

FOOD PRESERVATION



iStock.com



iStock.com

National Center for
Home Food Preservation

NDSU EXTENSION SERVICE

North Dakota State University
Fargo, North Dakota

August 2017

Make Your Own Home-canned Condiments

Julie Garden-Robinson, Ph.D., R.D., L.R.D.

Food and Nutrition Specialist

North Dakota State University Extension Service

What do you like on your burgers, hotdogs, tacos or other foods? This handout provides a collection of research-tested recipes for condiments, including barbecue sauce, Dijon mustard, ketchup, taco sauce, horseradish, hot sauce, pickle relish and pepper rings.

If you never have preserved food, visit www.ag.ndsu.edu/food and click on “Food Preservation” for a variety of tested food preservation recipes. Most of the featured recipes in this guide require water-bath canning, so be sure to review the information in “Questions and Answers About Using a Boiling Water-bath Canner” (FN1425).

- More research-tested salsa recipes are available in “Canning and Freezing Tomatoes and Making Salsa” (FN175).
- To make sauerkraut, see “Sauerkraut: From Garden to Table” (FN433).
- See www.ag.ndsu.edu/fieldtofork for information about growing, preparing and preserving a variety of fruits and vegetables.

RECIPES

Many types of sauce, salsa and relish recipes are available, and the acidity will vary among recipes. The canning processes described are intended for **these** recipes. Be sure to follow the measurements and processing times closely to ensure safety.

Barbecue Sauce

4 qt. (16 c.) peeled, cored, chopped red ripe tomatoes (about 24 large tomatoes)
2 c. chopped celery
2 c. chopped onions
1½ c. chopped sweet red or green peppers (about 3 medium peppers)
2 hot red peppers, cored and chopped
1 tsp. black peppercorns
2 cloves garlic, crushed
1 c. brown sugar
1 Tbsp. dry mustard
1 Tbsp. paprika
1 Tbsp. canning salt
1 tsp. hot pepper sauce (e.g., Tabasco)
1/8 to 1¼ tsp. cayenne pepper
1¼ c. vinegar (5%)

Yield: About 4 pint jars

Caution: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash your hands thoroughly with soap and water before touching your face or eyes.

Wash and rinse canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.

Combine prepared tomatoes, celery, onions and peppers. Cook until vegetables are soft (about 30 minutes). Puree using a fine sieve, food mill, food processor or blender. Cook until mixture is reduced to about one half (about 45 minutes).

Tie peppercorns in a cheesecloth bag; add with remaining ingredients and cook slowly until mixture is the consistency of ketchup, about 1½ to two hours. As mixture thickens, stir frequently to prevent sticking. Remove bag of peppercorns.

Fill hot sauce into clean, hot jars, leaving ½ inch head space. Remove air bubbles and adjust head space if needed. Wipe rims of jars with a dampened clean paper towel; apply two-piece metal canning lids. Process in a boiling water-bath canner according to the recommendations in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals.

Source: Adapted from "So Easy to Preserve", 6th ed. 2014. Bulletin 989, Cooperative Extension Service, The University of Georgia, Athens. Revised by Elizabeth L. Andress, Ph.D., and Judy A. Harrison, Ph.D., Extension foods specialists. Reviewed August 2016.

Key to abbreviations:

qt. = quart	Tbsp. = tablespoon
c. = cup	lb. = pound
oz. = ounce	min. = minutes
tsp. = teaspoon	% = percent

Blender Ketchup

You can use an electric blender and eliminate the need for pressing or sieving.

24 lb. ripe tomatoes ¼ c. canning or pickling salt
2 lb. onions 3 Tbsp. dry mustard
1 lb. sweet red peppers 1½ Tbsp. ground red pepper
1 lb. sweet green peppers 1½ tsp. whole allspice
9 c. vinegar (5%) 1½ Tbsp. whole cloves
9 c. sugar 3 sticks cinnamon

Yield: About 9 pint jars

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. Peel and quarter onions.

Blend tomatoes, peppers and onions at high speed for five seconds in electric blender. Pour into a 3- to 4-gallon stock pot or large kettle 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 and ketchup mounds up on a spoon with no separation of liquid and solids.

Remove spice bag and fill clean, hot jars, leaving ½ inch head space. Adjust lids and follow process times for regular ketchup according to the recommendations in Table 1.

