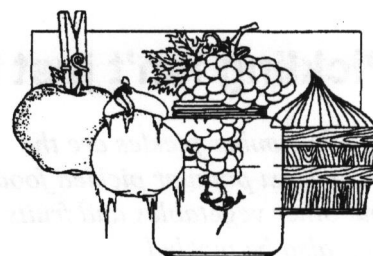


# Quality for Keeps



Information for those who produce and preserve food

## From ordinary to extraordinary with pickles

*For added zest and flavor, include pickled products as an ingredient or garnish. Although frequently expensive when purchased, the ingredients are fairly basic and sometimes plentiful to gardeners.*

The addition of vinegar (acid) to low-acid vegetables during pickling allows some vegetables, that would otherwise have to be pressure canned, to be safely preserved in a water bath canner.

Vegetables are lower in acid than fruits, so vegetables must be either pressure canned, or pickled with plenty of acid, to be safely water bath processed.

Most fruits are naturally acidic, and do not need to be pressure canned to destroy deadly *Clostridium Botulinum* bacterium. *Clostridium Botulinum* cannot survive in a non-acidic environment.

Some cucumber pickles and sauerkraut are made by using brine and fermenting for approximately six weeks. Keep food in a brine solution, and add salt each week to maintain the brine solution at 10% salt. Remove scum each day to maintain the acidity and prevent spoilage of the vegetables. Hold the temperature around 70° to 75° F during the fermentation process. Cucumbers are then rinsed before being made into pickles. The fermenting process produces acids necessary for the preservation process, and creates

unique flavors typical of fermented pickles. This pickling process takes several weeks to complete.

For a simpler alternative, choose a quick pickle recipe for pickles, relishes, or chutney that is easily completed in one to two days.

For good quality pickles, fresh high quality fruits or vegetables must be used. For pickled cucumbers, use the correct size cucumbers for the type of pickle being made. Remove and discard a 1/16-inch slice from the blossom end of fresh cucumbers. Blossoms may contain an enzyme that causes excessive softening.

Use only pickling or canning salt to prevent cloudiness in the brine. Measure salt and other ingredients exactly. The right amount of salt is necessary in fermented pickles and sauerkraut to prevent spoilage.

Use only 5% vinegar in pickles to get the proper acidity. Do not use homemade vinegar, since the acidity may not be 5%. White or cider vinegar may be used. To avoid discoloration, white vinegar is preferred for white or light colored vegetables. Cider vinegar offers more flavor and aroma, and is preferred if discoloration is not a factor.

White sugar is used for pickles, unless brown sugar is specified. Use artificial sweeteners like Splenda® and Equal® only in recipes designed to use less sugar. Artificial sweeteners may not be substituted for sugar in pickle recipes.

Choose whole fresh spices, instead of powdered spices, to prevent cloudy brine and obtain best flavor and quality, but remove whole spices before processing pickles to prevent possible discoloration.

Firming agents are not necessary, if up-to-date procedures are followed. The safest way to make crisp pickles is to soak cucumbers in ice water for four to five hours before pickling. Some recipes suggest soaking cucumbers in a **food grade** lime and water mixture, but all the lime must be rinsed out after soaking.

Pickle Crisp® is a commercial product that can be used to firm fresh pickles. For brined pickles, alum may be used to make the pickles crisp, but do not use alum for fresh pack or quick pickles.

All pickles, relishes and chutney must be processed in a boiling water canner. Under processing can lead to spoilage. Over processing can lead to soft pickles. To insure the best quality of product, follow the directions of a tested recipe exactly.

Sources: "Home Food Preservation" Curriculum, University of Missouri Extension, 3/2010.

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

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## Pickling isn't just for cucumbers

**C**ucumber pickles are the most popular pickled food, but other vegetables and fruits can also be pickled.

USDA approved recipes can be found at the National Center for Home Food Preservation web site at: <http://www.uga.edu/nchfp/> or Extension publications such as: <http://>

[extension.missouri.edu/publications/DisplayPub.aspx?P=Gh1457](http://extension.missouri.edu/publications/DisplayPub.aspx?P=Gh1457) or [http://extension.usu.edu/utah/htm/fcs/food-preservation-canning/usda\\_home\\_canning/](http://extension.usu.edu/utah/htm/fcs/food-preservation-canning/usda_home_canning/).

Recipes are also in the "So Easy to Preserve" canning book or the "USDA Complete Guide to Home Canning".

Prepare unique pickled products to include in gift baskets, offer as hostess gifts, or add pizzazz to home-made casseroles, snacks, or sandwiches.

