and freeze until solid.
- 3. Remove from freezer 15 minutes prior to serving; garnish with mint.

Source: Costco Connection

Praline Syrup

Yield: 3 half-pint jars

2 cups dark corn syrup ½ cup lightly packed dark 1 cup pecan pieces ½ cup water brown sugar ½ teaspoon vanilla

- 1. Prepare canner, jars, and lids.
- 2. In a stainless steel saucepan, combine corn syrup, water and sugar. Heat over medium heat, stirring constantly, until sugar dissolves. Increase heat to medium-high, bring to a boil and boil for 1 minute. Reduce heat and stir in pecans and vanilla. Boil gently, stirring constantly, for 5 minutes.
- 3. Remove from heat, ladle hot syrup into hot jars, leaving 1/4-inch headspace, remove air bubbles, adjust two piece lids and rings.
- 4. Process jars in either boiling water or steam canner for 10 minutes at 0-1,000 feet elevation, 15 minutes between 1,001-3,000 feet, 20 minutes between 3,001-6,000 feet, 25 minutes between 6,001-8,000 feet, and 30 minutes between 8,001-10,000 feet.
- 5. Let cool undisturbed 12-24 hours. Clean, label and store sealed jars in a cool, dry location.

Tip: For a lighter-flavored syrup, use light corn syrup and light brown sugar.

Source: Ball Complete Book of Home Preserving, 2020 page 198.

Danish Cherry Sauce Yield: 3 pints

1½ cups granulated sugar 1 cup water 7½ cups pitted sweet or sour 3 cinnamon sticks (each about 4 inches) 34 cup corn syrup cherries

1½ teaspoons almond extract

1. Prepare canner, jars, and lids. In a large stainless steel saucepan, combine sugar, cinnamon sticks, almond extract, water, and corn syrup. Bring to a boil over medium-high heat, stirring constantly. Reduce heat to a gentle boil. Add cherries and boil gently, stirring until heated thoroughly. Discard cinnamon sticks.

- 2. Ladle hot cherries and syrup into hot jars, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot syrup. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
- 3. Process in a boiling water or atmospheric steam canner for 10 minutes at 0-1,000 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.
- 4. Let cool undisturbed 12-24 hours. Clean, label and store sealed jars in a cool, dry location.

Source: Ball Complete Book of Home Preserving, 2020 page 184

Chocolate Raspberry Sundae Topper

Yield: 6 half-pint jars

½ cup sifted unsweetened cocoa powder
 1 package regular powdered pectin
 4½ cups crushed red raspberries

4 tablespoons bottled lemon juice 6¾ cups granulated sugar

- 1. Prepare canner, jars, and lids. In a medium glass bowl, combine cocoa powder and pectin. Set aside.
- 2. In a large stainless steel saucepan, place crushed raspberries and lemon juice. Whisk in pectin mixture until dissolved. Bring to a boil over high heat, stirring frequently. Add sugar all at once and return to a full rolling boil, stirring constantly. Remove from heat and skim off foam.
- 3. Ladle hot sundae topper into hot jars, leaving ¼-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot sundae topper. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
- 4. Process in a boiling water or atmospheric steam canner for 10 minutes at 0-1,000 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.
- 5. Let cool undisturbed 12-24 hours. Clean, label and store sealed jars in a cool, dry location.

Source: Ball Complete Book of Home Preserving, 2020 page 186

Peach FondueYield: About 7 half-pint jars

If you're a fan of chocolate fondue, you are sure to love this classy peach conserve. With a hint of chocolate liqueur, this softer set jam makes a wonderful topping for ice cream and crepes!

4 cups finely chopped or crushed peaches, about 3 pounds 5½ cups granulated sugar

4 tablespoon bottled lemon juice 1 pouch liquid pectin ½ cup chocolate liqueur Optional ½ teaspoon butter

- 1. Prepare canner, jars, and lids.
- 2. Blanch, peel, pit and finely chop or crush peaches, one layer at a time. Measure 4 cups.
- 3. In a large, deep stainless steel saucepan, combine prepared peaches, lemon juice, sugar, and optional butter (to reduce foaming). Over high heat, bring mixture to a full rolling boil that cannot be stirred down. Add chocolate liqueur and liquid pectin, squeezing entire contents from pectin pouch. Return to boil; boil hard 1 minute, stirring constantly. Remove from heat and skim off foam.
- 4. Ladle hot jam into hot jars, leaving ¼-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot jam. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
- 5. Process in a boiling water or atmospheric steam canner for 10 minutes at 0-1,000 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.
- 6. Let cool undisturbed 12-24 hours. Clean, label and store sealed jars in a cool, dry location.

