

Preserving Tomato Sauces and Ketchup

CANNING TOMATOES AND TOMATO PRODUCTS

Tomatoes and tomato products have traditionally been canned in a boiling water bath (212 °F). However, recent research shows that for some products, pressure canning will result in a high-quality and more nutritious product.

Directions for canning a variety of tomato products are given on the following pages. Some recipes will give you the option of canning either in a pressure canner or in a boiling water bath. Some will give only boiling water bath times and others will give only pressure canning times. The recipes that specify only pressure canning have so many low-acid ingredients added to them that they are only safe when canned in a pressure canner at the specified pressure.

Whether you're canning tomato products in a boiling water bath or in a pressure canner, be sure you're canning them safely.

ACIDIFYING TOMATO PRODUCTS

Because tomatoes have pH values that fall close to 4.6, you must take some precautions to can them safely. First, select only disease-free, preferably vine-ripened, firm fruit for canning. Do not can tomatoes from dead or frost-killed vines.

To ensure the safety of whole, crushed, juiced tomatoes and some tomato products, add acid whether they will be processed in a boiling water bath or pressure canner. To acidify these tomatoes, add 1 tablespoon of bottled lemon juice or ¼ teaspoon citric acid per pint of tomatoes. For quarts,

use 2 tablespoons of bottled lemon juice or ½ teaspoon citric acid. The acid can be added directly to each jar before filling them with the product. If this makes the product taste too acidic, add a little sugar to offset the taste.

NOTE: Four tablespoons of vinegar per quart or 2 tablespoons per pint can be used instead of lemon juice or citric acid. However, the vinegar may cause undesirable flavor changes.

TOMATO SAUCE - SEASONED (about 5 half-pint jars)

10 pounds tomatoes, peeled, cored and chopped
3 medium onions, finely chopped
3 cloves garlic, minced
1½ teaspoons oregano
2 bay leaves
1 teaspoon salt
1 teaspoon black pepper
½ teaspoon crushed red pepper
1 teaspoon sugar

Hot Pack: Place all ingredients in a large saucepan. Bring to a boil. Simmer 2 hours, stirring occasionally. Press mixture through a food mill and discard seeds. Cook mixture until thick over medium-high heat, stirring frequently. Add bottled lemon juice or citric acid to jars, according to the directions for acidifying tomato products.

Pour hot sauce into jars, leaving ½-inch headspace. Wipe jar rims. Adjust lids and process as for "Unseasoned Tomato Sauce."

TOMATO SAUCE - UNSEASONED

Hot Pack: Wash tomatoes, 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 crushed, freshly cut tomato quarters to the boiling mixture. Make sure the mixture boils constantly and vigorously while you add the remaining tomatoes. Simmer 5 minutes after you add all pieces.

If you are not concerned about juice separation, simply slice or quarter tomatoes into a large saucepan. Crush, heat and simmer for 5 minutes before juicing.

Press the heated juice through a sieve or food mill to remove skins and seeds. Simmer in large-diameter saucepan until volume is reduced by about one-third for thin sauce, by one-half for thick sauce.

Add bottled lemon juice or citric acid to jars, according to the directions in "Acidifying Tomatoes and Tomato Products." Add ½ teaspoon salt to each pint jar; 1 teaspoon to each quart jar, if desired.

Fill hot jars, leaving ¼-inch headspace. Wipe jar rims. Adjust lids and process.

Option I: Process in a Boiling Water Bath

Pints.....35 minutes
Quarts.....40 minutes

Option 2: Process in a dial-gauge pressure canner at 11 pounds pressure OR in a weighted-gauge pressure canner at 10 pounds pressure:

Pints or quarts.....15 minutes

MEXICAN TOMATO SAUCE

(7 quart jars)

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

To Prepare Chili Peppers: (CAUTION: Wear rubber gloves while handling chiles or wash hands thoroughly with soap and water before touching your face.) Wash and dry chiles. Slit each pepper on its side to allow steam to escape. Peel peppers using one of the following methods:

Oven or Broiler Method: Place chiles in 400 °F oven or broiler for 6 to 8 minutes until skins blister.

Range-Top Method: Cover hot burner, either gas or electric, with heavy wire mesh. Place chiles on burner for several minutes until skins blister.

Allow peppers to cool. Place in a pan and cover with a damp cloth. This will make peeling the peppers easier. After several minutes, peel each pepper. Remove stem and seeds from peppers.

Hot Pack: 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. Combine chopped tomatoes, peppers and remaining ingredients in a large saucepan. Bring to a boil. Cover and simmer 10 minutes. Pour into hot jars, leaving 1-inch headspace. Wipe jar rims. Adjust lids and process.

Process in a dial-gauge pressure canner at 11 pounds pressure OR in a weighted-gauge pressure canner at 10 pounds pressure:

Pint.....20 minutes
Quarts.....25 minutes

TOMATO KETCHUP

(about 6 or 7 pint jars)

24 pounds ripe tomatoes
3 cups chopped onions
 $\frac{3}{4}$ teaspoon ground red pepper (cayenne)
4 teaspoons whole cloves
2 sticks cinnamon, crushed
 $1\frac{1}{2}$ teaspoons whole allspice
3 tablespoons celery seeds
3 cups cider vinegar
 $1\frac{1}{2}$ cups sugar
 $\frac{1}{4}$ cup salt

Hot Pack: Wash tomatoes. Dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins and remove cores. Quarter tomatoes into 4-gallon pot. Add onions and red peppers. Bring to boil and simmer 20 minutes, uncovered.

