



Using, Storing and Preserving Apples



*Michigan-grown apples are available most of the year.
The peak harvest is August through October.*

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Michigan Fresh: Using, Storing and Preserving Apples was first published in March 2015 and revised in June 2023. It replaces *WO1040 Food Preservation Series – Apples* (Michigan State University Extension, 2006).

Yield

1 pound of apples	=	3 medium-sized apples 4 cups peeled, cored slices
2½ to 3 pounds	=	2 pints frozen apple slices 2 pints canned (slices or apple sauce)
13½ pounds	=	9 pints
21 pounds	=	7 quarts
48 pounds (1 bushel)	=	14–19 quarts sauce

Food Safety and Storage

- Wash hands before and after handling fresh produce.
- Wash apples thoroughly under cool running water. Do not use soap.
- You can store apples in the refrigerator in a plastic bag with holes for ventilation. Store large quantities of apples in a cool place, between 32 and 40 °F. Properly stored apples will keep up to a month.
- Keep apples away from raw meat and meat juices to prevent cross-contamination.
- For best quality and nutritive value, preserve only what your family can consume in 12 months.

How to Preserve

Canning

Select apples that are juicy and crisp, preferably a mixture of both sweet and tart varieties.

- **Hot pack method:** Make a very light, light or medium syrup, or can apples in water. (See table that follows.)

Find out more about Michigan Fresh at
canr.msu.edu/mi_fresh/.

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Preparing and Using Syrups

		Measures of water and sugar				
Syrup type	Approx. % sugar	For 9-pt load (1)		For 7-qt load		Fruits commonly packed in syrup (2)
		Cups water	Cups sugar	Cups water	Cups sugar	
Very light	10	6½	¾	10½	1¼	Approximates natural sugar levels in most fruits and adds the fewest calories.
Light	20	5¾	1½	9	2¼	Very sweet fruit. Try a small amount the first time to see if your family likes it.
Medium	30	5¼	2¼	8¼	3¾	Sweet apples, sweet cherries, berries, grapes.
Heavy	40	5	3¼	7¾	5¼	Tart apples, apricots, sour cherries, gooseberries, nectarines, peaches, pears, plums.
Very heavy	50	4¼	4¼	6½	6¾	Very sour fruit. Try a small amount the first time to see if your family likes it.

(1) This amount is also adequate for a 4-quart load.

(2) Many fruits that are typically packed in heavy syrup are excellent and tasteful products when packed in lighter syrups. The USDA recommends that lighter syrups be tried, since they contain fewer calories from added sugar.

This table is adapted from "Table 1. Preparing and Using Syrups" from *Selecting, Preparing and Canning Fruit* on the National Center for Home Food Preservation website at https://nchfp.uga.edu/how/can_02/syrups.html. That table was adapted from the USDA's *Complete Guide to Home Canning* (Agriculture Information Bulletin No. 539). Revised 2015.

Canning (continued)

Wash, peel, core and slice apples into ½-inch wedges.

To prevent darkening, add 1 teaspoon ascorbic acid to 1 gallon water. Remove apples from anti-darkening solution and drain well. In a saucepan, add 2 cups water or syrup per 5 pounds of sliced apples. Boil 5 minutes, stirring

occasionally. Fill hot jars with hot slices and hot syrup or water, leaving ½-inch headspace. Remove air bubbles, adjust headspace if needed, wipe jar rims with clean paper towel. Adjust lids. Process in a boiling-water bath.

See tables that follow for recommended processing times for sliced apples.

Recommended process time (in minutes) for apples, sliced in a boiling-water canner.

Style of pack	Jar size	Process time at altitudes of			
		0 - 1,000 ft	1,001 - 3,000 ft	3,001 - 6,000 ft	Above 6,000 ft
Hot	Pints or quarts	20	25	30	35

Recommended process time (in minutes) for apples, sliced in a dial-gauge pressure canner.

Style of pack	Jar size	Process time	Canner pressure (PSI) at altitudes of			
			0 - 2,000 ft	2,001 - 4,000 ft	4,001 - 6,000 ft	6,001 - 8,000 ft
Hot	Pints or quarts	8	6 lb.	7 lb.	8 lb.	9 lb.

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Recommended process time (in minutes) for apples, sliced in a weighted-gauge pressure canner.

Style of pack	Jar size	Process time (min.)	Canner pressure (PSI) at altitudes of	
			0 - 1,000 ft	Above 1,000 ft
Hot	Pints or quarts	8	5 lb.	10 lb.

