



## FOOD PRESERVATION SERIES

# Pears

Michigan-grown pears are available  
August, September and October

### RECOMMENDED VARIETIES

Clapp's Favorite, Moonglow and Bartlett are excellent for canning.

### TRIM LOSS

Approximately 22 percent from cores, stems, skins and bruises.

### YIELD

1 pound	2 cups sliced
11 pounds	canner load of 9 pints
17 ½ pounds	canner load of 7 quarts
1 bushel (50 pounds)	40 to 50 pints frozen
	16 to 25 quarts canned (2 ½ pounds per quart)

### FOOD SAFETY TIPS

Purchase fruits that are not bruised or damaged. Bag fresh fruits separate from meat, poultry and seafood products.

Wash hands before and after handling fresh produce.

Wash fruits thoroughly under running water. Do not use soap or detergent. If necessary, use a clean, produce brush to scrub off dirt or soil. Dry with paper or cloth towel.

Use a separate cutting board for fruits, and keep away from raw meat, poultry and seafood

Follow standardized procedures recommended by the United States Department of Agriculture for home canning.

### HOW TO STORE

Store in the refrigerator at 40 F, in the crisper drawer to help retain moisture.

Store processed canned products in a cool, dry area.

### QUICK AND EASY SERVING TIPS

Eat fresh as a snack.

Serve pear halves or quarters sprinkled with cinnamon.

### RECIPE

#### BAKED PEARS

Pears  
2 teaspoons Raisins  
¼ cup Lemon juice  
¼ cup Orange juice  
Cinnamon powder

Preheat the oven at 375 °F. Core the pears. Put 2 teaspoons of raisins inside the fruit. Mix lemon juice and orange juice. Pour several teaspoons of lemon-orange juice mixture around the pears. Sprinkle lightly with cinnamon, pierce and bake 5-6 minutes at 375 °F.

*This is an official 5 A Day recipe.*

## HOW TO PRESERVE

### FREEZING OF PEARS

Select pears that are well ripened and firm, but not hard. Peel, cut in halves or quarters, and remove cores. To prevent darkening during preparation, follow the directions for preparing ascorbic acid solution. Heat pears in boiling 40 percent syrup (1 cup cold water to  $\frac{3}{4}$  cup sugar) for 1 to 2 minutes, depending on the size of the pieces. Drain and cool. Pack pears into containers and cover with cold 40 percent syrup. To minimize browning, add  $\frac{3}{4}$  teaspoon ascorbic acid to each quart of cold syrup. Leave  $\frac{1}{2}$  inch headspace. Seal, label and freeze.

#### How To Prevent Discoloration

While preparing pears for freezing or canning, keep cut pear sections in a solution of ascorbic acid and cold water. Ascorbic acid can be purchased in several forms:

**Pure powdered form:** Seasonally available among canning supplies in supermarkets. Use 1 teaspoon per gallon of water as a treatment solution.

**Vitamin C tablets :** Buy 500-milligram tablets; crush and dissolve six tablets per gallon of water as a treatment solution.

**Commercial mixes of ascorbic and citric acid :** seasonally available among canning supplies in supermarkets.

**Citric acid powder :** Sold in supermarkets, but it is less effective in controlling discoloration. Follow the manufacturer's directions.

**Ascorbic Acid Mixture (AA) :** Available in local supermarkets as EVER-FRESH® and FRUIT FRESH® fruit protectors. To pretreat fruit, dissolve 3 tablespoons of either mixture in 2 quarts (8 cups) cold water and soak the fruit. When freezing pears with sugar, dissolve 1 tablespoon AA in 3 tablespoons cold water in a large bowl. Add fruit and sugar and allow to stand for 15 minutes before packing in freezer containers.

Drain pears before packing. Freeze no more than 2 pounds of food per cubic foot of freezer capacity per day. One cubic foot will hold 7.4 gallons.

Table 1. Amount of Water and Sugar to make Syrup

Syrup Type	Approx. Sugar (%)	For 9-Pt Load*		For 7-Qt Load	
		Cups Water	Cups Sugar	Cups Water	Cups Sugar
Very light	10	6 $\frac{1}{2}$	$\frac{3}{4}$	10 $\frac{1}{2}$	1 $\frac{1}{4}$
Light	20	5 $\frac{3}{4}$	1 $\frac{1}{2}$	9	2 $\frac{1}{4}$
Medium	30	5 $\frac{1}{4}$	2 $\frac{1}{4}$	8 $\frac{1}{4}$	3 $\frac{3}{4}$
Heavy	40	5	3 $\frac{1}{4}$	7 $\frac{3}{4}$	5 $\frac{1}{4}$

### CANNING OF PEARS

Choose ripe, mature fruits ideal for eating fresh or cooking. Peel pears, cut lengthwise into halves and remove cores. To prevent discoloration, keep pears in an ascorbic acid solution. Prepare a very light or medium syrup, or pack pears in apple juice, white grape juice or water. Drain pears and boil for 5 minutes in syrup, juice or water. Fill hot jars with hot fruit and cooking liquid, leaving  $\frac{1}{2}$  inch headspace. Adjust lids and process.

