

FOOD PRESERVATION



Canning and Freezing Tomatoes and Making Salsa

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Safety

When canning tomato products, measure accurately and follow recipes carefully. For example, the spaghetti sauce recipe calls for 30 pounds of tomatoes and 1 cup of celery or green pepper. The proportions of tomatoes, the acidic food, must not be decreased. Peppers and celery are low-acid foods and their proportions cannot be increased if safety is to be assured. The low-acid foods may be decreased or omitted.

Many people grow tomatoes in their traditional or container gardens. With a good year, you may want to preserve some tomatoes to enjoy during the winter. The recommendations in this publication take into account numerous tomato varieties, including those described as meaty, solid, firm and with few seeds, and the recommendations also allow for various growing conditions. If you do not want to follow these instructions, freezing is a safe alternative.

General Considerations

QUALITY: Select only disease-free, preferably vine-ripened, firm fruit for canning. **CAUTION: Do not can tomatoes from dead or frost-killed vines because the acidity of the fruit may be altered. Green tomatoes are more acidic than ripened fruit and can be canned safely with any of the following recommendations.**

ACIDIFICATION: To ensure safe acidity in whole, crushed or juiced tomatoes, add 2 tablespoons of bottled lemon juice or ½ teaspoon of citric acid per quart of tomatoes. For pints, use 1 tablespoon of bottled lemon juice or ¼ teaspoon of citric acid. Acid can be added directly to the jars before filling with product. Add sugar to offset the acidic taste, if desired. One to 2 teaspoons of sugar may be enough to enhance the flavor.

PREPARING TOMATOES: Wash the tomatoes. Dip them in boiling water for 30 to 60 seconds or until the skins split; then dip them in cold water. Slip off the skins and remove the cores.

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Canning Procedures

Wash the jars. Prepare lids according to manufacturer's instructions. Fill hot tomato products into the jars. Remove air bubbles by inserting a flat plastic spatula between the food and the jar. Wipe the sealing edge of the jars with a clean, damp paper towel. Add the lids and tighten the screw bands. Process the jars in a boiling water-bath or pressure canner as directed. Salt may be added if desired. In tomatoes and tomato products, salt seasons the food, but it is not necessary to ensure safety.

To process in a boiling water-bath canner, fill the canner halfway with water and preheat to 180 degrees Fahrenheit for hot packs or 140 F for raw packs. Load sealed jars onto the canner rack and lower with the handles or load one jar at a time with a jar lifter onto the rack in the canner. Add water, if needed, to a level of 1 inch above the jars. Cover the canner. Turn the heat to high and bring the water to a boil. When the water boils vigorously, lower the heat to maintain a gentle boil and process the jars for the time given in Table 1.

To process in a pressure canner, place the jar rack, at least 2 inches of water and the sealed jars in the canner. Fasten the lid and heat the canner on a high setting. After steam exhausts 10 minutes, add a weighted gauge or close the petcock to pressurize the canner. Start timing the recommended process when the desired pressure is reached. Regulate the heat to maintain a uniform pressure and process the product for the time given in Table 2. For more information on the use of the pressure canner, see FN-173, "Home Canning Low-acid Vegetables."

When processing is complete, remove the canner from the heat. Air-cool the canner until it is fully depressurized. Slowly remove the weighted gauge or open the petcock, wait two more minutes, and unfasten and carefully remove the canner lid. After processing is completed, remove the jars from the canner with a jar lifter and place them on a towel or rack. Do not retighten the screw bands.

Air-cool jars 12 to 24 hours. Remove the screw bands and check the lid seals. If the center of the lid is indented, wash, dry, label and store the jars in a clean, cool, dark place. If the lid is unsealed, examine and replace the jar if it is defective, use new lids and reprocess as before. Wash the screw bands and store them separately. Tomato products are best if eaten within one year and are safe as long as the lids remain vacuum sealed.



