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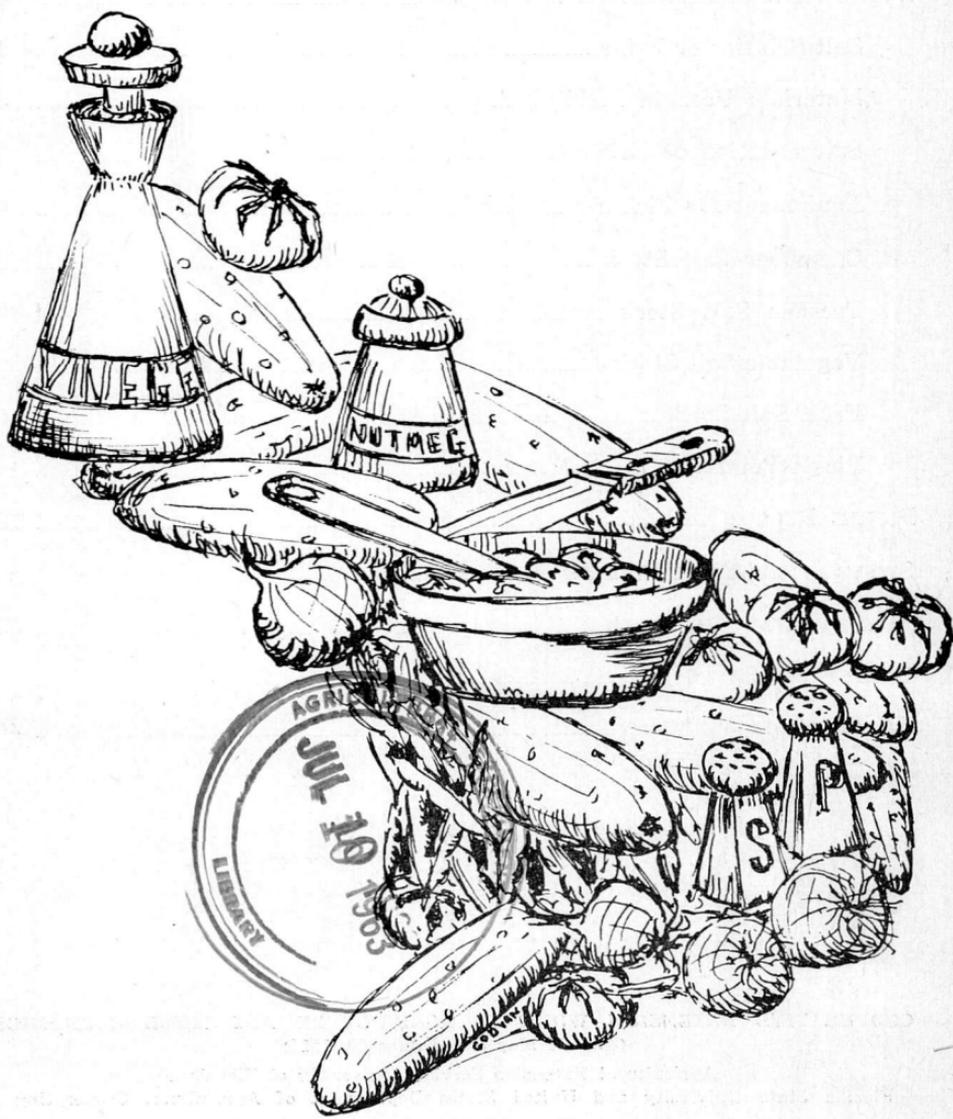
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# PICKLES & RELISHES FROM FLORIDA FRUITS & VEGETABLES



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**COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS**  
(Acts of May 8 and June 30, 1914)

Agricultural Extension Service, University of Florida  
Florida State University and United States Department of Agriculture, Cooperating  
M. O. Watkins, Director

# Introduction

Pickles and relishes are important to a meal. While not considered real food, they make food more interesting. Pickles are eaten for flavor. Their crisp spiciness stimulates appetites for other wholesome but less flavorful foods. The season for making pickles, spicy fruits, and relishes is anytime.

The true flavor of pickles and relishes comes from spices and herbs, carefully selected and perfectly blended to suit a given product.

This bulletin will present the principles of making fermented and quick process pickles, fine flavored relishes and a discussion of the keeping qualities from Florida fruits and vegetables.

The term **pickle** applies to any food that is preserved in brine or vinegar, either with or without bacterial fermentation, and either with or without the addition of spices and sugar.

Pickling is an art and a science. The making of pickles involves more than the putting of the products into brine. The products must be fresh, sound, of fine quality, and of proper maturity; and must be given time to cure and then time to develop flavor.

There are two types of pickles, the **quick process pickles** made from fresh vegetables, and **salt stock pickles** made from vegetables that have first been "cured" in a salt solution or brine for six weeks or longer. Such pickles are termed "salt pickles" or "salt stock."

The "brine cure" prepares the tissues of the fruits or vegetables to absorb the vinegar or the spicy syrup.

Brining or "curing" vegetables and fruits in salt solution produces changes in color, texture and flavor. It is possible to make pickles from uncured fresh vegetables. But pickles made from cured vegetables are finer in flavor, more crisp in texture, and more attractive in color and general appearance, and have better keeping qualities.

# Lactic Acid Fermentation

The object of brining is to bring about a lactic acid fermentation that will produce good flavor and texture and change the composition of the vegetables so they will keep for a long time. The brine is made of salt and water accurately measured. A weak brine permits the growth of desirable yeasts and lactic acid bacteria, but prevents the growth of putrefactive bacteria that would naturally cause the product to spoil. If the solution is too weak the pickles will be soft and only the putrefactive bacteria will develop; if it is too strong the action of the lactic acid bacteria is hindered. Therefore, the strength of the solution must be accurately measured. This is done by means of a **salinometer**. Most vegetables contain 80 percent or more water and as the salt in the solution draws out part of the water, the brine solution should be tested frequently.

The brine also extracts the vegetable juices and fermentable sugars. This promotes the required acid fermentation. The lactic acid and the salt preserve the product, **provided air is excluded** and yeast scum has not been allowed to develop. In the presence of air, aerobic micro-organisms, so-called "pickle scum," develop and destroy the acid so that softening and spoilage take place.

## Salt Solution or Brine

Strong (20 to 25 percent) brine acts as a preservative, while a 5 percent to 15 percent brine will permit desirable fermentation during which process the sugars present in the vegetable juice will be largely changed to lactic acid bacteria on the vegetable, which, with the brine, acts as a preservative.

