

A photograph of a loaf of bread, a bowl of jam, and a slice of bread with jam being spread on it. The loaf is on the left, the bowl is on the right, and the slice is in the foreground. The background is a dark blue cloth.

Never Buy Jam Again

by Melissa K. Norris

Favorite
old-fashioned
low-sugar jam and
jellies without store-
bought pectin

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**Favorite old-fashioned low sugar jam and jellies
without store-bought pectin**

Melissa K. Norris

Cover Image by Michelle Visser

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Published by Pioneering Today LLC

Rockport, WA 98283

Readers are advised to do their own research and to stay up to date with safe canning and food preservation techniques.

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Welcome!

Making sure I feed my family wholesome foods without food dye, high fructose corn syrup, no GMO ingredients, and without copious amounts of sugar is very important to me, and I'm willing to bet, to you too.

The problem with most jam and jelly recipes is they use as much, or more sugar, than actual berries. While there are a few commercially available pectins that do allow you to use little or no sugar and aren't derived from GMO ingredients, it is still an added cost.

When I was growing up, we picked all our own berries and fruit from our backyard and surrounding land. Blackberries (they're actually labeled a noxious weed here they're so invasive) and small strawberries grow wild here. Summer months were filled with picking berries for jam and jelly.

However, we didn't have the extra money to buy pectin and my grandmother (who lived and raised her children during the Great Depression) never used it a day in her life. Thankfully, she taught my mother (her daughter-in-law) how to use natural pectin sources.

The recipes you'll find in here, along with the troubleshooting section, will guide you to making your own low sugar no store-bought pectin jams and jellies. This is one of many items we never purchase from the store... and now you don't have to either.

Enjoy!

Strawberry Jam

8 cups rinsed, hulled, and mashed strawberries

3 cups sugar

Zest from 2 lemons

1/4 cup lemon juice

Instructions:

1. Wash jars and bands in hot soapy water. Place canning lids in a sauce pan, cover with water, and heat on medium low heat. Fill water bath canner with water and put on medium heat.
2. Mash berries with a potato masher, blender, or immersion blender to desired consistency. I prefer mine chunky, but my husband likes it more pureed.
3. Place berries, sugar, lemon juice, and lemon zest into large pot. Stir until well combined. Bring berries to a boil. Stir frequently to keep sugar from scorching.
4. Simmer on a low boil for 15 minutes. You can test the set of the jam by the sheeting test. Place a metal spoon in the freezer when you begin making your jam.
5. After the 15 minutes of boiling, use the chilled metal spoon to ladle out a spoonful of jam. Hold the spoon and watch the way the jam drips off of the spoon. If its little individual drops, jam is not set, if it's big goops, it's almost there, allow it to simmer for 5 minutes and check again. If it comes off the spoon in a sheet or doesn't really drop off at all, then jam is set, yank that baby off the heat.
6. Jam will continue to thicken up, or set in canning lingo, as it cools.

7. Place jars on a dish towel. Fill jars with a ¼ inch from the top with jam. A canning funnel will be your best friend during this part. With a clean damp towel, wipe down rim of jar. Place lids on, then bands, and screw down to finger tight.
8. Immerse jars in water bath canner inside the canning rack, making sure water covers the tops of the jars by 1 to 2 inches. Once water is boiling, set timer for 10 minutes and allow jars to process.
9. When time is up, turn off heat. After 5 minutes remove jars from canner. Place on a towel folded in thirds in a draft free area. Allow to cool and set overnight or for at least 12 hours. Check seals. If the center of the lid gives, then store in the fridge and eat soon.
10. If jars are sealed, wipe down with a damp cloth and store in the pantry out of the light for up to a year.

Makes approximately 4 pints.

Note: Always inspect your jars of jam and jelly before using. If the seal is broken, jar is leaking, off odor, off appearance, or any signs of mold, do not eat or taste it. Throw it out. Check the seal when you go to use a jar, even if it sealed when you put it in the pantry. Seals can sometimes come undone over time.