Adjust for Altitude

As altitudes increase, air becomes thinner, and this affects both pressures and boiling points in home canning. Using the water-bath process times for canning food at sea level may result in spoilage if you live at altitudes of 1,000 feet or more. Water boils at lower temperatures as altitude increases. Lower boiling temperatures are less effective for killing bacteria. Increasing the processing time or canner pressure compensates for lower boiling temperatures. Select the proper processing time and canner pressure for the altitude where you live.

The altitude in North Dakota varies from 800 feet above sea level in the east to 3,000 feet in the west. The map below shows the approximate altitude of areas of North Dakota.

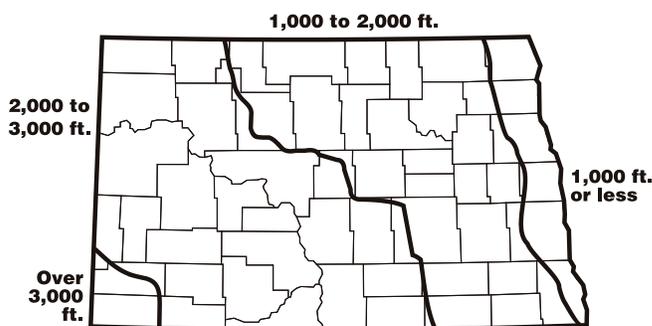


Table 1

Recommended processing times in a boiling water-bath canner.

Product	Style of Pack	Jar Size	Minutes of Processing Time at Altitudes of		
			0-1,000 ft.	1,001-3,000 ft.	3,001-6,000 ft.
Tomato juice or tomato vegetable juice blend, standard tomato sauce	Hot	Pints	35	40	45
		Quarts	40	45	50
Crushed tomatoes	Hot	Pints	35	40	45
		Quarts	45	50	55
Whole or halved tomatoes packed in water	Hot and Raw	Pints	40	45	50
		Quarts	45	50	55
Whole or halved tomatoes packed in juice or without added liquid	Raw	Pints or Quarts	85	90	95
Tomato ketchup	Hot	Pints	15	20	20
Chili salsa, tomatillo green salsa, tomato salsa, tomato/green chili salsa, tomato paste salsa, tomato taco sauce	Hot	Pints	15	20	20

Table 2

Pressure canner processing times and pressures at designated altitudes.

Product	Style of Pack	Jar Size	Process Time	Canner Gauge Pressure at Altitudes of				
				0-2,000 ft.	2,001-4,000 ft.	4,001-6,000 ft.	0-1,000 ft.	Above 1,000 ft.
				----- for dial gauge -----			for weighted gauge	
Tomato juice, tomato vegetable juice blend, standard tomato sauce or crushed tomatoes	Hot	Pints or Quarts	20 min	6 lb	7 lb	8 lb	5 lb	10 lb
			15 min	11 lb	12 lb	13 lb	10 lb	15 lb
			10 min	–	–	–	15 lb	Not recommended
Whole or halved tomatoes packed in water	Hot or Raw	Pints or Quarts	15 min	6 lb	7 lb	8 lb	5 lb	10 lb
			10 min	11 lb	12 lb	13 lb	10 lb	15 lb
Whole or halved tomatoes packed in juice or without added liquid	Raw	Pints or Quarts	40 min	6 lb	7 lb	8 lb	5 lb	10 lb
			25 min	11 lb	12 lb	13 lb	10 lb	15 lb
Spaghetti sauce without meat	Hot	Pints	20 min	11 lb	12 lb	13 lb	10 lb	15 lb
		Quarts	25 min	11 lb	12 lb	13 lb	10 lb	15 lb
Spaghetti sauce with meat	Hot	Pints	60 min	11 lb	12 lb	13 lb	10 lb	15 lb
		Quarts	70 min	11 lb	12 lb	13 lb	10 lb	15 lb
Mexican tomato sauce	Hot	Pints	20 min	11 lb	12 lb	13 lb	10 lb	15 lb
		Quarts	25 min	11 lb	12 lb	13 lb	10 lb	15 lb