The storage of vegetables or fruit in brine until certain desired changes in color, flavor and texture take place is called **curing**. Lactic acid fermentation may or may not have taken place. Those cured with fermentation have a pleasant fermented flavor while those cured without have less flavor. Vegetables lose their raw flavor and become crisp, the flesh becomes semi-transparent and the color changes from green to a dark olive or yellowish green. When fermentation has stopped the pickles are considered **cured** and are known commercially as **salt stock**. With proper care this **salt stock** may be kept in the solution for a year or so.

The vegetables most often used for making salt stock are cucumbers, cauliflower, onions, beans, peppers, green tomatoes, okra and mangos. Watermelon rind or the citron melon is largely used for sweet pickles.

When the vegetables are ready to be made into vinegar pickles, they are removed from the brine, soaked overnight in cold water (warm water hastens the process) to remove the excess of salt from their tissues. Then they are stored in vinegar which may be plain or sweetened and spiced.

## Materials Used in Pickling

**Salt.**—Use a coarse salt that contains no product to prevent caking and that contains less than 1 percent carbonate or bicarbonate of sodium, calcium or magnesium.

**Vinegar.**—For making pickles, use a clear cider vinegar, free from mother of vinegar and sediment. The strength of vinegars is expressed in terms of “grains.” A “10 grain” vinegar contains 1 percent acetic acid and a “40 grain” contains 4 percent. The strength of the vinegar is given on the label of the container. Vinegar for pickle making should contain 4 to 6 percent acid. The label should read 40 to 60 grains. Too strong a vinegar will cause pickles to shrivel; too weak a vinegar will cause them to soften.

**Sugar.**—Granulated sugar is used in pickle making. Too much sugar causes pickles to shrivel.

**Spices.**—The kind and amount of spices used will vary with the type and kind of pickle. Whole spices are to be preferred to ground ones. They should be tied loosely in a cheesecloth bag and be pounded lightly before using.

**Water.**—Soft water is recommended. Lime and other salts, as occur in water, may prevent proper acid formation in pickles. Iron may cause blackening of the pickles.

**Coloring Agents.**—Well selected cucumbers, properly brined and processed will be dark olive in color and will not need coloring agents added. **Caution:** Don't heat cucumbers in copper kettle to give a dark green color. Heating vinegar in copper produces copper acetate which is **POISONOUS**.

**Hardening Agents.**—Many recipes for cucumber pickles call for alum to harden the pickles. Alum is not needed, if pickles

# SALT SOLUTION OR BRINE CHART

**Quality of salt for making brine:** Use a coarse salt that contains no product to prevent caking.

**Quality of water for making brine:** Use soft water. If soft water is not available boil water, cool it and pour off from any sediment and filter. Add one tablespoon vinegar to each quart of hard water after it has been boiled, cooled and filtered.

**Quantity of brine needed:** Allow from one-half to two-thirds the volume of the material to be brined. Example: One gallon of vegetable will require from one-half to two-thirds gallon of brine.

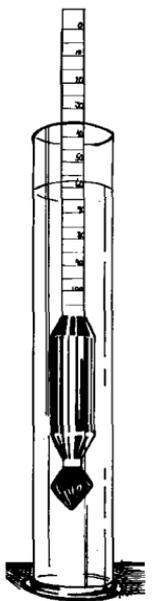
Approximate strength of Brine		Approximate Amount of Salt Per Quart of Water		Nature of Brine	Uses of Brine
Salt Solution	Salinometer Reading	Ounces	Cup		
Percent	Degrees				
5	20	2	¼	Permits rapid fermentation with formation of lactic acid. Must be watched closely for signs of spoilage. Vinegar, ¼ cup to 1 quart of water, may be added to help prevent spoilage.	For making dill pickles, dilled green tomatoes, snap beans, okra, chayotes, kumquats, calamondins.
10	40	4	½	Permits slow fermentation with formation of lactic acid. After fermentation, pickles keep well in this brine for 2 to 3 months:  (1) if kept below surface of brine; (2) if brine is protected from air; (3) if stored in a cool place.	For curing cucumbers and most other vegetables which are to be made into a salt stock for pickles.

# SALT SOLUTION OR BRINE CHART

Approximate strength of Brine		Approximate Amount of Salt Per Quart of Water		Nature of Brine	Uses of Brine
Salt Solution	Salinometer Reading	Ounces	Cup		
15	60	6	$\frac{1}{2}$	Permits slow fermentation with formation of lactic acids. After fermentation, pickles keep in this brine indefinitely.	For curing vegetables such as cauliflower and pimento which do not shrivel. For storing vegetables fermented in a 10 percent brine.
20	80	8	$\frac{3}{4}$	Practically no fermentation takes place and no lactic acid is formed.	For making unfermented salt stock of onions, peppers, pears, peaches and other vegetables and hard fruits which do not shrivel, and which do not require fermentation for flavor or color.
25	100	10	1	Saturated salt solution, no fermentation takes place. Produced when a large amount of salt is added to vegetables.	For preserving vegetables indefinitely, it is a method of preservation.

are properly brined 6 to 8 weeks, and processed according to directions.

## Equipment for Pickling



Salinometer

1. Container: A clean wooden keg or glazed pottery or glass container.
2. Cheesecloth or similar material.
3. Cover: Use large plate or board for holding vegetables under brine.
4. Weight to hold plate or board under the brine. (A tightly sealed glass jug or jar filled with water or sand makes a good weight.)
5. A salinometer: It is used to measure the exact salt content of the brine. Follow directions for its use.



A Stone Churn

6. Containers and seals: Use standard glass jars and lids for completed pickles. Seal by packing hot and processing in a water bath canner for 5 minutes. Store in a cool dry place.

## Cucumber Salt Stock

- 1 to 4 gallon containers
- 12 pounds (about  $\frac{1}{4}$  bushel) cucumbers
- 9 quarts brine (10 percent or 40 degrees salinometer reading)
- 9 quarts ( $2\frac{1}{4}$  gallons) water
- 2 pounds (about  $3\frac{1}{4}$  cups) salt      Refer to Chart, Page 6.
- If desired to hasten fermentation, add 4 tablespoons sugar.

Cut cucumbers from vine leaving quarter inch stem. Weigh and wash. Pack into the container within an inch of the top. Fill to overflowing with the brine. Cover and add weight. Set the containers in a pan or where the overflow during the period

of fermentation will not do any damage. The loss or overflow of brine should be replenished every few days with fresh brine. Remove any scum that may form.

Every week test the strength of the brine. It should never fall below 40 degrees salinometer reading. It should increase in strength gradually from 3 to 4 degrees each week. Since the brine is diluted by the juices drawn from the cucumbers, at the end of the first day, one pound and three ounces, about  $1\frac{7}{8}$  cups, of salt should be placed on the cover so salt will not sink to the bottom of the container before it is dissolved. If it sinks, the salt solution at the bottom will be very strong while that near the top may be so weak the pickles will spoil.

