

CANNING Project for 4-H Clubs

UNIT V



PICKLES and RELISHES

By Edith Lacy and Dorothy Gentry

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Thomas P. Cooper, Dean and Director

Units in the Canning Project

Seven units are available to 4-H Club girls who wish to take the canning project. It is best to take the first 3 in the order given.

- Unit I.....Fruits and Fruit Juices
- Unit II.....Tomatoes and Tomato Juice
- Unit III.....Vegetables
- Unit IV.....Meats (Use U. S. Dept. of Agriculture AW 1-110) In this unit, can—
5 quarts chicken
5 quarts pork
5 quarts of meat (other than pork or chicken if available)
30 quarts of fruits and vegetables
Keep a record using 4-H Canning Record Book
- Unit V.....Pickles and Relishes
- Unit VI.....Jellies, Jams, and Marmalades
- Unit VII.....Canning Budget
Help plan and can the budget for the family.
Can at least a budget for one person (100 jars).
Use budget plan in Canning Record Book.
Use the above circulars for canning directions.

A 4-H Canning Record Book is available for keeping a record in any unit.

4-H CLUB CANNING PROJECT

UNIT V

PICKLES AND RELISHES

By Edith Lacy and Dorothy Gentry

The process of preserving vegetables or fruits with salt water or vinegar is called pickling. "Pickles" are those preserved whole or in large pieces; "relishes" are those chopped fine and preserved. Several different kinds of pickles and relishes can be made by combining fruits and vegetables with various spices and vinegar.

Pickles and relishes have a sharp aroma and a spicy flavor. They are highly seasoned and when used with bland foods their penetrating flavor adds zest. They are not a food for every meal, but when served occasionally, either alone or combined with less spicy foods, they stimulate the appetite.

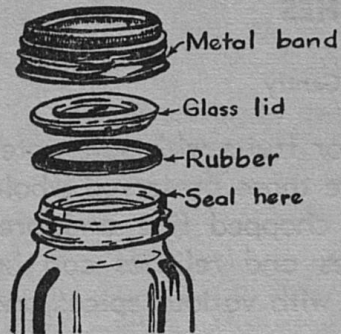
To buy pickles and relishes is expensive, but to make them at home costs little. Recipes are given in this unit for sour, dill, sweet cucumber, fruit, and mixed pickles; relishes, chili sauce, catsup, and sauerkraut. The method of preparation and the kinds and amount of seasoning, are used as a basis for defining the various types of pickle and relish products.

WHAT TO DO IN UNIT V



1. Can 20 pints of pickles or relishes including at least 5 varieties described in this circular.
2. Label each jar, giving name of product and date canned. Use regular club labels for County, District, and State exhibits. For home storage use homemade labels.
3. Can at least 35 quarts of fruits, vegetables, and meats as a review of the first units.
4. Show someone how to make one kind of pickle or relish, or demonstrate how to use a pressure cooker.
5. Exhibit 5 pints of 5 varieties of pickles and relishes. Show fruits, vegetables, and meats in open class if there is an exhibit or fair in your county or community.
6. Keep a complete record in the 4-H Canning Record Book.

KNOW YOUR JARS . . . AND HOW TO SEAL THEM



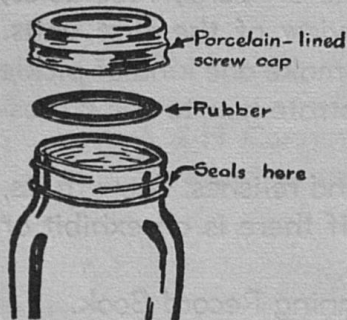
3-piece cap—metal band, glass lid, and rubber—Fit rubber to underside of the lid. Place lid, with rubber side down, on top of the jar. Screw the band on firmly . . . then **turn back almost a quarter turn**. After jar with food in it has been boiled and taken out of the water, **screw the band on tight**.



2-piece cap. Place metal lid, with rubber side down, on top of jar. Screw band on firmly, and **do not tighten** it again even after the jar of food is taken from the boiling water.



"Lightning" jar. Fit rubber in place on ledge at top of the jar. Put on glass lid, then push the long wire clamp tight over top of lid. Leave short wire loose. After the jars of food have been boiled and taken out of the boiling water . . . push this short wire down.



Zinc porcelain-lined cap with shoulder rubber ring to fit standard Mason jar. Fit wet ring down on jar shoulder, but don't stretch more than needed. Fill jar, then screw cap down firmly and turn it back $\frac{1}{4}$ to $\frac{1}{2}$ inch. As soon as jar is taken from canner, quickly screw cap down tight to complete seal.

