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How to Make Homemade Kumquat Jam or Marmalade - Easily!



Making and canning your own kumquat jam (sometimes misspelled cumquat or even comquat) or marmalade is quite easy. Just scroll down this page to see how to make a kumquat jam that you can store on your counter or shelf until you are ready to open it. The recipe is in easy steps and completely illustrated. Kumquats are typically available from November through June in the US, particularly California, Texas and Florida. The kumquat is a small orange fruit of the citrus family. It is oblong and about the size of a small plum; the rind is golden-orange, the flesh is rather dry and the seeds are small. When fully ripe, kumquats can be eaten raw, often sliced and added to salads and fruit cups. More commonly they are cooked whole in a sugar syrup, candied, or made into jam or marmalade (recipe below)

Answers to common questions and problems are found [at the bottom of this page](#), and many more on [this page of Jam and Jelly FAQs](#).

I've added [free labels for your jars here](#), in a Word format! Just download, edit, and print in label paper.

Ingredients

- **Fruit** - 2 pounds kumquats (about 2 quarts)
- **Water:** 6 cups water; Better yet, use orange juice instead of water. The orange juice type with extra pulp makes the flavor better than just using water
- **Lemon juice:** $\frac{1}{2}$ cup lemon juice
- **Pectin** (it's a natural product, made from apples and available at grocery stores (season - spring through late summer) and local "big box" stores. It usually goes for about \$2.00 to \$2.50 per box. [See here for more information about how to choose the type of pectin to use.](#)
- **Jar funnel** (\$2 at Target, other big box stores, and often grocery stores; and available online - see this page) or order it as part of the kit with the jar grabber.
- **Sugar** - About 5 cups of dry, granulated (table) sugar (yes, you can substitute honey or agave, but artificial sweeteners, like Splenda or Aspartame generally don't work well)

Equipment

- **At least 1 large pot;** I prefer 16 to 20 quart lined or stainless steel pots for easy cleanup.
- **Large spoons and ladles**
- **1 Canner** (a huge pot to sterilize the jars after filling (about \$30 to \$35 at mall kitchen stores, sometimes at big box stores and grocery stores.). Note: [we sell canners and supplies here, too - at excellent prices](#) - and it helps support this web site!
- **Ball jars** (Grocery stores, like Publix, Kroger, Safeway carry them, as do some big box stores - about \$7 per dozen 8 ounce jars including the lids and rings)
- **Lids** - thin, flat, round metal lids with a gum binder that seals them against the top of the jar. They may only be used once.

- **Rings** - metal bands that secure the lids to the jars. They may be reused many times.
- **Jar grabber** (to pick up the hot jars)- Big box stores and grocery stores sometimes carry them; and it is available online - see this page. It's a tremendously useful to put jars in the canner and take the hot jars out (without scalding yourself!). The kit sold below has everything you need, and at a pretty good price:



Optional stuff:

- **Foley Food Mill** (\$25) - not necessary; useful if you want to remove seeds (from blackberries) or [make applesauce](#).
- **Lid lifter** (has a magnet to pick the lids out of the boiling water where you sterilize them. (\$2 at big box stores or it comes in the kit at left)

Jam-making Directions

This example shows you how to make Kumquat jam. The yield from this recipe is about 8 eight-ounce jars (which is the same as 4 pints).

Step 1 - Pick the kumquats! (or buy them already picked)

If you have your own trees (typically in Florida, Texas or California) or have a local farm to pick your own, you can obviously get better quality fruit!

As mentioned in the Ingredients section; you may use frozen kumquats (those without syrup or added sugar); which is especially useful if you want to make some jam in the off-season.

How much fruit?

Jam can ONLY be made in rather small batches - about 6 to 8 cups at a time - like the directions on the pectin say, DO NOT increase the recipes or the jam won't "set" (jell, thicken). (WHY? Alton Brown on the Food Channel says pectin can overcook easily and lose its thickening properties. It is easier and faster to get an even heat distribution in smaller batches.