At the end of each week thereafter until five weeks have passed, place on the cover  $\frac{1}{3}$  pound or  $\frac{1}{2}$  cup salt for each 12 pounds of cucumbers. When testing each week, it should be noted that the brine gradually increased in strength, until at the end of 5 or 6 weeks (when fermentation is over) the strength of the brine should be 15 percent or a 60 degrees salinometer reading. "Curing" is complete when fermentation ceases.

The cucumbers then will be firm and crisp in texture, translucent and free from whitish spots, dark olive or yellowish green in color and salty. The cucumber salt stock is now ready to be stored in air-tight containers in a cool place until needed to be made into various kinds of pickles.

## **Freshen Salt Stock**

Drain off the brine, cover with fresh water that feels fairly hot to the hands. Hold at about this temperature, changing and stirring occasionally, for 10 to 12 hours or longer, according to the salty flavor desired. Do not remove all salt, as some is needed for flavor. The stock is now ready to make into salt, sour, sweet or spiced pickles, cucumber rings, chow-chow, relish, or combined with other stock and made into mustard and mixed pickles.

## **Vegetable Salt Stock**

Fermented salt stock may be made from other vegetables by following the same directions as given for cucumbers. In preparing cauliflower, leave it whole or break heads into flowerets.

Peppers should be left with stems on; green beans should be left intact, as should other vegetables. Avoid crushing or bruising.

## **Fruit Salt Stock**

Fermented fruit stock may be made from papaya, watermelon, cantaloupes, citrus fruits and other fruits by following the outline for making cucumber salt stock. Under-ripe cantaloupes should be cut into small pieces, seeds and soft centers removed and the sections pared. Pare off the thick green skin from watermelon rind, all the red portions, and cut into pieces. Small green papayas may be left whole. Grapefruit peel, orange peel, and other citrus products may be held as salt stock until needed for preserving or candying.

## **Pickle Pointers**

### **Number I**

Quality pickles depend upon the quality of products used. It is important to have:

1. Fresh, high grade fruit and vegetables, sorted for size and degree of ripeness.
2. Highest quality whole spice preferable. Flavor comes out as pickles stand.
3. High grade cider vinegar, or distilled vinegar. Use clear and colorless vinegar for light vegetables such as onions and cauliflower.

### **Number II**

Fine texture, flavor and color of pickles require:

1. Excluding air from the brined vegetables before, during and after fermentation.

2. Maintaining a fairly uniform temperature during fermentation.
3. Maintaining a salt content of brine high enough to prevent growth of spoilage organisms.
4. Adding a small amount of vinegar to brine for all "dills" to cause desirable fermentation and to slow undesirable fermentation.

### **Number III**

Pickles include:

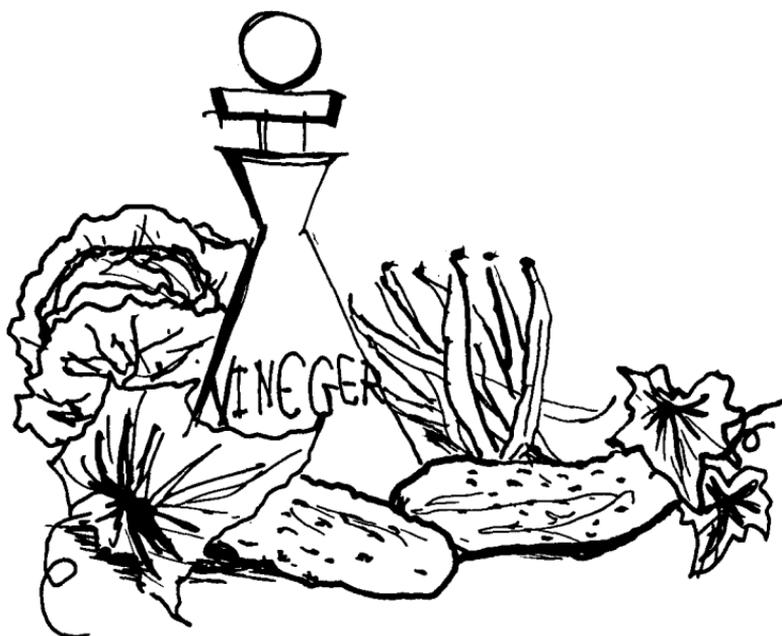
1. Fruit pickles, as whole peaches, pears, papayas or pineapple, cooked in a spicy, sweet-sour syrup.
2. Quick process pickles salted overnight and combined with spices and vinegar the second day, as "Bread and Butter" pickles.
3. Salt stock, or fermented pickles, requiring three to six weeks to cure. In general this is the recommended method for vegetable pickles.
4. Relishes, catsups, chutneys and sauces consist of spiced, cooked and strained fruits, vegetables and nuts.

### **Number IV**

Containers and storage:

1. Use standard glass jars and lids for completed pickles.
2. Seal by packing hot and processing in a water bath canner for 5 minutes.
3. Store pickles in a cool dry place.

## Pickle Recipes



After pickles have been freshened or had excess salt removed, they should be drained and sorted. To secure an attractive pack, pickles should be as nearly uniform in size as possible. Cover the pickles with 45 to 50 grain vinegar and store for a week or 10 days; then transfer to fresh vinegar if a very sour taste is desired.

When only one application of vinegar is used, the water in the pickles dilutes the acid greatly and may, after a few weeks, permit softening and the pickles may spoil. Covered with a second vinegar of the correct strength, with spices and other desired flavoring agents added, pickles should keep indefinitely—after being sealed.

The flavor and other appetizing qualities of many kinds of pickles are due largely to the spices added. A person with a flair for testing and experimenting for something different can blend and perfect new and interesting flavor combinations from the variety of herbs and other seasoning agents available.

**Spiced Vinegar No. 1 for Sour Pickles**

Allow about 1 quart of vinegar for each 2 quarts of cucumbers or other vegetables.

1 quart vinegar	½ tablespoon mustard seed
½ cup sugar	⅓ tablespoon pepper corns
½ tablespoon celery seed	2 sprigs tarragon
½ tablespoon whole cloves	

Mix vinegar and sugar. Add spices tied loosely in a piece of cheesecloth. Simmer the mixture for 5 minutes. Allow the spices to stand in the vinegar over night. Pack salt stock pickles that have been freshened and then stored in vinegar for 10 days into clean, hot containers, and pour the boiling spiced mixture over them. Seal.