HOW TO BRINE CUCUMBERS

Cucumbers which have been cured in brine by the long process from 4 to 6 months make a crisper, better flavored, and darker green pickle than those which have been brined for a shorter time. Small, cut, or chopped cucumbers require less time for brining than do large cucumbers. Relishes may be made by the short brine process satisfactorily.

Long Process

Make the brine by dissolving 2 cups of salt in 1 gallon of boiling water. Let the brine cool. Don't wash the cucumbers unless they are very dirty, but wipe them with a clean cloth. Put them in a clean, stone jar or crock, and completely cover them with the brine. Then put a plate or board (small enough to slip down inside the jar or crock) over the cucumbers and place a weight on it heavy enough to keep it under the brine. The next day, place 2 cups of salt on the cover and allow it to dissolve gradually. Don't place the salt under the cover because much of it would then sink to the bottom, making a brine too strong at the bottom and too weak at the top. Seven days later place $\frac{1}{2}$ cup salt on the brine cover. Repeat $\frac{1}{2}$ cup salt each week for 5 weeks or more, skimming the brine as scum forms. If the cucumbers are kept well under the brine, and salt is added, it will not be necessary to seal them. It is important to keep all the cucumbers covered. One uncovered cucumber may cause an entire batch to spoil. This curing process requires at least 6 to 8 weeks, depending on size of cucumbers and temperature of the room—the larger the cucumbers and the cooler the room, the longer the time needed. When the cucumbers contain no white spots and are an even olive green, the curing is complete. Then take the cucumbers from the brine and soak them in cold water overnight to remove excess salt. Repeat the soaking if necessary, before making pickles.

Short process

Very small cucumbers up to 2 inches may be brined by the short process. Make the brine by dissolving 1 cup of salt in 4 quarts of boiling water, and let it cool. Place the cucumbers in a clean stone jar and cover with the cooled brine. (Cover the cucumbers with a plate or board, weighting it to hold it under the brine.) To help give the finished pickles a bright green color, put a layer of fresh green grape leaves in the bottom of the jar, another between layers of cucumbers 4 or 5 inches thick, and another

layer on top. Stir gently twice a day after the second day. When the cucumbers have stood 5 to 7 days in the brine, drain them and cover with fresh cold water. Change the cold water 2 or 3 times, then let them stand 24 hours in the clear water. If the cucumbers are still salty, repeat the process.

CUCUMBER PICKLES

Sweet Pickles

Sweet pickles are made from cucumbers which have been cured in a brine, processed to remove the excess salt and covered with a sweetened spiced vinegar. Use cucumbers which have been brined and had the excess salt removed. Add 1 cup of sugar to 1 quart of good apple cider vinegar and 2 teaspoonfuls of spices tied loosely in a cheesecloth bag. Bring the vinegar, sugar, and spices to a boil, and remove the spice bag to prevent darkening pickles. Pour over $\frac{1}{2}$ gallon of the cucumbers. The next day pour off the vinegar, add another cup of sugar and if vinegar is not spicy enough replace spice bag; bring to boil and pour over the cucumbers. Repeat on the third day. Allow the cucumbers to stand in the sweetened spiced vinegar until they have a good flavor. Pack pickles into glass jars and cover with the same spiced vinegar after bringing it to a boil. Seal and store.

Sour Pickles

Sour pickles are made from cucumbers which have been cured in a brine processed to remove the excess salt and covered with plain or spiced vinegar. Place brined cucumbers from which excess salt has been removed in a stone or glass jar, cover with a 4-6% vinegar and allow pickles to remain in vinegar ten days. Drain, add fresh vinegar and seal.

Sour Spiced Pickles

Heat spices in the vinegar, which is to be poured over the cucumbers at the end of ten days. A good flavor may be obtained by heating 1 oz of stick cinnamon, $\frac{1}{2}$ oz whole cloves in 6 c vinegar for five minutes, strain and pour the spicy mixture over the cucumbers. The cucumbers should be allowed to cool after spiced vinegar is poured over them, before sealing.

Dill Pickles

Dill pickles are brined cucumbers flavored with the herb, dill. Place 100 large cucumbers in a jar and cover with a brine made by using $1\frac{1}{2}$ c salt to 1 gallon of water. Allow cucumbers

to remain in brine until an acid test is given. (Blue litmus paper turns red when placed in brine.) Drain and arrange in layers in a jar, putting grape or cherry leaves in the bottom of the jar, placing a layer of cucumbers on the leaves and sprinkling the cucumbers with dill, a few cloves and pieces of red pepper. Repeat until the jar is filled.

Cover with the brine which was poured off the cucumbers, to which has been added $\frac{1}{2}$ c mustard seed, $\frac{1}{2}$ c horseradish and $\frac{1}{2}$ c salt. Cover with cheesecloth, put a plate or board and a light weight on top, and seal with paraffin.

