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## **How to Make Homemade Canned Carrots**



Canning your own carrots is easy! The only trick is, you really do need a pressure canner. Every university food science department and the government will tell you that it just is not safe to use the water bath method; it takes the higher temperatures of the pressure canner to kill the botulism bacteria.

BUT, with a pressure canner it's easy. And although a pressure canner costs \$100 to \$200 (see this page for pressure canners models, makes and prices), they last a lifetime, and your children

and grandchildren may be using it. You can also find free information from the USDA in this PDF file (it will take a while to load!) about <u>selecting and using canners</u> here!

So, here's how to can carrots! The directions are complete with instructions in easy steps and completely illustrated. In the winter when you open a jar, the carrots will taste MUCH better than any store-bought canned carrots.

Prepared this way, the jars have a shelf life of about 12 months, and aside from storing in a cool, dark place, require no special attention. If you'd rather freeze your carrots, see my page on <u>how to freeze carrots</u>. Even easier than canning and they will taste just like fresh.. but it does take up space in the freezer.

## Directions for Making Canned Carrots

### Using the Hot Pack Method With a Pressure Canner

### Ingredients

- Carrots (see step 1)
- Salt (optional I don't use any)

### Equipment

- Jar grabber (to pick up the hot jars)
- Jar funnel (\$2 at mall kitchen stores and local "big box" stores, but it's usually cheaper online from our affiliates)
- At least 1 large pot
- Large spoons and ladles
- Ball jars (Publix, Kroger, other grocery stores and some "big box" stores carry them about \$8 per dozen quart jars including the lids and rings)
- 1 Pressure Canner (a large pressure pot with a lifting rack to sanitize the jars after filling (about \$75 to \$200 at mall kitchen stores and "big box" stores, but it is cheaper online; see this page for more information). For low acid foods (most vegetables, you can't use an open water bath canner, it has to be a pressure canner to get the high temperatures to kill the bacteria. If you plan on canning every year, they're worth the investment.

## **Recipe and Directions**

### Step 1 - Selecting the carrots

The most important step! You need carrots that are FRESH and crisp. Limp, old carrots will make nasty tasting canned carrots. Guests will probably throw them at you.. Select filled but tender, firm, crisp carrots. Remove and discard any soft, diseased, or spotted carrots. Select small carrots, preferably 1 inch to 1 and  $\frac{1}{4}$ -



inch in diameter. Larger carrots are often too fibrous and tough.

#### How many carrots and where to get them

You can grow your own, pick your own, or buy them at the grocery store. An average of 17.5 pounds (without tops) is needed per canner load of 7 quarts. An average of 11 pounds is needed per canner load of 9 pints. A bushel (without the tops) weighs about 50 pounds and yields 17 to 25 quarts jars ; an average of 2.5 pounds per quart.

Step 2 - Prepare the jars and pressure canner

## Wash the jars and lids

This is a good time to get the jars ready! The dishwasher is fine for the jars; especially if it has a "sanitize" cycle. Otherwise put the jars in boiling water for 10 minutes. I just put the lids in a small pot



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#### http://www.PickYourOwn.org/canningcarrots.htm

of almost boiling water for 5 minutes, and use the magnetic "lid lifter wand" (available from target, other big box stores, and often grocery stores; and available online - see this page) to pull them out.

## Get a large pot of water boiling



We will use this water to pour over the carrots and fill each jar with liquid, after we've packed them full of carrots. I use the largest pot I have, so that there is plenty of clean, boiling water ready when I need it.

## Get the pressure canner heating up

Rinse out your pressure canner, put the rack plate in the bottom, and fill it to a depth of 4 inches with hot tap water. (of course, follow the instruction that came with the canner, if they are different). Put it on the stove over low heat, with the lid OFF of it, just to get it heating up for later on.

### Step 3 - Wash the carrots!

I'm sure you can figure out how to rinse the carrots in plain cold or lukewarm water.



# Step 4 - Peel the carrots, trim the ends and cut into smaller pieces

A vegetable peeler works great! Then just take a sharp knife and cut of both ends (about 1/4 of an inch, or half the width of an average woman's little finger). Then cut them into pieces of the size you prefer; either crosswise 1/8 thick slices, or lengthwise.

Of course, if your prefer Julianne cut carrots, you can cut the carrots lengthwise in thin strips instead.







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### Step 5 - Cook the carrots for 5 minutes

This is called "hot packing" because we cook the carrots briefly before packing them into the jars. Cover the carrots with boiling water; bring to boil and simmer for 5 minutes.



# Step 6 - Pack the jars and pour boiling water into each packed jar

Fill jars, leaving 1-inch of headspace. Pack the jars fairly tightly, but be sure to leave 1 inch of space at the TOP of the jar. That is called "headspace" and is needed for expansion during heading. Use a ladle or pyrex measuring cup to

carefully fill each packed jar with water from pot of boiling water that they were cooked in. The carrots should be covered and there should still be 1 inch of airspace left in the top of each jar. Be careful not to burn yourself, (or anyone else - children should be kept back during this step!)



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### Step 7 - Put the lids and rings on

Put the lids on each jar and seal them by putting a ring on and screwing it down snugly (but not with all your might, just "snug").

