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Making and Canning (or freezing) Homemade Spaghetti Sauce from Fresh Tomatoes, with Meat!

Making and canning your own spaghetti sauce is something families remember years later. No store bought spaghetti sauce compares with the taste of that made from your own tomatoes from your garden or fresh-picked from a local farm! In the middle of the winter, you can make a meal with your spaghetti sauce and taste the summer flavor of fresh tomatoes. And yes, you CAN do it with meat, although, frankly, I don't recommend it, for two reasons. First, you need a pressure canner: it can NOT be done safely in a plain water bath canner because the temperatures do not get high enough to kill the bacteria that can attack the meat. Secondly, have you ever eaten canned meat (yes, it's called "Spam"). If canning meats improved or even maintained their flavor, then we'd all be buying canned beef, chicken in a tin, pork whiz, and Turkey ala Can, wouldn't we? I just can the spaghetti sauce without the meat (see this recipe for how to can meatless spaghetti sauce) and make a batch of meatballs separately, freeze them and combine the two when I want to make a meal. OR brown the meat and add it when I use the sauce.

Now, having tried to discourage you from adding meat to the spaghetti sauce your going to can, here's how to do it, in easy steps and completely illustrated. This method is so easy, ANYONE (with access to a pressure canner) can do this!

Ingredients and Equipment

- Tomatoes about 20 lbs (yes, you need a big basketful - you remove the skins, seeds and a lot of the water, so it takes a lot to start.)
- Spaghetti sauce mix or your own seasonings. The Ball spaghetti sauce mix sells for about \$2.00 to \$4.00 per packet. A packet will make about a 7 pint jars. See below for seasonings.
- 1.5 pounds of ground meat ("minced" for you English-types) meat: beef, turkey, chicken or even pork.
- 1 Pressure Canner Note: we sell many sizes and types of canners for all types of stoves and needs - see <u>canning</u> <u>supplies</u>). Tomatoes are on the border between the high-acid fruits that can be preserved in a boiling-water bath and the low-acid fruits, vegetables and meats that need pressure canning, and this recipe requires a pressure canner.

- Pint canning jars (Ball or Kerr jars can be found at Publix, Kroger, Safeway and local "big box" stores - about \$8 per dozen jars including the lids and rings).
 Be sure to get wide mouth jars to fit the pickles in! Pint size works best!
- 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)
- Lid lifter (has a magnet to pick the lids out of the boiling water where you sterilize them. (\$2 at mall kitchen stores and local "big box" stores, but it's usually cheaper online from our affiliates)
- 1 large pot.
- Large spoons and ladles
- Jar funnel (\$3-Grocery stores, like Publix, Kroger and Safeway and local "big box" stores; sometimes even hardware stores)

Process - How to Make Spaghetti Sauce from Fresh Tomatoes, with meat

Step 1 - Selecting the tomatoes

It's fun to go pick your own and you can obviously get better quality tomatoes!

At right is a picture of tomatoes from my garden - they are so much better than anything from the grocery store. And if you don't have enough, a pick-you-own farm is the pace to go! At right are 4 common varieties that will work:

Top left: Beefsteak

Top right: Lemon Boy, yellow

Bottom left: Roma, paste-

Bottom right: Better Boy

type

The picture at right shows the best variety of tomato to use: Roma; also called paste tomatoes. They have fewer sides,

thicker, meatier walls, and less water. And that means thicker sauce in less cooking time!

Also, you don't want mushy, bruised or rotten tomatoes!



Step 2 - Removing the tomato skins

Here's a trick you may not know: put the tomatoes, a few at a time in a large pot of boiling water for no more than 1 minute (30 - 45 seconds is usually enough)

then....



Plunge them into a waiting bowl of ice water.

This makes the skins slide right off of the tomatoes! If you leave the skins in, they become tough and chewy in the sauce, not very pleasant.



Step 3 - Removing seeds and water

After you have peeled the skins off the tomatoes, cut the tomatoes in half. Now we need to remove the seeds and excess water.



Step 4 - Squeeze of the seeds and water

Just like it sounds: wash your hands then squeeze each tomato and use your finger or a spoon to scoop and shake out most of the seeds. You don't need to get fanatical about it; removing just most will do.





Step 5 - Drain the tomatoes

Toss the squeezed (Squozen?:) tomatoes into a colander or drainer, while you work on others. This helps more of the water to drain off. You may want to save the liquid: if you then pass it through a sieve, screen or cheesecloth, you have fresh tomato juice; great to drink cold or use in cooking! By draining the water off now, you'll end up with a thicker spaghetti sauce in less cooking time! And that preserves vitamins (and your sanity).

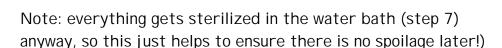


Step 6 - Get the jars and lids sterilizing

The dishwasher is fine for the jars; especially if it has a "sterilize" cycle. I get that going while I'm preparing everything else, so it's done by the time I'm ready to fill the jars.