**Spiced Vinegar No. 2 for Sour Pickles**

2 tablespoons white mustard seed	3 tablespoons grated horseradish
1 tablespoon whole black pepper	1 tablespoon celery seed
1 tablespoon whole allspice	1 tablespoon whole cloves
1 inch piece ginger root	2 large cloves garlic
4 to 6 cups vinegar	4 dried red peppers
1 tablespoon mace	

Heat vinegar and spices together at simmering for 5 minutes, and set aside overnight. Then strain to remove spices. Pour the boiling liquid over the drained cucumbers or other vegetables packed into clean, hot containers. Seal.

**Spiced Vinegar No. 3**

3 cups vinegar	1 tablespoon mustard seed
1 cup water	2 hot, red peppers
1½ cups sugar	1 tablespoon celery seed
½ ounce Spice Mixture (below)	

Mix and bring to the boiling point. Pour while boiling hot over the brined, prepared vegetables in jars and seal.

**Spice Mixture**

5 tablespoons allspice	¼ cup white mustard seed
⅓ cup coriander	6 dried red peppers
6 bay leaves	

Mix well and use as stated above.

**Dill Pickles—Fermented**

Dill pickles are made by a special process. The flavor of dill is characteristic and a weak brine is used which permits fast fermentation and curing. Some manufacturers add dill in a vinegar solution, after the pickles are cured with salt. Others add the dill direct to the brine in which they are cured, using no vinegar at all. This is the genuine dill pickle, or German dill. For Florida conditions, it is recommended that a small amount of vinegar be added to the brine to flavor fermentation and inhibit the spoilage organisms in the first stages of fermentation.

**Dill Cucumber Pickles**

4 gallon glass container	Brine requires 8½ quarts water
2 cups vinegar	1¼ pounds (about 2 cups) salt
2-3 layers of dill	1 ounce (4 tablespoons) mixed
12 pounds (about ¼ bu.) cucum- bers	pickled spices
(5 percent or 20 degree salinometer reading)	2 cloves garlic
	1 layer grape leaves for use in stone or wooden container

Use medium size freshly picked cucumbers. Wash and drain. Cover bottom of container with a layer of the dill and spice. Add cucumbers, packing in gently and firmly, with alternate layers of the mixed pickle spice and dill. Then pour the brine mixed with the vinegar over the cucumbers. The addition of one tablespoon of sugar per gallon capacity of the container assists in the development of the proper acidity. If a glass jar is used, fill to overflowing with brine, adjust cover so that gas formed during fermentation can escape. Any loss of brine during fermentation and storage must be replaced. When fermentation is over, the jars may be filled and sealed completely, or preferably

be packed in smaller air-tight containers for more convenient use. Drain off the brine, after transferring the pickles to the smaller glass jars, bring the brine to the boiling point, fill the jars to overflowing. Seal. Dill pickles should be ready for use 4 to 8 weeks after they are first placed in the brine.

If stone crocks or wooden containers are used instead of glass, fill with the cucumbers, spice and dill to within 2 to 3 inches of top and finish with a heavy layer of clean grape leaves if they can be obtained. Cover with plate or wood one inch less in diameter than container and heavy enough to keep cucumbers submerged. Pour the brine and vinegar mixture over the pickles to overflowing. Containers should have an air-tight cover.

When pickles are cured, it is best to transfer them to quart glass containers. Fill completely with old brine or make new, adding a small amount of fresh spice and dill. A clove of garlic to each jar adds an interesting flavor.

Do not store glass jars in the sun or light as the light will kill the lactic bacteria. Dill pickles cure slowly, usually six weeks or longer is required before they acquire the desired flavor, color and texture; also dill pickles keep less well than others because the brine in which they are fermented and stored is weak.

### **Dilled Green Tomatoes**

Small green tomatoes make choice dills when freshly gathered and fermented under conditions as given above. In about 6 weeks the tomatoes should be ready to use. For storage, pack in glass jars and add  $\frac{1}{4}$  to  $\frac{1}{2}$  cup vinegar to each jar. Strain pickle brine; bring it to a boil and cool. Fill jars with hot brine and seal.

### **Dilled Okra**

Small, tender pods of okra cut with as much stem as possible make fine dill pickles. Follow directions as given above. In about 6 weeks the okra should be clear and of good flavor and texture.

## **Sauerkraut**

(Fermented Cabbage)

Select sound heads of cabbage. Remove all decayed or bruised leaves. Wash well, drain and quarter heads and discard the core portion. Shred the cabbage with a knife or a slaw cutter. Cut about 5 pounds of cabbage at a time, weigh accurately. Mix with 2 ounces of salt, until juices flow freely. When small amounts of cabbage and salt are mixed at a time the mixing will be more thorough. After salt has dissolved, pack the cabbage-salt mixture into the container.

Large glass jars are best for use. Other jars or glazed pottery may be used. To force out the air, pack the mixture down gently but firmly with a large wooden masher or a spoon. **DO NOT POUND KRAUT.** Pack glass jars to within one inch of top, leaving space for fermentation and to prevent an overflow. Pack glazed pottery until nearly full. Cover the kraut with a clean cloth, a plate and weight. Put the container in a warm place where fermentation may begin at once. Fermentation is completed in from 10 days to two weeks. Fermentation is more rapid at higher temperatures, but spoilage is more likely to occur and a better quality kraut is produced at a lower temperature. The best temperature is 70 to 75 degrees.

Fermentation will begin within a day after packing. A scum usually forms on the surface of the brine within a few days. Remove the scum every few days and wash and scald the cloth frequently. Replace the cloth, the cover, and the weight on top of the container. Cover container with another cloth to keep out dust. When fermentation is complete, bubbles cease to rise to the top of the liquid and the liquid settles. The sauerkraut should then be canned.

### **To Can Sauerkraut**

After fermentation is complete, pack the cold kraut firmly but not tightly into hot, sterile, containers. Add enough of the kraut brine to fill the containers completely. If there is not enough kraut brine, add a brine made by dissolving 2 tablespoons of salt in 1 quart of water. Partially seal jars and place in water bath, and process pints 15 minutes at simmering. Remove from water bath and completely seal jar. Set the jars far apart so

they will cool as quickly as possible. When cans are used, kraut must be steaming hot before can is sealed.

### Spoilage of Sauerkraut

Kraut may discolor, soften, or spoil for the following reasons:

A wrong proportion of salt to cabbage

Poor mixing of salt and cabbage

Poor packing

Poor skimming

Dirty containers

The rising of the shredded cabbage above the surface of the brine

The storage of the kraut in too warm a place

### Mustard Pickles

(Salt Stock or Fresh)

2 cups small cucumbers about 2 inches long	3 green peppers, seeded and chopped
2 cups large cucumbers	1½ quarts vinegar, hot
2 cups onions	Also 3 cups vinegar for soak- ing
2 cups small green tomatoes cut in halves or quarters	2 cups brown sugar
1 cup snapbeans, cut diagonally in 1 inch pieces	6 tablespoons flour
1 cup cauliflower, flowerets, cut uniform size	1 teaspoon celery salt
	6 tablespoons powdered mustard
	1 tablespoon tumeric

When salt stock is used, freshen it first and then cut into desirable pieces. If fresh vegetables are used, cut and soak them overnight in brine made by dissolving 1 cup of salt to 2 quarts of water, then drain them. Soak the drained vegetables 1 hour each time in 2 changes of clear water. Drain again.