Source: www.bernardin.ca

Canned Lemon Curd

Yield: About 3 to 4 half-pint jars

2½ cups superfine sugar*
Optional ½ cup lemon zest (freshly zested)
1 cup bottled lemon juice**

¾ cup unsalted butter, chilled, cut into about ¾-inch pieces7 large egg yolks4 large whole eggs

Special Equipment Needed:

Lemon zester Balloon whisk

 $1\frac{1}{2}$ -quart double boiler*** (the top double boiler pan should be at least $1\frac{1}{2}$ -quart volume)

Strainer

kitchen thermometer measuring at least up to 180°F Glass or stainless steel medium mixing bowl Silicone spatula or cooking spoon

Preparation Notes:

*If superfine sugar is not available, run granulated sugar through a grinder or food processor for 1 minute, let settle, and use in place of superfine sugar. Do not use powdered sugar.

**Bottled lemon juice is used to standardize acidity. Fresh lemon juice can vary in acidity and is not recommended.

***If a double boiler is not available, a substitute can be made with a large bowl or saucepan that can fit partway down into a saucepan of a smaller diameter. If the bottom pan has a larger diameter, the top bowl or pan should have a handle(s) that can rest on the rim of the lower pan.

- 1. Prepare canner, jars, and lids. **Caution for boiling water canner:** Do not heat the water in the canner to more than 180°F before filled jars are added. If the water in the canner is too hot when jars are added, the process time will not be long enough. Process time starts after the water in the canner comes to a full boil over the tops of the jars.
- 2. Combine the sugar and lemon zest in a small bowl, stir to mix, and set aside about 30 minutes. Pre-measure the lemon juice and prepare the chilled butter pieces.
- 3. Heat water in the bottom pan of the double boiler until it boils gently. The water should not boil vigorously or touch the bottom of the top double boiler pan or bowl in which the curd is to be cooked. Steam produced will be sufficient for the cooking process to occur.
- 4. In the top of the double boiler, on the counter top or table, whisk the egg yolks and whole eggs together until thoroughly mixed. Slowly whisk in the sugar and zest, blending until well mixed and smooth. Blend in the lemon juice and then add the butter pieces to the mixture.
- 5. Place the top of the double boiler over boiling water in the bottom pan. Stir gently but continuously with a silicone spatula or cooking spoon, to prevent the mixture from sticking to the bottom of the pan. Continue cooking until the mixture reaches a temperature of 170°F. Use a food thermometer to monitor the temperature.
- 6. Remove the double boiler pan from the stove and place on a protected surface, such as a dish cloth or towel on the counter top. Continue to stir gently until the curd thickens (about 5 minutes). Strain curd through a mesh strainer into a glass or stainless steel bowl; discard collected zest.
- 7. Ladle hot strained curd into hot jars, leaving ½-inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot curd. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.
- 8. Process in a boiling water or atmospheric steam canner for 15 minutes at 0-1,000 feet elevation, 20 minutes at 1,001-3,000 feet, 25 minutes at 3,001-6,000 feet, 30 minutes at 6,001-8,000
- 9. Let cool undisturbed 12-24 hours. Clean, label and store sealed jars in a cool, dry location.

Shelf Life:

- For best quality, store in a cool, dark place (away from light). Plan to use canned lemon curd within 3 to 4 months. Browning and/or separation may occur with longer storage; discard any time these changes are observed.
- Prepared lemon curd can also be frozen instead of canned for up to 1 year without quality changes when thawed. Package in freezer containers after straining and cooling to room temperature. To thaw, place container in a refrigerator at 40°F or lower for 24 hours before intended use. After thawing, consume within 4 weeks.

Variation:

• For Lime Curd, use the same recipe but substitute 1 cup bottled lime juice and ½ cup fresh lime zest for the lemon juice and zest.

Source: National Center for Home Food Preservation

Lemon Bar Cookie Ice Cream Sandwiches

Yield: 16 servings

½ cup butter, softened 1 egg

½ cup sugar½ teaspoon vanilla2 tablespoons finely shredded lemon peel, divided1½ cups all-purpose flour½ teaspoon baking soda1¾ quarts vanilla ice cream

1/2 teaspoon cream of tartar
10 ounces lemon curd, about 1 cup
1/4 teaspoon salt
Optional crushed lemon candies

- 1. Preheat oven to 350°F, line a 9x9x2-inch baking pan with foil.
- 2. In a large bowl beat butter on medium speed for 30 seconds. Add sugar, 1 tablespoon lemon peel, baking soda, cream of tartar and salt, beat until combined. Beat in egg and vanilla. Beat in as much flour as you can with the mixer. Stir in any remaining flour.
- 3. Pat half the dough into the prepared baking pan. Bake for 12 minutes. Using foil, lift the cookie from the pan. Re-line the pan and repeat with the remaining dough.
- 4. Soften ice cream. Fold in lemon curd and remaining lemon peel. Line the same baking pan with plastic wrap. Place one baked cookie square in pan. Spread with ice cream mixture. Top with remaining cookie square. Cover. Freeze for 4 hours. Cut into 16 squares while frozen. Roll sides in crushed lemon candies if desired.

Source: www.bhg.com/recipe/lemon-bar-cookie-ice-cream-sandwiches/

Sources

National Center for Home Food Preservation: http://nchfp.uga.edu/ USDA Complete Guide to Home Canning, 2015 Ball Blue Book Guide to Preserving, 2014

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