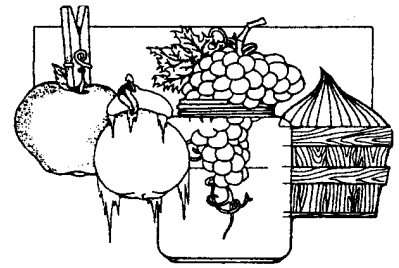


Quality for Keeps



Information for those who produce and preserve food

Blueberries in abundance

If you happen to have access to a lot of blueberries, you can enjoy them well past the season.

The berries can be frozen, canned, made into jam, freezer jam, jelly, syrup, and pie filling. Always start with ripe good quality fruit.

The easiest way to preserve the blueberries is to freeze them. If the berries are going to be frozen whole, they **should not** be washed before they are frozen. They can be washed later before they are eaten. Sort the berries to get rid of poor quality berries and any debris. The berries can be frozen individually so a small portion may be removed at a time.

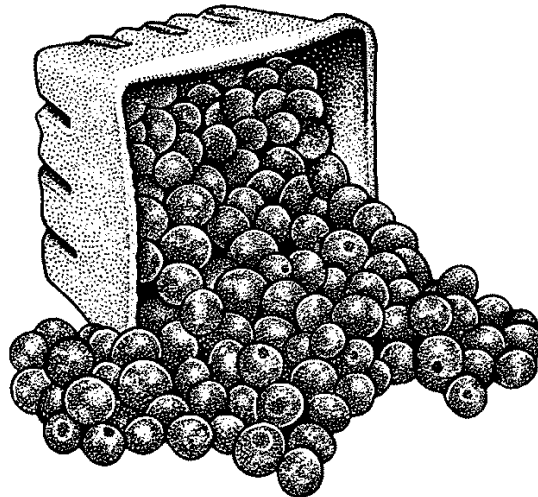
Freezing. To freeze, place the berries on a tray and freeze 4-6 hours. Immediately pack into a container, seal, label and store in the freezer, or pack in a container before freezing leaving 1/2-inch headspace.

If berries are crushed before freezing, wash them before crushing. Stir in 1 to 1-1/8 cups of sugar to a quart (or 2 pounds) of crushed blueberries, until the sugar is dissolved. Pack in containers, leaving 1/2-inch headspace, seal, label, and freeze.

Canning. Blueberries can be canned in water, juice or syrup using a hot pack or raw pack method. Use 12 pounds of berries to fill 7 quart jars, or 8 pounds to fill 9 pint jars.

To pack berries in syrup, prepare the syrup ahead of time. Most berries use a medium syrup. For 7 quarts, mix 3-3/4 cups of sugar with 8-1/4 cups of water and bring to a boil. For 9 pints, use 2-1/4 cups of sugar with 5-1/4 cups water and bring to a boil. Keep warm to pour over berries.

Hot pack. Place berries in boiling water for 30 seconds, then drain. Put drained blueberries in the quart jars



and cover with hot juice, syrup, or water, leaving 1/2-inch head space. Process quarts in a boiling water bath for 15 minutes, or at 6 pounds of pressure for 8 minutes.

Raw pack. Gently pack berries into a clean, warm jar, fill with hot water, syrup, or juice leaving a 1/2-inch head space. Adjust lids, and process quarts for 20 minutes in a boiling water bath, or 6 pounds of pressure for 10 minutes.

Pints are processed for 15 minutes in a boiling water bath, or 8 minutes at 6 pounds of pressure, whether they are hot or raw packed.

Blueberry syrup. Syrup can be made with or without whole fruit in it. Use 6-1/2 cups of washed and stemmed blueberries (reserve 2 cups of whole berries if fruit is desired in the syrup).

In a saucepan, heat the crushed blueberries to boiling and simmer until the fruit is soft. Strain the hot fruit through a colander, and let it cool. Once cooled, strain and press the juice again through a jelly bag, or double layer of cheese cloth. Discard any dried pulp.

For syrup containing whole berries, combine reserved fruit with 6-3/4 cups of sugar. Add strained fruit juice. For plain syrup, mix the remaining filtered juice with 6-3/4 cups of sugar. Place in a large saucepan and bring the mixture to a boil; simmer one minute. Remove from heat and skim off the foam. Pour into clean pint or half pint jars, leaving 1/2-inch headspace. Wipe the jar tops and adjust the two piece lids. Process the jars in a boiling water canner for 10 minutes.

Inside this issue:

Substitutions when canning 2

Choose two-piece lids 3

Canning fruit –based baby food . 4

Substitute canning ingredients with caution

For success when canning, gather any supplies needed before washing or slicing vegetables, fruit, or meat.

For safety, stick to current USDA approved recipes. The proper amounts of acid, salt, and sugar are necessary to prevent the growth of microorganisms.

Pickles. Pickle recipes must be exact, and may become unsafe if ingredients are adjusted.

Vinegar. Since low acid vegetables are used when making pickles, the correct amount and type of vinegar is essential to yield a safe product. Use a commercial white or cider vinegar with 5% acidity for canning. White vinegar is best for light colored fruits or vegetables to prevent discoloring the product.

Do not change the vinegar to water ratio in recipes for a less tart product. Do not dilute the amount of vinegar. In fresh pack pickles, the vinegar is the essential ingredient.

Salt. Salt may be omitted when canning vegetables in a pressure canner. Current processing times and temperatures have been developed to be safe, even if salt is omitted.

However, in sauerkraut and brined pickles, the salt is required to control dangerous bacteria and provide a safe product.

Follow recipes exactly. Carefully measure ingredients, or weigh both salt and shredded cabbage when preparing fermented products. The brine must be salty enough to inhibit undesirable bacteria, but still allow fermentation bacteria to grow. Use pickling or canning salt for best results. Table salt contains added ingredients which prevent clumping; however, these ingredients tend to cause cloudiness in canned products.

Sugar. Either white or brown sugar is used for pickles. Sugar is used in sweet pickles to plump the pickles and keep them firm. Substituting honey or corn syrup may not produce the desired flavor.

Spices. The spices used in pickles may be adjusted or omitted to taste, since spices provide flavor, and are not needed for safety. Use whole spices to prevent cloudiness and keep the food from discoloring.

Jams and Jellies. When making jellied products, the product will not gel unless the proportions of fruit, acid, pectin, and sugar is exactly balanced. Too much or too little sugar, fruit, pectin, or acid will result in failure. Follow a tested recipe to get the best results. In jelly, sugar is used to prevent the growth of harmful microorganisms, give the correct texture, and provide flavor.

To make reduced sugar or sugar-free jelly, buy a pectin labeled for that use. Attempting to reduce the sugar or use artificial sweeteners in a regular jelly recipe will change the texture and affect the safety of jelly.

Do not substitute liquid for powdered pectin. The two forms of pectin are not interchangeable. Some fruits are naturally high in pectin, so

commercial pectin is not always necessary.

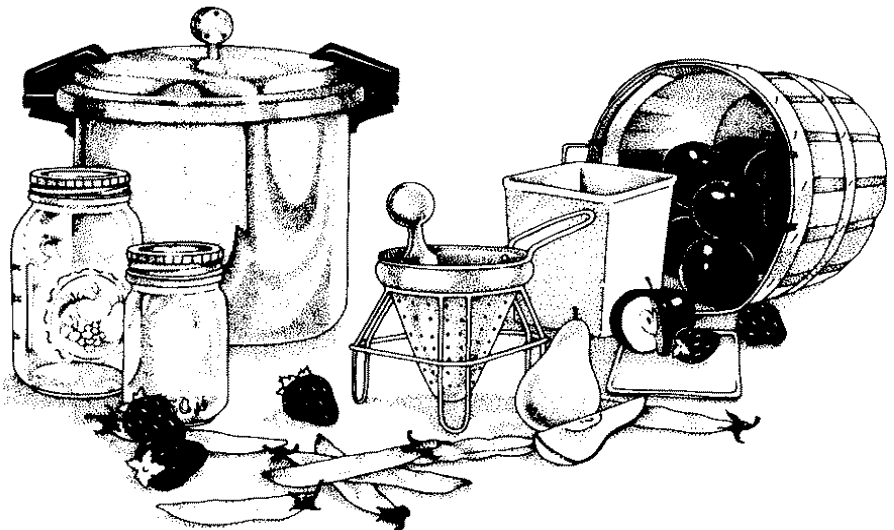
Canning. Sugar is not needed when canning fruit; fruit can be safely canned in water or fruit juice, although the fruit will be less firm.

If desired, one half of the sugar can be replaced with corn syrup or mild honey. Although sugar helps canned fruit keep a good color and a firm texture, sugar is not necessary for safety in canned fruit. Sucralose or Splenda® are the only types of artificial sweetener that can be used for canning. Both will maintain sweetening properties during canning. Add other types of artificial sweeteners just before eating.

Canning recipes for Splenda® are available from the National Center for Home Food Preservation: http://www.uga.edu/nchfp/how/can_07/reduced_sugar_spread.html.

Source: <http://www.uga.edu/nchp/index.html>

Brand names are mentioned for educational purposes only and do not imply endorsement.