Step 2 - Wash the jars and lids



Now's a good time to get the jars ready, so you won't be rushed later. The dishwasher is fine for the jars; especially if it has a "sterilize" cycle, the water bath processing will sterilize them as well as the contents! If you don't have a dishwasher with a sterilize cycle, you can wash the containers in hot, soapy water and rinse, then sterilize the jars by boiling them 10 minutes, and keep the jars in hot water until

they are used.

NOTE: If unsterilized jars are used, the product should be processed for 5 more minutes. However, since this additional processing can result in a poor set (runny jam), it's better to sterilize the jars.

Put the lids into a pan of hot, but not quite boiling water (that's what the manufacturer's recommend) for 5 minutes, and use the magnetic "lid lifter wand" to pull them out. Leave the jars in the dishwasher on "heated dry" until you are ready to use them. Keeping them hot will prevent the jars from breaking when you fill them with the hot jam.

Step 3 -Wash the fruit!

I'm sure you can figure out how to wash the kumquats in plain cold water.

Step 4 - Chop the fruit



Finely chop the kumquats and measure them before dropping them into a large stew pot. Chop up enough to make 2 quarts (which is 8 cups)



chopped fruit. That will probably take about 24 kumquats, but it does vary! If you want to make marmalade, instead of jam, cut kumquats in cartwheel slices with a very sharp knife, to make slices thin as possible.

Discard seeds, stems and the white center part.



Step 5 - Cook the kumquats until tender

Put the chopped or sliced fruit in 8-quart kettle. Add the 6 cups of water (or orange juice) and $\frac{1}{2}$ cup lemon juice. Bring to a quick boil, then turn down the heat and cook gently for 1 hour, uncovered.

If peel is not tender in 1 hour, continue simmering until tender.



Step 6 - Let stand overnight

The Ball Blue book and many recipes suggest that the set is improved by allowing the mixture to stand, in a cool room or fridge for 12 to 18 hours.

Step 7 - Jam or marmalade?

If you want seedless, skimless jam, you may need to run the crushed cooked kumquats through a Foley food mill (at right). They cost about \$30. If you want marmalade, just move on to the next step!

Step 8 - Measure out the sugar

Measure out 5 cups of sugar. Of that 5 cups, remove 1/4 cup to use in the next step to mix with the pectin.

You can substitute honey or agave, but artificial sweeteners, like Splenda or Aspartame generally don't work well)

Step 9 - Mix the kumquats with the pectin and cook to a full boil



Measure the cooked kumquats. Add water, as necessary, to make a total of 7 cups of the cooked kumquat puree with added water. Put back in pot. Stir the pectin into the kumquats and put the mix in a big pot on the stove over medium to high heat (stir often enough to prevent burning). It should take about 5 to 10 minutes to get it to a full boil (the kind that can not be stirred away).

Why use pectin? You may run into grandmotherly types who sniff "*I* never used pectin!" at you. Well, sure, and their generation took a horse and buggy to work, died of smallpox and ate canned meat and green beans that tastes like wet newspapers. Old fashioned ways are not always better nor healthier. Pectin,



which occurs naturally in fruit, is what makes the jam "set" or thicken. The pectin you buy is just natural apple pectin, more concentrated. Using pectin dramatically reduces the cooking time, which helps to preserve the vitamins and flavor of the fruit, and uses much less added sugar. But, hey, if you want to stand there and stir for hours, cooking the flavor away, who am I to stop you! :) Having said that, there are some fruits that have naturally high amounts of pectin ([see this page for a list](#)) and they simply don't need much or even any added pectin.

Notes about pectin: I usually add about 20% more pectin (just open another pack and add a little) or else the jam is runnier than I like. With a little practice, you'll find out exactly how much pectin to get the thickness you like.

Another tip: use the no-sugar needed pectin. You can still add sugar to it and it cuts the amount of sugar you need from 7 cups per batch to 4 cups or less! And it tastes even better! On the other hand; I have never had success with the No-sugar pectin without adding ANY sugar. It always turned out runny and bland. You might want to try using the no-sugar recipe with a mixture of sugar and Splenda; sugar and white grape juice, or just white grape juice - that will cut down the sugar, but still preserve the flavor.



