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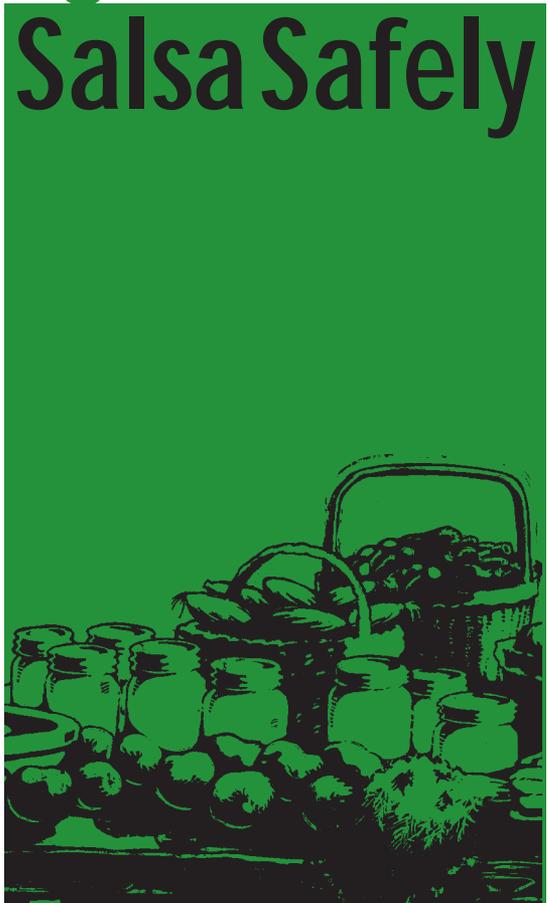
University of Wisconsin-Extension Cooperative Extension

Wisconsin Safe Food
Preservation Series

Canning



Salsa Safely



Barbara H. Ingham



Salsa can be a fun and easy way to preserve peak-of-season tomatoes to enjoy all year.

Most salsa recipes mix **low-acid foods**, such as onions and peppers, with **acid foods**, such as tomatoes. The salsa recipes in this bulletin have been tested to ensure that they contain enough acid to be processed safely in a boiling water canner.

Ingredients

Tomatoes

Use only high quality tomatoes for canning salsa or any other tomato product. Canning is no way to use overripe or damaged tomatoes, nor tomatoes from dead or frost-killed vines. Poor quality or overripe tomatoes will yield a very poor salsa that may spoil and be unsafe.

The type of tomato you use affects salsa quality. **Paste or Italian tomatoes**, such as Roma VF, Debaro, Italian Gold, Sheriff or Viva Italia, have firmer flesh and produce thicker salsas than large **slicing tomatoes**, such as Celebrity, Big Boy, Better Boy or Husky Gold (yellow).*

Although both types make good salsas, slicing tomatoes usually yield a thinner, more watery salsa than paste tomatoes. You can thicken

these salsas by adding tomato paste or by draining off some of the liquid after you chop the tomatoes. But use the quantity of chopped tomatoes listed in the recipe.

Where recipes call for peeled tomatoes, remove the skin by dipping tomatoes in boiling water for 30 to 60 seconds or until skins split. Dip in cold water, then slip off skins and remove cores and seeds.

You may substitute green tomatoes or tomatillos for tomatoes in any of these recipes.



* For a complete list of recommended vegetables to plant, request the publication *Vegetable Cultivars and Planting Guide for Wisconsin Gardens* A1653. Other

helpful information can be found in the publications *Disease-Resistant Vegetables for the Home Garden* A3110, *Growing Tomatoes, Peppers and Eggplants in Wisconsin* A3687, and *Harvesting Vegetables from the Home Garden* A2727. These are available from your county UW-Extension office or Cooperative Extension Publications at the address on the back page.

Tomatillos

Tomatillos are also known as **Mexican husk tomatoes**. You do not need to peel or seed these, but you must remove the dry outer husk. Varieties suitable for Wisconsin gardens include Purple and TomaVerde.*

Peppers

Use only high quality peppers.

Do not increase the total amount of peppers in any recipe. But you may substitute one type of pepper for another, or use canned chilies in place of fresh.