Source: Adapted from the "Complete Guide to Home Canning," Agriculture Information Bulletin No. 539, USDA, revised 2009.

Country Western Ketchup

24 lb. ripe tomatoes 4 tsp. paprika
5 chili peppers, sliced and seeded 4 tsp. whole allspice
½ c. salt 4 tsp. dry mustard
2⅓ c. vinegar (5%) 1 Tbsp. whole peppercorns
1¼ c. sugar 1 tsp. mustard seeds
½ tsp. ground red pepper (cayenne) 1 Tbsp. bay leaves

Yield: 6 to 7 pint jars

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.

Quarter tomatoes into 4-gallon stock pot or a large kettle. Add chili peppers and red pepper. Bring to boil and simmer 20 minutes, uncovered.

Combine spices in a spice bag and add to vinegar in a 2-quart saucepan. Bring to boil. Turn off heat and let stand until tomato mixture has been cooked 20 minutes.

Then remove spice bag and combine vinegar and tomato mixture. Boil about 30 minutes. Put boiled mixture through a food mill or sieve. Return to pot. Add sugar and salt, boil gently, and stir frequently until volume is reduced by one-half or until mixture mounds up on spoon without separation.

Fill clean, hot pint jars, leaving ½ inch head space. Adjust lids and process according to the recommendations in Table 1.

Source: Adapted from the "Complete Guide to Home Canning," Agriculture Information Bulletin No. 539, USDA, revised 2009.

Dill Pickle Relish

14 c. chopped pickling cucumbers (about 5 lb. pickling cucumbers as purchased)	5½ c. cider vinegar (5%)
3 tsp. dill seed	6 cloves garlic, minced
2 c. chopped red bell pepper	5 Tbsp. pickling or canning salt

Yield: About 7 pint jars

Wash and rinse pint canning jars; keep hot until ready to use. Prepare lids and bands according to manufacturer's directions.

Prepare cucumbers and peppers by first washing them well. After washing the cucumbers, slice a thin piece from the stem and blossom ends and discard. Cut into about 1-inch pieces and then chop in a food processor (using three to four short pulses on "chop") to yield ¼-inch or smaller pieces. Measure 14 cups of the chopped cucumber.

After washing the peppers, remove the stem, seeds and white membranes. Cut into about 1-inch pieces or slices and then chop in a food processor (using three to four pulses on "chop") to yield about ¼-inch or slightly smaller pieces. Measure 2 cups of the chopped pepper.

Combine chopped cucumbers and bell peppers and set aside. In a large stockpot, stir together the cider vinegar, dill seed, minced garlic and pickling salt until the salt dissolves. Add chopped vegetables and bring to a boil. Reduce heat and simmer 10 minutes.

Fill hot relish into clean, hot pint jars leaving ½ inch head space. Remove air bubbles and adjust head space if needed. Make sure liquid covers the top of the food pieces. Wipe rims of jars with a dampened, clean paper towel; apply two-piece metal canning lids.

Process in a boiling water-bath canner according to the recommendations in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals.

Source: Developed at The University of Georgia, Athens, for the National Center for Home Food Preservation. Released by Elizabeth L. Andress, Ph.D., Department of Foods and Nutrition, College of Family and Consumer Sciences. June 2008.

Dijon Mustard

2 c. chopped onion	4 black peppercorns
2 c. Pinot Grigio or other dry white wine	1 rosemary sprig
1 c. white wine vinegar (5%)	1 c. yellow mustard seeds
1 tsp. salt	½ c. dry mustard
6 garlic cloves, coarsely chopped	2⅓ c. water

Yield: About 6 (4-oz.) jars

Combine first seven ingredients in a large stainless steel or enameled saucepan. Bring to a boil over high heat; reduce heat and simmer, uncovered, 15 to 20 minutes or until onion is very soft, stirring occasionally. Remove pan from heat; pour onion mixture through a wire-mesh strainer into a glass or stainless steel bowl. Discard solids.

Stir mustard seeds and dry mustard into wine mixture. Cover and let stand at room temperature at least 24 hours, but no longer than 48 hours.

Process mustard mixture in a blender or food processor, adding water until consistency of cooked oatmeal.

Transfer mustard to a small saucepan. Bring to a boil, stirring often; reduce heat and simmer, uncovered, five minutes.