Check out the following list for using foods other than cucumbers for pickling:

Fruit or Vegetable	Pickling Options
Apples	sweet apple relish, apple chutney, tomato apple chutney, spiced apple rings
Artichokes	jerusalem artichoke relish
Asparagus	pickled asparagus
Beans	green beans, three bean salad, chow chow
Beets	beets, no-sugar-added pickled beets
Brussel Sprouts	pickled brussels sprouts
Cantaloupe	cantaloupe pickles, no-sugar-added cantaloupe pickles
Cabbage	piccalilli, sauerkraut, fall garden relish, dixie relish, chow chow
Carrots	pickled carrots, pickled baby carrots, chow chow, mixed vegetable pickles
Cauliflower	pickled cauliflower, fall garden relish, mixed vegetable pickle
Chayote	chayote and jicama slaw, chayote and pear relish
Corn	corn relish
Crabapples	spiced crabapples
Cranberry	cranberry orange chutney
Cucumbers	quick fresh pack dill pickles, fermented dill pickles, kosher dills, bread and butter pickle slices, quick sour pickles, ice water pickles, sweet pickle rings, sweet cucumber pickles, sweet gherkins, quick sweet pickle slices or strips, 14-day sweet pickles, pickle relish, sweet pickle relish, chow chow, mixed vegetable pickles, reduced-sodium sliced sweet pickles, reduced-sodium sliced dill pickles, no-sugar-added sweet pickled cucumber slices
Figs	fig pickles
Grapes	spiced red grapes, spiced muscadines
Horseradish	horseradish relish
Jicama	spicy jicama relish, chayote and jicama slaw, tangy tomatillo relish, bread and butter pickled jicama
Mango	mango chutney

## Food Preservation

Fruit or Vegetable	Pickling Options
Mushrooms	marinated whole mushrooms
Okra	okra dill pickles
Onions	pickled onions, pickled pearl onions, onion relish, Vidalia onion relish, Oscar relish, mixed vegetable pickles, bread and butter pickle slices, piccalilli, pickle relish, sweet pickle relish, fall garden relish, pickled green tomato relish, spicy jicama relish, dixie relish, corn relish, chayote and pear relish, tangy tomatillo relish
Peaches	peach pickles, peach chutney, oscar relish
Pears	pear pickles, spiced pears, pear relish, chayote and pear relish
Peppers	marinated peppers, pickled bell peppers, pickled peppers, pickled peppers II, pickled jalapeno peppers, pickled jalapeno pepper rings, pickled yellow pepper rings, pepper relish, oscar relish, piccalilli, pickle relish, sweet pickle relish, pear relish, fall garden relish, pickled green tomato relish, tangy tomatillo relish, spicy jicama relish, dixie relish, corn relish, chow chow, chayote and pear Relish, mixed vegetable pickles
Plums	spiced plums
Squash	squash bread and butter pickles, pickled bread and butter zucchini, squash pickles I, squash pickles II
Tomatillo	tangy tomatillo relish
Tomatoes (green)	kosher style dill green tomato pickles, spiced green tomatoes, piccalilli, pickled green tomato relish, chow chow
Tomatoes (ripe)	tangy tomatillo relish, tomato apple chutney
Watermelon	watermelon rind pickles

Source: Adapted from "So Easy to Preserve", 5th Edition 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 Food Specialists.

## Avoid pesky pickle problems

**T**he most frequent complaint received from home-canners concerns soft pickles. Common causes of soft or slippery pickles include:

- a weak brine or vinegar
- pickles not being kept covered in brine
- scum not being removed daily
- insufficient processing
- blossom ends left on cucumbers
- pickles were over-processed
- pickles were stored in an area that was too warm.

Pickles that are not as crisp as usual may be a sensory issue, but excessively soft or slippery pickles are probably spoiled and should be discarded, so they are not eaten by people or animals.

Pickles may turn dark if there is iron in the water, the wrong type of utensils were used (brass, iron, copper, or zinc), ground spices or iodized salt were used, whole spices were left in the liquid during processing, or dark colored vinegar was used.

White sediment in the bottom is usually caused by using salt with an anti-caking agent or by fermenting bacteria.

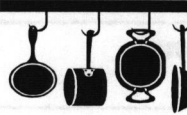
Unless there are signs of spoilage, the white sediment is not a reason for concern.

If the cucumbers are not fresh, or are of poor quality, the resulting pickles may be hollow, shriveled, have poor coloring, or have a bitter flavor.

Pickle problems may also occur if the weather during growing season was excessively hot or wet, if the wrong types of cucumbers were used, or if the produce was not handled properly. Use only top quality produce and follow the recipe exactly to yield a quality pickle.

Source: [http://www.uga.edu/nchfp/how/can\\_06/pickleproblems.html](http://www.uga.edu/nchfp/how/can_06/pickleproblems.html)

## THE RECIPE BOX



### Kosher Style Dill Green Tomato Pickles

- small green firm tomatoes
- 6 stalks celery, cut in 2-inch lengths
- 6 sweet green peppers, seeded and quartered
- 6 cloves garlic
- 2 quarts water
- 1 quart distilled white vinegar (5%)
- 1 cup canning or pickling salt
- fresh dill to taste

**Yield:** About 6 quart jars

**Procedure:** Remove stems and cores from green peppers; quarter and remove seeds. Wash and drain all vegetables. Pack washed tomatoes in hot jars. Add to each quart jar: 1 clove of garlic, 1 stalk of celery and 4 quarters of green pepper.

Combine water, vinegar and salt. Boil with dill for 5 minutes, pour hot brine over vegetables in jars, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace. Wipe rims of jars with a dampened clean paper towel; adjust two-piece lids.

Process in a boiling water canner. Raw pack. In quart jars, process for 15 minutes at altitudes of 0-1,000 ft., 20 minutes at 1,000-6,000 ft., or 25 minutes above 6,000 ft. altitude.

*Source: Adapted from "So Easy to Preserve", 5th Edition 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 Food Specialists.*

*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://missouri.extension.edu/franklin>. Questions may be directed to:

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