Peppers range from mild to fiery in taste. Mild peppers are usually big — 4 to 10 inches long. **Mild pepper** varieties that grow in Wisconsin are bell-types such as NorthStar, Big Bertha, Early Cal Wonder, Yankee Bell or Gypsy (yellow) and others.* Choose a mild pepper when the recipe calls for long green chilies, or substitute bell peppers for some or all. For hints on substituting peppers, see the chart on page 3.

Very hot peppers are usually small — 1 to 3 inches long — except for Hungarian Yellow Wax. They provide a distinct taste to salsas. Jalapeño is the most popular. Other varieties that grow in Wisconsin include Super Cayenne, Super Chili, Habañero, Anaheim College and Ancho 101. Hot peppers usually need longer growing seasons than mild varieties, and thus do best in the southern half of the state.*

Hot peppers such as jalapeño do not need to be peeled, but seeds are often removed. Finely chopped mild peppers do not usually need to be skinned.



* For a complete list of recommended vegetables to plant, see UW-Extension publication *Vegetable Cultivars and Planting Guide for Wisconsin Gardens A1653*

(see back page to order).

Caution: The volatile oils in hot peppers can cause burns. Wear rubber gloves when you cut or chop these peppers. Do not touch your face, particularly near your eyes. Wash hands thoroughly with soap and water if you do handle hot peppers.

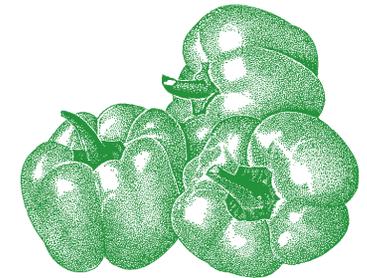
If you want to remove the tough skin from peppers, first slit each pepper along the side to allow steam to escape when you heat them. Next, peel using one of these two methods:

- **Oven or broiler** — Place peppers in a hot oven (400° F) or broiler for 6 to 8 minutes until skins blister.
- **Range top** — Cover hot gas or electric burner with heavy wire mesh. Place peppers over the burner for several minutes until skins blister.

After heating, place peppers in a pan and cover with a damp towel. Allow to steam for 5 to 10 minutes. Slip off skins, discard seeds, and chop.

Acids

Salsa is preserved by adding **acid**, either vinegar or bottled lemon or lime juice. You must add acid to canned salsas because the natural acidity may not be high enough to prevent growth of *Clostridium botulinum* and production of the potentially fatal *C. botulinum* toxin.



Pepper substitutions



Use the following chart to guide you in mixing different peppers. The hotness of salsa depends on the kind and amount of peppers used. For a very mild salsa, substitute bell peppers for hot peppers. The mix of peppers can be varied as long as the total amount stays the same.

Remember: Always measure the amount of chopped pepper listed in the recipe. Do not rely on this chart for exact quantities.

Amount whole

Bell pepper — 1 medium
Bell pepper — 1 large
Jalapeño — 1 medium
Long green chili — 1 pepper

Amount chopped

About 1 cup chopped
About 2 cups chopped
About ¼ cup chopped
About ⅓ cup chopped

When substituting canned peppers for fresh, first drain the canned peppers, then chop and measure the desired amount.



Caution: Adding acid is necessary to safely preserve salsa.

Follow recipe directions for adding vinegar (5% acetic acid) or bottled lemon or lime juice to home canned salsa. Do not substitute vinegar for lemon juice unless this substitution is given in the recipe. To do so will result in a less acidic salsa that may be unsafe.

Use vinegar that is at least **5 percent acetic acid**, or use **bottled** lemon or lime juice. Do not use homemade vinegar, or substitute vinegar for lemon juice — unless this substitution is given in the recipe.

Lemon juice is more acidic than vinegar, so you **may** safely substitute an equal amount of bottled lemon or lime juice for vinegar in recipes using vinegar.

Spices

Spices and herbs add a characteristic flavor to salsas. You may decrease the amounts of spices and herbs in these recipes. But do not increase the amounts **before** canning. Increasing the amount of herbs and spices before canning may produce an unsafe salsa. For a stronger flavor, add fresh herbs and spices just before serving.

Canning safely

For safe canning:

- **Follow these research-tested recipes carefully.** This bulletin provides recipes for safely processing pint jars of salsa in all of Wisconsin. Safe processing times are not available for quart jars.
- **If you use any other recipe or adapt one of these:** Freeze the salsa, or refrigerate it and use within several weeks.
- **If you want salsas with more body:**

Before canning — Add commercial tomato paste to thicken before canning. **Do not** thicken salsas with flour or cornstarch.

