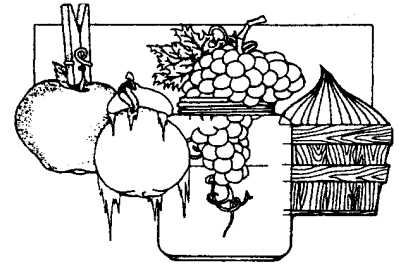


# Quality for Keeps



Information for those who produce and preserve food

## Reconsider family food preservation traditions

*Many home food preservers learned how to can, freeze, dry or pickle foods from their mother, grandmother or other relative. Family memories may include stirring fresh strawberries into jam, peeling luscious sweet peaches, or the aroma of shredded cabbage fermenting into sauerkraut.*

Although passing down favorite family recipes is a wonderful tradition, some food preservation methods are outdated and even dangerous. Stick to research-based methods to be sure foods preserved at home meet the same high standards of safety expected of those commercially processed.

A recent national survey found that one-third of survey respondents were canning vegetables using unsafe methods and that 54% adapt recipe directions, which could result in hazardous products.

Thus, cases of botulism from home-canned foods continue to occur. In 2012 three people were sickened from foods brought to a barbeque in Oregon, and in 2008 and 2009 botulism was linked to improperly home-canned green beans and asparagus. Botulism can be deadly, causing not just digestive upset, but difficulty swallowing or breathing, paralysis and potentially death.

While not all food preservation mistakes are deadly, they can lead to waste of food, time and energy. When improperly preserved food becomes unusable, it has to be thrown out.

To keep food safe use only research-based, tested recipes and directions.

**Many unsafe practices continue to be used by home food preservers.**

Up to date, safe directions for preserving food are available at these sites:



**The National Center for Home Food Preservation** at: <http://nchfp.uga.edu/index.html> offers:

- Detailed recipes and how-to instructions for canning, freezing, pickling, drying and preparing jams and jellies.
- A free on-line course on food preservation.
- “So Easy to Preserve”, a 375 page canning and preserving book with tested recipes.

**University of Missouri Extension**, <http://extension.missouri.edu> provides:

- Printed “how to” guide sheets on canning, freezing and food preservation.
- Knowledgeable faculty to answer questions by phone or email. To find a local office, add a county name to the URL above; for example: <http://extension.missouri.edu/stcharles>. Phone numbers of many local Extension offices are printed on the back page of this newsletter.
- Food preservation classes are available in many communities. Call a local Extension office for times and locations, or check your county website for availability.

**USDA Guide to Home Canning**, 2009 edition. The Guide, or any of its pages, can be printed from this website: [http://nchfp.uga.edu/publications/publications\\_usda.html](http://nchfp.uga.edu/publications/publications_usda.html).

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## Family Traditions *(cont'd from page one)*

- Extension services affiliated with universities in other states have research-based information. However, some of their recommendations may not be appropriate for Missouri's climate or altitude. Check other state's information against recommendations specific to Missouri.

Begin, or keep a family tradition this year by taking a food preservation class with other family members. Enjoy preserving food together and hand down a tradition of doing it safely.

*Source: Linda Rellergert, Nutrition and Health Education Specialist, University of Missouri Extension.*



*Applesauce, that was not properly processed, has developed fuzzy, white mold. (Photo courtesy of Eric Blumenberg)*

## Keep catch of the day fresh

**F**ish deteriorates quickly and should be cleaned and frozen soon after it is caught. If fish cannot be frozen immediately, pack it in crushed ice until it can be frozen, no longer than 3 to 5 days.

**Preparation.** Wash fish in drinking-quality water then remove entrails, head and fins. Cut fish into steaks, fillet or leave whole, depending on size and planned use.

Before freezing, pretreat fish to improve quality during storage. Pretreatment method varies with the fat content of fish.

- Fish with higher fat content (mullet, mackerel, trout, tuna and salmon): Dip for 20 seconds in a solution made with 2 teaspoons crystalline ascorbic acid and one quart of cold water. This reduces rancidity and flavor changes.
- Lean fish (flounder, cod, whiting, snapper, grouper and most freshwater fish): Dip for 20 seconds in a brine of ¼ cup salt mixed in 1 quart cold water to firm the flesh and decrease drip loss on thawing.

### Packaging.

Use one of these methods to package fish for the freezer:



- **Wrap.** Place in moisture/vapor proof wrapping using the drugstore wrap. Place a double piece of freezer paper or wrap between fish pieces in a package to make separation easier.
- **Water.** Place fish in a shallow metal, foil or plastic pan. Cover with water and freeze. To prevent evaporation of the ice, wrap the container in freezer paper after it is frozen.
- **Ice Glaze.** Place unwrapped fish in the freezer to freeze. As soon as it is frozen, dip fish in near-freezing ice water. Place fish again in the freezer a few minutes to harden the glaze. Take out fish, and repeat the glazing until a uniform cover of ice is formed. Wrap the fish in moisture/vapor proof paper or place in freezer bags.

Store lean fish up to 6 months; fat fish 2 to 3 months at 0°F.

**Thawing.** Fish, like other foods, must be thawed in the refrigerator to prevent the growth of spoilage organisms. A whole fish may take a day or longer to thaw, while fillets just a few hours. Or, if time is short, place frozen fish, in a sealed plastic bag, in cold water to thaw. Fillets will be thawed enough to cook in 30 minutes or less. Fish that will be breaded before cooking should be at least partially thawed so the coating will stick to the surface.