Cover the vegetables with a mixture of 3 cups of vinegar and 3 cups of water. Let stand for 24 hours. Heat to the simmering point, then drain the vegetables and discard the liquid. Mix the sugar, flour and spices. Add the 1½ quarts of hot vinegar slowly, stirring to make a smooth paste. Cook this over a pan of hot water until the mixture is well thickened. Pour this

mixture over the drained vegetables while they are hot. Stir thoroughly. Pack hot pickles into clean, hot jars, and seal at once.

### **Pickled Onions**

(Salt Stock or Fresh)

4 quarts of small white onions	3 tablespoons allspice
¼ cup grated horseradish	3 tablespoons white mustard seed
1 quart white vinegar	1 small hot red pepper for each
½ cup sugar	container

When salt stock is used, freshen it first. If fresh onions are used, drop them into hot water to loosen the outside skin; cut off the dark portion from the root and slip off the skin, leaving the onion perfectly smooth. Cover onions with boiling hot brine made by dissolving 1 cup of salt in 1½ quarts of boiling water. Soak the onions for 24 hours, then drain them. Soak onions in fresh water for 1 hour, and drain.

Mix vinegar, sugar and spices. Boil this syrup mixture for one minute. Pack the onions into clean, sterile, hot jars. Cover the onions with boiling syrup mixture. Add a hot red pepper in each jar, and seal. Cool the jars and store them in a cool place.

### **Sweet Vegetable Pickles**

As with sour pickles, better sweet pickles are obtained by using vegetables previously cured in brine than by using fresh vegetables. The vegetables should be freshened as directed for sour pickles. Prick the vegetables through and through with sharp pointed fork or other tool, otherwise the sweet vinegar may cause vegetables to shrivel.

Store the pickles in strong unsweetened vinegar for about 1 week. Drain. Use one-half the drained vinegar for making the pickling syrup.

Prepare the syrup of:

2 pints vinegar drained from the pickles	1 tablespoon each of mace, ginger root, and whole cloves
2 pints fresh vinegar	2 tablespoons stick cinnamon
2 cups sugar, granulated or brown	

Simmer the vinegar, sugar, and spices together for 5 minutes and let stand overnight. Strain. Pack drained vegetables in clean hot jars. Cover with hot syrup and seal.

Onions, cauliflower, green and red peppers, round yellow tomatoes, red and green pear-shaped tomatoes, small ears of corn, tiny melons, yellow and green pod beans, one-half grown pods of the unicorn plant, okra, chayote, as well as cucumbers make delicious mixed pickles in the same way.

All these vegetables should be first **cured** in brine for best results. Very small vegetables are preferred. When larger vegetables are used it is better to cut them into pieces of desired size and shape.

For sour pickles, fill jars completely with 45 grain vinegar and store for 10 days. Pour off. Fill jars with fresh vinegar and seal. If sweet pickles are wanted, cover vegetables the second time with a liquor made by dissolving four to six pounds of sugar in a gallon of vinegar. Seal hot.

### Mixed Sweet Pickles

(Salt Stock or Fresh)

1 quart small whole cucumbers	1 cup small okra
1 quart large cucumbers, sliced	1 large green pepper, seeded and sliced
1 quart small white onions, cut in half	2 red peppers, seeded and sliced
1 cup beans, cut 1½ inches on the "bias"	¼ cup horseradish, cut in pieces
1 cup green beans, cut same way	3 quarts vinegar
1 cauliflower broken into flowerets	3 pounds brown sugar
4 small chayotes, cut into eights	4 tablespoons celery seed
	4 tablespoons white mustard seed
	½ teaspoon black pepper

When salt stock is used, freshen vegetables first and then cut as desired. Soak them 10 days in 45 grain vinegar before putting in the following sweet spiced solution. If fresh vegetables are used, cut and soak them overnight in brine made by dissolving 1 cup of salt in 2 quarts of water, then drain; wash the vegetables with fresh water and drain again.

Add the horseradish to the drained vegetables. Mix the vinegar, brown sugar, and spices. Boil the mixture for 10 minutes. Pour the boiling hot syrup over the vegetable mixture.

Soak the pickles for 2 days, then drain and again heat the syrup to the boiling point. Pack the pickles into clean hot jars. Cover the pickles with boiling syrup and seal.

### **Sweet Spiced Pickled Tomatoes**

(Quick Process)

5 pounds small yellow or green tomatoes	1 teaspoon whole allspice
3½ pounds sugar	1 tablespoon stock cinnamon
2 cups vinegar	1 teaspoon whole cloves
2 lemons sliced thinly	1 tablespoon white mustard seed

Small yellow or green tomatoes are best for this pickle, although the large green tomatoes may be cored and cut in quarters. Wash and peel if desired. Prick whole small tomatoes to prevent bursting. Mix the vinegar, sugar, and spices. Boil the mixture for 5 minutes. Pour the boiling syrup over the tomatoes, let them stand for several hours or overnight, then drain off the syrup and boil it until it is thick enough to coat a spoon. Add the tomatoes, and boil the mixture until the tomatoes are clear. Pack the tomatoes into clean, hot jars. Cover the tomatoes with the boiling syrup, and seal.

### **Sweet Gherkins**

(Salt Stock or Fresh)

2 quarts small, green cucumbers, uniform size, 1-2 inches	1 tablespoon celery seed
2 quarts boiling vinegar	2 tablespoons stick cinnamon
2 pounds of sugar (4 cups)	2 tablespoons whole cloves
2 tablespoons whole allspice	½ cup mustard seed

Freshen salt stock. When fresh cucumbers are used, cover them with boiling hot brine made by dissolving 2 cups of salt in 1½ quarts boiling water. Soak the cucumbers in this brine for 24 hours, then drain.

Heat the vinegar to boiling and pour it over the cucumbers. Let stand for another 24 hours, then drain.

Save the vinegar and add the sugar and spices. Boil the mix-

ture for 5 minutes. Pack the pickles into clean, hot jars. Cover the cucumbers with the boiling syrup and seal.