After canning — After you open a jar, you may pour off some liquid, or thicken the salsa with cornstarch before serving.



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Filling jars

Follow the manufacturer's directions for pretreating two-piece vacuum seal lids. Fill hot, clean pint jars with hot salsa, leaving 1/2-inch headspace. Be careful not to leave any salsa on the jar rims. Wipe jar rims with a clean, damp paper towel. Put on pretreated lids and screw on metal bands until you begin to feel resistance, then turn the band until it is firmly tight.

Processing in a boiling water canner

- Use a rack to keep jars from touching the canner bottom and to allow heat to reach all sides of the filled pint jars.
- Put jars into a canner that contains simmering (180° F) water.
- Add boiling water if needed to bring water 1 to 2 inches above jar tops. Do not pour water directly on the jars. Place a tight-fitting cover on the canner. If you use a pressure canner for boiling water canning, leave the cover unfastened and the petcock open to prevent pressure buildup.

- Bring water to a rolling boil. Set the timer for 20 minutes. Watch closely to keep water boiling gently and steadily. Add boiling water if necessary to keep jars covered.

Processing times given in this publication are designed to produce a safe salsa in all parts of Wisconsin.

- Remove jars from the canner immediately after the timer sounds. The salsa could spoil if jars are left in hot water too long.

Cooling jars

Put jars on a rack or cloth so air can circulate freely around them. Do not use a fan to cool jars, and avoid cold drafts. Do not retighten screw bands after processing.

Testing for seal

Test each jar for a seal the day after canning. Jars with flat metal lids are sealed if:

- Lid has popped down in the center.
- Lid does not move when pressed down.

If a jar is not sealed, refrigerate it and use within a few weeks, or reprocess within 24 hours. Jars of salsa that do not seal may be safely reprocessed within 24 hours.

To reprocess: Remove lids and empty salsa into a pan. Since all of these recipes require a hot pack, heat salsa to boiling. Place hot salsa in clean, hot jars. Wipe jar rims and put on new lids. Process again for the full time. The quality of twice-processed salsa may be lower, but it will be safe.

Spoilage has occurred if jars of salsa seal at first and then unseal a few days later. Signs of spoilage may include bubbling in the jars, bulging lids, or the appearance of mold under the lid or on the top layer of food in the jar. Sometimes the salsa is spoiled even without obvious signs of spoilage.



Salsa that failed to seal may be safely reprocessed within 24 hours. Empty salsa from jars, heat to boiling, and ladle into clean, hot jars. Reprocess again for the full time. Safely discard jars of salsa that are spoiled or that become unsealed. Place the jars and their contents in a heavy garbage bag. Close and place the bag in a regular trash container, or bury it in a nearby landfill away from humans and animals.

Never use salsa where the jar seal has broken or where there are obvious signs of spoilage such as bulging lids, bubbling or frothing of jar contents, or a strong sour smell when you lift the jar lid.

Do not taste spoiled food. Safely discard jars of salsa that are spoiled or that become unsealed. Place the jars and their contents in a heavy garbage bag. Close and place the bag in a regular trash container, or bury it in a nearby landfill away from humans and animals.

Storing canned salsa

Wipe jars. Label with the date and contents of the jar. Remove the screw bands to avoid rust.

Store jars in a cool, dark place. For best eating quality and nutritive value, use within one year. Heat, freezing temperatures, light or dampness will decrease the quality and shelf life of canned food.



RECIPES



Tomato taco sauce

8 quarts paste tomatoes, peeled, cored, and finely chopped

2 cloves garlic, crushed

5 cups onions, chopped (about 5 medium)

4 jalapeño peppers, seeded and chopped

4 long green chilies, seeded and chopped

2½ cups vinegar (5% acetic acid) or bottled lemon juice

2 tbsp. salt

1 tbsp. red or black pepper

1 tbsp. sugar

2 tbsp. oregano leaves

1 tsp. ground cumin

Yield: 11 pints

Combine ingredients in a large saucepan. Bring to a boil, then reduce heat and simmer. Stir frequently until thick, about 1 hour. Ladle hot salsa into hot pint jars, leaving ½-inch headspace. Wipe jar rims and cap with properly pretreated lids. Adjust lids.