RECIPES

Tomato Juice

QUANTITY: An average of 3¼ pounds of fresh tomatoes per quart

PROCEDURE: Wash, remove the stems and trim off bruised or discolored portions. To prevent the juice from separating, quickly cut about 1 pound of fruit into quarters and put it directly into a saucepan. Heat immediately to boiling while crushing. Continue to slowly crush freshly cut tomato quarters and add them to the boiling mixture. Make sure the mixture boils constantly and vigorously while you add the remaining tomatoes. Simmer five minutes after you add all the pieces.

If you are not concerned about juice separation, simply slice or quarter the tomatoes into a large saucepan. Crush, heat and simmer for five minutes before juicing. Press both types of heated juice through a sieve or food mill to remove skins and seeds. **Add bottled lemon juice or citric acid to jars; see acidification instructions on Page 1.** Heat the juice again to boiling. Add 1 teaspoon of salt per quart, if desired. Fill jars with hot tomato juice, leaving ½ inch of head space. Adjust the lids and process according to Table 1 or 2.

Tomato and Vegetable Juice Blend

QUANTITY: An average of 22 pounds of fresh tomatoes is needed per canner load of 7 quarts. Not more than 3 cups of other vegetables may be added for each 22 pounds of tomatoes.

PROCEDURE: Crush and simmer tomatoes as for making tomato juice (see above). Add no more than 3 cups of any combination of finely chopped celery, onions, carrots and peppers for each 22 pounds of tomatoes. Simmer mixture 20 minutes. Press hot cooked tomatoes and vegetables through a sieve or food mill to remove skins and seeds. **Add bottled lemon juice or citric acid to jars; see acidification directions on Page 1.** Add 1 teaspoon of salt per quart, if desired. Reheat tomato-vegetable juice blend to boiling and fill immediately into jars, leaving ½ inch of head space. Adjust the lids and process according to Table 1 or 2.

Standard Tomato Sauce

QUANTITY: An average of 5 pounds per quart for thin sauce and 6½ pounds for thick sauce

PROCEDURE: Prepare and press as for making tomato juice (see Page 4). Simmer in large-diameter saucepan until sauce reaches desired consistency. Boil until volume is reduced by about one-third for thin sauce or by one-half for thick sauce. This may take approximately two hours. **Add bottled lemon juice or citric acid to the jars; see acidification directions on Page 1.** Fill jars, leaving ¼ inch of head space. Adjust the lids and process according to Table 1 or 2.

Tomatoes – Crushed

(with no added liquid)

A high-quality product ideally suited for use in soups, stews and casseroles. This recipe is similar to that formerly referred to as “Quartered Tomatoes.”

QUANTITY: An average of 2¾ pounds per quart

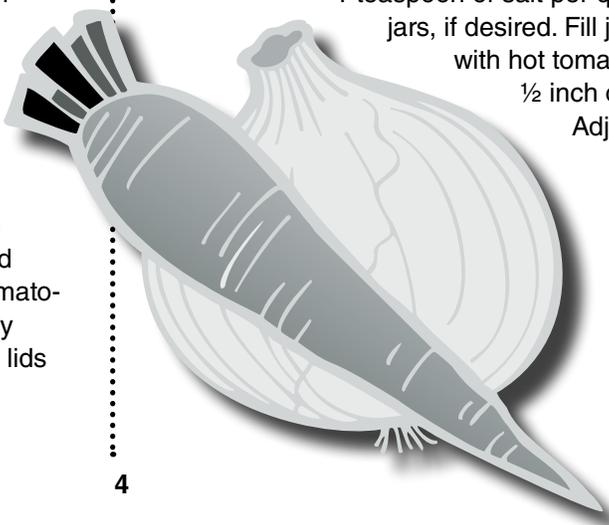
PROCEDURE: Prepare tomatoes (see Page 1). Trim off any bruised or discolored portions and quarter.

Heat one-sixth of the quarters quickly in a large pot, crushing them with a wooden mallet or spoon as they are added to the pot. This will exude juice. Continue heating the tomatoes, stirring to prevent burning. Once the tomatoes are boiling, gradually add remaining quartered tomatoes, stirring constantly. These remaining tomatoes do not need to be crushed. They will soften with heating and stirring. Continue until all the tomatoes are added. Then boil gently five minutes.

Add bottled lemon juice or citric acid to the jars; see acidification directions on Page 1. Add

1 teaspoon of salt per quart to the jars, if desired. Fill jars immediately with hot tomatoes, leaving ½ inch of head space.

Adjust the lids and process according to Table 1 or 2.



Spaghetti Sauce Without Meat

30 pounds tomatoes
1 cup onions, chopped
5 cloves garlic, minced
1 cup celery or green pepper, chopped
1 pound fresh mushrooms, sliced (optional)
4½ teaspoons salt
2 tablespoons oregano
4 tablespoons parsley, minced
2 teaspoons black pepper
¼ cup brown sugar
¼ cup vegetable oil

YIELD: About 9 pints

PROCEDURE: CAUTION: Do not increase the proportions of onions, peppers or mushrooms. Prepare tomatoes (see Page 1) and quarter. Boil 20 minutes uncovered in a large saucepan. Put the tomatoes through a food mill or sieve. Saute the onions, garlic, celery or peppers and mushrooms (if desired) in vegetable oil until tender. Combine the sauteed vegetables and tomatoes and add the remainder of the spices, salt and sugar. Bring to a boil. Simmer uncovered until thick enough for serving. At this time, the initial volume will have been reduced by nearly one-half. Stir frequently to avoid burning. Fill jars, leaving 1 inch of head space. Adjust the lids and process according to Table 2.

Tomatoes – Whole or Halved (packed in water)

QUANTITY: An average of 3 pounds of fresh tomatoes per quart

PROCEDURE for hot or raw tomatoes filled with water in jars: Prepare tomatoes (see Page 1). Leave whole or halve. Add 1 teaspoon of salt per quart, if desired. **Add bottled lemon juice or citric acid to the jars; see acidification directions on Page 1.** For *hot pack*, bring tomatoes to a boil in enough water to cover the tomatoes and boil gently five minutes. Fill the jars with hot tomatoes and cooking liquid. Leave ½ inch of head space. For *raw pack*, fill the jars with raw peeled tomatoes. Add hot water to cover, leaving ½ inch of head space. Adjust the lids and process according to Table 1 or 2.

Tomatoes – Whole or Halved

(packed in tomato juice or no added liquid)

QUANTITY: An average of 3 pounds of fresh tomatoes per quart

PROCEDURE: Prepare tomatoes (see Page 1). Leave whole or halve. Add bottled lemon juice or citric acid to the jars; see acidification instructions on Page 1. Add 1 teaspoon of salt per quart to the jars, if desired.

Raw pack – Heat tomato juice in a saucepan. Fill the jars with raw tomatoes, leaving ½ inch of head space. Cover tomatoes in the jars with hot tomato juice, leaving ½ inch of head space or fill the jars with raw tomatoes, leaving ½ inch of head space. Press the tomatoes into the jars until the spaces between them fill with juice. Leave ½ inch of head space.

Hot pack – Put the tomatoes in a large saucepan and add enough tomato juice to completely cover them. Boil tomatoes and juice gently for five minutes. Fill jars with hot tomatoes, leaving ½ inch of head space. Add hot tomato juice to the jars to cover the tomatoes, leaving ½ inch of head space. Adjust the lids and process according to Table 1 or 2.

Spaghetti Sauce With Meat

Add 2½ pounds of ground beef or sausage to the Spaghetti Sauce recipe on Page 5. Omit the ¼ cup of oil.

PROCEDURE: To prepare tomatoes, follow directions for Spaghetti Sauce Without Meat, Page 5. Saute the beef or sausage until brown. Add garlic, onion, celery or green pepper and mushrooms if desired. Cook until vegetables are tender. Combine them with tomato pulp in a large saucepan. Add spices, salt and sugar. Bring to a boil. Simmer uncovered until thick enough for serving. At this time, the initial volume will have been reduced by nearly one-half. Stir frequently to avoid burning. Fill jars, leaving 1 inch of head space. Adjust the lids and process according to Table 2.

MAKING SALSA

Tomato Ketchup

24 pounds ripe tomatoes
3 cups chopped onions
¾ teaspoon ground red pepper (cayenne)
3 cups cider vinegar (5%)
4 teaspoons whole cloves
3 sticks cinnamon, crushed
1½ teaspoons whole allspice
3 tablespoons celery seeds
1½ cups sugar
¼ cup salt

YIELD: 6 to 7 pints

PROCEDURE: Prepare tomatoes (see Page 1). Quarter tomatoes into a 4-gallon stock pot or large kettle. Add onions and red pepper. Bring to a boil and simmer 20 minutes, uncovered. Combine spices in a spice bag and add to the vinegar in a 2-quart saucepan. Bring to a boil. Cover, turn off the heat and hold the tomato mixture 20 minutes. Then remove the spice bag and combine the vinegar and tomato mixture. Boil about 30 minutes.

Put the boiled mixture through a food mill or sieve. Return it to the pot. Add sugar and salt, boil gently and stir frequently until the volume is reduced by one-half or until the mixture rounds up on a spoon without separation. Fill pint jars, leaving ⅛ inch of head space. Adjust the lids and process according to Table 1.

Freezing Tomatoes

Frozen tomatoes and tomato products do not need to be acidified. They should be cooled rapidly before freezing by placing the pan containing the hot product in cold water.

Juice and mixtures: Prepare products using recipes for canning. Cool. Pour into freezer containers, leaving 1½ inches of head space. Seal and freeze.

Whole or quarters: Prepare tomatoes as for canning by the hot pack method. Cool. Pack into freezer containers. Leave 1 inch of head space. Seal and freeze. Use as canned tomatoes. Frozen whole or sliced tomatoes become limp after thawing and are unsatisfactory to serve as fresh produce.

Follow These Tips to Can Salsa Safely

- Follow the formulation exactly and measure/weigh ingredients carefully. Use bottled lemon or lime juice or vinegar as indicated.
- In canning recipes calling for spices, you safely may *decrease* the amount of spice (cumin, oregano, pepper, etc.), but do not increase the spice amounts.
- To alter the “heat” in salsa, you safely can substitute one type of pepper for another, but keep the total amount of pepper the same.
- Do not thicken salsas with cornstarch before canning. If the salsa appears thin, it can be heated and thickened with cornstarch or some of the excess juice may be strained away *after opening the jars*.
- Before beginning to prepare salsa for canning, fill the water-bath canner about half full of clean water. For hot-packed food, preheat the water in the canner to about 180 F. Use a rack in the canner.
- Start with clean jars, and heat them in a pan of hot water. Heat the lids as recommended by the manufacturer.
- Fill jars, leaving ½ inch of head space. After filling the jars with food, remove trapped air bubbles with a nonmetallic spatula, adjusting the head space if needed.
- Wipe the rim of each jar carefully with a cloth or paper towel and apply the lid and screw ring. Do not overtighten the screw ring. It should be only “finger tight” or the lids may not seal properly.
- Place jars in the canner using a jar lifter positioned below the screw band of the lid. Keep the jars upright at all times.
- Add additional boiling water, as needed, to bring the water level to at least 1 inch over the jar tops.
- Begin timing when the water boils. Keep the canner covered during processing. The water should remain boiling at all times.
- When the processing time is complete, carefully remove the jars from the canner, using a jar lifter. Place the jars at least 1 inch apart on cooling racks or towels to cool at least 12 hours. Do not retighten the screw rings. Do not expose the jars to a cold surface or cold drafts, which could lead to cracking or breaking.
- Test the seals the next day. A good seal is evidenced by a concave lid that does not move when pressed. Remove the screw rings. Label sealed jars with contents and canning date.
- Unsealed jars may be reprocessed safely **within 24 hours** or the jars of salsa may be refrigerated for fresh consumption. To reprocess, empty the salsa into a pan, heat to boiling and ladle the mixture into clean, hot jars. Use new lids and process for the full recommended time. The quality and nutrient content of twice-processed food may be lower, but the product will be safe to consume.
- For best quality, use home-canned goods within one year.

Several of the following salsa recipes were developed by food specialists from the Pacific Northwest Extension Services.

Directions for Handling Hot Peppers

PROCEDURE: CAUTION! Wear plastic gloves while handling chilies or wash your hands thoroughly with soap and water before touching your face. Hot peppers, such as the jalapeno, do not need to be peeled but the seeds often are removed. Wash and dry. If you choose to peel peppers, slit each pepper on its side to allow steam to escape. Peel peppers using one of the following methods:

Oven or broiler method: Place chilies in the oven (400 F) or broiler for six to eight minutes until skins blister.

Range-top method: Cover the hot burner, either gas or electric, with heavy wire mesh. Place the chilies on the burner for several minutes until skins blister. Allow the peppers to cool. Place them in a pan and cover them with a damp cloth. This will make peeling the peppers easier. After several minutes of cooling, peel each pepper. Discard the seeds and chop the peppers.

Tomato Salsa

(using paste tomatoes)

7 quarts peeled, cored, chopped tomatoes
4 cups seeded, chopped long green chilies
5 cups chopped onion
½ cup seeded, finely chopped jalapeno peppers
6 cloves garlic, finely chopped
2 cups bottled lemon or lime juice
2 tablespoons salt
1 tablespoon black pepper
2 tablespoons ground cumin*
3 tablespoons oregano leaves*
2 tablespoons fresh cilantro*

YIELD: About 16 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Combine all the ingredients except the cumin, oregano and cilantro in a large pot and bring to a boil, stirring frequently, then reduce the heat and simmer 10 minutes. Add the spices and simmer for another 20 minutes, stirring occasionally. Ladle hot into pint jars, leaving ½ inch of head space. Adjust the lids and process in a boiling-water canner according to Table 1. This recipe works best with paste tomatoes. Slicing tomatoes require a much longer cooking time to achieve a desirable consistency.

***Optional:** Spice amounts may be reduced. Do not make other adjustments to this recipe.

SALSA RECIPES

Tomato/Green Chili Salsa

3 cups peeled, cored, chopped tomatoes
3 cups seeded, chopped long green chilies
¾ cup chopped onions
1 jalapeno pepper, seeded, finely chopped
6 cloves garlic, finely chopped
1½ cups vinegar (5%)
½ teaspoon ground cumin*
2 teaspoons oregano leaves*
1½ teaspoons salt

YIELD: 3 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Combine all the ingredients in a large saucepan and heat, stirring frequently, until the mixture boils. Reduce the heat and simmer for 20 minutes, stirring occasionally. Ladle hot into pint jars, leaving ½ inch of head space. Adjust the lids and process in a boiling-water canner according to Table 1.

***Optional:** Spice amounts may be reduced. Do not make other adjustments to this recipe.

Tomatillo Green Salsa

5 cups chopped tomatillos
1½ cups seeded, chopped long green chilies
½ cup seeded, finely chopped jalapeno peppers
4 cups chopped onions
1 cup bottled lemon juice
6 cloves garlic, finely chopped
1 tablespoon ground cumin*
3 tablespoons oregano leaves*
1 tablespoon salt
1 teaspoon black pepper

YIELD: 5 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Combine all ingredients in a large saucepan and stir frequently over high heat until the mixture begins to boil, then reduce the heat and simmer for 20 minutes, stirring occasionally. Ladle hot into pint jars, leaving ½ inch of head space. Adjust the lids and process in a boiling-water canner according to Table 1.

You may use green tomatoes in this recipe instead of tomatillos.

***Optional:** Spice amounts may be reduced. Do not make other adjustments to the recipe.

Tomato Taco Sauce

8 quarts peeled, cored, finely chopped paste tomatoes
2 cloves garlic, crushed
5 cups chopped onions
4 jalapeno peppers, seeded, chopped
4 long green chilies, seeded, chopped
2½ cups vinegar
2 tablespoons salt
1½ tablespoons black pepper
1 tablespoon sugar
2 tablespoons oregano leaves*
1 teaspoon ground cumin*

YIELD: About 16 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Combine ingredients in a large saucepan. Bring to a boil, then reduce the heat and simmer, stirring frequently until thick (about one hour). Ladle hot mixture into pint jars, leaving ½ inch of head space. Adjust the lids and process in a boiling-water canner according to Table 1. This recipe works best with paste tomatoes because slicing tomatoes will result in a thin, watery salsa.

Note: If you only have slicing tomatoes available, use the Tomato/Tomato Paste Salsa recipe.

**Optional: Spice amounts may be reduced. Do not make other adjustments to this recipe.*

Chili Salsa

(Hot Tomato-Pepper Sauce)

5 pounds tomatoes
2 pounds chili peppers*
1 pound onions
1 cup vinegar (5%)
3 teaspoons salt
½ teaspoon pepper

YIELD: 6 to 8 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Coarsely chop the tomatoes and combine the chopped peppers, onions and remaining ingredients in a large saucepan. Heat to a boil and simmer 10 minutes. Fill jars, leaving ½ inch of head space. Adjust the lids and process according to Table 1.

*For a milder salsa, reduce the pepper amount or use a mixture of mild and hot peppers. Do not make other adjustments to the recipe.

Tomato/Tomato Paste Salsa

3 quarts peeled, cored, chopped slicing tomatoes
3 cups chopped onions
6 jalapeno peppers, seeded, finely chopped
4 long green chilies, seeded, chopped
4 cloves garlic, finely chopped
2 12-ounce cans tomato paste
2 cups bottled lemon or lime juice
1 tablespoon salt
1 tablespoon sugar
1 tablespoon ground cumin*
2 tablespoons oregano leaves*
1 teaspoon black pepper

YIELD: 7 pints

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Combine all ingredients in a large saucepan. Bring to a boil. Reduce the heat and simmer for 30 minutes, stirring occasionally. Ladle hot into pint jars, leaving ½ inch of head space. Adjust the lids and process in a boiling-water canner according to Table 1.

**Optional: Spice amounts may be reduced. Do not make other adjustments to this recipe.*

Mexican Tomato Sauce

2½ to 3 pounds chili peppers
18 pounds tomatoes
3 cups chopped onions
1 tablespoon salt
1 tablespoon oregano*
½ cup vinegar

YIELD: About 7 quarts

PROCEDURE: Prepare tomatoes (see Page 1). Prepare peppers (see Page 7). Coarsely chop tomatoes and combine chopped peppers and remaining ingredients in a large saucepan. Bring to a boil. Cover. Simmer 10 minutes. Fill jars, leaving 1 inch of head space. Adjust the lids and process in a pressure canner according to Table 2.

**Optional: Spice amounts may be reduced. Do not make other adjustments to this recipe.*

For more food and nutrition information, see www.ag.ndsu.edu/food.
(Click on "Nutrition, Food Safety and Health" then "Food Preservation and Storage")

Source: Based on "Complete Guide to Home Canning," Agriculture Information Bulletin 539, 2006 revision, and information from the National Center for Home Food Preservation, University of Georgia, Athens, Ga.: www.uga.edu/nchfp/

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