



FOOD PRESERVATION SERIES

Blueberries

Michigan-grown Blueberries are available between July and August.

RECOMMENDED VARIETIES

Bluecrop, Bluejay and Jersey varieties are recommended for freezing and canning.

YIELD

3/4 pound	2 cups fresh pint frozen
10-pound carton	26 cups
13 pints frozen	4-6 quarts canned
8 pounds	canner load of 9 pints
12 pound	canner load of 7 quarts
24-quart crate (36 pounds)	18-24 quarts canned (1 3/4 pounds per quart)

TRIM LOSS

Approximately 2 percent from cleaning and sorting.

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.

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

Do not wash blueberries prior to freezing when using a dry or unsweetened type of packing. Washing results in a tougher skinned product.

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

Serve as a snack.

Top cereals, hot oatmeal, pancakes or waffles with fresh or frozen berries

Include in vegetable and fruit salads.

Topping for ice cream, yogurt and pastries

RECIPE

LO'S BLUEBERRY COFFEE CAKE

1 egg
 1/2 cup nonfat milk
 1/2 cup yogurt, nonfat vanilla
 3 Tablespoons canola oil
 2 teaspoons grated lemon peel (yellow only)
 4 teaspoons baking powder
 1 1/2 cup fresh
 (or frozen unsweetened) blueberries
 2 cups flour
 1/2 cup sugar
 1/2 teaspoon salt

For the topping :

3 Tablespoons sugar
2 Tablespoons coarsely chopped walnuts
¼ teaspoon cinnamon

1. Preheat oven to 400 °F. Position the rack in the center of the oven.
2. In a large bowl whisk together the egg, milk, yogurt, oil and lemon peel.
3. Sift the flour, sugar, baking powder and salt onto the liquid ingredients. Using a fork, stir very lightly, just until ingredients are combined.
4. Gently fold in the blueberries. Pour the batter into an 8- or 9-inch baking pan coated with nonstick spray.
5. In a small bowl combine the topping ingredients. Sprinkle evenly over the cake batter.
6. Bake at 400 °F for 30 to 35 minutes or until the top is lightly browned and a wooden toothpick inserted in the center comes out clean.
7. Allow the cake to cool in the baking pan on a wire rack for at least 10 minutes.
8. Serve warm or at room temperature.

Nutrient Analysis per serving: calories, 250; fat 6g; cholesterol, 25 mg; sodium 420 mg; fiber 2g

HOW TO PRESERVE

FREEZING BLUEBERRIES

Elderberries, huckleberries and goose berries may also be frozen using the following directions:

WHOLE : Syrup pack is preferred for berries for cooking. Select full-flavored, ripe berries of similar size, preferably with tender skins. Sort, wash and drain. Use one of the following packs:

Syrup pack : Pack berries into freezer containers or bags and cover with cold 50-percent syrup (1 cup water and 1 cup sugar), leaving 1/2 inch headspace. Seal, label and freeze.

Dry pack : Pack unsweetened berries into containers, leaving headspace. Seal, label and freeze. Berries can also be frozen on a tray prior to packing in a freezer bag.

Pectin pack : This alternative uses pectin and less sugar than syrup pack and retains the fresh berry flavor, color and texture. Combine 1 box powdered pectin (1 ¾ ounces) with 1 cup of water in a saucepan, stir and boil for 1 minute. Stir in ½ cup sugar and dissolve. Remove the pan from heat, and add cold water to make 2 cups of syrup. Chill. Put cleaned and prepared fruit in a 4- to 6-quart bowl; add enough pectin syrup to glaze the fruit with a thin film. Gently fold the fruit to coat each piece with syrup. Pack into freezer bags or containers, leaving ½ inch headspace. Seal, label and freeze.

CRUSHED OR PUREED : Select fully ripened berries. Sort, wash and drain. Crush, or press berries through a fine sieve or food mill, or puree with a blender or a food processor. To a quart (2 pounds) of crushed berries or puree, add approximately 2/3 cup sugar, depending on tartness of the fruit. Stir until the sugar is dissolved. Pack into freezer containers or bags, leaving ½ inch headspace. Seal, label and freeze.

Blueberry Freezer Jam

(about 6 half-pints)

Sort, wash and drain the berries thoroughly. Crush berries one layer at a time. Add 2 tablespoons lemon juice to the berries. In a bowl, mix 3 cups of prepared fruit with 5 ¼ cups sugar. Stir well and let stand for 10 minutes. Combine 1 box of powdered pectin with 3/4 cup water in a saucepan. Boil for 1 minute, stirring constantly. Mix the fruit.

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

CANNING BLUEBERRIES

This procedure may also be used with blackberries, currants, dewberries, elderberries, gooseberries, huckleberries, loganberries, mulberries and raspberries.

Choose ripe, sweet berries with uniform color. Wash 1 or 2 quarts of berries at a time, drain and stem. Prepare and boil medium syrup, if desired. Add ½ cup syrup, apple or white grape juice, or water to each hot, clean jar.

Hot pack : For blueberries (also currants, elderberries, gooseberries and huckleberries), heat in boiling water for 30 seconds and drain. Fill hot jars and cover with hot juice, leaving ½ inch headspace.

Raw pack : Pack hot jars with blueberries (or any of the berries listed above), shaking down gently while filling. Cover with hot syrup, juice or water, leaving ½ inch headspace. Adjust lids and process.

Medium (30%) Syrup : Measure 5 ¼ cups of water and 2 ¼ cups sugar (enough for 9 pints or 4 quarts). For 7 quarts of fruit, measure 8 ¼ cups water and 3 ¾ cups sugar. Bring sugar and water mixture to a boil and pour over the fruit in jars.

Blueberry Syrup

(about 9-half-pints)

Juices from fresh or frozen blueberries are easily made into toppings for use on ice cream and pastries.

Select 6 ½ cups of fresh or frozen fruit of your choice. Wash and stem fresh fruit and crush in a saucepan. Heat to boiling and simmer until soft (5 to 10 minutes). Strain hot through a colander and drain until cool enough to handle. Strain the collected juice through a double layer of cheesecloth or a jelly bag. Discard the dry pulp. The yield of the pressed juice should be about 4 ½ to 5 cups. Combine the juice with 6 ¾ cups of sugar in a large saucepan, bring to boiling, and simmer 1 minute. To make syrup with whole fruit pieces, save 1 or 2 cups of the fresh or frozen fruit, combine these with the sugar, and simmer as in making syrup without fruit pieces. Remove from heat, skim off foam, and fill clean, hot half-pint or pint jars, leaving ½ inch headspace. Adjust lids and process.

Table 2. Process Times for whole Blueberries 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	8	6	7	8	9
Raw	Pints	8	6	7	8	9
	Quarts	10	6	7	8	9

Table 3. Process Times for Blueberries 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	8	5	10
Raw	Pints	8	5	10
	Quarts	10	5	10

Table 1. Recommended process time for whole Blueberries, whole 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 or Quarts	15 min	20	20	25
Raw	Pints	15	20	20	25
	Quarts	20	25	30	35

FURTHER INFORMATION

Food Domain Website

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

Food Stamp Nutrition Connection

http://recipefinder.nal.usda.gov/index.php?ing_term=blueberries&mode=ing_search&Submit=Search

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>

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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