#### VERSIONS OF PACKING SYRUP

**CINNAMON PEARS.** Add 2 sticks of cinnamon and a few drops of red food coloring per quart of syrup mixture. Cook pears in syrup for 10 minutes before packing. Remove the cinnamon sticks just before packing the fruit. Follow directions for hot packed pear halves.

**PINEAPPLE PEARS.** Use pineapple juice in place of water for the syrup. Follow directions for hot packed pear halves.

**MINT PEARS.** Add oil of peppermint and green food coloring a drop at a time, until the syrup is flavored and colored as desired. Cook pears in syrup for 10 minutes before packing. Follow directions for hot packed pear halves. Adjust lids and process.

**Table 2.** Recommended process time for **Pears, halved**, in a boiling-water canner.

		Process Time at Altitudes of			
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 3,000 ft	3,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	<b>20 min</b>	25	30	35
	Quarts		25	30	40

**Table 3.** Process Times for **Pears**, halved in a Dial-Gauge Pressure Canner.

			Canner Pressure (PSI*) at Altitudes of			
Style of Pack	Jar Size	Process Time (Min)	0 - 2,000 ft	2,001 - 4,000 ft	4,001 - 6,000 ft	6,001 - 8,000 ft
Hot	Pints or Quarts	10	6	7	8	9

**Table 4.** Process Times for Halved **Pears** in a Weighted-Gauge Pressure Canner.

			Canner Pressure (PSI*) at Altitudes of	
Style of Pack	Jar Size	Process Time (Min)	0 - 1,000 ft	Above 1,000 ft
Hot	Pints or Quarts	10	5	10

\*Pounds per square inch

Source: National Center for Home Preservation  
<http://www.uga.edu/nchfp/index.html>

## PEAR JAM and JELLY

### Pear Jam with Liquid Pectin

(about 8 half-pints)

4 cups peeled, cored and finely chopped pears (about 4 pounds)

¼ cup bottled lemon juice

7 ½ cups sugar

1 pouch (3.175 ounces) liquid pectin (Purchase fresh pectin each year. Old pectin may result in poor gels.)

Place prepared pears in a saucepan and stir in lemon juice. Measure sugar and set aside. Add sugar to the pear and lemon mixture, stirring constantly. Place over high heat and bring to a full rolling boil. Boil hard one minute, stirring

constantly. Remove from the heat and stir in all the liquid pectin. Skim off foam. Pour hot jam into hot, sterilized jars, leaving ¼ inch headspace. Wipe jar rims, adjust lids and process.

### Pear-Apple Jam (about 7 to 8 half-pints)

2 cups peeled, cored and finely chopped pears (about 2 pounds)

1 cup peeled, cored and finely chopped apples (about 1 pound)

6 ½ cups sugar

¼ teaspoon ground cinnamon

1/3 cup bottled lemon juice

2 pouches (6.35 ounces) liquid pectin

Crush apples and pears in a large saucepan and stir in the cinnamon. Thoroughly mix sugar and lemon juice with the fruits and bring to a boil over high heat, stirring constantly. Immediately stir in pectin. Bring to a full rolling boil and boil hard for 1 minute, stirring constantly. Remove from the heat, quickly skim off foam, and fill into hot sterilized jars, leaving ¼ inch headspace.

**Table 5.** Recommended Process Times (minutes) in a Boiling-Water Canner

Product	Style of Pack	Jar Size	Process Times (mins) At Altitudes (ft) of		
			0 - 1,000 ft	1,001 - 6,000	6,000-8000
Pear Jam	Hot	Half-pints	5 min	10	15
Pear-Apple Jam	Hot	Half-pints	5 min	10	15

## FURTHER INFORMATION

Food Domain Website

<http://fooddomain.msu.edu/>

National Center for Home Preservation

<http://www.uga.edu/nchfp/index.html>

"So Easy to Preserve" 5th ed. 2006. Cooperative Extension Service, The University of Georgia, Athens.

<http://www.uga.edu/setp/>

Safe Handling of Raw Produce and Fresh-Squeezed Fruit and Vegetable Juices

<http://www.cfsan.fda.gov/~dms/prodsafe.html>

Produce for Better Health Foundation

<http://dccps.nci.nih.gov/5aday/RECIPES.HTML>

Handbook of Fruits and Fruit Processing. 2006.

Hui, Y., Barta, J., Cano, M., Gusek, T., Sidhu, J. and Sinha, N. (eds). Blackwell Publishing.

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