Be sure to let it go through the rinse cycle to get rid of any soap!

Lids: Put the lids into a pan of boiling water for at least several minutes.



Step 7 - Brown the ground meat

Simply cook the ground meat in a pan (I use a tall pot to contain the splattering). Cook the meat over medium high heat, stirring frequently (if not constantly) for about 10 to 15 minutes, until the no traces of pink remain, and the meat is uniformly browned. Then turn off the heat, cover and set it aside. We won't need it until step

Step 8 - Mix or your own seasoning?





Either works equally well. The spaghetti sauce mix for canning has the advantage of being tested and VERY easy to use. It's basically corn starch, onion powder, salt and seasoning. It doesn't have any preservative to improve the canning, so the advantage is just that it is easier.

Otherwise, use:

1/2 cups chopped onions

2 cloves of garlic, minced

2 Tablespoons diced, fresh OR dried basil

1/4 cup chopped celery

1 teaspoon salt (optional - I don't put any in!)

Mushrooms (also optional): up to 1 lb.

3 Tablespoons of oregano

4 bay leaves

1/2 teaspoon black pepper

2 Tablespoons chopped green peppers

1/4 cup lemon juice (helps to acidify it, not needed if you have a pressure canner)

1/4 red wine (optional) I think a little burgundy

makes it!)

And if you like your spaghetti sauce thick, add tomato paste to thicken it, or boil it down more.

A note about spices: Less spice, especially garlic and onions in canned sauce is better. They

tend to strengthen and sometimes become bitter in storage. So use less when you prepare the sauce and add more when you actually use it, if you want!

Step 9 - Bring the sauce to a gentle simmer

You don't need to overcook it; just bring it to boiling to sterilize it, mix the seasonings and cook down the tomatoes.



Step 10 - Add the browned ground meat.

Just add it to the pot and stir well! Bring back to a boil, and now you simply cook it until it is the thickness that you desire!

Step 11 - Fill the jars with sauces and put the lid and rings on

Fill them to within ¼-inch of the top, seat the lid and hand-tighten the ring around them.

NOTE: if you want to freeze the sauce instead, just fill your freezer containers (I like Ziploc freezer bags in the quart size), fill them completely, eliminate air pockets, seal them and pop them in the freezer. You're done!



Be sure the contact surfaces (top of the jar and underside of the ring) are clean to get a good seal!



Step 12 - Process the jars in the canner

Put them in the canner and follow the directions that come with your canner (generally, you add a specified amount of water, put the jars in, clamp down the lid, and put the weight or dial gauge on. Process the jars according to the table below for your type of canner. Remember to adjust the time if you are at a different altitude other than sea level!

I use a dial-type pressure canner (shown at right) To order one, click on <u>Canning supplies</u> and select the canner that is right for your stove (regular or flat bottomed for glass or ceramic stoves)



Table 1. Recommended process time for Spaghetti Sauce With Meat in a dial-gauge pressure canner.

		Canner Gauge Pressure (PSI) at Altitudes of				
Jar Size	Process Time	0 - 2,000 ft	2,001 - 4,000 ft	4,001 - 6,000 ft	6,001 - 8,000 ft	
Pints	60 min	11 lb	12 lb	13 lb	14 lb	
Quarts	70	11	12	13	14	

Table 2. Recommended process time for Spaghetti Sauce With Meat in a weighted-gauge pressure canner.

		Canner Gauge Pressure (PSI) at Altitudes of		
Jar Size	Process Time	0 - 1,000 ft	Above 1,000 ft	
Pints	60 min	10 lb	15 lb	
Quarts	70	10	15	

Step 13 - 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.



Other Equipment:

From left to right:

- Jar lifting tongs to pick up hot jars
- 2. Lid lifter
 - to remove lids from the pot of boiling water (sterilizing)
- 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



Home Canning Kits



This is the same type of standard canner that my grandmother used to make everything from applesauce to jams and jellies to tomato and spaghetti sauce. This complete kit includes everything you need and lasts for years: the canner, jar rack, jar grabber tongs, lid lifting wand, a plastic funnel, labels, bubble freer, and the bible of canning, the Ball Blue Book. It's much cheaper than buying the items separately. You'll never need anything else except jars & lids! To see more canners, of different styles, makes and prices, click here! For more information and current pricing:

<u>Click here for a larger photo, more information, pricing, ordering, etc.</u>

Average Customer Review:

Summary - Cost of Making Homemade Spaghetti Sauce - makes 7 pint jars, 16 oz each*

	!	J .		
Item	Quantity	Cost in 2009	Source	Subtotal
Tomatoes	20 - 25 lbs (to make about 16 cups of prepared tomato)	free from the garden, or \$0.50 cents at a PYO		\$0.00
Canning jars (pint size, wide mouth), includes lids and rings	7 jars	\$8.00/dozen	Grocery stores, like Publix, Kroger and Safeway and local "big box" stores; sometimes Big Lots and even hardware stores	\$4.50
seasoning	See step 7	\$2.00?	Grocery stores, like Publix, Kroger and Safeway and local "big box" stores	\$2.00
Spaghetti mix	1 packet	\$3.00 per package	Grocery stores, like Publix, Kroger and Safeway and local "big box" stores; sometimes Big Lots and even hardware stores	
Ground meat	1.5 lbs	\$3 to \$5	Grocery store	\$4.00
Total			\$6.50 total or about \$0.95 per jar INCLUDING the jars - which you can reuse!	

^{* -} 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. Note that the Classico's manufacturer does not recommend reuse of their jars: see what they have to say on this page:

Answers to Common Questions

What did I do wrong if my jars spoil?

Tomatoes are a low acid fruit - adding lemon juice helps, processing at least 35 minutes in the water bath canner, or better still, using a pressure canner almost eliminates spoilage. If you don't have a pressure canner, you must boost the acid level of the sauce, by adding 2 tablespoons of lemon juice or 1/2 teaspoon of citric acid per quart of sauce.

I have read in other homemade spaghetti sauce recipes that you need to cook the mixture for at least 4-5 hours. Is this necessary?

I suppose if you really want to make sure that absolutely no vitamins survive, you could cook it that long!:) The only reason people used to tomato sauce that long was the Roma paste-type tomatoes, with thicker walls, meatier with fewer seeds and less water didn't exist, so they had to cook it for hours to get rid of water and thicken it. And of course, modern sauce mixes that contain a little bit of corn starch as a thickener, also help shorten the time.

And for those who want to go strictly organic and au naturale, my method of squeezing out the excess water and seeds eliminates much of the excess juice (which you can save as tomato juice for drinking) and lets you start with a thicker tomato pulp which means much shorter cooking time!

Meat - I noticed you said it is best not to put meat in the sauce, as it might spoil as a child my mom canned all her meat with nothing but salt in it as she had no freezer. I cannot remember a problem with it going bad. She submerged the jars in a canning pot with a wire rack under it and boiled it for 4 hours always making sure the meat in the jar was covered with water so it would not spoil, also the jars kept covered with water at all times for four hours of boiling. "

It is statistically possible to engage in a very dangerous activity and still experience no harm. For example, one of my father's friends charged the beach at I wo Jima in World War 2, (definitely, one of the riskiest things you could do) and yet he survived without a scratch, while 7 of 10 of his platoon died. Canning meat in a water bath is the same.

The problem is that Botulism is not killed by temperatures under 240. Water baths only reach 212. You could boil it for 4 days and the botulism would still survive. By the time you ate the jars, enough may not have grow to make you ill. But it is still very, very dangerous.

I could send you dozens and dozens of statements supporting what I stated above from many universities and food authorities. Here is one example from the <u>University of Maine</u>:

Match the canner to the food

There are two types of home canning methods: boiling-water-bath canners and pressure canners. The type of canner that you use should be based upon the type of food you are preserving. According to UMaine Food ScienceSpecialist Beth Calder, fruits, pickled foods, sauerkraut, marmalades, fruit spreads, jams, jellies, fruit butters (except for pumpkin) and salsa can be safely preserved using the water-bath canning method. "However, make sure you use a scientifically tested recipe from a reputable resource," she says.

All other foods should be preserved using a pressure canner. This is because botulism-producing bacteria produce spores that can survive boiling water temperatures, but are destroyed using a pressure canner with the appropriate time and pressure, which reaches temperatures between 240 and 250 degrees F.

I have a favorite spaghetti sauce recipe that I make in the crockpot. Making it this way reduces the acid so it doesn't do a number on my stomach. Among other things, I add olive oil and marinated short ribs. I marinate the ribs in Italian dressing overnight and then brown them before I add them to the sauce. I use the ribs for flavoring, removing them once the sauce it done. Will I be able to can this sauce once it's done? I usually freeze, but canning in quart jars would be much more convenient. I have both a boiling water canner and a pressure canner

I would doubt that would be safe if canned in a water bath canner. You'd at least need a pressure canner, since you've reduced the acidity and added oil and some meat. The USDA-tested recipe on this page (above) shows you how to safely make a spaghetti sauce with meat, and since you've removed 99% of it, I have little concern about that aspect. So, let's consider the other ingredients that deviate from the recipe above, namely olive oil. I haven't yet found one UDSA-tested or University food science dept-tested recipe that includes olive oil for spaghetti sauce (or any other recipe, for that matter). The USDA says it's very risky to combine it in canning with herbs, but they're silent about it with regard to other vegetables. I'd recommend you omit it from the recipe and add it at the time you use the spaghetti sauce. You haven't provided the details of the recipe of your recipe, but assuming it conforming in proportions and ingredients to the one above, you should be fine to pressure can it.