Cherry Jam

5 cups pitted and chopped cherries

2 & 1/2 to 3 cups sugar (depending on how sweet your cherries are and your preference)

5 tablespoons lemon juice

Instructions:

1. Wash, remove stems, and pit cherries. Get the cherry pitter!
2. Roughly chop up cherries. Place chopped cherries in a large stock pot. Add 1/2 cup water to cherries. Bring to a boil and allow to simmer for 15 minutes, stirring occasionally. You'll see the cherries begin to break down and thicken.
3. Stir in sugar and lemon juice, mixing well. Bring to a full rolling boil, stirring constantly. Sugar will scorch quickly if not kept moving.
4. Boil, uncovered, till thick, about 10 minutes. and has reached the gel point via the sheet test. Remove from heat and pour into hot jars.
5. Note: It's set when it sticks to the back of a metal spoon. This is called sheeting. Look at the jam dripping off the edge of the spoon. It should look like a "sheet" of jam, not a bunch of individual drops. Cherry jam is not meant to be extremely thick. It's a thinner jam, excellent on pancakes, waffles, toast, etc.
6. Wipe rims with a damp towel, put on lids and bands. Submerge in hot water bath and process for 15 minutes.

7. Take off of heat and let sit for 5 minutes before moving to a folded towel. Let sit for at least 12 hours before checking seals on jars. Then store in a cool dark place for up to a year. If any jars didn't set, store in fridge.

Want to make this into cherry freezer jam instead? Simply put into freezer containers after jam has reached the gel point and freeze instead of processing via the water bath.

Blueberry Jam

4 cups pureed blueberries

1 $\frac{1}{4}$ cups sugar (I used organic dehydrated cane juice)

zest of 2 limes

$\frac{1}{4}$ cup lime juice

Instructions:

1. Wash jars and bands in hot soapy water. Place canning lids in a sauce pan, cover with water, and heat on medium low heat. Fill water bath canner with water and put on medium heat.
2. Mash berries with a potato masher, blender, or immersion blender to desired consistency.
3. Place berries, sugar, lime juice, and lemon zest into large pot. Stir until well combined. Bring berries to a boil. Stir frequently to keep sugar from scorching.
4. Simmer on a low boil for 20 minutes. You can test the set of the jam by the sheeting test. Place a metal spoon in the freezer when you begin making your jam.
5. After the 20 minutes of boiling, use the chilled metal spoon to ladle out a spoonful of jam. Hold the spoon and watch the way the jam drips off of the spoon. If its little individual drops, jam is not set, if it's big goops, it's almost there, allow it to simmer for 5 minutes and check again. If it comes off the spoon in a sheet or doesn't really drop off at all, then jam is set, yank that baby off the heat.
6. Jam will continue to thicken up, or set in canning lingo, as it cools.
7. Place jars on a dish towel. Fill jars with a $\frac{1}{4}$ inch from the top with jam. A canning funnel will be your best friend during this part. With a clean damp towel, wipe down rim of jar. Place lids on, then bands, and screw down to finger tight.

8. Immerse jars in water bath canner inside the canning rack, making sure water covers the tops of the jars by 1 to 2 inches. Once water is boiling, set timer for 10 minutes and allow jars to process.
9. When time is up, turn off heat. After 5 minutes remove jars from canner. Place on a towel folded in thirds in a draft free area. Allow to cool and set overnight or for at least 12 hours. Check seals. If the center of the lid gives, then store in the fridge and eat soon.
10. If jars are sealed, wipe down with a damp cloth and store in the pantry out of the light for up to a year.

Makes 3 six-ounce jelly jars of jam. You may substitute lemons for lime.

Do not alter the amount of lime juice, but you may increase sugar if desired to taste.