Combine spices in a spice bag. Place spices and vinegar in a 2-quart saucepan. Bring to boil. Cover, turn off heat and let stand for 20 minutes. Remove spice bag from the vinegar and add the vinegar to the tomato mixture. Boil about 30 minutes. Press boiled mixture through a food mill or sieve. Return to pot. Add sugar and salt and boil gently, stirring frequently until volume is reduced by one-half or until mixture rounds up on spoon without separation. Pour into hot pint jars, leaving $\frac{1}{8}$ -inch headspace. Wipe jar rims. Adjust lids. Process half-pints in a boiling water bath for 15 minutes.

BLENDER KETCHUP

(about 9 pint jars)

24 pounds ripe tomatoes
2 pounds onions, peeled and quartered
1 pound sweet red peppers
1 pound sweet green peppers
9 cups vinegar
9 cups sugar
 $\frac{1}{4}$ cup canning salt
3 tablespoons dry mustard
 $1\frac{1}{2}$ tablespoons ground red pepper
 $1\frac{1}{2}$ teaspoons whole allspice
 $1\frac{1}{2}$ tablespoons whole cloves
3 sticks cinnamon

Hot Pack: 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 into strips. Blend tomatoes, peppers and onions at high speed for 5 seconds in electric blender. Pour into a 3- to 4-gallon pot and heat. Boil gently 60 minutes, stirring frequently. Add vinegar, sugar, salt and a spice bag containing dry mustard, red pepper and other spices. Continue boiling and stirring until volume is reduced one-half. Ketchup should round up on a spoon with no separation of liquid and solids. Remove spice bag. Pour ketchup into hot pint jars, leaving $\frac{1}{8}$ -inch headspace. Wipe jar rims. Adjust lids and process. Process pints in boiling water bath for 15 minutes.

COUNTRY WESTERN KETCHUP

(about 6 or 7 pint jars)

24 pounds ripe tomatoes
5 chili peppers
 $\frac{1}{2}$ teaspoon ground red pepper (cayenne)
4 teaspoons paprika
4 teaspoons whole allspice
4 teaspoons dry mustard
1 tablespoon whole peppercorns
1 teaspoon mustard seeds
1 tablespoon bay leaves
 $2\frac{2}{3}$ cups vinegar
 $1\frac{1}{4}$ cups sugar
 $\frac{1}{4}$ cup salt

Hot Pack: Prepare chili peppers according to the directions in "Mexican Tomato Sauce." Slice peppers. Wash tomatoes. Dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins and remove cores. Quarter tomatoes. Place in 4-gallon pot. Add peppers. Bring to boil and simmer 20 minutes, uncovered. Combine spices in a spice bag. Place spices and vinegar in a 2-quart saucepan. Bring to boil. Turn off heat and let stand.

When tomato mixture has cooked 20 minutes, remove spice bag from the vinegar and add the vinegar to the tomato mixture. Boil about 30 minutes. Press boiled mixture through a food mill or sieve. Return to pot. Add sugar and salt. Boil gently, stirring frequently, until volume is reduced by one-half or until mixture rounds up on spoon without separation. Pour into hot pint jars, leaving $\frac{1}{8}$ -inch headspace. Wipe jar rims. Adjust lids and process pints for 15 minutes in a boiling water bath.

SPAGHETTI SAUCE WITHOUT MEAT

(about 9 pint jars)

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

Caution: Do not increase the proportion of onions, peppers or mushrooms.

Hot Pack: 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 tomatoes for 20 minutes, uncovered, in a large saucepan. Press 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 remaining spices, salt and sugar. Bring to a boil. Simmer, uncovered, stirring frequently until thick enough for serving. (The volume will have been reduced by nearly one-half.)

Pour into hot jars, leaving 1-inch headspace. Wipe jar rims. Adjust lids and process.

Process in a dial-gauge pressure canner at 11 pounds pressure OR in a weighted-gauge pressure canner at 10 pounds pressure:

Pints.....20 minutes
Quarts.....25 minutes

SPAGHETTI SAUCE WITH MEAT

(about 9 pint jars)

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

Hot Pack: 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 tomatoes for 20 minutes, uncovered in a large saucepan. Press through a food mill or sieve.

Sauté beef or sausage until brown. 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 a boil. Simmer, uncovered, stirring frequently until thick enough for serving. (The volume should be reduced by nearly one-half). Pour into hot jars, leaving 1-inch headspace. Wipe jar rims. Adjust lids and process.

Process in a dial gauge-pressure canner at 11 pounds pressure OR in a weighted-gauge pressure canner at 10 pounds pressure:

Pints.....60 minutes
Quarts.....70 minutes

SOURCE: Reynolds, Susan and Paulette Williams. *So Easy to Preserve*. Cooperative Extension Service, The University of Georgia, Athens. Revised by Judy Harrison, 1993.

This information has been reviewed and adapted for use in South Carolina by E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. (New 6/99).