Let jars sit undisturbed for 12 to 24 hours, check lids to be sure they've sealed, remove rings, wash jars, date, label and store. Food in jars that do not seal must be reprocessed in a clean jar with a new lid within 24 hours, refrigerated or frozen.

Tables were adapted from the National Center for Home Food Preservation (NCHFP), *Selecting, Preparing and Canning Fruit: Apples-Sliced*, reviewed February 2018 (https://nchfp.uga.edu/how/can_02/apple_sliced.html). The NCHFP adapted them from the *Complete Guide to Home Canning* (Agriculture Information Bulletin, No. 539). USDA, 2015.

Applesauce

Wash, peel, and core apples. If desired, slice apples into water containing ascorbic acid to prevent browning. Placed drained slices in an 8- to 10-quart pot. Add ½ cup water. Stirring occasionally to prevent burning, heat quickly until tender (5 to 20 minutes, depending on maturity and variety). Press through a sieve or food mill, or skip the pressing step if you prefer chunk-style sauce. Sauce may be packed without sugar. If desired, add ⅛ cup sugar per quart of sauce. Taste and add more, if preferred. Reheat sauce to boiling. Fill jars with hot sauce, leaving ½-inch headspace. Adjust lids and process.

Recipe for applesauce from the National Center for Home Food Preservation (NCHFP), *Selecting, Preparing and Canning Fruit: Applesauce*, reviewed February 2018 (https://nchfp.uga.edu/how/can_02/applesauce.html). The NCHFP adapted it from the *Complete Guide to Home Canning* (Agriculture Information Bulletin, No. 539). USDA, 2015.

See table that follows for water bath canning applesauce. For pressure canning guidelines, refer to (https://nchfp.uga.edu/how/can_02/applesauce.html).



Recommended process time (in minutes) for applesauce in a boiling-water canner.

Style of pack	Jar size	Process time at altitudes of			
		0 - 1,000 ft	1,001 - 3,000 ft	3,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	15	20	20	25
	Quarts	20	25	30	35

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Freezing

Select full-flavored apples that are crisp and firm, not mealy in texture. Wash, peel and core. Slice medium apples into twelfths, large ones into sixteenths.

Syrup Pack is preferred for apples to be used for uncooked desserts or fruit cocktail. A sugar or dry pack is good for pie making.

Syrup Pack – Use cold 40% syrup. To prevent browning, add ½ teaspoon (1500 mg) ascorbic acid to each quart of syrup.

Slice apples directly into syrup in container starting with ½ cup syrup to a pint container. Press fruit down in containers and add enough syrup to cover. Leave headspace. Place a small piece of crumpled water-resistant paper on top to hold fruit down. Seal, label, date and freeze.

Sugar Pack – To prevent darkening, dissolve ½ teaspoon (1500 mg) ascorbic acid in 3 tablespoons water. Sprinkle over the fruit. Apple slices can also be steam blanched for 1½ to 2 minutes.

Mix ½ cup sugar with 1 quart (1¼ pounds) of fruit. Pack apples into containers and press fruit down, leaving headspace. Seal, label, date and freeze.

Dry Pack – Follow the directions for **Sugar Pack**, omitting the sugar. Treated apple slices can also be frozen first on a tray and then packed into containers as soon as they are frozen.

The Freezing section is adapted from *Freezing – Apples* (<https://nchfp.uga.edu/how/freeze/apple.html>) from the National Center for Home Food Preservation who extracted it from Andress, E. and Harrison, J.A., *So Easy to Preserve*, (Bulletin 989). (6th ed.). University of Georgia Cooperative Extension.

Syrups for Use in Freezing Fruits

Type of syrup	Percent sugar*	Cups of sugar**	Cups of water	Yield of syrup in cups
Very light	10	½	4	4½ cups
Light	20	1	4	4¾ cups
Medium	30	1¾	4	5 cups
Heavy	40	2¾	4	5½ cups
Very heavy	50	4	4	6 cups

*Approximate

**In general, up to one-fourth of the sugar may be replaced by corn syrup or mild-flavored honey. A larger proportion of corn syrup may be used if a very bland, light-colored type is selected.

References:

Andress, E., & Harrison, J. A. (2014). *So easy to preserve* (Bulletin 989). (6th ed.). University of Georgia Cooperative Extension.

National Center for Home Food Preservation.

<http://nchfp.uga.edu/>

U.S. Department of Agriculture. (2015). *Complete guide to home canning* (Rev. ed.). (Agriculture Information

Bulletin No. 539). http://nchfp.uga.edu/publications/publications_usda.html