



Welcome to the Canning and Preserving Resource Training!

Please take this time to complete our attendance form and fax it to our Community Nutrition Advisor at 780-495-7338 or email to hc.abnutrition.sc@canada.ca.

We will begin shortly!

Thank you!



Welcome!



Canning and Preserving

   Resource Training





Outline

- Today's training will be about **1 hour** long
- It will include:
 - How to blanch foods
 - How to freeze-store foods
 - How to vacuum-seal foods
 - How to dry foods
 - How to can foods
 - What foods can be canned
 - How to make pickled vegetables
 - Freezer jam demonstration
 - Discussion/Questions
 - Evaluation





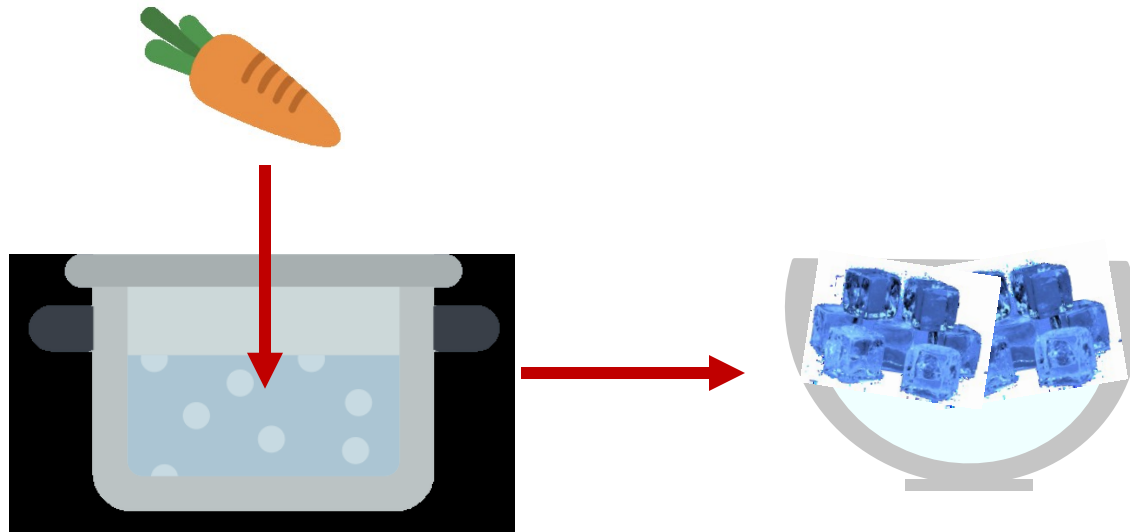
Blanching





What is Blanching?

- **Blanching:** a cooking process of immersing the vegetables in hot, boiling water, then in iced water
- Inactivates natural food enzymes that cause loss of flavour, color, and texture
- Often used before freeze-storing vegetables to keep their freshness





Blanching: Tools and Ingredients Required

Tools	Ingredients
<ul style="list-style-type: none">• Deep cooking pot• Strainer• Large bowl• Knife• Cutting board	<ul style="list-style-type: none">• Vegetable of choice• Water• Ice• Salt
Additional tools and ingredient required if freeze-storing:	
<ul style="list-style-type: none">• Baking sheet• Freezer bag(s)• Bowl or pot• Water	





How to Blanch Foods

How to Blanch Vegetables: eHow

- <https://www.youtube.com/watch?v=svHjQwJcJaE>



Blanching: Key Points

- Add 1 teaspoon of salt for every 5 litres of water used
- Cut vegetables into equal pieces so they cook evenly
- Bring to a **rolling boil**: bubbles do not disappear even after stirring
- Add only a few pieces of vegetables to the boiling water at a time
- Boil vegetables for 2 – 3 minutes
 - Vegetables should be crisp, not crunchy (undercooked) or mushy (overcooked)
- Use a strainer or slotted spoon to transfer vegetables from hot water to cold water





Freezing





What is Freezing?

- **Freezing:** storing foods at temperatures of -18°C to -23°C
- Slows the spoilage of foods by stopping microbial growth and ripening enzymes
 - **Note: freezing does not kill the microorganisms**
 - Microorganisms will begin to grow again once the food is thawed





How to Freeze Blanched Foods

Blanch and Freeze Fresh Vegetables: Co+op Kitchen

- <https://www.youtube.com/watch?v=M0vT8UFeQvU>



Freezing: Key Points

- Freeze food in a single layer, keeping them apart from each other
 - Optional: place parchment or wax paper on baking sheet to prevent food from freezing onto the baking sheet
- Place frozen food into a freezer bag
- Freeze foods quickly to avoid formation of large ice crystals
- Avoid thawing, then re-freezing





Vacuum Sealing





What is Vacuum Sealing?