Is your jam too runny? Pectin enables you to turn out perfectly set jam every time. Made from natural apples, there are also low-sugar pectins that allow you to reduce the sugar you add by almost half! [Get it here at BETTER prices!](#)

Step 10 - Get the lids warming in hot (but not boiling) water

<http://pickyourown.org/kumquat-jam.php>



Lids: put the lids into a pan of hot water for at least several minutes; to soften up the gummed surface and clean the lids.

Need lids, rings and replacement jars?



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Step 11 - Add the remaining sugar and bring to a boil again for 1 minute



When the kumquat-pectin mix has reached a full boil, add the rest of the sugar (about 5 cups of sugar per batch of kumquats) and then bring it back to a boil and boil hard for 4 minutes... If you bring it back to a full boil fairly slowly (on medium heat rather than high) that will help reduce foaming.

Remove from heat.

Step 12 - Skim any excessive foam



Foam... What is it? Just jam with a lot of air from the boiling. But it tastes more like, well, foam, that jam, so most people remove it. It is harmless, though. Some people add 1 teaspoon of butter or margarine to the mix in step 6 to reduce foaming, but food experts debate whether that may contribute to earlier spoilage, so I usually omit it and skim.



But save the skimmed foam! You can recover jam from it to use fresh! [See this page for directions!](#)

(The photo is from strawberry jam, that's why it is red - I forgot to take a picture of this step with kumquats!)

Step 13 - Testing for "jell" (thickness)

I keep a metal tablespoon sitting in a glass of ice water, then take a half spoonful of the mix and let it cool to room temperature on the spoon. If it thickens up to

the consistency I like, then I know the jam is ready. If not, I mix in a little more pectin (about 1/4 to 1/2 of another package) and bring it to a boil again for 1 minute.

Notes about "set" (thickening or jell): It takes 3 ingredients for jams and jellies to set: pectin, sugar and acidity. The amount of pectin that is naturally occurring in the fruit varies from one type of fruit to another and by ripeness (counter intuitively, unripe contains more pectin). [See this page](#) for more about pectin in fruit. It takes the right balance, and sufficient amounts of each of pectin, sugar and acidity to result in a firm jam or jelly. Lastly, it takes a brief period (1 minute) of a hard boil, to provide enough heat to bring the three together. Generally speaking, if your jam doesn't firm up, you were short in pectin, sugar or acidity or didn't get a hard boil. That's ok - you can "remake" the jam; see [this page](#)!

Step 14 - Fill the jars and put the lid and rings on

Fill them to within $\frac{1}{4}$ -inch of the top, wipe any spilled jam off the top, seat the lid and tighten the ring around them. Then put them into the boiling water canner!

This is where the jar tongs come in really handy!



Step 15 - Process the jars in the boiling water bath

Keep the jars covered with at least 2 inches of water. Keep the water boiling. In general, boil them for 5 minutes, which is what SureJell (the makers of the pectin) recommend. I say "in general" because you have to process (boil) them longer at higher altitudes than sea level, or if you use larger jars, or if you did not sterilize the jars and lids right before using them. The directions inside every box of pectin will tell you exactly. The directions on the



pectin tend to be pretty conservative. Clemson University says you only need to process them for 5 minutes. I usually hedge my bets and start pulling them out after 5 minutes, and the last jars were probably in for 10. I rarely have a jar spoil, so it must work. But you don't want to process them too long, or the jam will turn dark and get runny. See the chart below for altitude adjustment to processing times, if you are not in the sea level to 1,000ft above sea level range.

Note 1: If you plan to eat the jam immediately, or don't have canning equipment, you can let it cool, then store it in the fridge or freezer! It will keep for a month or two in the fridge and almost indefinitely in the freezer

Note 2: Some people don't even boil the jars; they just ladle it hot into hot jars, put the lids and rings on and invert them. No authority I know recommends this, and putting the jars in the boiling water bath REALLY helps to reduce spoilage! To me, it makes little sense to put all the working into making the jam and then not to process the jars to be sure they don't spoil!

Recommended process time for kumquat jams in a boiling water canner.				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Half-pints or Pints	10 min	15	20

Step 16 - Remove and cool the jars - Done!