Plum Jam

10 cups pitted and halved plums (leave the peels on)

4 to 5 cups sugar (to your taste)

2 cups water

Instructions:

1. Wash jars and bands in hot soapy water. Place canning lids in a sauce pan, cover with water, and heat on medium low heat. Fill water bath canner with water and put on medium heat.
2. Combine all ingredients in a large sauce pan and bring to a boil. Stir frequently to keep sugar from scorching.
3. Simmer on a low boil for 20 minutes. You can test the set of the jam by the sheeting test. Place a metal spoon in the freezer when you begin making your jam.
4. After the 20 minutes of boiling, use the chilled metal spoon to ladle out a spoonful of jam. Hold the spoon and watch the way the jam drips off of the spoon. If its little individual drops, jam is not set, if it's big goops, it's almost there, allow it to simmer for 5 minutes and check again. If it comes off the spoon in a sheet or doesn't really drop off at all, then jam is set, yank that baby off the heat.
5. Jam will continue to thicken up, or set in canning lingo, as it cools.
6. Place jars on a dish towel. Fill jars with a ¼ inch from the top with jam. A canning funnel will be your best friend during this part. With a clean damp towel, wipe down rim of jar. Place lids on, then bands, and screw down to finger tight.
7. Immerse jars in water bath canner inside the canning rack, making sure water covers the tops of the jars by 1 to 2 inches. Once water is boiling, set timer for 15 minutes and allow jars to process.

8. When time is up, turn off heat. After 5 minutes remove jars from canner. Place on a towel folded in thirds in a draft free area. Allow to cool and set overnight or for at least 12 hours. Check seals. If the center of the lid gives, then store in the fridge and eat soon.
9. If jars are sealed, wipe down with a damp cloth and store in the pantry out of the light for up to a year.

Homemade Jam and Jelly Setting Troubleshooting Section

Learning how to make homemade jam and jelly without store bought pectin and low sugar is a bit different if you're used to relying on commercial pectin and recipes.

Traditionally jam and jelly making is much more frugal and self-sufficient, not to mention healthier without loads of sugar or processed packets.

In order to troubleshoot, you need to know how jam and jelly sets in the first place, aka gels.

For jam or jelly to set it's a **trinity of three things, the amount of sugar, pectin, and acid working together to create the gelling point.**

1. Sugar

Fruit naturally has sugar in it, but not enough to reach the setting point on its own. However, it will set without the tons of sugar called for in many recipes. Start by adding the amount called for in the recipe (my book, [The Made-from-Scratch Life](#)) has some of our family favorites.

Types of Sugar

You can use regular white sugar, evaporated cane juice, organic sugar, brown sugar, and honey with success.

2. Pectin

Our great-grandparents and the pioneers before us didn't have shiny packets or liquid pouches of pectin to make their jam and jelly. And you don't need it either.

Pectin is naturally found in fruits. (See chart on page 18) You can choose a fruit high in pectin or mix a low pectin fruit with a high pectin. For medium to low level pectin

containing fruits, the zest of 2 limes or lemons, or a large green apple (grated with the peel) or some crab apples, will provide you with natural pectin.

3. Acid

We need acid to help not only with our set and gel, but also in order stay safe with canning. The addition of a ¼ cup of lemon or lime juice helps create acidity as well as a wonderful flavor profile.

Safety Note: High acidic foods that are either 4.6 or lower on the pH scale are safe for canning. This means no bananas, melons, dates, or figs in canning recipes. (See chart on page 18)

How to Reach the Gelling Point

Not only do we have to have the correct amount of the three main ingredients, but they must reach the correct temperature in order to set.

Jam and jelly set at a temperature of 220° Fahrenheit (104 °C)

The easiest way to gauge this is to use a candy thermometer. I use mine all the time from making yogurt, candy making (shocker there, right?) and when making jams, jellies, syrups, and fruit spreads.

Altitude note: It's important to note that if you're at high altitude, 1,000 feet above sea level, then you need to subtract 2° for every 1,000 feet above sea level.

If you don't have a candy thermometer you can test it with the Sheet Test below.

How to Test if Your Jam or Jelly is Gelled or Set

The sheet test is the one I use most often. Take a large metal spoon and put it in the fridge or freezer when you begin making your jam. Dip the spoon into the boiling jam and hold it up so that the spoon is sideways and the jam can drip off the side/edge of the spoon.

