

Seville Orange Marmalade



Ingredients

1.4 kg bitter oranges (6 to 12 oranges, depending on the size of the oranges)
6 cups water
2 lemons - 1 regular lemon and 1 meyer lemon
5 cups granulated sugar white to taste ()

Equipment

bowl
frying pan
paper towels

	ladle
	oven
	pot
	measuring cup
	cheesecloth
	canning jar
	candy thermometer
	chefs knife
	teapot
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— 	rections
	Preparing the fruit
	Scrub the oranges clean. Discard any that are damaged or soft.
	Cut the oranges in half and juice them. As you juice the oranges, save the seeds.
	Put the seeds into a separate bowl and set them aside. You will use the seeds to make natural pectin for the marmalade
	Cut the peels into narrow strips: Taking a clean juiced orange half rind, use a spoon to dig out segment membranes still attached to the inside. Put a few of these in with the seeds (segment membranes will also provide pectin).
	Use a sharp chef's knife to thinly julienne the peel. Once you julienne all of the oranges put the cut peels and the juice in a large (8-cup Pyrex works great) measuring cup.
	Juice the regular lemon and add this juice to the orange peels and juice. Save the seeds for making pectin.
	Cut the Meyer lemon in eighths, lengthwise.
	Remove the seeds and as much of the inner membranes as you can easily remove.
	Cut the lemon segments crosswise into triangular pieces. (See the steps in the Meyer lemon marmalade recipe for photo descriptions.)
	Add the cut Meyer lemon to the measuring cup with the oranges.
	Add the Meyer lemon seeds to the Seville orange seeds and membranes.
	You should have 5 to 6 cups combined, of citrus peels and juices.

Put seeds into cheesecloth or muslin bag:
Put the citrus seeds and membranes into 4 layers of cheesecloth, tied up tightly with string, or into a muslin jelly bag. (I made a "pectin bag" which I use for making marmalade, by sewing up piece of plain muslin cloth into a bag with a drawstring at the end.)
First stage of cooking
Put orange mixture into pot, add water:
Place the orange and lemon juices and cut peels into a large, wide (6 to 8-quart) thick-bottomed pot.
Add 6 cups of water. (At this point you can soak overnight if you want. It will help the peels cook faster.)
Secure pectin bag:
Place the cheesecloth or muslin bag containing the citrus seeds and pulp into the pot, submerging it in the liquid, and secure the string at the other end to the pot handle.
As the mixture cooks, the pectin from the seeds and membranes will be extracted into the mixture.
Boil until the peels are soft: Bring mixture to a boil.
Let boil, uncovered, for 30 minutes (or longer), or until the peels are completely soft and cooked through.
Depending on your particular fruit, it may take more time, and more water, to get to the point where the peels are soft. Once you add sugar to the mixture in the next step, the peels will firm up with the sugar, so it's very important that the peels in this first stage of cooking are completely soft.
Test the orange peels as you go. Take a bite, if the peel is at all firm to the bite, it needs more cooking.
If the water has boiled down and the mixture starts to stick to the bottom of the pot, add more water, a cup at a time.
When the peels are soft, remove from heat.
Remove the pectin bag and place it in a bowl to let cool until it is comfortable to touch.
Measure the fruit and add sugar and pectin
Measure the mixture:
Pour out the mixture from the pot into a large measuring cup. Measure how much of the mixture you have. Depending on how hard of a boil and how long the cooking time, you could

have anywhere from 4 to 5 cups. Return the mixture back to the pan.
Add to the mixture 7/8 cup of sugar for every cup of mixture. So, if you measured 4 cups of mixture, add in 3 1/2 cups of sugar. Once the sugar has dissolved, taste the mixture.
Add more sugar depending on how sweet you want your marmalade to be.
Note that the jelly mixture will reduce further, intensifying both the flavor and the sweetness of the jelly. I typically use 4 cups of sugar for every 4 cups of fruit mixture, which produces a rather tart marmalade. Feel free to use more!
Squeeze pectin from pectin bag: Once your pectin bag has cooled to the point you can handle it, squeeze it like play-doh to extract extra pectin. Grasp a tangerine size portion of the bag and squeeze, pulling the bag away from you with one hand as you hold firmly with the other hand. Work your way around the bag.
"Milk" the pectin until you have released about a tablespoon of pectin. The pectin has the consistency of sour cream.
Add it to the orange mixture.
Second stage of cooking
Boil and check temperature:
Heat the jelly mixture on medium high and bring it to a rapid boil, stirring occasionally, making sure nothing is sticking to the bottom of the pan. Secure a candy thermometer to the side of the pan.
The marmalade may take anywhere from 15 to 30 minutes or so to set. After about 10 minutes, start checking it frequently.
Test to see if the marmalade is at setting point: Once the mixture reaches a temperature of 218°F it is close to the set point. It should set between 218°F and 222°F (or 6 to 10°F above the boiling point at your altitude).
You can tell if the mixture has reached its set point by putting a small amount of the jelly liquid on a chilled plate, and looking for signs of it wrinkling when you push it with your finger tip.
While thermometers aren't always accurate, the wrinkle test works. If the jelly wrinkles on a cold plate, it's ready.
Put several small plates into the freezer to chill. As the marmalade temperature reaches 218°F, start testing it by placing a small amount of the hot jelly on a chilled plate. If the jelly spreads out and thins immediately, it isn't ready. If it holds its shape a bit, that's a good sign.
Let it cool on the plate for a few seconds.