- **Vacuum sealing:** a packaging method where air is removed from the package before it is sealed
- Extends shelf-life by preventing microbial growth
- Prevents freezer burn



How to Vacuum Seal using Water Displacement

Vacuum Seal Freezer Bags: CNET

- https://www.youtube.com/watch?v=fO_lcL7Ibgo



Water Displacement Vacuum Sealing: Key Points

- Place the whole bag, except the unzipped end, underwater
- Shake the bag underwater to remove more air
- Zip the freezer bag while the rest of the bag is still underwater
- Wipe the bag, then place in freezer





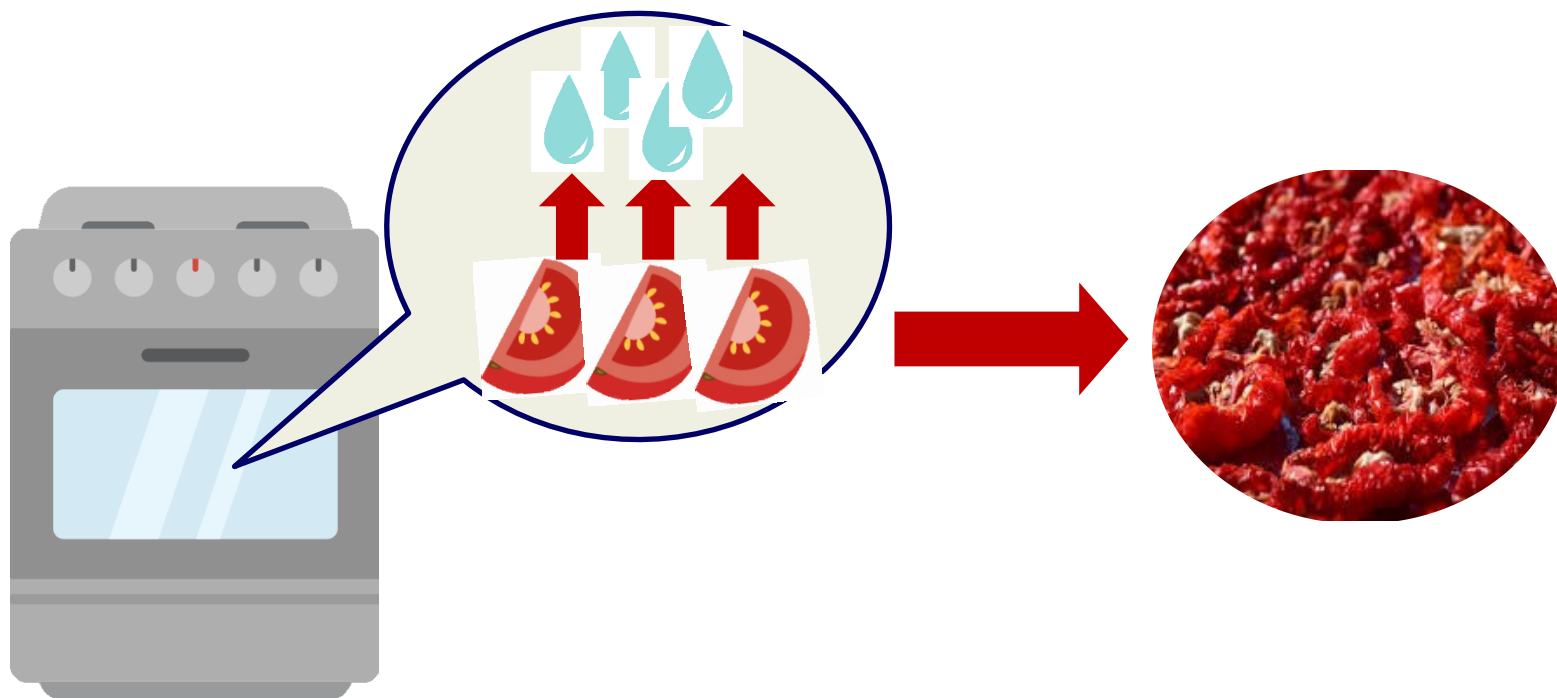
Drying / Dehydrating





What is Drying?