If it just runs off, it's not ready. Large drops mean you're almost there, and the sheeting is when the jelly/jam drips off the spoon in one sheet, instead of individual drops, hence the name "sheet test."

What to do if Jam or Jelly Isn't Reaching the Correct Temperature or Setting?

Option 1:

Let it cook longer. Let it cook for 5 minutes and test it again. I generally have to let my no store-bought pectin recipes cook for 20 minutes but start testing at 10 minutes of simmering time to avoid going over the gel or set point.

Option 2:

Add more sugar. If you've let your jam cook for 15 minutes and it's not showing signs of gelling, I would suggest adding a 1/4 cup more sugar.

Cook for another 3 to 5 minutes, if it's still not gelling, I'd add another 1/2 cup of sugar. This is especially true with the lower sugar recipes I stick with.

Option 3:

Add more acid or pectin source. First, I try adding 1 more tablespoon of lemon or lime juice.

Cook for another 3 minutes and check for the gel or set.

I use the above options in their numbered order. Most of the time the addition of the sugar in option 2 will get the recipe to the gelling point.

Wait, once cooled my jam and jelly is too runny

If you thought your jam/jelly had set, but upon cooling realize it's not really "set" you have two options.

Option 1:

Go ahead and can it up as syrup.

Option 2:

Put it back in the pot, bring it to a boil, and add a 1/2 cup more sugar or more of a natural pectin source, such as more grated citrus peel or grated up green apple.

Pectin and Fruit Acidity Level Chart

Fruit* assumption fruit is ripe	PH	Pectin Level: High/Low	Pectin Level: Percent
Apple	3.3-4	High (green)/Medium (ripe)	.71-.84
Apricot	3.3-4.8	Low	.71-1.32
Blackberry	3.85-4.5	High	.68-1.19
Blueberry	3.12-3.33	Low	
Cherry	3.2-4.54	Medium (sour)/Low (sweet)	.24-.54
Chokeberry, Black (aka Ariona)	3.3-3.7	Low	
Crab Apple		High	
Cranberry	2.3-2.5	High	
Currant	2.9	High	
Elderberry	3.8-4.5	Medium	
Fig	5.05-5.98	Low	
Gooseberry	2.8-3.1	High	
Grape	2.8-3.82	High (wild)/Medium (Concord)/Low (others)	.09-.28
Grapefruit	3.00-3.75	High (skins)/Low (flesh)	3.3-4.5
Kiwi, Hardy	3.61-3.75	Low	
Kumquat	3.64-4.25	Medium	

Fruit	PH	Pectin Level: High/Low	Pectin Level: Percent
Lemon	2.2- 2.4	High (skins)/Low (flesh)	2.8-2.99
Lime	2-2.8	High (skins)/Low (flesh)	
Lingonberry	2.95- 3.18	High	
Loganberry	2.7- 3.5	Medium	0.59
Lychee	4.7- 5.01	Low	
Mango	3.4- 4.8	Low	
Mulberry	5.6	Medium	
Nectarine	3.92- 4.18	Low	
Orange	3.69- 4.34	High (skins)/Low (flesh)	2.34- 2.38
Papaya	5.2-6	High	
Peach	3.3- 4.05	Low	
Pear	3.5- 4.6	Low	
Persimmon	4.42- 4.7	High	
Plum	2.8- 4.3	High (most)/Low (Italian)	
Pomegranate	2.93- 3.2	High	
Quince	3.12- 3.4	High	
Raspberry	3.22- 3.95	Low	0.97
Rhubarb	3.1- 3.4	Medium	
Strawberry	3-3.9	Low	
Tangerine	3.32- 4.48	High (skins)/Low (flesh)	

Filling your pantry with home canned goodies from items you've raised yourself is something I never grow tired of.

To learn more about stocking the larder like great-grandma did, but with up to date and modern tools, click for information on [The Pioneering Today Academy here](#).

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