# Step 8 - Put the jars in the canner and the lid on the canner (but still vented)

Using the jar tongs, put the jars on the rack in the canner. By now the water level has probably boiled down to 3 inches. If it is lower than that, add more hot tap water to the canner. When all the jars that the canner will hold are in, out on the lid and twist it into place, but leave the weight off (or valve open, if you have that type of pressure canner).



### Step 9 - Let the canner vent steam for 10 minutes

Put the heat on high and let the steam escape through the vent for 10 minutes to purge the airspace inside the canner.



### Step 10 - Put the weight on and let the pressure build

After 10 minutes of venting, put the weight on and close any openings to allow the pressure to build to 11 pounds.

### Step 11 - Process for 25 minutes

Once the gauge hits 10 pounds, start your timer going - for 25 minutes. Adjust the heat, as needed, to maintain 10 pounds of pressure.

Note: the chart below will help you determine the right processing time and pressure, if you have a different type of canner, or are above sea level.

It is important to learn how to operate your pressure canner by reading the owner's manual that came with your particular canner. If you can not find your owner's manual, you can obtain find one online: Here is where to find some common manufacturer's manuals: <u>Presto canner manuals</u>

or by contacting the company that made your canner. Give the model number to the manufacturer, and they will send you the right manual. Click here for more <u>information about pressure canners and a variety of models you can order</u>.

Recommended process time for carrots in a dial-gauge pressure canner.					
		Canner Pressure (PSI) at Altitudes:			
Jar Size	Process Time	0 - 2,000 ft	2,000 ft - 4000 ft		
Pints	25 min	11 lb	12 lb		
Quarts	30	11 lb	12 lb		

Recommended process time for Carrots in a weighted-gauge pressure canner.

		Canner Pressure (PSI) at Various Altitudes	
Jar Size	Process Time	0 - 1,000 ft	Above 1,000 ft
Pints	25 min	10 ІЬ	15 lb
Quarts	30	10 ІЬ	15 lb

### Step 12 - Turn off the heat and let it cool down

When the processing time from the chart above is up, turn off the heat, and allow the pressure canner to cool and the pressure to drop to zero before opening the canner. Let the jars cool without being jostled. After the pressure

drops to zero (usually, you can tell but the "click" sound of the safety release vents opening, as well as but the gauge. Let the pressure in the canner drop to zero by itself. This may take 45 minutes in a 16-quart canner filled with jars and almost an hour in a 22-quart canner. If the vent is opened before the pressure drops to zero OR if the cooling is rushed by running cold water over the canner, liquid will be lost from the jars. Too rapid cooling causes loss of liquid in the jars!



### Step 13 - Remove the jars

Lift the jars out of the water and let them cool on a wooden cutting board or a towel, without touching or bumping them in a draft-free place (usually takes overnight), here they won't be bumped. You can then remove the rings if you like, but if you leave them on, at least loosen them quite a bit, so they don't rust in place due to trapped moisture. 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. You're done

## Frequently Asked Questions

Q. Is it safe to can carrots in a traditional water bath? If so how long do you do process them?

A. The answer, quite simply is no. Quoting from the <u>Ohio State University</u> <u>Extension's Fact Sheet</u>:

"Pressure canning is the only safe method for home canning vegetables. *Clostridium botulinum* is the bacterium that causes botulism food poisoning in low-acid foods, such as vegetables. The bacterial spores are destroyed only when the vegetables are processed in a pressure canner at 240 degrees Fahrenheit (F) for the correct amount of time.

*Clostridium botulinum* is the bacterium commonly found in vegetables and meats. It is harmless until it finds itself in a moist, low-acid, oxygen-free environment or a partial vacuum. Under these conditions, the bacterium can grow and produce toxins dangerous to people and animals.

Do not process (low acid) vegetables using the boiling water bath because the botulinum bacteria can survive that method.

And Clemson University provides these questions and answers:

**Can fruits and vegetables be canned without heating if aspirin is used?** No. Aspirin should not be used in canning. It cannot be relied on to prevent spoilage or to give satisfactory products. Adequate heat treatment is the only safe procedure.

Is it safe to can carrots in a boiling water bath if vinegar is used? No. Recommended processing methods must be used to assure safety. Recommended processing times cannot be shortened if vinegar is used in canning fresh vegetables. (This does not refer to pickled vegetables.)

Salt and sugar are not preservatives for vegetables: they are added to stabilize and improve flavor, but will not prevent spoilage.

Salicylic acid is also NOT a preservative. The University of Illinois reports:

## Using Aspirin for Canning

Several years ago, a recipe circulated using aspirin to acidify tomatoes and carrots for canning. Aspirin is not recommended for canning. While it contains salicylic acid, it does not sufficiently acidify tomatoes or carrots for safe hot water bath canning. Green carrots are low acid foods and may only be processed safely in a pressure canner. Lemon juice or vinegar is recommended to acidify tomato products for safe water bath processing.

Think of it like smoking. We all know someone who smoke their entire life and lived to be 90. But the cemeteries are filled with the vast majority who didn't. You'll hear people say "my grandmother did it that way for 20 years". But of course, the people who died from food poisoning aren't around and often didn't have descendants to tell their tale...

#### 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
- 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

