



Cooking Skills Workshops Canning Vegetables and Fruit



Goodness in Many Ways.

A campaign to increase access to, and consumption of, fresh, canned, and frozen vegetables and fruit for Nova Scotians and their families.

freshcannedfrozen.com



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Goodness in Many Ways Cooking Skills Workshops

The workshops are part of a larger province wide campaign called Goodness in Many Ways, which is led by the Heart and Stroke Foundation, the Canadian Cancer Society (Nova Scotia Division) and the Nova Scotia Department of Health and Wellness. The campaign focuses on increasing awareness of the benefits of fresh, canned and frozen vegetables and fruit.

About the Workshops

The content and modules used as part of the Goodness in Many Ways Workshops were designed based on pilot testing in 2010. Each workshop covers a specific topic related to fruit and vegetable food preparation, and it is designed to support the development of cooking skills, healthy eating knowledge and habits. The modules are designed to build on each other over four weeks; however they can also be offered on a standalone basis. Be sure to check out all of the workshops at www.freshcannedfrozen.com.

Goodness in Many Ways was funded by the Nova Scotia Department of Health and Wellness and the Public Health Agency of Canada from 2010-2012. **Note:** The Workshop modules are provided for community use and should acknowledge the Goodness in Many Ways campaign when being used. You may not adapt this work without permission.



Canned Vegetables and Fruit

Canned vegetables and fruit are a good choice when fresh vegetables and fruit are not in season. Keep a few cans or jars of vegetables and fruit in the cupboard to make it easy to plan meals that always include vegetables and fruit.

Advantages of canned vegetables and fruit	Disadvantages of canned vegetables and fruit
<ul style="list-style-type: none">• Convenient and available all year round• A healthy food choice• Fast to prepare	<ul style="list-style-type: none">• They may not look as nice or as fresh• Salt may be added to vegetables• Sugar may be added to fruit





- ✓ The goals of the workshop are:
- ✓ To understand that canned vegetables and fruits may be substituted for fresh.
- ✓ To learn how to 'can' fresh fruits and tomatoes by practicing the Boiling Water Bath Canning Method.
- ✓ To select Strive for Five at School recipes that use canned vegetables and fruits.



Which Brand is the Best Buy?

Grocery stores have many different brands of canned vegetables and fruit. The cost of canned vegetables and fruit depend on the brand name, size of the can and other ingredients which have been added. Look at the following prices of canned fruit and vegetables from a local Nova Scotia grocery store.

Canned peaches & canned pears

Brand	Size	Cost	Cost per serving
Store Brand	14 oz	\$1.19	0.24
Leading Brand Name	14 oz	\$2.39	0.48

Canned applesauce

Brand	Size	Cost	Cost per serving
Store Brand	14 oz	\$1.49	0.30
No Name Store Brand	28 oz	\$1.89	0.18



Canned Corn

Brand	Size	Cost	Cost per serving
No Name Store Brand	12 oz	\$0.99	0.25
Leading Store Brand	12 oz	\$1.39	0.35

Which brand of vegetables and fruit is the best buy? _____

Tips on buying canned vegetables and fruits:

- Watch for sales. Stock up!
- Do not buy bulging cans as they may be spoiled
- Buy canned vegetables that have less salt
- Buy canned fruits that are canned in juice instead of syrup

Using canned vegetables and fruit is a convenient way to add vegetables and fruit to your meal plan.

- Leading brand names are usually the most expensive
- Larger can sizes are often better value

Important: Before cooking or eating, rinse canned vegetables in cold water. This will remove some of the salt and sugar that were added during processing.



Goodness in Many Ways

Home Canning Fruit and Tomatoes

Foods like fruit and tomatoes may be safely preserved at home in a boiling water bath canner.

- Fruit and tomatoes are 'high acid' foods.
- High acid foods like fruit and tomatoes may be safely canned in the boiling water bath canner.

The Boiling Water Bath Canner

The boiling water canner is a safe way to can high acid foods like fruit and tomatoes. The boiling water temperature (100 °C) kills the yeasts and moulds on the fruit and tomatoes.

Bacteria such as the dangerous Clostridium Botulism bacteria cannot grow or produce their deadly toxin in high acid foods like fruit and tomatoes.

Home Canning Nova Scotia Fruit and Tomatoes

Plan to can fruit and tomatoes when they are in season.

Fruit and tomatoes should be fully ripe.

To review Seasonal Availability – refer to 'Seasonal Availability Chart of Fresh Nova Scotia Vegetables' in the Workshop # 1 training module (p. 4) and 'Seasonal Availability Chart of Fresh Nova Scotia Fruit' in the Workshop # 1 training module (p. 5).