Lift the jars out of the water and let them cool without touching or bumping them in a draft-free place (usually takes overnight) You can then remove the rings if you like. Once the jars are cool, you can check that they are sealed verifying that the lid has been sucked down. Just press in the center, gently, with your finger. If it pops up and down (often making a popping sound), it is not sealed. If you put the jar in the refrigerator right away, you can still use it. Some people replace the lid and reprocess the jar, then that's a bit iffy. If you heat the contents back up, re-jar them (with a new lid) and the full time in the canner, it's usually ok.

It may take up to two weeks for the marmalade to set and thicken up. It will be runny until then!

Once cooled, they're ready to store. I find they last about 18 months. After that, they get darker in color and start to get runny. They still seem safe to eat, but the flavor is bland. So eat them in the first 12 to 18 months after you prepare them!

**Summary - Cost of Making Homemade
Kumquat Jam or Marmalade - makes 8 jars,
8 oz each****

Item	Quantity	Cost in 2009	Source	Subtotal
fresh whole kumquats	about 24	?	Pick your own	\$
Canning jars (8 oz size), includes lids and rings	8 jars	\$7.50/dozen Lids alone are about \$1.25 per dozen	Grocery stores, like Public, Kroger, Safeway and sometimes, Big Lots, local hardware stores and big box stores	\$5.00
Sweetener - see step 4	4 cups	\$1.75	Grocery stores, like Public, Kroger, Safeway and sometimes, Big Lots, local hardware stores and	\$1.75

			big box stores	
Pectin (no-sugar, low sugar or regular, dry)	1 and a third boxes	\$2.10 per box	<p>Sure-Jell No-Sugar needed pectin</p> <p>Ball / Jarden No-Sugar needed pectin</p> <p>Pomona Universal Pectin.</p> <p>local "big box" stores, sometimes Big Lots and local hardware stores, and usually grocery stores, like Publix, Kroger</p>	\$2.80
Total				<p>\$20.55 total or about \$2.56 per jar</p> <p>(if you already have the jars, and just need new lids: \$1.82 per jar</p> <p>And if you grow your own</p>

				strawberries, it's almost free!
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** - This assumes you already have the pots, pans, ladles, and reusable equipment. Note that you can reuse the jars! Many products are sold in jars that will take the lids and rings for canning. For example, Classico Spaghetti sauce is in quart sized jars that work with Ball and Kerr lids and rings- some authorities do not recommend these, saying they are more prone to break, and while I have found that is true of mayonnaise jars, I have found the Classico spaghetti jars to be pretty sturdy.

Additional information about kumquats:

- [Perdue University](#)
- [Kumquat Festival in Dade City, Florida](#)
- [Kumquat Growers association](#)
- [New York Times story about kumquats](#)
- Nutritional information of fresh kumquats:

Food Value Per 100 g of Edible Portion (*raw*)*

Calories	274
Protein	3.8 g
Fat	0.4g
Carbohydrates	72.1 g
Calcium	266 mg
Phosphorus	97 mg

Iron	1.7 mg
Sodium	30 mg
Potassium	995 mg
Vitamin A	2,530 I.U.
Thiamine	0.35 mg
Riboflavin	0.40 mg
Niacin	
Ascorbic Acid	151 mg

*According to analyses published by the United States Department of Agriculture.

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FAQs - Answers to Common Questions

- **As my jars are cooling after i take them out of the canner, they sometimes make a popping or hissing noise. Is this normal and safe?**
Yes, the lids are designed to flex and that's actually a key selling point. You can tell if a jar hasn't sealed properly (after it has cooled completely) if the lid flexes and makes a popping sound when you press the center of the lid with your finger. The popping sounds while it is cooling is the lid being sucked down by the vacuum that is forming inside the jar - which a normal part of the sealing process. Hissing sounds are usually just escaping steam or hot water evaporating on hot surfaces, also normal!

- **Why should cooked jelly be made in small batches?**

If a larger quantity of juice is used, it will be necessary to boil it longer thus causing loss of flavor, darkening of jelly, and toughening of jelly. It really doesn't work. Trust me; I've tried many times!

- **Can I use frozen kumquats instead of fresh?**

Yep! Raspberries can be particularly hard to find fresh and are expensive! Frozen kumquats work just fine, and measure the same. Just be sure to get the loose, frozen whole fruit; not those that have been mushed up or frozen in a sugar syrup!