**Cooking.** Fish has little or no connective tissue, is very tender and cooks quickly. When pan frying or grilling, plan on about 4 to 5 minutes per ½-inch thickness. Fish is done when it turns opaque white and flakes easily. Overcooking will cause fish to be tough and dry.

Fish may also be canned following directions in University of Missouri Extension publication, GH1490 Quality for Keeps Canning Meat, Fish and Poultry, also available online at: <http://extension.missouri.edu/p/GH1490>.

## Greens—a taste of spring

*Young spring greens are some of the first vegetables of the growing season to be enjoyed from home gardens. Greens can also be gathered from the wild if carefully identified.*

David Trinklein, University of Missouri plant scientist, wrote an article on gathering wild greens in the March 5, 2013 issue of Missouri Environment and Garden newsletter: <http://ipm.missouri.edu/meg/>. He advises using a classic resource available from Missouri Department of Conservation, Missouri Wildflowers, by Edgar Denison, to identify wild edibles.

Trinklein's article describes some of the tastiest greens to be found in the wild, such as watercress and lambsquarters. He also notes that poke, which was once considered edible, should be avoided because all parts of the plant contain toxic compounds.

Whether wild or cultivated, greens taste best when harvested in cooler weather like spring and fall. They are highly nutritious, a great source of vitamin K and also contain vitamin A, calcium, magnesium, folate and fiber.

**Selection and storage.** When picking or buying, choose dark green leaves that are crisp and springy, fresh looking and with no yellowed or brown edges.

Keep fresh greens wrapped in a damp paper towel in a perforated plastic bag in the refrigerator. Change the towel to keep it damp. Use greens within one week, and wash just before using.

**Preparation.** Wash greens by immersing in cold water, swish and lift out of water, leaving behind any soil or sand. Repeat until water remains clear.

**Canning Spinach and Other Greens.** An average of 28 pounds is needed per canner load of 7 quarts, or about 4 pounds per quart.

Can only freshly harvested greens. Discard any wilted, discolored, diseased, or insect-damaged leaves. Leaves should be tender and attractive in color.



**Procedure.** Wash small amounts of greens at one time. Drain water and continue rinsing until water is clear and free of grit. Cut out tough stems and midribs. Place 1 pound of greens at a time in a cheesecloth bag or blancher basket and steam 3 to 5 minutes, or until well wilted.

Add ½ teaspoon of salt to each quart jar if desired. Fill hot jars loosely with blanched greens and add fresh boiling water, leaving 1-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened clean paper towel.

Adjust lids and process pints for 70 minutes and quarts for 90



minutes at 11 pounds pressure in a dial gauge canner, or 10 pounds pressure in a weighted gauge canner. Above 1,000 feet in elevation, process at 15 pounds pressure in a weighted gauge canner (no adjustment needed in dial gauge canner below 2,000 feet).

**Freezing.** Select young, tender green leaves. Wash thoroughly and cut off woody stems. Cut leaves of chard into pieces.

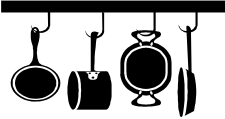
Water blanch collards 3 minutes and all other greens 2 minutes. Blanch tender young leaves 1-½ minutes. Cool and drain, then package, seal, label and freeze. Note: do not steam blanch greens when freezing.

*Source: University of Missouri Extension GH1454 How to Can Fresh Vegetables, <http://extension.missouri.edu/p/GH1454>.*

*Source: University of Missouri Extension GH1503 Freezing Vegetables, <http://extension.missouri.edu/p/GH1503>.*



## THE RECIPE BOX



### Braised Greens

- 3 tablespoons olive oil, divided
- 1 medium onion, chopped fine
- 5 medium garlic cloves, minced
- 2 pounds fresh greens (ribs removed and leaves chopped into 3-inch pieces.)
- 1 cup vegetable or chicken broth
- 1 cup water
- 2 teaspoon lemon juice

Procedure: In a Dutch oven, over medium heat, heat 2 tablespoons olive oil. Add onion and cook, stirring occasionally, until softened and beginning to brown (about 4 to 5 minutes). Add garlic and greens and stir until greens begin to wilt (about 1 minute). Add broth and water. Cover pot and reduce heat to medium-low. Cook, stirring occasionally, until greens are tender. Kale will take about 25 to 35 minutes and collards 35 to 45 minutes.

Remove lid and increase heat to medium-high. Cook, stirring occasionally, until most of liquid has evaporated (bottom of pot will be almost dry and greens will begin to sizzle), 8 to 12 minutes. Remove pot from heat. Stir in lemon juice and remaining tablespoon of olive oil.

Yield: 8 servings

Source: "Seasonal and Simple" - A Guide for Enjoying Fresh Fruits & Vegetables", University of Missouri Extension, 2009.

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

*Mary Schroepfer*

**Mary Schroepfer**  
Nutrition & Health Specialist  
116 W. Main  
Union, MO 63084  
Ph: (636) 583-5141  
Fax: (636) 583-5145  
Email: SchroepferM@missouri.edu

#### EAST CENTRAL OFFICES:

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*Linda S. Rellergert*

**Linda S. Rellergert**  
Extension Professional  
Nutrition and Health Education Specialist  
260 Brown Rd.  
St. Peters, MO 63376  
Ph: (636) 970-3000  
Fax: (636) 279-3310  
Email: RellergertL@missouri.edu

#### URBAN EAST OFFICES:

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