Important:

- Low acid foods like vegetables should not be canned in the Boiling Water Bath Canner
- Do not can vegetables in the boiling water bath canner. This is very dangerous.
- Low acid foods like vegetables must be processed in a pressure canner.

Clostridium Botulism Spores

- Can grow in low acid foods like vegetables.
- Can survive the temperature of the boiling water bath (100 °C).
- Are destroyed by heat that reaches a higher temperature in a pressure canner.



Preserving High Acid Foods, like Fruit and Tomatoes by Heat

Home canning involves heating jars of food in the boiling water bath canner to a temperature high enough to kill the bacteria that cause them to spoil.

The boiling water bath is the canning method for high acid foods like fruits and tomatoes. Jars are filled with the fruit or tomatoes and placed in the boiling water bath for a certain amount of time. The jars must be covered with at least 2 inches (5 cm) of boiling water to be canned safely.

The boiling water bath

- Kills organisms such as molds and yeasts that spoil fruit and tomatoes.
- Drives the air out of the jars to create an airtight seal. This airtight seal keeps both the air and bacteria from re-entering the jar.

How much time is needed for the boiling water bath?

- Every recipe has its own canning time. Canning time is measured after the water in the boiling water bath comes to a boil over the jars. Even the difference of one minute could cause the food to spoil.
- Larger jars need more time in the water
- Each fruit and tomatoes have their own canning time.

Equipment: Look for canning supplies at hardware stores or grocery stores. Some of the equipment like the jars and screw lids may be used from year to year. Lids should not be reused.



Basic Boiling Water Bath Canning Equipment



Boiling Water Bath Canner



Non-metallic funnel



Canning jars 2 cups (500 mL) or 4 cups size (1 L)



Tongs to lift jars



Canning lids and Screw bands for lids

NOTES:



Alternate Canning Equipment



DO NOT HAVE A RACK → arrange canning lids in a circle around the bottom of the pot. Place the jars on top of the lids



Large Pot deep enough to hold water 3 inches above jars

Boiling Water Bath Canning Equipment

You may already have a pot at home that is safe for Boiling Water Bath Canning. Check to see if:

- ✓ A rack will fit into the bottom of the pot
- ✓ The pot is tall enough to fit at least 2 inches of water above the jars
- ✓ The pot has a lid



Demonstration: Getting Ready for Boiling Water Bath

1. Find a recipe; check that you have all ingredients, the fruit or tomatoes and equipment.
2. Fill the boiling water bath canner with fresh water and heat on high. It will take longer than you think to come to a boil!
3. Check all the canning jars for nicks, cracks, uneven rims or sharp edges that may prevent sealing or cause breakage. Wash jars (even if new) and place on a rack in a boiling water canner. Cover jars with water and heat water to simmer. Keep jars hot until ready to use.
4. Set screw caps aside. Place the lids in small pot of hot but not boiling water.
5. Set up your "filling station" and have your funnel, ladle, paper towels, tongs and screw bands ready.
6. Set up your "resting station". Set clean tea towels in a place near the stove where your canned jars can rest, undisturbed, for 24 hours.
7. Measure any dry ingredients. Some recipes are time sensitive, so having ingredients ready is essential.
8. Prepare fresh ingredients (tomatoes or fruit).
9. Follow a recipe.

Adapted from: <http://www.bernardin.com/>



Basic Boiling Water Bath Canning Equipment



Set up your filling station

- Canning jars
- non-metallic funnel
- paper towels
- tongs
- screw bands
- lids

Canning Jars should be left on the rack, undisturbed for 12 to 24 hours. After 24 hours, check the lids for a safe, proper seal. A properly sealed lid curves downward and does not move when pressed.

The resting station



Important: Improperly sealed lids should be stored in the refrigerators and used within two to three weeks.

Recipe 1: Pears in Apple Juice

Ingredients:

- 5 or 6 pears (1 kg)
- ½ tsp (2 mL) ascorbic acid (See box below)
- 4 cups (1 L) water
- 2 cups (500 mL) apple juice

Equipment:

- 2 canning jars, 2 cup (500 mL) size
- lids
- screw bands
- boiling water bath canner
- bowl and measures

Hot Pack

Cooked fruits or tomatoes are packed into hot jars before placed in the boiling water bath. Hot Pack fruits and tomatoes are