Ladle hot mustard into clean, hot jars, leaving ¼ inch head space. Remove air bubbles. Wipe jar rim. Center lid on jar. Apply band and adjust to fingertip-tight. Place jar in boiling water-bath canner. Repeat until all jars are filled.

Process in a boiling water-bath canner according to the recommendations in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals.

Source: Recipe reprinted with permission from "The All New Ball Book of Canning and Preserving," published by Oxmoor House (2016).

Hot Sauce

8 c. (64 oz.) canned, diced tomatoes, undrained
1½ c. seeded, chopped Serrano peppers
4 c. distilled white vinegar (5%)
2 tsp. canning salt
2 Tbsp. whole mixed pickling spices

Yield: About 7 to 8 half-pint jars

Caution: Wear plastic or rubber gloves when handling, cutting and seeding hot peppers or wash your hands thoroughly with soap and water before touching your face or eyes.

Wash and rinse half-pint canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.

Place mixed pickling spices in a spice bag and tie the ends firmly. Mix all ingredients in a Dutch oven or large saucepot. Bring to a boil, stirring occasionally.

Simmer another 20 minutes, until tomatoes are soft. Press mixture through a food mill. Return the liquid to the stockpot, heat to boiling and boil for another 15 minutes.

Fill hot sauce into clean, hot half-pint jars, leaving ¼ inch head space. Remove air bubbles and adjust head space if needed. Wipe rims of jars with a dampened clean paper towel; apply two-piece metal canning lids. Process in a boiling water-bath canner according to the recommendations in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals.

Source: Developed at The University of Georgia, Athens, for the National Center for Home Food Preservation. Released by Elizabeth L. Andress, Ph.D., Department of Foods and Nutrition, College of Family and Consumer Sciences. March 2003; revised February 2009.

Pickled Horseradish Sauce*

2 c. (¾ lb.) freshly grated horseradish
1 c. white vinegar (5%)
½ tsp. canning or pickling salt
¼ tsp. powdered ascorbic acid

Yield: About 2 half-pint jars

The pungency of fresh horseradish fades within one to two months, even when refrigerated. Therefore, make only small quantities at a time. Wash horseradish roots thoroughly and peel off brown outer skin. The peeled roots may be grated in a food processor or cut into small cubes and put through a food grinder. Combine ingredients and fill into sterile jars, leaving ¼ inch head space.

Note: This recipe cannot be canned. Seal jars tightly and store in a refrigerator up to three months.

Source: Adapted from the "Complete Guide to Home Canning," Agriculture Information Bulletin No. 539, USDA, revised 2009.

Pickled Yellow Pepper Rings

2½-3 lb. yellow (banana) peppers	5 tsp. canning salt
5 c. cider vinegar (5%)	2 Tbsp. celery seed
1¼ c. water	4 Tbsp. mustard seed

Yield: About 4 pint jars

Wash and rinse four 1-pint canning jars; keep hot until ready to use. Prepare lids and bands according to the manufacturer's directions.

Wash peppers well and remove stem end; slice peppers in ¼-inch-thick rings. In a 4-quart Dutch oven or saucepan, combine the cider vinegar, water and salt; heat to boiling.

Place ½ tablespoon celery seed and 1 tablespoon mustard seed in the bottom of each clean, hot pint jar.

Fill pepper rings into jars. Cover pepper rings with boiling hot pickling liquid, leaving ½ inch head space. Remove air bubbles and adjust head space if needed. Wipe rims of jars with a dampened, clean paper towel; adjust two-piece metal canning lids.

Process in a boiling water-bath canner, as recommended in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals. Shake jar to disperse spices before using contents.

Source: Developed by the National Center for Home Food Preservation at The University of Georgia, Athens. Released by Elizabeth L. Andress, Ph.D., Department of Foods and Nutrition, College of Family and Consumer Sciences. March 2003.

Sweet Pickle Relish

3 qt. chopped cucumbers
3 c. chopped sweet green peppers
3 c. chopped red peppers
1 c. chopped onions
¾ c. canning or pickling salt
4 c. ice
8 c. water
2 c. sugar
4 tsp. each of mustard seed, turmeric, whole allspice and whole cloves
6 c. white vinegar (5%)

Yield: About 9 pint jars

Add cucumbers, peppers, onions, salt and ice to water and let stand four hours. Drain and re-cover vegetables with fresh ice water for another hour. Drain again.