### **Filled Sweet Pickle**

Remove centers from large sweet cucumber pickles as directed above. Or young pickled papayas (3 to 4 inches in length) may have a circular piece removed from one side and be filled with the following mixture:

1 cup preserved citron or watermelon rind	kumquat or a mixture of these fruits
$\frac{1}{4}$ cup preserved ginger	$\frac{1}{4}$ cup preserved or candied Surinam cherries
$\frac{1}{2}$ cup spiced orange or grapefruit peel or 1 cup spiced	$\frac{1}{4}$ cup sweet red pepper jam

Close openings with the pieces removed or with a preserved cherry or orange peel. Cover with a hot spiced syrup, seal and process in water bath—pints 5 to 10 minutes at simmering.

### **Sweet Pickled Watermelon Rind**

(Salt Stock Process)

Best texture, flavor and keeping qualities for watermelon pickles are made by curing the rind in brine rather than by the heat treatment method. Proceed to freshen the rind as previously directed. Then store in strong, unsweetened vinegar for one week. Prepare a syrup of:

3 pints of vinegar, white, if light color is desired	3 pounds of sugar
2 lemons, sliced	1 tablespoon each of mace, ginger root and whole cloves
2 sticks cinnamon	

Simmer vinegar, sugar, spices and lemon together for about 5 to 10 minutes, and let stand overnight. Strain. Pour hot mixture over melon rind and bring all to a boil. Let stand overnight and repeat the process the following day. The rind should be crisp, tender and well flavored. If a less sour product is desired, use part of the first vinegar in making the syrup, although fresh, new vinegar is to be preferred.

**Sweet Pickled Watermelon Rind**

(Quick Process)

4 pounds watermelon rind	2 lemons, sliced
2 tablespoons lime	1 pint water
2 quarts cold water	lime water
2 quarts vinegar	2 tablespoons whole cloves
	4 long pieces stick cinnamon

Select rind from a firm, not over-ripe melon. Before weighing, trim off the green skin and pink flesh. Cut in one inch cubes and soak for 2½ hours in the lime water. Freshen in cold water. Drain. Cover with fresh water and cook for 1½ hours, or until tender. Add more water as it boils off. Let stand over night in this same water, and next morning drain. Bring to the boiling point the 2 quarts of vinegar, 1 pint of water, the 4 pounds of sugar and the spices, tied loosely in cheesecloth. Add drained watermelon, and boil gently for 2 hours, or until the syrup is fairly thick and rind is clear. Remove the spice bag, pack watermelon pickle in sterilized glass jars. Cover with syrup. Seal.

**NOTE:** The lime (calcium oxide) may be secured from the drugstore or use slaked lime—2 ounces (2 tablespoonfuls) to 2 quarts of water for 2 pounds of fruit.

**Pickled Plums Or “Plum Olives”**

Select firm ripe cultivated or wild plums. Do not remove stem or seeds. Wash and pack, without crushing, into sterilized jars. Add 2 tablespoons of salt and 1 tablespoon of sugar to each quart jar. Fill the jars with a mixture of one-half vinegar and one-half water. Seal and store.

They will be ready for use in about 6 to 8 weeks. They are somewhat like olives in taste.

Note: A more desirable product may be obtained by fermenting the plums by the method given for dill pickles (page 14), omitting the pickle spice and dill.

**Pickled Kumquats**

(Fermented)

Either fully mature kumquats still in the green stage, but just before they turn yellow, or ripe, well colored fruit may be used for making into fermented pickles.

Use freshly gathered fruit. Scrape thoroughly to remove any

scale or dust. Wash and rinse. Pack, without crushing, in all-glass containers to within 1 inch of top. Place weight across the fruit in such way as to prevent their rising in the pickling solution. Cover with brine made by adding 3 tablespoons salt to one quart water to completely fill the jar and partially seal. As fermentation takes place and liquid decreases, it should be replaced with new brine, keeping container full so as to leave no air space. As soon as fermentation is over the jar should be sealed.

The kumquats should cure in about six weeks to two months. They may be used as a substitute for olives.

**Caution:** Do not wait until fruit is becoming dry or over mature before using.

Note: You may make sweet spiced kumquats of salt stock or fermented kumquats. Freshen kumquats.

### **Pickled Calamondins**

Follow directions as given for pickled kumquats.

### **Pickled Limes and Limequats**

May be pickled as directed for pickled kumquats.

### **Bread and Butter Pickle No. 1**

(Quick Process)

A type of cucumber pickle known as the bread and butter pickle differs from the ordinary cucumber pickle in that it is not made from cucumbers which have previously undergone a lactic acid fermentation in brine. Fresh green cucumbers are used to make Bread and Butter pickles. The cucumbers are washed, graded and uniformly sliced cross-wise. The round cucumber chips are packed in a sweet spiced vinegar with a few pieces of onion. The bread and butter pickle owes its attraction to its delicious crispness. Care must be taken in preparation to avoid too long heating as this will destroy the crispness and make the chips mushy.

Follow these directions:

1. Use fresh green cucumbers and a few onions.
2. Wash the cucumbers and peel and wash the onions.
3. Cut the cucumbers and onions into coarse slices, cross-wise.

4. Prepare a light brine by dissolving  $\frac{1}{2}$  pound of salt in one gallon of water.
5. Cover the cucumbers and the onions separately with this brine and let stand overnight and then drain thoroughly.
6. Make a liquor of equal amounts of vinegar and water, use to scald the pickles for about 5 minutes, or until they are tender. Be careful not to get them too soft. Drain this liquor off thoroughly. Do not use again.
7. Dissolve 6 pounds brown sugar in one quart water and 3 quarts vinegar. Then add the following spices: 2 tablespoons celery seed, 2 tablespoons mustard seed, and 2 tablespoons ground turmeric.
8. Pack the drained pickles in sterile glass jars.
9. Bring the vinegar, sugar and spices mixture to a boil. Pour hot over the pickles.
10. Fill jars and seal.

### **Bread and Butter Pickle No. 2**

(Quick Process)

Slice 25 cucumbers of medium size and 12 small onions. Soak in cold water with a large handful of salt for 3 hours. Then drain well. Pack sliced cucumbers and onion in sterile glass jars.

Scald 1 quart of vinegar, 2 cups of white sugar, 2 tablespoons of mustard seed, 2 tablespoons turmeric, 2 tablespoons celery seed, and 1 teaspoon of cassia buds. Pour this scalding hot mixture over the cucumbers and onions previously packed in jars. Seal.