- Colourful
- Flavourful
- Fit into the jar well

1. Preheat the washed jars in hot water in the boiling water bath canner.
2. Prepare the lids by immersing in a small pot of hot water.
3. Dissolve the ascorbic acid in the 4 cups (1 L) of water.
4. Select good quality ripe but firm pears. Wash and peel the pears. Cut pears in half (lengthwise) and remove the core and seeds with the tip of a spoon. Immerse immediately in the ascorbic acid solution.
5. Heat the apple juice on top of the stove.
6. Drain the pears and heat in the apple juice.
7. Pack the pears in the hot jars, cavity side down and overlapping the halves.
8. Cover with boiling apple juice; remove the air bubbles by sliding a narrow spatula down the side of the jar. Adjust the head space to ½ inch (1 cm). Wipe the rim of the jar.
9. Place a lid on the top of the jar and secure with the screw band just until it is fingertip tight.
10. Place the jars on the rack in the boiling water bath canner and immerse below the water in the canner. Boil for **20 minutes**.
11. Remove the jars from the canner. Cool in the resting station for 12 to 24 hours. Test the jars for a proper seal.

Note: Ascorbic Acid prevents the pears from turning brown. Lemon juice mixed with water also prevents browning. Mix ¼ cup (50 mL) lemon juice with 4 cups (1 L) of water.



Recipe 2: Crushed Tomatoes

Ingredients:

- 3 lb (1.5 kg) small tomatoes
- ½ tsp (2 mL) citric acid
- 1 tsp (5 mL) salt

Equipment:

- 2 canning jars, 2 cup (500 mL) size
- screw bands
- lids
- boiling water bath canner
- small knife

Citric acid adds acid to the tomatoes to help preserve them safely.

Adapted from:
<http://www.bernardin.ca/>

1. Preheat the washed jars in hot water in the boiling water bath canner.
2. Prepare the lids by placing in a small pot of hot water.
3. Select ripe, firm tomatoes. Blanch (to review blanching go to Workshop # 2, p. 4) to remove skins by dipping in boiling water for 30-60 seconds, immerse the tomatoes in ice water. Drain. Slip the skins off and remove the core end with the small knife.
4. Cut the skinless tomatoes into quarters. Heat one-quarter of the tomatoes in a large pot, crushing them with a spoon as they are added to the pot. Continue heating the tomatoes, stirring to prevent burning. Once the tomatoes are boiling, gradually add remaining quartered tomatoes, stirring constantly. These remaining tomatoes do not need to be crushed. They will soften with heating and stirring. Continue until all tomatoes are added. Then simmer for five minutes.
5. Pack blanched skinless tomatoes into hot jars. Add ½ tsp (2 mL) salt and ¼ tsp (1 mL) citric acid to each jar. Remove air bubbles by sliding a narrow spatula down the side of the jar. Adjust the headspace to ½ (2 mL) inch. Wipe the rim of the jar.
6. Place the lid on the top of the jar and secure it with the screw band just until it is fingertip tight.
7. Place the jars on the rack in the boiling water bath canner and immerse below the water in the canner. Measure time once the water starts to boil. Boil for **35 minutes**.
8. Remove jars from the canner. Cool in the resting station for 12 to 24 hours. Test lids for a proper seal. Store.



Recipe 3: Fresh Plums

Ingredients:

1 ½ to 2 lb (1 kg) plums
2 cups (500 mL) apple or white grape juice

Equipment:

2 canning jars, 2 cup (500 mL) size
screw bands
lids
boiling water bath canner

For a healthy choice, choose can fruits like pears and plums in 100% fruit juice instead of sugar syrup.

1. Preheat the washed jars in hot water in the boiling water bath canner.
2. Prepare the lids by immersing in a small pot hot water.
3. Stem and wash plums. To can whole, prick skins on two sides of plums with fork to prevent splitting.
4. Add plums to boiling juice, bring back to a boil; boil 5 minutes. Remove from heat; cover saucepan and let stand 20 to 30 minutes. Remove plums from juice; return juice to a boil.
5. Pack plums into a hot jar to within ¾ inch (2 cm) of top rim. Add hot juice to cover plums. Using a narrow spatula, remove air bubbles and adjust headspace to ½ inch (1 cm), if required, by adding more hot liquid. Wipe the rim of the jar.
6. Centre the lid on the rim and secure with the screw band until the screw band is fingertip tight. Repeat for the remaining plums and hot liquid.
7. Place the jars on the rack in the boiling water bath canner and immerse below the water in the canner. Measure time once the water starts to boil. Process for **20 minutes**.
8. Remove the jars from the canner. Cool in the resting station for 12 to 24 hours. Test the jars for a proper seal. Store.