Push up against it with your finger tip. If the jelly sample wrinkles at all, it is time to take the jelly off the heat.
If it wrinkles even just a little, it's ready
When you use a candy thermometer to test the temperature of your mixture, make sure the probe is NOT touching the bottom of the pan. Make sure the indentation on the probe (with modern candy thermometers this is about an inch and a half from the bottom of the probe) is actually surrounded by the mixture. You may have to tilt the pan to one side, to cover the probe sufficiently to get a good reading.
Overcooking a marmalade will result in a caramelized flavor or tough orange peels in your marmalade.
Canning the marmalade
Sterilize the canning jars: There are several ways to sterilize your jars for canning. You can run them through a short cycle on your dishwasher.
You can place them in a large pot (12 quart) of water on top of a steaming rack (so they don't touch the bottom of the pan), and bring the water to a boil for 10 minutes.
Or you can rinse out the jars, dry them, and place them, without lids, in a 200°F oven for 10 minutes.
Sterilize the lids: As the time approaches for the marmalade to be done, boil some water in a tea pot.
Put the jar lids in a glass or ceramic bowl and pour the boiling water over them to sterilize.
Ladle jam into sterilized jars: Once the jelly has reached its set point, remove the jelly pot from the heat.
Let the jelly sit in the pot for a couple minutes (that will help keep the peels from floating in the jars).
Carefully pour or ladle the marmalade into the jars, one at a time, leaving 1/4 inch head space at the top of the jars for a vacuum seal.
Clean rims, secure with lids and jar ring: Wipe the rim clean with a clean, wet paper towel.
Place the lid on the jar, securing with a jar ring. Work quickly.
Process in water bath (optional): If you want, you can process the jars in a hot water bath for 5 minutes to help get a better seal and to help prevent mold. If you used boiling water in an earlier step to sterilize the jars, you can just keep the same set-up for the water bath. You want to make sure there is a rack at the bottom of the pot so that the jars aren't actually resting on the bottom of the pot.

Ш	Allowing the jars to seal: Once you have sealed the jars with a lid and ring, and have water bathed (or not) the jars.
	Let the sit on your kitchen counter. As the marmalade cools, you'll hear a popping noise as a vacuum is created in the headspace of the jars, pulling the lids down.
	Sometimes the marmalade orange peels float to the top of the jar, so to help keep that from happening, turn the jars upside down for half an hour at a time. Keep turning every 30 minutes or so until the marmalade seems stable and the peels are well distributed through the marmalade.

Nutrition Facts



Properties

Glycemic Index: 2.76, Glycemic Load: 15.05, Inflammation Score: -1, Nutrition Score: 1.4726086809583%

Flavonoids

Eriodictyol: 0.01mg, Eriodictyol: 0.01mg, Eriodictyol: 0.01mg, Eriodictyol: 0.01mg Hesperetin: 7.42mg, Hesperetin: 7.42mg, Hesperetin: 7.42mg, Hesperetin: 7.42mg, Naringenin: 4.17mg, Naringenin: 4.17mg, Naringenin: 4.17mg, Naringenin: 4.17mg, Luteolin: 0.05mg, Luteolin: 0.05mg, Luteolin: 0.05mg, Luteolin: 0.05mg, Luteolin: 0.05mg, Kaempferol: 0.04mg, Kaempferol: 0.04mg, Myricetin: 0.04mg, Myricetin: 0.04mg, Myricetin: 0.04mg, Quercetin: 0.12mg, Quercetin: 0.12mg, Quercetin: 0.12mg, Quercetin: 0.12mg

Nutrients (% of daily need)

Calories: 89.8kcal (4.49%), Fat: 0.1g (0.15%), Saturated Fat: 0g (0.03%), Carbohydrates: 23.13g (7.71%), Net Carbohydrates: 22.48g (8.17%), Sugar: 22.5g (25%), Cholesterol: 0mg (0%), Sodium: 1.62mg (0.07%), Alcohol: 0g (100%), Alcohol %: 0% (100%), Protein: 0.26g (0.51%), Vitamin C: 14.49mg (17.57%), Fiber: 0.65g (2.62%), Folate: 8.16µg (2.04%), Vitamin B1: 0.02mg (1.58%), Potassium: 49.69mg (1.42%), Vitamin A: 61.21IU (1.22%), Calcium: 11.94mg (1.19%)