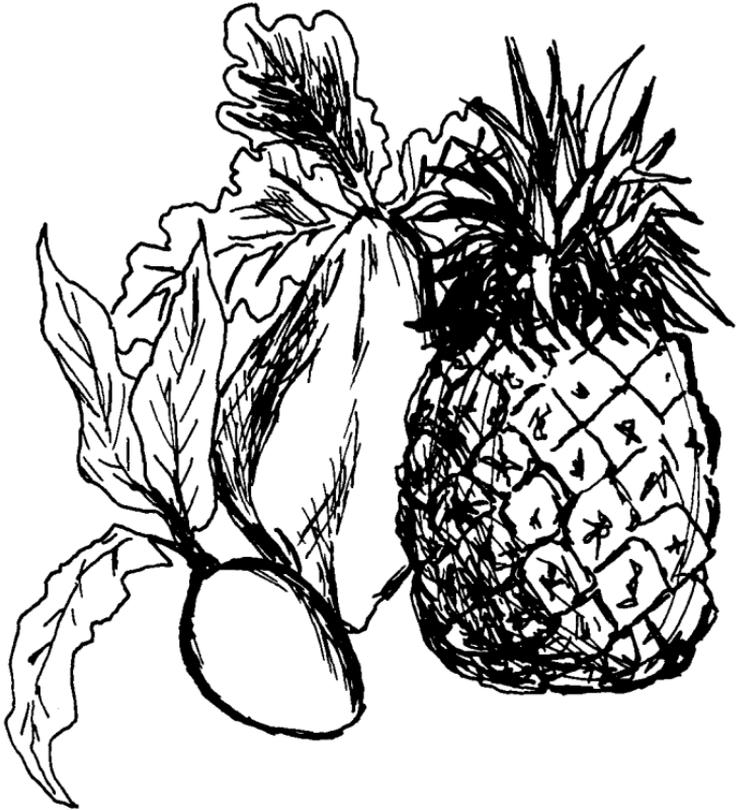
### **Cucumber Pickles**

(Quick Process)

100 small cucumbers	1 pint of small white onions
1 cup salt	$\frac{1}{2}$ cup white mustard seed
$\frac{1}{2}$ cup celery seed	1 cup salad oil
$\frac{1}{2}$ tablespoon ground black pepper	

Slice the cucumbers and onions very thin, sprinkle with the salt and let stand overnight. Use a glass or glazed pottery container. In the morning, drain well; add the celery and mustard seeds, salad oil, and pepper. Mix thoroughly. Put into glass jars. Fill jars with cold vinegar. Seal. While these are delicious, they will remain firm only a few months.

## Sweet Spiced Fruit Pickles



Spiced fruit, or the so-called sweet pickle fruit, saturated with a spicy, sweet-sour syrup, is the easiest of all pickles to make. Only fresh, high quality fruits should be used and they should be graded for size and stage of ripeness. The ripest fruit should be kept in one lot if there is a marked difference. When fruits like carissa, green papayas, kumquats and plums are not peeled, puncture them thoroughly with a fork or in some other way to permit the syrup to penetrate fruit. This helps prevent shriveling. Guavas, ripe papayas and peaches should be peeled; grapefruit and other large citrus fruits should be carefully grated and cut into halves, quarters or a preferred size.

In general, figs, guavas, ripe papayas, pineapples, and all fruits that make good preserves can be easily made into pickles by adding to the rich preserve syrup a small amount of high grade vinegar and whole spices—stick cinnamon—whole cloves, allspice and ginger being commonly preferred. Pour the boiling hot spiced syrup over the preserves and let stand to penetrate the fruit. A day or two later, drain off the syrup and repeat the operation until the fruit is thoroughly saturated, well flavored, clear, tender, translucent and shapely.

For spicing crabapples, figs, peaches, pears, pineapples, and many other fruits, prepare the following syrup:

3 pounds sugar	1 tablespoon ginger root
2 pints water	1½ teaspoons whole cloves
1 pint vinegar	2 tablespoons stick cinnamon

Prepare fruit, puncturing whole fruit when needed to prevent shriveling.

If pears are very hard, cover with water and pre-cook 10 minutes. Use this water to dilute the vinegar for the syrup. Peaches, like pears and quinces, may need pre-cooking before being placed in syrup. To prevent discoloration, drop the fruit as it is prepared into a salt solution made by dissolving 1 tablespoon salt in each quart of water.

Very soft fruits like guavas and ripe papayas may need the opposite treatment. They may need to stand in the sugar overnight to be "firmed". The liquid which the sugar draws out can then be used in place of a syrup made with water. Also a higher proportion of sugar,  $\frac{3}{4}$  pound to 1 pound of fruit, produces a finer quality product than the proportions given for syrup above. It is to be preferred for the best quality guava or papaya pickle.

Thoroughly ripe, fresh, firm figs, with stems trimmed to  $\frac{1}{4}$  inch, benefit when they are placed in a strainer and are dipped for one minute in boiling water before being added to the spiced syrup. A soda treatment for figs is **NEVER** necessary when ripe, fresh, unbruised figs are used. The repeated washing and handling that the practice calls for, destroys or breaks down the delicate structure of the fig. *Figs require long cooking to get rid of the white chalky color.*

Boil the sugar, vinegar, and water together. Tie spices loosely in a cheesecloth bag and pound lightly to increase the flavor.

Whole spices do not cloud and darken products as much as ground spices.

Place the fruit in the syrup and cook gently until somewhat clear and tender. Cover and let stand in the syrup overnight. Reheat. If clear, pack boiling hot into hot containers and seal. Process in water bath for 5 minutes at boiling point for an air-tight seal.

Tender fruits like the papaya call for pouring boiling hot syrup over the fruit on successive days rather than giving fruit a long cooking. Do this until fruit is tender, transparent, clear and syrup is thick. Better color, flavor and texture are obtained in this way.

### **Pickle Syrups or Juices**

Left-over sweetened, spiced vinegars, excess juices drained from various pickles and relishes—peach, plum, watermelon, mango, citrus—are desirable for use in general cookery.

Syrup is valuable for using with mincement. It is delicious to use diluted with hot water to baste baked ham or roast lamb—the sweet, spice and sour all adding greatly to the final flavor. The syrup stiffened with gelatin as a jelly for piquant garnish for cold meats or for jellied fruit or vegetable salads, for fruit salad dressings or the sweetened vinegar used alone as a dressing for lettuce is liked by many. A half cup of rich syrup may serve for part liquid and part sweetening in spice cake.

### **Sweet Spiced Loquats**

2 quarts loquats	2 tablespoons stick cinnamon
½ pint vinegar	1 cup hot water
1 tablespoon whole cloves	1 lemon or 3 calamondins
4 cups sugar	

Wash loquats and remove stem and blossom ends. Cut lengthwise on one side of loquat and remove seed. Slice lemons or calamondins. Steam loquats in the water 2 to 3 minutes to soften and to prevent shriveling. Add other ingredients and cook gently about 10 minutes. Let stand overnight. Next day bring to the boiling point and cook gently until syrup is somewhat thick.

Pour boiling hot into clean jars and seal. Very delicious to serve with cold meats.