FRUIT PICKLES

Fruit pickles are made from hard fruits such as peaches, pears, or crab apples, cooked in a sweetened spiced vinegar. Watermelon and cantaloupe pickles are brined for a short time, then cooked in a spiced vinegar.

Peach Pickles

6 lb peaches (preferably
clingstones)
6 c sugar
2 c water

2 c vinegar
2 oz mixed pickling spice
(remove peppers)

Peel small, firm peaches, and drop into a sirup made by boiling the sugar and water together, and boil for fifteen minutes. Drain sirup from peaches, add vinegar and spices to it, and boil the sirup for 15 minutes. Add peaches to spiced sirup, cook for $\frac{1}{2}$ hour, cover, and let stand overnight. The next morning, drain the sirup from the peaches, boil for 20 minutes, add the peaches, and cook for 15 minutes longer. Cool and again let stand overnight. The next morning boil peaches in the sirup until they are clear and tender. Pack them in jars, cover with strained sirup, seal, and process 20 minutes at a simmering temperature.

Sweet crabapple pickles

Wash and remove the blossom ends from ripe but firm crabapples. Follow directions for peach pickles.

Sweet pear pickles

Cook small, ripe, but firm pickling pears in clear water until tender, then follow directions for sweet peach pickles.

Watermelon rind pickles

Trim green and pink from watermelon rind and cut in pieces of desired size. Cover with a brine made by adding 3 tablespoons of salt to 1 quart of water, and let stand overnight. Drain, and

cook rind in clear water until tender; then follow directions for peach pickles.

PICKLED VEGETABLES

Make vegetable pickles by brining them and cooking with a spiced vinegar.

Pickled onions

Peel tiny white pickling onions, and place in a brine made by dissolving 3 cups of salt in 1 gallon of water. Use a weight to hold onions under brine, and let stand for 5 weeks. Drain and rinse in cold water; drain again and pack in sterilized jars. Make a sirup of equal parts of vinegar and sugar, and bring to boil. Pour boiling hot sirup over onions in jar. Cover jar but do not seal. Drain off vinegar solution for 3 successive mornings, reheating it each time and pouring it back over onions in jar. With the third and last heating, add 1 teaspoon pickling spices to each pint jar of onions, and seal at once.

Mixed pickles

Mixed pickles are made from a combination of vegetables, brined for a short period, covered with a spiced vinegar either sweetened or unsweetened, and simmered for a few minutes.

1 qt small cucumbers	4 T mustard seed
1 pt pickling onions	2 T celery seed
1 pt small carrots	1½ c sugar
1 pod hot red pepper	5 c vinegar
2 sweet red peppers	Spices if desired
1 pt ½ inch pieces celery	
1 pt cauliflower	

Soak cucumbers and onions separately for 24 hours in a brine made by dissolving 1 cup salt in 1 gallon of cold water. Rinse and drain. Scrape carrots and chop all ingredients to uniform size. Combine all ingredients, simmer until tender, pack into hot jars, and seal at once.

Bread and butter pickles

1 gal sliced cucumbers	5 c sugar (2½ pounds)
8 large white onions	2 T mustard seed
2 large sweet peppers	1 t turmeric
½ c salt	½ t cloves
5 c cider vinegar	

Wash cucumbers and slice as thin as possible. Chop onions and peppers; combine with cucumbers and salt; let stand 3 hours, then drain. Combine vinegar, sugar, and spices in large enamel preserv-

ing kettle and bring to a boil. Add drained cucumbers; simmer a few minutes but do not boil. Pack hot into sterilized jars and seal at once.

RELISHES

Relishes are a mixture of finely chopped vegetables brined for a few hours and cooked in a spiced vinegar for a short period.

Dixie relish

1 qt chopped cabbage	4 T salt
1 pt sweet red pepper	2 T celery seed
$\frac{3}{4}$ c sugar	1 pt green pepper
1 qt vinegar	3 T mustard seed
1 pt chopped onion	

Let whole peppers stand 24 hours in a brine made by adding $\frac{1}{4}$ cup salt to 1 quart of cold water. Remove from brine and soak in cold water for 2 hours; then remove seed from peppers, chop, and measure. Mix vegetables with sugar, seasonings, and vinegar, and let stand overnight. Pack into hot jars, process 15 minutes at simmering, and complete the seal.

Chow-chow

1 peck (12 $\frac{1}{2}$ lb) green tomatoes	1 T allspice
8 large onions	$\frac{1}{4}$ t cloves
10 green bell peppers	3 T mustard
3 T salt	Few bay leaves
6 hot peppers	1 $\frac{3}{4}$ c sugar
1 qt vinegar	$\frac{1}{2}$ c horseradish
1 T cinnamon	

Chop tomatoes, onions, and peppers together and cover with salt. Let stand overnight, then drain and add the hot peppers which have been chopped, the vinegar, and the spices tied in a cheesecloth bag. Let boil slowly about 15 minutes, pack into clean jars, process in water bath for 15 minutes and seal.