- **Drying:** the removal of moisture from food
- Extends shelf-life by preventing microbial growth and slowing down enzymes that spoil food
 - Note: drying **does not inactivate** these ripening enzymes





Drying: Tools and Ingredients Required

Tools	Ingredients
<ul style="list-style-type: none">• Knife• Cutting board• Parchment paper• Baking sheet	<ul style="list-style-type: none">• Produce of choice• Vegetable Oil*• Salt* <p>*Optional, as per recipe</p>





How to Dry Foods in the Oven

How to Use an Oven as a Food Dehydrator: eHow

- <https://www.youtube.com/watch?v=2REw7Dra4hE>



Drying Food in the Oven: Key Points

- Heat your oven to the lowest temperature possible (usually 140°F - 200°F)
- Cut the produce in even sizes so they dry at the same rate
- Prop open oven doors about 2 – 3 inches to create air flow
 - **Please use caution, especially with children!**
- Never rush the drying process by raising the oven temperature
- Drying time will depend on the amount and moisture content of food, as well as room temperature and humidity
- Always store dried foods in a cool, dry place





Canning





What is Canning?

- **Canning:** a method of preserving foods by heating them to high temperatures while being sealed in an airtight container
- High-temperature heating reduces the number of enzymes and microorganisms in the food
 - Also helps push out air from the container
- Airtight containers limit the amount of oxygen for microbial growth
 - Also prevents microorganisms from re-entering the container
- Canning methods are different for high acid foods and low acid foods





Canning: High Acid Foods

pH < 4.6

- Fruits and fruit juices
 - Jams, jellies, and other fruit spreads
 - Tomatoes with added acid
 - Pickles
 - Relishes
 - Chutneys
 - Sauces
 - Vinegars
 - Condiments
- Must be heated to 100°C (212°F) prior to canning
 - Can be canned using a boiling water canner





Canning: Low Acid Foods

pH > 4.6

- Vegetables
- Soups
- Stews
- Meats
- Poultry
- Seafood
- Tomato/vegetable mixtures or sauces

- **Must be heated to 116°C (240°F) prior to canning**
- Can only be canned using a pressure cooker





Different Types of Canning



Canning



High Acid
Foods



Low Acid
Foods



Pickles



Jams



Pressure
Canning



Canning: Tools and Ingredients Required

Tools	Ingredients
<ul style="list-style-type: none">• Mason jars• Snap lids (new)• Screw bands• Saucepan• Large, deep cooking pot with fitting jar rack• Jar lifter tongs• Ladle• Clean wooden board, newspaper, or towels• Jar labels	<ul style="list-style-type: none">• High acid food of choice* <p>*prepare as per recipe directions</p>





How to Can Pickled Vegetables

How to Make Bread and Butter Pickles: Bernardin

- <https://www.youtube.com/watch?v=yRBj4z7a-2I>



Canning: Key Points

- Special jars made for canning (Mason jars) must be used
 - **Do NOT use jars that contained store-bought foods**
- Snap lids cannot be reused
 - Screw bands and canning jars may be reused
- Always place jars on a rack in the canner to prevent breakage
- Canning jars should be heat-sanitized before filling
- For pickles, leave 1cm (1/2 inch) of headspace when filling
- Wipe the rim of the jar with a damp cloth after filling
- The jars **must** be heated after filling in order to kill microorganisms and form a seal
 - If a good seal is not formed, store the product in the fridge
- For best quality, use home canned foods within 1 year



Freezer Jam Demonstration





Freezer Jam: Key Points

- Always use the quantity of fruit, sugar, and lemon juice specified in jam and jelly recipes, especially those that include added pectin
 - **Jam or jelly will not form otherwise**
- Do not double recipes; make two batches instead
- For jams and jellies, leave 0.5cm (1/4 inch) of headspace when filling
- For best quality, use homemade freezer jam within 1 year