Process in a boiling water canner for 20 minutes.

Note: This recipe works best with paste tomatoes such as Roma VF. Slicing tomatoes will yield a thin, watery sauce. If you only have slicing tomatoes, use the Tomato/Tomato paste salsa recipe on page 8.



The only changes you can safely make in these salsa recipes are to substitute bottled lemon or lime juice for vinegar, and to decrease the amount of spices and herbs. The mix of hot and mild peppers can be varied as long as the *total amount stays the same*. Carefully measure all ingredients for a safe salsa.

About how many whole vegetables you will need is included to guide you in preparing each recipe. Carefully measure all ingredients, and measure chopped vegetables rather than whole. Do not rely on the amounts in parentheses.

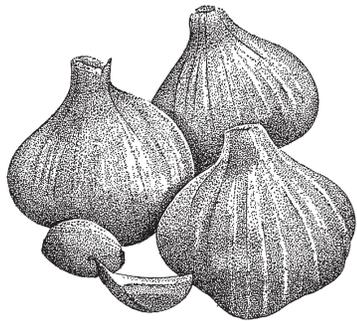
Do not use overripe or damaged tomatoes, or tomatoes harvested from dead vines.

Note: tbsp. = tablespoon
tsp. = teaspoon
1 quart = 2 pints = 4 cups



Caution: The volatile oils in hot peppers can cause burns. Wear rubber gloves when you cut or chop these peppers. Do not touch your face, particularly near your eyes. Wash hands thoroughly with soap and water if you do handle hot peppers.

About how many whole vegetables you will need is included to guide you in preparing each recipe. Carefully measure all ingredients, and measure chopped vegetables rather than whole. Do not rely on the amounts in parentheses.



Tomato/Tomato paste salsa

- 3 quarts tomatoes, peeled and chopped
- 4 cups green peppers, chopped (about 2 large bell peppers)
- 12-ounce jar jalapeño peppers (in vinegar, drained)
- 1 cup long green chilies, seeded and chopped (about 3 chilies)
- 3 cups onions, chopped (about 3 medium)
- 3 cups celery, chopped
- 4 cloves garlic, minced
- 2 12-ounce cans tomato paste
- 2 cups bottled lemon juice
- 1 tbsp. salt
- 1 cup sugar
- 1 tbsp. ground cumin

Yield: 16 pints

Combine all ingredients in a large saucepan. Bring to a boil. Reduce heat and continue boiling for 30 minutes, stirring occasionally. Ladle hot salsa into hot pint jars, leaving 1/2-inch headspace. Wipe jar rims and cap with properly pre-treated lids. Adjust lids.

Process in a boiling water canner for 20 minutes.

Tomatillo salsa

- 5 cups tomatillos or green tomatoes, chopped
- 1 cup long green chilies, seeded and chopped (about 3 chilies)
- 1/2 cup jalapeño peppers, seeded and finely chopped (about 2 peppers)
- 2 cups onions, chopped (about 2 medium)
- 1 cup vinegar (5% acetic acid)
- 1/4 cup bottled lime juice
- 6 cloves garlic, minced
- 1 tbsp. ground cumin
- 2 tbsp. cilantro, minced
- 1 tbsp. salt
- 1 tsp. red pepper

Yield: 5 pints

Combine all ingredients in a large saucepan. Stir frequently over high heat until mixture begins to boil. Then reduce heat and boil gently for 20 minutes, stirring occasionally. Ladle hot salsa into hot pint jars, leaving 1/2-inch headspace. Wipe jar rims and cap with properly pre-treated lids. Adjust lids.

Process in a boiling water canner for 20 minutes.

Tomato salsa — Italian paste tomatoes

- 7 quarts paste tomatoes, peeled, cored and chopped
- 4 cups long green chilies, seeded and chopped (about 12 chilies)
- 5 cups onion, chopped (about 5 medium onions)
- 1/2 cup jalapeño peppers, seeded and finely chopped (about 2 peppers)
- 6 cloves garlic, minced
- 2 cups bottled lemon or lime juice
- 2 tbsp. salt
- 1/2 tbsp. red pepper
- 2 tbsp. ground cumin
- 3 tbsp. oregano leaves
- 2 tbsp. fresh cilantro

Yield: 13 pints

Combine all ingredients except cumin, oregano and cilantro in a large pot. Bring to a boil, stirring frequently. Then reduce heat and boil gently 10 minutes. Add herbs and spices and simmer for another 20 minutes, stirring occasionally. Ladle hot salsa into hot pint jars, leaving 1/2-inch headspace. Wipe jar rims and cap with properly pre-treated lids. Adjust lids.