Tomato catsup

Catsup is a bright red, smooth, and fairly thick liquid with a spicy flavor.

1 peck tomatoes	1 T celery seed
3 sweet red peppers	2 t mustard seed
1 pod hot red pepper	1 T whole allspice
4 T salt	1 stick cinnamon (broken into short pieces)
2 c sugar	
3 c vinegar	

Wash and chop tomatoes and peppers, and simmer them until soft. Press through a fine sieve, then cook rapidly until reduced to about one half. Add salt, sugar, and spices tied in a bag, and boil until

thick. Add vinegar about 5 minutes before removing from heat. Pour into hot jars and seal at once.

Chili sauce

Chili sauce looks the same as catsup, except that it is not smooth.

1 gal ripe tomatoes, measured before peeling and coring	½ t curry powder
⅔ c chopped white onions	2 c vinegar
1½ c white sugar	5 t salt
¾ t red pepper	2 t ginger
1 t nutmeg, grated	1 t cinnamon
	1 t mustard

Put tomatoes and onions through food chopper. Add all other ingredients and boil 2 hours or until thick, stirring frequently to prevent burning. As soon as the sauce is thick enough, pour into sterilized jars and seal.

SAUERKRAUT

Sauerkraut is cabbage which has been cut fine, salted, and allowed to ferment in its own juice.

5 lb cabbage	3½ T salt
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Remove the outer leaves and wash the cabbage; drain; and shred. Shred 5 lb cabbage at a time and add 3½ tablespoons salt. Measure carefully because oversalting prevents proper fermentation. Mix thoroughly with the hands. Pack the salted cabbage firmly and evenly with a tamper into a 5-gallon stone jar. Repeat shredding, salting, and packing of cabbage until jar is filled to within 4 to 5 inches of top. Press firmly to draw out enough juice to cover cabbage by the time jar is filled. Cover cabbage with 2 or 3 layers of thin, white cloth and tuck the edges down against inside of jar. Cover with a plate or paraffined board that fits loosely inside jar. Weight down with paraffined brick or stone heavy enough to keep the plate under the liquid. Remove scum every few days, washing cloth, plate, and weight at the same time. In cool weather let kraut ferment about 4 weeks; in warm weather, only about 2 weeks.

Pack kraut into clean quart jars to within 1 inch of the top. Fill with juice to within ½ inch of top. If more juice is needed, add boiling hot brine (1½ tablespoons salt to 1 quart water). Set jars in a pan of cold water that comes to shoulder of the jar. Bring water slowly to boil, then remove jars. Wipe off jar rims and adjust lids. Boil jars 30 minutes in boiling-water bath (be sure water covers jars). Remove jars and complete the seal. Five pounds of cabbage makes 2 quarts of kraut.

CHARACTERISTICS OF GOOD PICKLES AND RELISHES

Pickled vegetables are firm, clear, even olive green (not bright) throughout, with no cloudy or white spots.

Pickled fruits are plump, firm but tender, with a spicy, sweet tart taste.

Cucumber pickles are firm, solid, dark olive green, and of a translucent and uniform color throughout.

Relishes are bright and have the color of the original fruit or vegetables, with a crisp texture.

Mixed pickles—all vegetables in the pickle are firm, crisp, and have a bright color.

IMPORTANT POINTS TO REMEMBER IN MAKING PICKLES AND RELISHES

1. Use only fresh, good quality fruits and vegetables.
2. Grade according to size.
3. Follow directions in 4-H Canning circulars.
4. Use the right ingredients and measure them accurately.
5. Use spices of best quality.
6. Use good standard vinegar free from sediment. Cider vinegar is the best.
7. Use only coarse salt for brining.
8. Use soft water for making brine.
9. Boil the water before adding salt.
10. Cool the brine before adding the vegetables.
11. Don't put cucumbers into too heavy brine or fruit into too heavy sirup. This causes shriveling.
12. Use kettles of enamelware, aluminum, or stainless steel for heating acid pickling liquids. Never use a copper kettle or a galvanized pail.
13. Don't leave spices in the jars of pickles. This will turn the pickles dark.
14. Can pickles and relishes in pints, or other small containers, as usually only a small amount is used at one time.
15. Be sure jars are sealed airtight.
16. Store all canned products in a cool, dry, dark place.

Cooperative Extension Work in Agriculture and Home Economics: College of Agriculture and Home Economics, University of Kentucky, and the United States Department of Agriculture, cooperating. Thomas P. Cooper, *Director*. Issued in furtherance of the Acts of May 8 and June 30, 1914.

Lexington, Kentucky
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