Choose two-piece lids when canning

Although both 1-piece and 2-piece canning lids are appearing on home canning supply web sites, only the 2-piece ring and flat is currently recommended.

The design of 1-piece lids does not allow enough air to escape under home canning conditions, and may result in a weak seal.

The common self-sealing lid consists of a flat metal lid held in place by a metal screw band during processing. The flat lid is crimped around its bottom edge to form a trough, which is filled with a colored gasket compound. When jars are processed, the lid gasket softens and flows slightly to cover the jar-sealing surface, yet allows air to escape from the jar. The gasket then forms an airtight seal as the jar cools.

For sealing success, use flats within one year of manufacture. Flats may be good up to 5 years from date of manufacture if stored in tight, cool containers.

However, expect more sealing failures in older unused lids.

Buy only the quantity of lids that can be used within one year. Follow the manufacturer's directions in preparing lids for use. Examine all metal lids carefully. Do not use old, dented, or deformed lids, or lids with gaps or other defects in the sealing gasket.

After filling jars with food, release air bubbles by inserting a flat plastic (not metal) spatula between the food and the jar. Slowly turn the jar and move the spatula up and down to allow air bubbles to escape. Adjust the headspace and then clean the jar rim (sealing surface) with a dampened paper towel. Place the lid, gasket down, onto the cleaned jar-sealing surface. Un-cleaned jar-sealing surfaces may cause seal failures.

Then fit the metal screw band over the flat lid. Follow the manufacturer's guidelines for tightening the jar lids properly.

Do not retighten lids after processing jars. As jars cool, the contents in the jar contract, pulling the self-sealing lid firmly against the jar to form a high vacuum. If rings are too loose, liquid may escape from jars during processing, and seals may fail. If rings are too tight, air cannot vent during processing, and food will discolor during storage. Over tightening may also cause lids to buckle and jars to break, especially with raw-packed, pressure-processed food.

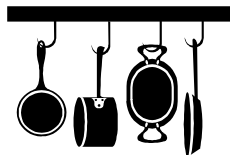
Remove screw bands after jars are cooled. When removed, washed, dried, and stored in a dry area, screw bands may be used many times. If left on stored jars, they become difficult to remove, often rust, and may not work properly again.

Source: USDA Guide 1, Principles of Home Canning

THE RECIPE BOX

Blueberry Conserve

- 2 cups water
- 4 cups sugar
- 1/2 thinly sliced lemon
- 1/2 thinly sliced orange
- 1/2 cup seedless raisins
- 1 quart stemmed blueberries



Sterilize canning jars. Bring water and sugar to boiling. Add lemon, orange, and raisins; simmer 5 minutes. Add blueberries and cook rapidly until thick, about 30 minutes. As mixture thickens, stir frequently to prevent sticking. Pour hot conserve into hot jars, leaving 1/4-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a boiling water bath.

Source: So Easy to Preserve, 5th ed. 2006. Bulletin 989, Cooperative Extension Service, The University of Georgia, Athens. Revised by Elizabeth L. Andress, Ph.D. and Judy A. Harrison, Ph.D., Extension Foods Specialists.

Canning fruit-based baby food

You can make home-canned fruit-based foods for baby food use, but not vegetables, meat or poultry. Any fruit or mixture of fruits, (except figs), may be used to make chunk style or pureed baby food with or without sugar. The fruit should be washed and drained, and any stems, peelings and pits should be removed.

In a saucepan, add one cup of water to a quart of slightly crushed fruit. The fruit should be cooked slowly and stirred frequently until it is soft. Mash the fruit, or put it through a sieve or food mill. Reheat the fruit to a boil, making sure any added sugar is dissolved. Pack fruit into hot half-pint (preferably), or pint jars leaving ½-inch headspace. Remove bubbles, wipe the top of the jars, place two piece lid on jars, and use the following processing times.

Process time for fruit-based baby foods in a boiling-water canner				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Half-pints Pints	20 min	25	30

Caution: Do not attempt to can pureed vegetables, red meats, or poultry meats, because proper processing times for pureed foods have not been determined for home use. Instead, can and store these foods using the standard processing procedures; puree or blend them at serving time. Heat the blended foods to boiling, simmer for 10 minutes, cool, and serve. Store unused portions in the refrigerator and use within 2 days for best quality.

Source: http://www.uga.edu/nchfp/how/general/baby_food.html

Quality for Keeps, published monthly, April through October, is made available to residents of East Central and Southeast Missouri by their Extension Councils. Contact your county Extension office to subscribe or visit our website <http://extension.missouri.edu/franklin>. Questions may be directed to:

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