Process in a boiling water canner for 20 minutes.



Important: The only changes you can safely make in these salsa recipes are to substitute bottled lemon or lime juice for vinegar, and to decrease the amount of spices and

herbs. The mix of hot and mild peppers can be varied as long as the total amount stays the same. Carefully measure all ingredients for a safe salsa.

Caution: The volatile oils in hot peppers can cause burns. Wear rubber gloves when you cut or chop these peppers. Do not touch your face, particularly near your eyes. Wash hands thoroughly with soap and water if you do handle hot peppers.

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Hot pepper salsa — Hot tomato-pepper sauce

10 cups tomatoes, peeled, cored and chopped

5 cups chili peppers, seeded and chopped (about 15 chillies)

1 cup onion, chopped (about 1 medium)

6 cloves garlic, minced

1 cup cider vinegar (5% acetic acid)

1 tbsp. salt

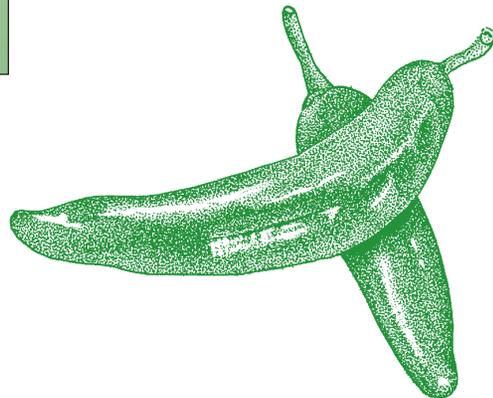
¼ cup cilantro, minced

1 tsp. cumin

Yield: 6 to 8 pints

Use a mixture of mild and hot peppers, 5 cups total. Combine ingredients in a large saucepan. Heat to a boil, and boil gently 10 minutes. Ladle hot salsa into hot pint jars, leaving ½-inch headspace. Wipe jar rims and cap with properly pre-treated lids. Adjust lids.

Process in a boiling water canner for 20 minutes.



Wisconsin Safe Food Preservation Series publications

Canning Fruits Safely B0430

Canning Meat and Poultry B3345

Canning Salsa Safely B3570

Canning Vegetables Safely B1159

Freezing Fruits and Vegetables B3278

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Tomatoes Tart & Tasty B2605

Using and Caring for a Pressure Canner
B2593

*Wisconsin's Wild Game: Enjoying the
Harvest* B3573

To start with the right ingredients,
see also:

*Disease-Resistant Vegetables for the
Home Garden* A3110

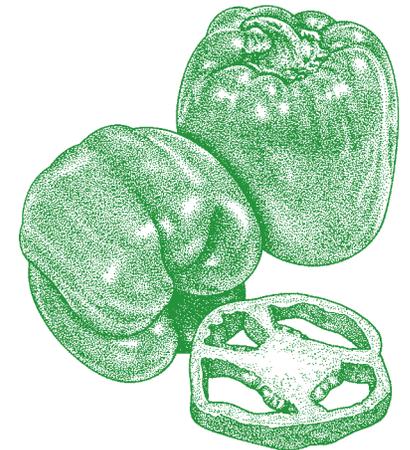
*Growing Tomatoes, Peppers and
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*Harvesting Vegetables from the Home
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*Vegetable Cultivars and Planting Guide
for Wisconsin Gardens* A1653

These are available from your county UW-Extension office or the address on the back page.

Web site — If you have Internet access, the *USDA Complete Guide to Home Canning* (Ag Information Bulletin 539, 1994) is online via the National Food Safety Database: <http://www.foodsafety.ufl.edu/cmnu/can/canhome.htm>



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Adapted with permission from *Salsa Recipes for Canning* PNW395, by Val Hillers and Richard Dougherty, Washington State University (Pullman, Wash.: Pacific Northwest Extension Publications), 1996.

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Produced by Cooperative Extension Publications, University of Wisconsin-Extension: Susan Anderson, designer; Rhonda Lee, editor.

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