Combine spices in a spice or cheesecloth bag. Add spices to sugar and vinegar. Heat to boiling and pour mixture over vegetables. Cover and refrigerate 24 hours. Remove spice bag.

Heat mixture to boiling and fill into clean, hot jars, leaving ½ inch head space. Process in a boiling water-bath canner, as recommended in Table 1. Let cool, undisturbed, 12 to 24 hours and check for seals.

Source: Adapted from the "Complete Guide to Home Canning," Agriculture Information Bulletin No. 539, USDA, revised 2009.

Tomato Taco Sauce

8 qt. peeled, cored, finely chopped paste tomatoes	2½ c. vinegar (5%)
2 cloves garlic, crushed	2 Tbsp. salt
5 c. chopped onions	1½ Tbsp. black pepper
4 jalapeño peppers, seeded, chopped	1 Tbsp. sugar
4 long green chilies, seeded, chopped	2 Tbsp. oregano leaves (optional)
	1 tsp. ground cumin. (optional)

Note: This recipe works best with paste tomatoes; slicing tomatoes will yield a thin, watery salsa.

Yield: About 16 to 18 pint jars

Caution: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash your hands thoroughly with soap and water before touching your face or eyes.

Important Note: The only changes you can make safely in this salsa recipe are to substitute bottled lemon juice for the vinegar and to change the amount of spices and herbs. Do not alter the proportions of vegetables to acid and tomatoes because changes might make the salsa unsafe.

Preparing Peppers: The jalapeño peppers do not need to be peeled. The skin of long green chilies may be tough and can be removed by heating the peppers. Usually when peppers are finely chopped, they do not need to be peeled. If you choose to peel chilies, slit each pepper along the side to allow steam to escape. Peel using one of these two methods:

- **Oven or broiler method to blister skins**—Place chilies in a hot oven (400 F) or broiler for six to eight minutes until skins blister.
- **Range-top method to blister skins**—Cover hot burner (gas or electric) with heavy wire mesh. Place peppers on burner for several minutes until skins blister.
- **To peel, after blistering skins**, place peppers in a pan and cover with a damp cloth. (This will make peeling the peppers easier.) Cool several minutes; slip off skins. Discard seeds and chop.

Hot Pack: Combine all ingredients in a large saucepot and heat, stirring frequently, until mixture boils. Reduce heat and simmer, stirring frequently until thick (about one hour). Ladle hot into clean, hot pint jars, leaving ½ inch head space. Remove air bubbles and adjust head space if needed. Wipe rims of jars with a dampened, clean paper towel; apply two-piece metal canning lids. Process in a boiling water-bath canner according to the recommendations in Table 1.

Source: Salsa Recipes for Canning, PNW0395, by Val Hillers and Richard Dougherty, Washington State University, Pullman: Pacific Northwest Extension Publications, 2000 revision. Reprinted by the National Center for Home Food Preservation, August 2004.

Table 1. Recommended Processing Times in a Boiling Water-bath Canner

Recipe	Style of Pack	Jar Size	Process Time at Altitudes of		
			0 – 1,000 ft.	1,001-6,000 ft.	Above 6,000 ft.
Barbecue Sauce	Hot	Pints or half-pints	20 min.	25 min.: 1,001-3,000 ft. 30 min.: 3,001-6,000 ft.	35 min.
Blender Ketchup	Hot	Pints	15 min.	20 min.	25 min.
Country Western Ketchup	Hot	Pints	15 min.	20 min.	25 min.
Dijon Mustard	Hot	Half-pints	10 min.	15 min.	20 min.
Dill Pickle Relish	Hot	Pints	15 min.	20 min.	25 min.
Hot Sauce	Hot	Half-pints	10 min.	15 min.	20 min.
Pickled Yellow Pepper Rings	Raw	Pints	10 min.	15 min.	20 min.
Sweet Pickle Relish	Hot	Pints or half-pints	10 min.	15 min.	20 min.
Tomato Taco Sauce	Hot	Pints	15 min.	20 min.	25 min.

This project was supported by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through grant 14-SCBGP-ND-0038. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.

The NDSU Extension Service does not endorse commercial products or companies even though reference may be made to trademarks, trademarks or service names. NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit www.ag.ndsu.edu/agcomm/creative-commons. County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost for Title IX ADA Coordinator, Old Main 201, NDSU Main Campus, 701-231-7708, nodsua.ooaa@ndsu.edu. This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.