Adapted from: <http://www.bernardin.ca/>



Recipe 4: Applesauce

Ingredients:

3 lb apples (1.5 kg)
¾ cup (175 mL) water
¼ cup (175 mL) sugar
¼ tsp (1 mL) cinnamon

Equipment:

2 canning jars, 2 cup (500 mL) size
screw bands
lids
boiling water bath canner

1. Preheat the washed jars in hot water in the boiling water bath canner.
2. Prepare the lids by immersing in a small pot of hot water.
3. ⇒ **FOLLOW THE APPLESAUCE RECIPE** in *A Cookbook for Families* (p. 128)
4. Pack the applesauce into the jars within ¾ inch (2 cm) of top rim. Remove the air bubbles from the jar with a narrow spatula; adjust the headspace to ½ inch (1 cm), if required, by adding more applesauce. Wipe the jar rim.
5. Centre the lid on jar rim. Place the screw band over the lid and turn until fingertip tight. Repeat for the other jar.
6. Place the jars on the rack in the boiling water bath canner and immerse below the water in the canner. Measure the time once the water starts to boil. Process for **20 minutes**.
7. Remove the jars from the canner. Cool in the resting station for 12 to 24 hours. Test the jars for a proper seal. Store. Adapted from: <http://www.bernardin.ca/>



Recipe 5: Rhubarb Sauce

Ingredients:

5 cups (1.25 L) chopped rhubarb
¼ cup (50 mL) water
⅔ cup (150 mL) sugar
¼ tsp (1 mL) cinnamon
¼ tsp (1 mL) ginger

Equipment:

2 canning jars, 2 cup (500 mL) size
screw bands
lids
boiling water bath canner

1. Preheat the washed jars in hot water in the boiling water bath canner.
2. Prepare the lids by immersing in a small pot of hot water.
3. ⇒ **FOLLOW THE BASIC RHUBARB SAUCE RECIPE** in *A Cookbook for Families* (p. 159)
4. Pack the rhubarb sauce into the jars within ¾ inch (2 cm) of top rim. Remove the air bubbles from the jar with a narrow spatula. Adjust the headspace to ½ inch (1 cm), if required, by adding more rhubarb sauce. Wipe the jar rim.
5. Centre the lid on the jar rim. Place the screw band over the lid and turn until fingertip tight. Repeat for the other jar.
8. Place the jars on the rack in the boiling water bath canner and immerse below the water in the canner. Measure time once the water starts to boil. Process for **20 minutes**.
9. Remove the jars from the canner. Cool in the resting station for 12 to 24 hours. Test the jars for a proper seal. Store. Adapted from: <http://www.bernardin.ca/>



Workshop Activities

The goal of this workshop is to can a fruit or tomatoes. Before we start the canning activity, as a group we will prepare a selection of Strive for 5 at School! recipes that will be ready for our meal. Note that every menu item uses canned ingredients.

- Super - Zesty Salmon Cakes & Apple Bean Bake
- Tex Mex Muffins
- Sassy Salsa Peaches
- Canned Pears with Saucy Blueberry Topping

Canning a Fruit and/or Tomatoes

Pears have been provided for you to can today. Canning the pears will be done as a group activity. All participants will follow along with the facilitator to complete each step of the Pears in Apple Juice recipe (p. 11). If time permits the preparation and canning of crushed tomatoes (See the Crushed Tomato recipe, p. 12) may be demonstrated by the facilitator.



Strive for Five at School! Family Cookbook

The Goodness in Many Ways cooking skills workshops use recipes adapted from the ***Strive for Five at School!*** Family Cookbook. Many of these recipes are featured on the Goodness in Many Ways website www.freshcannedfrozen.com. **Strive for Five at School!! A Guide to Promoting Fruit and Vegetables** was developed to help support increased fruit and vegetables in schools while highlighting local and in-vegetables and fruit. The recipes highlight vegetables and fruit by month based on seasonality and were developed by a professional dietitian.

Workshop Checklist

Thank you for coming to the Goodness in Many Ways Workshop # 3! Before you leave, please make sure that you have completed the following:

- Check the lids of your canned fruit or tomatoes to see if your jars sealed.
- Make sure that you have selected a recipe to prepare next week with the vegetable or fruit that you froze in Workshop # 2, **Freezing Vegetables and Fruit**, or the pears or tomatoes that you canned in this workshop.

To prepare for Workshop # 4 – Celebration of Vegetables & Fruit

- Look over the Workshop # 3 content to review the many things discussed today. Bring any questions to Workshop # 4!



Reminder: Please bring your binder, cookbook and apron to the next workshop.

Date:

Time:

Location:



