Preserving Food in Wyoming

TOMATOES

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and

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Altitude

Canning food in Wyoming differs from canning in many other locations because of the high altitudes found in our state. There is lower atmospheric pressure at high altitudes, which causes water to boil at a lower temperature. Consequently, altitude adjustments must be made when home canning.

The following guidelines have been established by the University of Wyoming Cooperative Extension (UW CES) and are recommended for all home canning in Wyoming.

Adjustments

Canning processes must be adjusted for all locations in Wyoming. For boiling-water canning, the processing time must be increased. For pressure canning, the pressure must be increased. Processing times for many foods were changed in 1988 when the U.S. Department of Agriculture (USDA) published Complete Guide to Home Canning. Additional revisions have since been made in 1994 and 2009 (see www.uga.edu/nchfp/publications/publications_usda.html). To ensure safe home canning, follow recipes with the most current processing times established by the USDA.

Jars

Only standard canning jars made of tempered glass are recommended. Commercial jars such as mayonnaise jars are not recommended for use in home canning. These jars may break more easily, and they have a narrower sealing surface that can prevent a good seal.

Botulism

To prevent the risk of botulism, low-acid home canned foods such as meats and vegetables should be boiled before eating. At altitudes below 1,000 feet, boil foods for 10 minutes. Add an additional minute of boiling time for each additional 1,000 feet.

Ingredients

Do not add or change the ingredients or proportions in home-canning recipes. Doing so could compromise the safety of the product.
Chile Salsa and General Procedures for All Salsas

Chile Salsa

**Quantity**
- 5 pounds tomatoes
- 2 pounds chile peppers
- 1 pound onions
- 1 cup vinegar (5-percent acid)
- 3 tsp salt
- ½ tsp pepper

**Yield:** 6 to 8 pints

**Preparation**

**Caution:** Wear rubber gloves while handling peppers or wash hands thoroughly with soap and water before touching your face. Wash and dry peppers. (Note: Jalapeños do not need to be peeled). Slit each pepper along its side to allow steam to escape. Prepare peppers for peeling by placing them either in an oven at 400° Fahrenheit or a broiler for 6 to 8 minutes until skins blister. Allow peppers to cool. Peel each pepper. Some skins may slip off. Discard seeds and chop peppers.

Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Dip in cold water, slip off skins, and remove cores. Coarsely chop tomatoes and combine chopped onions, pepper, and remaining ingredients in a large saucepan. Heat to boiling and simmer 12 to 15 minutes.

**Canning procedure**

Wash pint jars. (Do not pack into quart jars.) Prepare lids according to the manufacturer’s instructions. Fill hot jars with hot salsa leaving ½-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Wipe sealing edge of jars with a clean, damp paper towel. Add lids and tighten screw bands.

**Process**

Process in a boiling-water canner. Fill canner halfway with water and preheat to 180° Fahrenheit. Load filled jars into the canner rack and lower with handles or load one jar at a time with a jar lifter onto rack in canner. Add boiling water, if needed, to a level of 1 inch above jars and cover. When water boils vigorously, lower heat to maintain a gentle boil and process for time given in Table 1 (page 4).
Table 1. Recommended process times for all salsa recipes in a boiling water canner at designated altitudes

<table>
<thead>
<tr>
<th>Jar size</th>
<th>Pack style</th>
<th>3,001-6,000 feet (minutes)</th>
<th>Above 6,000 feet (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pints</td>
<td>Hot</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

After processing

After processing is complete, remove jars from canner with a jar lifter and place on a towel or rack. Do not retighten screw bands. Cool jars for 12 to 24 hours and remove screw bands. Check lid seals. If the center of the lid is indented, wash, dry, label, and store jar in a clean, cool, dark place without ring. If the lid is unsealed, refrigerate and use within four weeks. Alternatively, examine and replace jar if defective; use new lid and reprocess as before. Wash screw bands and store separately. Chile salsa is best if used within one year.

Spices

Spices add flavoring to salsas. The amount of spices and herbs may be altered in these recipes. Cilantro and cumin are often used in spicy salsas. You may leave them out if you prefer salsa with a milder taste. For a stronger cilantro flavor, add fresh cilantro just before serving the salsa.

IMPORTANT REMINDERS FOR HOME-CANNING SALSAS

Follow the directions carefully for each recipe. Use the amounts of each vegetable listed in recipe. Add the amount of vinegar or lemon juice listed. You may change the amount of spices if desired.

Do not can salsas that do not follow these or other research tested recipes. (They may be frozen or stored in the refrigerator.)

Do not thicken salsas with flour or cornstarch before canning. Thickening salsa prior to canning would result in underprocessing because heat penetration takes longer through a thick food product, and the salsa could spoil during storage. After you open a jar to use, you may pour off some of the liquid or thicken with cornstarch.

For all salsa recipes, follow the cautions under Chile Salsa for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps under Chile Salsa.
For all salsa recipes, follow the cautions under Chile Salsa for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on pages 3 and 4.

**Tomato Salsa (using slicing tomatoes)**

4 cups peeled, cored, chopped tomatoes
2 cups seeded, chopped long green chiles
½ cup seeded, chopped jalapeño peppers
¾ cup chopped onions
4 cloves garlic, finely chopped
2 cups vinegar (5-percent acid)
1 tsp ground cumin (optional)
1 tbsp oregano leaves (optional)
1 tbsp fresh cilantro (optional)
1½ tsp salt

Yield: 4 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine all ingredients in a large saucepan and bring the mixture to a boil stirring frequently. Reduce heat and simmer 20 minutes stirring occasionally. Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling-water canner as described in Table 1 (page 4).

**Tomato/Green Chile Salsa**

3 cups peeled, cored, chopped tomatoes
3 cups seeded, chopped long green chiles
¾ cup chopped onions
1 jalapeño pepper, seeded, finely chopped
6 cloves garlic, finely chopped
1½ cups vinegar (5-percent acid)
½ tsp ground cumin (optional)
2 tsp oregano leaves (optional)
1½ tsp salt

Yield: 3 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine all ingredients in a large saucepan and heat stirring frequently until mixture boils. Reduce heat and simmer 20 minutes stirring occasionally. Ladle to mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling-water canner as described in Table 1 (page 4).
Tomatillo Green Salsa

5 cups chopped tomatillos (remove dry outer husks before chopping)
1½ cups seeded, chopped long green chiles
½ cup seeded, finely chopped jalapeño peppers
4 cups chopped onions
1 cup bottled lemon or lime juice
6 cloves garlic, finely chopped
1 tbsp ground cumin (optional)
3 tbsp oregano leaves (optional)
1 tbsp salt
1 tsp black pepper
Yield: 5 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine all ingredients in a large saucepan and stir frequently over high heat until mixture begins to boil; then reduce heat and simmer 20 minutes stirring occasionally. Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling water canner as directed in Table 1 (page 4).
Tomato Salsa (using paste tomatoes)

7 quarts peeled, cored, and chopped paste tomatoes (i.e., Roma tomatoes)
4 cups seeded, chopped long green chiles
5 cups chopped onion
½ cup seeded, finely chopped jalapeño peppers
6 cloves garlic, finely chopped
2 cups bottled lemon or lime juice
2 tbsp salt
1 tbsp black pepper
2 tbsp ground cumin (optional)
3 tbsp oregano leaves (optional)
2 tbsp fresh cilantro (optional)
Yield: 16 to 18 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine all ingredients except cumin, oregano, and cilantro in a large pot and bring to a boil stirring frequently. Reduce heat and simmer 10 minutes. Add spices and simmer for another 20 minutes stirring occasionally. Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling water canner as described in Table 1 (page 4).

Tomato Taco Sauce

8 quarts peeled, cored, finely chopped paste (i.e., Roma tomatoes)
2 cloves garlic, crushed
5 cups chopped onions
4 jalapeño peppers, seeded, chopped
4 long green chiles, seeded, chopped
2½ cups vinegar (5-percent acid)
2 tbsp salt
1½ tbsp black pepper
1 tbsp sugar
2 tbsp oregano leaves (optional)
1 tsp ground cumin (optional)
Yield: 16 to 18 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine ingredients in a large saucepan. Bring to a boil, then reduce heat and simmer stirring frequently until thick (about 1 hour). Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in boiling water canner as described in Table 1 (page 4).
Tomato/Tomato Paste Salsa

- 3 quarts peeled, cored, chopped slicing tomatoes
- 3 cups chopped onions
- 6 jalapeño peppers, seeded, finely chopped
- 4 long green chiles, seeded, chopped
- 4 cloves garlic, finely chopped
- 2 twelve-oz cans tomato paste
- 2 cups bottled lemon or lime juice
- 1 tbsp salt
- 1 tbsp sugar
- 1 tbsp cumin (optional)
- 2 tbsp oregano leaves (optional)
- 1 tsp black pepper

Yield: 7 to 9 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine all ingredients in a large saucepan. Bring to a boil. Reduce heat and simmer 30 minutes stirring occasionally. Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling water canner as described in Table 1 (page 4).

Chile Salsa (Hot tomato-Pepper Sauce)

- 10 cups peeled, cored, chopped tomatoes
- 6 cups seeded, chopped chile peppers (use mixture of mild and hot peppers)
- 4 cups chopped onions
- 1 cup vinegar (5-percent acid)
- 3 tsp salt
- ½ tsp pepper

Yield: 6 to 8 pints

Follow the cautions for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps on page 3. Combine ingredients in a large saucepan. Heat to a boil and simmer 10 minutes. Ladle hot mixture into hot pint jars leaving ½-inch headspace. Adjust lids and process in a boiling water canner as described in Table 1 (page 4).

Important Reminder

The only changes you can safely make in these salsa recipes are to substitute bottled lemon juice for vinegar and to change the amount of spices and herbs. Do not alter the proportions of vegetables to acid and tomatoes because doing so may make the salsa unsafe.
Tomatoes and Other Tomato Products

Quantity
A bushel of tomatoes weighs approximately 53 pounds.

Table 2. Quantities of fresh tomatoes needed for tomato products

<table>
<thead>
<tr>
<th>Product</th>
<th>Average number of pounds of fresh tomatoes needed for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Quart</td>
</tr>
<tr>
<td>Juice</td>
<td>3¼</td>
</tr>
<tr>
<td>Juice blend; crushed</td>
<td>3</td>
</tr>
<tr>
<td>Whole or halved</td>
<td>3</td>
</tr>
<tr>
<td>Thin sauce</td>
<td>5</td>
</tr>
<tr>
<td>Thick sauce</td>
<td>6½</td>
</tr>
</tbody>
</table>

Quality
Select only disease-free, firm fruit for canning. Vine-ripened tomatoes are preferred. Do not can tomatoes from dead or frost-killed vines. Green tomatoes are more acidic than ripened fruit and can be canned safely with any of the following recommendations.

Acidification and Sterilizing Jars
To ensure safe acidity in whole, crushed, or juiced tomatoes, add 2 tablespoons bottled lemon juice or ½-teaspoon citric acid per quart of tomatoes. For pints, use 1 tablespoon bottled lemon juice or ¼ teaspoon citric acid. Sugar can be added to offset acid taste.

For products processed only 10 minutes, use sterilized jars. To sterilize empty jars, put them open side up on a rack in a boiling water canner. Fill the jars with hot (not boiling) water to 1 inch above tops of jars. Boil jars for 15 minutes. Using a jar lifter or tongs, carefully remove and drain hot, sterilized jars one at a time and fill immediately with food.

Freezing
For optimal quality, freeze no more than 2 to 3 pounds of food per cubic foot of freezer per day. To freeze tomatoes, wash, scald for 30 to 60 seconds to loosen skins, peel, and core. Cut into pieces and freeze, or for stewed tomatoes, simmer tomato pieces for 10 to 20 minutes until tender. To package, fill pint or quart freezer bags to a level 1 to 2 inches from top and squeeze out air. Seal leaving room at the top of the bag for expansion of the food during freezing. Label and freeze. Before freezing, bags may be inserted into reusable rigid freezer containers for added protection against punctures and leakage.

Process: Boiling Water
To process in a boiling-water canner, preheat canner filled halfway with water to 180°F Fahrenheit for hot packs and 140°F Fahrenheit for raw packs. Load filled jars onto the canner...
rack and lower rack with handles; or load one jar at a time with a jar lifter onto rack in the canner. Add water (boiling water for hot packs and hot water for raw packs), if needed, to a level of 1 inch above jars and add canner cover. When water boils vigorously, lower heat to maintain a gentle boil and process jars as described in Table 3 (below).

Table 3. Recommended processing times for tomato products in a boiling-water canner at designated altitudes

<table>
<thead>
<tr>
<th>Product</th>
<th>Style of pack</th>
<th>Jar size</th>
<th>3,001-6,000 feet (minutes)</th>
<th>Above 6,000 feet (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomato juice; tomato vegetable juice blend</td>
<td>Hot</td>
<td>Pints</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Hot</td>
<td>Quarts</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>Whole or halved tomatoes packed in water</td>
<td>Hot or raw</td>
<td>Pints</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>Crushed tomatoes</td>
<td>Hot</td>
<td>Pints</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Hot</td>
<td>Quarts</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>All tomato ketchups</td>
<td>Hot</td>
<td>Pints</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Standard tomato sauce</td>
<td>Hot</td>
<td>Pints</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Hot</td>
<td>Quarts</td>
<td>50</td>
<td>55</td>
</tr>
</tbody>
</table>

Process: Pressure

To process in a pressure canner, place jar rack, 2 inches of water, and filled jars in canner. Fasten lid and heat canner on high setting. Allow steam to escape in a fully steady stream for 10 minutes. Add weighted gauge or close petcock to pressurize the canner. Start timing the process when the desired pressure is reached. Regulate heat to maintain a uniform pressure and process jars for the time given in Table 4 (page 11). Do not allow the pressure to drop below the recommended pressure for your altitude.

When processing is complete, remove the canner from heat. Air-cool the canner until it is fully depressurized. Slowly remove weighted gauge or open petcock, wait 2 more minutes, and then carefully remove canner lid.
Table 4. Recommended processing times and pressures for tomato products in a pressure canner at designated altitudes

<table>
<thead>
<tr>
<th>Product</th>
<th>Style of pack</th>
<th>Jar size</th>
<th>Process time (minutes)</th>
<th>2,001-4,000 feet (lbs)</th>
<th>4,001-6,000 feet (lbs)</th>
<th>6,001-8,000 feet (lbs)</th>
<th>Above 1,000 feet (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomato juice; tomato vegetable juice blend; or crushed tomatoes</td>
<td>Hot</td>
<td>Pints</td>
<td>20</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>15</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Whole or halved tomatoes packed in water</td>
<td>Hot or Raw</td>
<td>Pints</td>
<td>15</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>10</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Tomatoes with okra or zucchini**</td>
<td>Hot</td>
<td>Pints</td>
<td>30</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>35</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>All tomato ketchups</td>
<td>Hot</td>
<td>Pints</td>
<td>10</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Standard tomato sauce</td>
<td>Hot</td>
<td>Pints</td>
<td>20</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>15</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Spaghetti sauce without meat**</td>
<td>Hot</td>
<td>Pints</td>
<td>20</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>25</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Spaghetti sauce with meat**</td>
<td>Hot</td>
<td>Pints</td>
<td>60</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>70</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Mexican tomato sauce**</td>
<td>Hot</td>
<td>Pints</td>
<td>20</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarts</td>
<td>25</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

* Reminder: check your dial pressure gauge annually. For more information, contact your local UW CES office.

** Products are considered low acid. The UW CES recommends all low-acid home canned foods be boiled for 15 to 20 minutes before eating.

After processing

Remove jars from canner with a jar lifter and place on a towel or rack. Do not retighten screw bands. Air cool jars for 12 to 24 hours. Remove screw bands and check lid seals. If the center of the lid is indented, wash, dry, label, and store in a clean, cool dark place without ring. If the lid is unsealed, refrigerate and use within one week. Alternatively, examine and replace jar if defective; use new lid and reprocess as before. Canned tomato products are best if eaten within a year.
### Tomato Juice

**Quantity**

See Table 2 (page 9) for guidelines.

**Procedure**

Wash, remove stems, and trim off bruised or discolored portions. To prevent juice from separating, quickly cut about 1 pound of fruit into quarters and put directly into saucepan. Heat immediately to boiling while crushing. Continue to slowly add and crush freshly cut tomato quarters to the boiling mixture. Make sure the mixture boils constantly and vigorously while adding the remaining tomatoes. Simmer 6 to 8 minutes after adding all pieces.

If you are not concerned about juice separation, simply slice or quarter tomatoes into a large saucepan. Crush, heat, and simmer 5 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 9. Reheat juice to boiling. Add up to 1 teaspoon salt per quart, if desired. Fill hot jars with hot tomato juice leaving ½-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

### Tomato and Vegetable Juice Blend

**Quantity**

See Table 2 (page 9) for guidelines.

**Procedure**

Crush and simmer tomatoes as described for tomato juice. 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 for 25 minutes. Press hot, cooked tomatoes and vegetables through sieve or food mill to remove skins and seeds. Add bottled lemon juice or citric acid to jars. See acidification instructions on page 9. Add up to 1 teaspoon salt per quart if desired. Reheat tomato-vegetable juice blend to boiling and fill immediately into hot jars leaving ½-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

### Whole or Halved Tomatoes Packed in Water

**Quantity**

See Table 2 (page 9) for guidelines.

*For products processed only 10 minutes, use sterilized jars. To sterilize empty jars, see procedure on page 9.*

**Procedure for whole or halved tomatoes packed in water**

Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins, and remove cores. Leave whole or halved. Add bottled lemon juice or citric acid to jars. See acidification instructions on page 9.

- **Hot pack** – Bring tomatoes to a boil in water and boil 5 minutes. Fill hot jars or hot sterilized jars with hot tomatoes. Add up to 1 teaspoon salt per quart if desired and add enough hot cooking water to cover tomatoes leaving ½-inch headspace.
- **Raw pack** – Fill hot jars or hot sterilized jars with raw peeled tomatoes. Add up to 1 teaspoon salt per quart if desired. Add hot water to cover tomatoes leaving ½-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

**Crushed Tomatoes**

**Quantity**
See Table 2 (page 9) for guidelines.

**Procedure for crushed tomatoes**
Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins, and remove cores. Trim off any bruised or discolored portions and quarter. Heat one-sixth of the quarters quickly in large pan crushing with wooden spoon as they are added to extract the juice. Continue to heat to boiling stirring to prevent burning. Gradually add remaining tomatoes (without crushing). Boil gently for 5 minutes. Add bottled lemon juice or citric acid to jars; see acidification instructions on page 9. Add up to 1 teaspoon salt per quart if desired. Fill hot jars immediately with hot tomatoes leaving ½-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

**Tomatoes and Okra or Tomatoes and Zucchini**

**Quantity**
An average of 12 pounds of tomatoes and 4 pounds of okra or zucchini are needed for 7 quarts. For 9 pints, an average of 7 pounds of tomatoes and 2½ pounds of okra or zucchini are needed.

**Procedure**
Wash tomatoes and okra or zucchini. Dip tomatoes in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins, remove cores, and quarter. Trim stems from okra and slice into 1-inch pieces or leave whole. Slice or cube zucchini if used. Bring tomatoes to a boil and simmer 10 minutes. Add okra or zucchini and boil gently for 5 minutes. Add up to 1 teaspoon salt to each quart if desired. Fill hot jars with mixture leaving 1-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 4 (page 11).
Standard Tomato Ketchup

24 pounds ripe tomatoes
3 cups onions, chopped
¾ tsp ground red pepper (cayenne)
3 cups cider vinegar (5-percent acid)
4 tsp whole cloves
3 sticks cinnamon
1½ tsp whole allspice
3 tbsp celery seeds
1½ cups sugar
¼ cup salt
Spice bag or cheesecloth to hold spices
Yield: 6 to 7 pints

Procedure

For products processed only 10 minutes, use sterilized jars. To sterilize empty jars, see procedure on page 9.

Wash tomatoes. Dip in boiling water for 30 to 60 seconds or until skins are split. Dip in cold water. Slip off skins and remove cores; quarter tomatoes and place in a large saucepan. Add onions and red pepper; bring to a boil and simmer uncovered for 25 minutes. Combine spices, tie them in the spice bag or cheesecloth, and add to vinegar in a separate 2-quart saucepan. Bring to a boil. Cover, turn off heat, and let stand 20 minutes. Then, remove spice bag and combine vinegar and tomato mixture. Boil for 30 minutes. Put boiled mixture through a food mill or sieve. Return to heat, add sugar and salt, boil gently, and stir frequently until volume is reduced by one-half or until mixture rounds up on spoon without separation. Fill hot pint jars or hot sterilized pint jars leaving ⅛-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

Country Western Ketchup

24 pounds ripe tomatoes
5 chile peppers, sliced and seeded
⅛ cup salt
2 ⅔ cups vinegar (5-percent acid)
1¼ cups sugar
½ tsp ground red pepper (cayenne)
4 tsp paprika
4 tsp whole allspice
4 tsp dry mustard
1 tbsp whole peppercorns
1 tsp mustard seeds
1 tbsp bay leaves
Yield: 6 to 7 pints

Procedure

Follow directions for standard tomato ketchup.
Blender Ketchup

Use electric blender (eliminates need for pressing or sieving)
24 pounds ripe tomatoes
2 pounds onions
1 pound sweet red peppers
1 pound sweet green peppers
9 cups vinegar (5-percent acid)
9 cups sugar
¼ cup canning or pickling salt
3 tbsp dry mustard
1½ tbsp ground red pepper
1½ tsp whole allspice
1½ tbsp whole cloves
Yield: about 9 pints

Procedure

*For products processed only 10 minutes, use sterilized jars. To sterilize empty jars, see procedure on page 9.*

Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins, core and quarter. Remove seeds from peppers and slice in strips. Peel and quarter onions. Blend tomatoes, peppers, and onions at high speed for 5 seconds in electric blender. Pour into large kettle and heat. Boil gently for 60 minutes stirring frequently. Add vinegar, sugar, salt, and spice bag containing dry mustard, red pepper, and other spices. Continue boiling and stirring until volume is reduced by one-half and ketchup rounds up on a spoon with no separation of liquid and solids. Remove spice bag and fill hot pint jars or hot sterilized pint jars leaving ⅛-inch headspace. Remove air bubbles pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 3 (page 10) or Table 4 (page 11).

Standard Tomato Sauce

Quantity

See Table 2 (page 9) for guidelines.

Procedure

Wash, remove stems, and trim off bruised or discolored portions. To prevent sauce from separating, quickly cut about 1 pound of tomatoes into quarters and put directly into saucepan; heat immediately to boiling while crushing. Continue to slowly add and crush freshly cut tomato quarters to the boiling mixture. Make sure the mixture boils constantly and vigorously while adding remaining tomatoes. Simmer 5 minutes after all tomatoes are added. If you are not concerned about sauce separating, simply slice or quarter tomatoes in a large saucepan. Crush, heat, and simmer 5 minutes before pressing. Press either type of heated juice through a sieve or food mill to remove skins and seeds. Heat juice again until boiling; simmer in a 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. Fill hot jars leaving ⅛-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process as described in Table 3 (page 10) or Table 4 (page 11).
**Spaghetti Sauce without Meat**

30 pounds tomatoes  
1 cup onions, chopped  
5 cloves garlic, minced  
1 cup celery or green peppers, chopped  
1 pound fresh mushrooms, sliced (optional)  
4½ tsp salt  
2 tbsp oregano  
4 tbsp parsley, minced  
2 tsp black pepper  
¼ cup brown sugar  
¼ cup vegetable oil  
Yield: about 9 pints

**Procedure**

Do not increase the portion of onions, peppers, or mushrooms. Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Dip in cold water and slip off skins. Remove cores and quarter tomatoes; boil 20 minutes uncovered in large saucepan.

Put through a food mill or sieve. Sauté onions, garlic, celery or peppers, and mushrooms (if desired) in vegetable oil until tender. Combine sautéed vegetables and tomatoes and add remainder of 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 hot jars leaving 1-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process jars as described in Table 4 (page 11).

**Spaghetti Sauce with Meat**

30 pounds tomatoes  
2½ pounds lean ground beef or sausage (any type – pork, beef, or venison)  
5 cloves garlic, minced  
1 cup chopped onions  
1 cup chopped celery or green peppers  
1 pound fresh mushrooms, sliced (optional)  
4½ tbsp salt  
2 tbsp oregano  
4 tbsp minced parsley  
2 tsp black pepper  
¼ cup brown sugar  
Yield: about 9 pints

**Procedure**

To prepare tomatoes, follow directions for spaghetti sauce without meat. Sauté beef or sausage until brown; drain off fat; add garlic, onion, celery or green pepper, and mushrooms (if desired). Cook until vegetables are tender. Combine with tomato pulp in large saucepan. Add spices, salt, and sugar; bring to boil. Simmer, uncovered, until thick enough for serving. At this time, initial volume will have been reduced by nearly one-half. Stir frequently to avoid burning. Fill hot jars leaving 1-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process as described in Table 4 (page 11).
**Mexican Tomato Sauce**

2½ to 3 pounds chiles  
18 pounds tomatoes  
3 cups onions, chopped  
1 tbsp salt  
1 tbsp oregano  
½ cup vinegar (5-percent acid)  

Yield: about 7 quarts

**Procedure**

Follow the cautions under Chile Salsa for handling chiles and for removing the chile skins, and follow the canning, processing, and after-processing steps under Chile Salsa (page 3).

Wash tomatoes, dip in boiling water for 30 to 60 seconds or until skins split, dip in cold water, slip off skins, and remove cores. Coarsely chop tomatoes and combine chopped peppers and remaining ingredients in large saucepan. Bring to a boil. Cover. Simmer for 10 minutes. Fill hot jars leaving 1-inch headspace. Remove air bubbles by pressing a rubber spatula between food and side of jar at several locations. Adjust lids and process as described in Table 4 (page 11).

**Sources of Information**