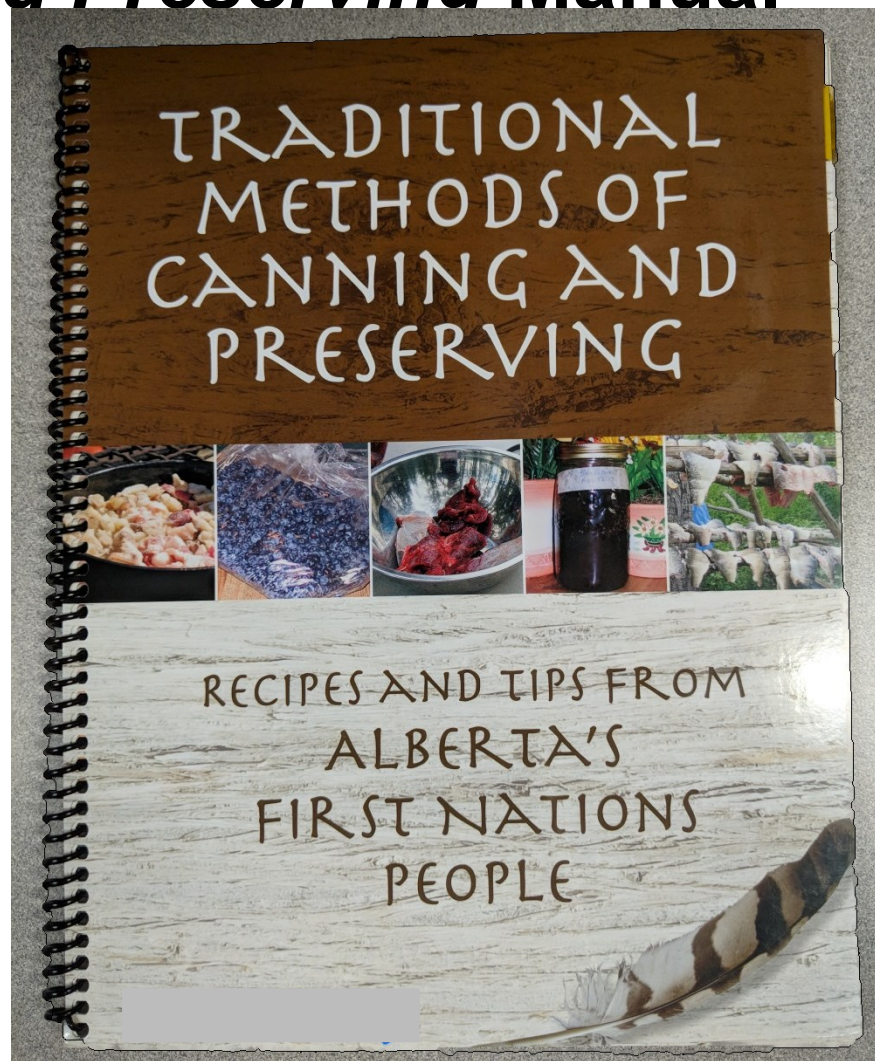


Questions?





Additional Resources: *Traditional Methods of Canning and Preserving Manual*





Additional Resources

More recipes available at:

- Allrecipes
 - <https://www.allrecipes.com>
- Bernardin Canada
 - <https://www.bernardin.ca/recipes/default.htm?Lang=EN-US>
- Martha Stewart
 - <https://www.marthastewart.com/search/results?keys=oven%20dry>



References

Content:

- Bernardin. (2016). *How to Guide: Introduction to Home Canning*. Retrieved from: <https://www.bernardin.ca/en/howtoguide.htm>
- University of Minnesota. (2017). *Methods for drying food at home*. Retrieved from: <https://extension.umn.edu/preserving-and-preparing/methods-drying-food-home>
- Yellowhead Tribal Council. (2007) *Traditional Methods of Canning and Preserving*.

Videos:

- Bernardin. (2015). *Bread and Butter Pickles*. YouTube. Retrieved from: <https://www.youtube.com/watch?v=yRBj4z7a-2I>
- CNET. (2016). *Use this hack to 'vacuum seal' any freezer bag*. YouTube. Retrieved from: https://www.youtube.com/watch?v=fO_lcl7lbgo
- Co+op Kitchen. (2013). *Blanch and Freeze Fresh Vegetables: Co+op Kitchen*. YouTube. Retrieved from: <https://www.youtube.com/watch?v=M0vT8UFeQvU>
- eHow Food. (2015). *How to Blanch Vegetables*. YouTube. Retrieved from: <https://www.youtube.com/watch?v=svHjQwJcJaE>
- eHow Food. (2015). *How to Use an Oven as a Food Dehydrator*. YouTube. Retrieved from: <https://www.youtube.com/watch?v=2REw7Dra4hE&t=19s>

Pictures:

- Piktochart. (2018). *Clipboard, Carrot, Cooking Pot, Fridge, Oven, and Tomato Slices*. Retrieved from: <https://piktochart.com/>
- All other images: Clip Art