Canning and Preserving 101



Water bath canning is the method to can HIGH acid foods. This includes foods such as tomatoes, pickles, jams, jellies, condiments, fruit juices, sauces, butters, chutneys, pie fillings . . . . . to name just a few!





Foods such as green beans, carrots, corn, peas, meats, etc. require processing with a pressure canner. They are LOW acid foods.

Why can?

- It's a fun and safe way to preserve garden produce.
- Canning provides a way to make food shelf stable without risking it going bad.
- It provides food security if the power goes out. No refrigeration required!
- Home canned fruit, pickles, jams, jellies, chutneys, etc, are great for sharing with your family and they make wonderful gifts!
- Jams, jellies, butters, salsa; sell well at fund raisers. **BUT**

DEPARTMENT OF AGRICULTURE

Be sure to register with MDA. It's quick and easy, but required if you want to donate or sell your home canned items.

COTTAGE FOOD PRODUCER REGISTRATION

Minnesota Department of Agriculture > Food, Feed > Selling Food > Cottage Food Producer Registration

Law Guidance | Registration



- **Find a trusted, approved recipe for what you want to can. Be sure it specifies the water bath canner method. Some foods require the pressure canned method. Some foods are not recommended for home canning.**
- **Follow the recipe instructions completely! From start to finish. There are reasons for each step.**
- **Use jars sold as canning jars (Ball or Kerr). Do not try to reuse mayonnaise jars, marinara jars, pickle jars, jelly jars, etc.**
- **Use a new lid for each jar each time you can. Lids with the rubber seal CANNOT be reused. Toss them in with your recyclables.**
- **It is recommended that you consume canned foods within a year but this is more because of quality, not safety.**

Tools of the trade



A water bath canner with rack



Jars





Lids

Recommended



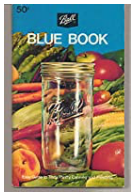
A reliable instruction and recipe book

About the Ball Blue Book . . . . . .

The idea for today's Ball Blue Book Home Canning Guide was originally developed in 1909 by George A. Ball and his wife, Frances Woodworth Ball. The earliest-known version was called "The Correct Method for Preserving Fruit".



1932

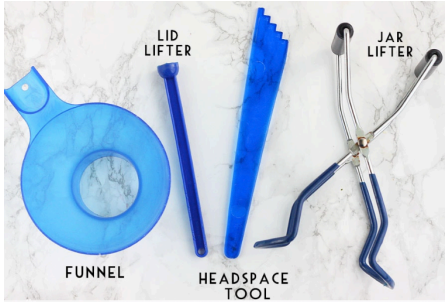


1972



Current

The recipes are all tested.
The book promotes canning and, yes, Ball products. It's a sampling of recipes designed to appeal to the broadest audience.
There are plenty of other sources, but this one is the best "handbook" for beginners.

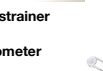


Some essential items for filling and moving jars.

Other equipment to consider

- Ladle
- Heavy bottom stock pot
- Food mill
- Food processor
- Juice extractor or strainer
- Candy/jelly thermometer
- Spice bag or cheesecloth
- Cooking timer
- Food scale

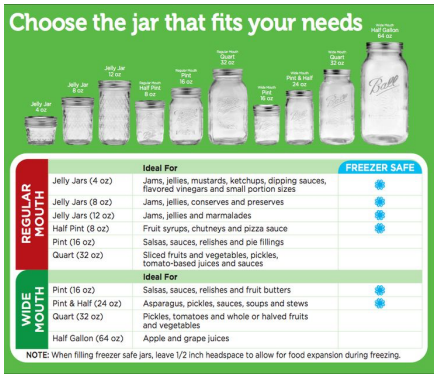








Jars



Lids

To be used only once and can be put in recycling.



Rings



Rings are to be reused.

Some Essentials

- **Pectin** - It's what causes fruit to gel. Recipes without added pectin usually require a longer cooking time and less sugar. **Follow recipes exactly**. If they call for pectin - add it but in the form and process specified. It matters.



- **Acid** - adds flavor and helps with the gel formation of soft spreads. If acid is needed, it will be listed as an ingredient. Generally lemon juice is used for additional acid. And it's best to use bottled lemon juice rather than squeezing your own. Vinegar is also a common acid in chutneys but especially in pickles and relishes.



$ There IS an investment to start canning! $

Waterbath canner options:



Granite Ware 21.5 Quart Water Bath Canner ~ $24.00
This classic speckled pot works in that it boiled water relatively quickly and fit enough to water to safely cover jars large and small.



McSunly Stainless Steel Water Bath Canner ~ $35.00
This large stainless-steel pot has metal handles at side and on the lid. Lid is clear for easy visibility. Includes a rack.



Victorio Stainless Steel Multi-Use Canner ~ $75.00
This large stainless-steel pot has comfortable, grippy handles and a clear lid. Its lid has a knob with a built-in dial that reads when the water is boiling and thus ready for processing.



Ball Collection Elite Canner with Rack 21-quart ~ $100.00
This pot is big and broad enough to fit a range of jar quantities and sizes, and it has a clear lid for monitoring its contents. It also had nice cushy handles that were easy to grab.

Basic Equipment/Assessories	Approximate Cost
Canning Jars - 12 Pack Half Pints (sold with lids and rings)	$8.00
Canning Jars - 12 Pack 4 oz Quilted Crystal Jelly Jars (w/ lids and rings)	$8.00
Canning Jars - 12 Pack Pints (sold with lids and rings)	$9.00
12 Pack Regular Mouth Lids	$4.00
12 Pack Wide Mouth Lids	$4.00
12 Pack Regular Mouth Rings	$4.00
12 Pack Wide Mouth Rings	$5.00
Jar Lifter	$10.00
Funnel - Plastic	$3.00
Funnel - Stainless	$10.00
Ladle	$10.00
Air bubble releaser w/ fill measure	$3.00
Fruit pectin (4.7 oz)	$5.00

Additional Notes:

A canner will hold:
8 half-pints or pints
7 quarts

A case of quart jars is running around $12.00

Cases of new jars include lids and rings.

Recipes will usually tell you how many half-pints/ pints/quarts will result.

2021 Update: Jars with lids seem to be readily available, but lids by themselves are not.

Some Terms

- **Butters** - fruit butter is made by cooking fruit pulp and sugar to a thick consistency that will easily spread. Butters are cooked slowly until thick enough to round up on a spoon. Tasty, but they take some time to do.
- **Jam** - made by cooking crushed or chopped fruits with sugar until the mixtures rounds up on a spoon. They can be made with just one fruit or a combination.
- **Chutney** - the chutney is a spicier jam that incorporates vinegar rather than pectin. Great on pork or fish. Can also be put on cream cheese for a great appetizer.
- **Jelly** - juice strained from fruit and prepared in a way that keeps the juice clear and shimmering; gelatinized enough hold its shape yet soft enough to spread easily.
- **Sauces** - apple sauce, pizza sauce, marinara, BBQ sauce, salsa! - lots of variety and all can be water bath canned.
- **Raw Pack or Hot Pack** - either pouring hot liquid over raw produce in a jar or putting the produce into the hot liquid and pouring both into the jar together.

Give some thought to . . .

- What do I like? What does my family like? What will they eat?
- What will I use/consume?
- How many jars would I need or like to have?
- What would make a great gift for friends or family?
- What are my sources of produce?
- How quickly can I process these foods after harvest or purchase?
- Can I freeze and process later?

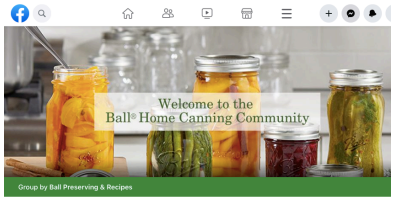


And **how much** produce will I need to grow or buy?

Other sources of information:

UMN Extension - University of Minnesota
https://extension.umn.edu/food-safety/preserving-and-preparing
Canning, freezing, drying, pickling, safe meals, food storage, Skip to navigation Skip to main content ... Building a stronger **Minnesota**. **University of Minnesota Extension** discovers science-based solutions, delivers practical education, and engages Minnesotans to build a better future.

Extension websites

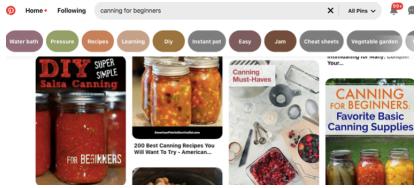


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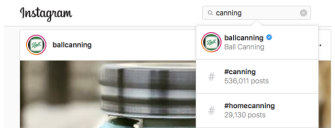
Ball® Home Canning Community

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Other sources of information:



Pintrest



Instagram

But be careful! Not all on-line sources may be the best place to get information.

- **NO DISTRACTIONS!!! Cleanliness and timing is important.**
- **Check the recipe and FOLLOW ALL INSTRUCTIONS!**
- **Gather and check all equipment; check jar rims, etc.**
- **Wash all equipment - including jars - with hot soapy water.**
- **Prep your canning station/area; towels on counters, etc.**
- **Walk through the flow in your kitchen;**
  - **Which burner will work best for the canner?**
  - **Which burner will work best for the hot product or brine?**
  - **Where will you fill jars?**





- **Prep the produce. Wash it well. This eliminates dirt/soil, bacteria, fungus.**
- **Measure your produce, sugar, liquids, spices. ALL OF THIS BEFORE STARTING!**
- **Use a proper size pan/pot for cooking the food. A heavy bottoms s worth the investment.**
- **Get the canner going well in advance of filling jars - fill with the required amount of water. Turn on the heat. Clean jars can be put in the canner to sterilize them while the food is being processed.**

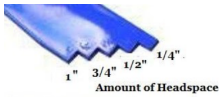




- For the cooking process, bring the mixture up to temp quickly. Stir properly. Do not allow to scorch or boil over.
- FULL ROLLING BOIL MEANS EXACTLY THAT!
- With added pectin - timing is essential.
- Work quickly to fill jars.
- Fill properly. Measure headspace and remove air bubbles.
- Wipe jar rims clean before putting on lids.
- Adjust 2 piece lids. Hot lids must be centered properly. Ring is "finger tight".



Example of how to measure headspace



Amount of Headspace

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- Lower and raise jars into the water on the rack slowly to avoid tipping the jars.
- Follow processing time instructions.
- After processing, place jars on a towel with a little space between them.
- Jars need to cool slowly. No drafts; close windows, turn off ceiling fans, etc.
- Check seals after 12-24 hours.
- Unscrew rings and clean rims with vinegar soaked paper towel. Jars can be stored without the rings.
- Store in a cool/dark area.





Things we have learned through the years:

Farmers market produce is preferred over grocery store produce.
Or grow your own! Can't get any fresher than that!

Reading and following instructions is critical!!!!
Jams and jellies CAN be made without pectin.
A cold plate test works best to check jelling point.



You can pickle just about anything!



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Things we have learned through the years:

You get better results and flavor on strawberry jam if you use just ripe and maybe a few under-ripe fruit. Just don't use over ripe fruit!!!



No time in the summer to can? Freeze the fruit or tomatoes and save the activity for winter.





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Things we have learned through the years:



You can't use grandma's canning books - processes have changed. Get a new Ball Blue Book. Some tomato varieties today are hybridized to be lower acid. Lemon juice should be added to canned tomatoes now.



Kitchens today have granite or other hard surface counters that are cold. Putting a hot jar from the canner on those surfaces could cause the jar to shatter. Use towels under your jars.



Changes have been made to the rubber on the lid to improve and lengthen the shelf life of the seal. Lids used to be held in hot water before placing them on the jar. Instructions on the box now say to wash with hot soapy water and set aside. So warm is good, but keeping them hot is not necessary.

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Things we have learned through the years:



Head space instructions are very important and should be followed for each recipe. Either way - too much or too little - can cause seal failure.

Apple sauce must be very close to the boiling point when put into a hot jar for canning. If the sauce is just hot and not bubbling a little, you will have little apple sauce volcanos on your counter towel.



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