- **When I used store-bought strawberries, and didn't crush them much, I got separation of the fruit from the liquid, and floating fruit in the jars? What happened?**

The problem is the store bough are much less solid; more airy - partially due to the varieties grown for shipping, partly due to being picked more unripe, and partly due to drying out a bit during shipping. So they are less dense than the sugar solution surrounding them. Add to this that your didn't crush them as much.. and you get floating! They should taste ok; just stir them up when you open them.

So, if you must use store bought, crush them more and simmer them a few minutes longer (before adding the sugar) and that should at least reduce the floating!

- **Should jelly be boiled slowly or rapidly?**

It should be boiled rapidly since long, slow boiling destroys the pectin in the fruit juice.

- **What do I do if there's mold on my jellied fruit product?**

Discard jams and jellies with mold on them. The mold could be producing a mycotoxin (poisonous substance that can make you sick). USDA and microbiologists recommend against scooping out the mold and using the remaining jam or jelly.

- **Why did my jellied fruit product ferment, and what do I do?**

Jellied fruit products may ferment because of yeast growth. This can occur

if the product is improperly processed and sealed, or if the sugar content is low. Fermented fruit products have a disagreeable taste. Discard them.

- **What happens if my jam or jelly doesn't gel?**

[Remaking cooked runny jam or jelly instructions can be found on this page](#)

- **Could you tell me why my JAM is thicker then the store bought?**

The natural pectin content of fresh fruit varies, so it is possible the the variety of fruit that you used has more natural pectin, making it thicker. But there's an easy answer - just add less pectin next time. You'll have to experiment to find how much pectin makes the consistency you like. Most people seem to like their jam thick, so you may to need to only use 3/4 of a pack of pectin per batch.

- **Must I use a water bath method to make jam? Can I use my pressure canner or is it not really necessary?**

Yes, you should use a water bath method; it cuts the spoilage rate down to almost zero. There are people who don't, by just inverting the jars, but unless your are absolutely scrupulously clean, you will get spoilage, and there is still a risk of food poisoning, albeit it smaller than with other canned products. Jams only need 5 minutes in the water bath anyway, thanks to the very high sugar content combined with the acidity.

Either water bath or pressure method works. For making jam, the water bath is easier and much faster. You needn't buy a water bath canner, if you already have a pressure canner, since you can use your pressure canner as a water bath canner, by simply not sealing it (allowing the vents to remain open, not putting the weight on it).

- **What is the best way to de-seed kumquats for jam? I heard a few different ways. A food mill, a ricer, and cheese cloth.**

For large seeds (blackberries, apples, and larger) I find a Foley Food Mill works best - it's certainly faster and easier than the other methods.

Raspberry and smaller seeds are a real pain. They get stuck in (and clog) or pass through a food mill. The Villaware mill has a smaller screen that works great for them! [See this page for more information about both strainers.](#)

Cheesecloth and jelly strainers are messy, take forever and you lose most of

the pulp. For these, I find a metal sieve or colander (with small enough holes) and a spatula to help mash them and push the pulp through, is best. Also, heating the mashed up berries almost to boiling really helps to separate the seeds and pulp.

- **Do you have a recipe for strawberry-rhubarb jam using honey for sweetener and using pectin as a thickener?**

I haven't tried it, but it ought to be possible, as the primary sugars in honey are fructose and glucose. With a no-sugar pectin, it should work well, using the usual honey-to-sugar substitution ratios that you use elsewhere. I'd estimate, that with a no-sugar pectin, you could use 2 cups of honey per batch (of 6 cups of mashed fruit) and get a pretty good result. If anyone makes jam with honey and has any tips, [write me](#), and I'll share them here.

- [Click here to see our complete list of frequently asked questions on this page!](#)

Other Equipment:

From left to right:

1. Jar lifting tongs - helpful to pick up hot jars
2. Lid lifter - to remove lids from the pot of hot water
3. Lid - disposable - you may only use them once
4. Ring - holds the lids on the jar until after the jars cool - then you don't need them
5. Canning jar funnel - to fill the jars