### Sweet Pickled Figs

5 quarts figs	1 quart sugar
1 quart water	1 tablespoon whole cloves
1 pint sugar	1 teaspoon allspice
1 pint vinegar	1 teaspoon mace
1 lemon sliced	2 tablespoons stick cinnamon

Prepare figs as on page 28. Cook 5 quarts of figs until tender in a syrup made of one quart of water to each pint of sugar, cooking gently for about one hour.

When figs become tender, add 1 quart of sugar, 1 pint of vinegar, the sliced lemon and the spices—cloves, allspice and mace. Cook gently until figs are clear and transparent. Let stand in the syrup overnight. Pack in pint jars, seal and process in water bath for 15 minutes at boiling point.

### Spiced Plums

7 pounds of fruit	3 tablespoons whole cinnamon
1 pint of vinegar	2 tablespoons whole cloves
4 pounds sugar	1 tablespoon allspice

Make a syrup of the sugar, spices and vinegar. Cool slightly, add the washed fruit. Cover container and let stand overnight. Drain off spiced syrup and boil it rapidly for about 10 to 20 minutes. Add plums and let stand until cold. Pack into clean jars and seal. Process in water bath, pints 15 minutes at simmering (180 degrees Fahrenheit).

### Spiced Muscadine Grapes

Pick the grapes, wash and slip the pulp from the skins, steam the pulps over hot water in a double boiler until they can be put through a coarse sieve to remove seeds. Combine pulp with skins and weigh. To each 7 pounds allow the same proportions of sugar and spices as for spiced plums given above. Cook all to-

gether until very thick, and skins very tender; Pack while hot, and seal.

### **Mango Sweet Pickle No. 1**

Seedling mangos, not yet mature, may be used. Pare, cut into thick slices. Cook in clear water until barely tender—not soft—then drain.

Make the following syrup:

3 pounds brown or white sugar	1 teaspoon whole allspice
1 pint cider vinegar	1 lemon sliced, or
1 teaspoon whole cloves	4 calamondins, cut in halves
1 tablespoon stick cinnamon	

Cook the syrup until thick. Pour over the mangos and allow them to heat through in the syrup. Place in jars and seal.

### **Mango Sweet Pickle No. 2**

Select small, ripe mangos. Peel and place in a container. Cover with a syrup made by boiling 1 pint of sugar and 1 pint of vinegar and one pint of water with whole cloves, allspices, and cinnamon to produce the desired flavor. When cold, drain off syrup, heat syrup and pour over the fruit again. Repeat several times. The last time put the fruit in the boiling syrup and when well heated, transfer to clean jars and seal. The continued draining off of the syrup, reheating and pouring over the fruit, cooks the fruit without breaking it. Only mangos free from fibre should be used as directed above. The syrup should become increasingly heavy as it receives the repeated cookings.

### **Sweet Pickled Surinam Cherries**

Wash and remove pits from large fresh gathered Surinam cherries. Stuff with pineapple, raisins, preserved orange peel, if desired. To each pound of cherries add  $\frac{3}{4}$  pound of sugar. Sprinkle the sugar over the fruit in layers, and let stand overnight. In the morning, stir gently until the sugar is dissolved,

and drain juice from the fruit. For each pound of cherries, tie whole spices—one teaspoon each of cinnamon stick, allspice and mace in a loose cheesecloth bag. Drop this into the juice together with  $\frac{1}{2}$  lemon, limequats or calamondins sliced, and boil together for about 10 minutes. While the syrup is hot, add  $\frac{1}{4}$  cup cider vinegar for each pint of juice. Cool slightly and pour over the drained cherries. Let stand overnight. Repeat process. Drain off syrup, heat to boiling, cool syrup slightly, pour over fruit. Let stand overnight. Pack in clean jars and seal. Simmer in water bath, ten minutes for pints.

### **Sweet Spiced Papaya**

Peel and cut fruit in medium size, shapely, uniform pieces or in large pieces if desired. Do not remove seed. Weigh and for every pound of papaya, add  $\frac{3}{4}$  pound of sugar. Sprinkle over fruit and allow to stand a few hours or until sugar is dissolved. Place over heat, bring to a boil and boil for 10 minutes. Cover tightly; remove from heat and let stand overnight. Syrup must cover fruit at all times. Next day drain off syrup, bring syrup to boil and pour over papaya. Repeat this process until fruit is clear and syrup heavy. Then add  $\frac{1}{2}$  cup vinegar to each pint syrup and whole spices—1 teaspoon each cinnamon, cloves and allspice tied in cheesecloth to the syrup. Boil 5 to 10 minutes, then add fruit and cook another 5 minutes. Transfer to hot jars and seal. If preferred, the vinegar and spices could be added to the dissolved sugar in the beginning.

### **Pickled Pineapple Chunks**

4 quarts prepared pineapple	2 tablespoons stick cinnamon
2 cups vinegar	1 tablespoon whole cloves
5 cups sugar	2 slices each of lemon and orange

Cut full ripe pineapple in thick slices, then peel and remove eyes and cores. Cut into chunks. Mix the vinegar, sugar and spices. Boil for 5 minutes. Place the chunks of pineapple into hot syrup. Simmer until the pineapple is tender and clear. Let stand overnight. Repeat, pack fruit in hot jars. Cover the fruit with boiling syrup and seal.

### Hemphill House Special Pinata Sweet Pickle

3 pounds green tomatoes, sliced rather thick or cut in quarters	1 cup orange honey 3 cups vinegar
2 pounds pineapple, fresh or canned, sliced about $\frac{1}{2}$ as thick as tomato slices, or	1 tablespoon celery seed 1 tablespoon each stick cinnamon, cloves and allspice
2 pounds green mango, peeled and sliced	2 tablespoons white mustard seed 1 tablespoon mace
3 pounds granulated sugar	

Mix vinegar, sugar, honey. Tie cinnamon, cloves and allspice in thin muslin bag and add to syrup mixture. Bring to boil and cook 10 minutes. Pour over green tomatoes, pineapple and mango. Cover and let stand overnight. Drain off liquid and boil as before. Add fruit and cook gently until fruit is tender and clear and syrup is somewhat thickened. Let stand overnight. Pack in clean pint jars and seal. Simmer in water bath for 10 minutes.

### Peaches, Pears, Pineapple, Papaya

For Sweet Spiced Pickle Peaches, Pears, Pineapple, Papaya and other fruits, follow directions for making sweet spiced fruit pickles.

### Guava Sweet Pickle

3 pounds prepared guavas	3 dozen whole cloves
3 cups brown sugar	2 large sticks cinnamon
1 cup white sugar	$\frac{1}{2}$ cup preserved ginger, or
$\frac{3}{4}$ cup vinegar	4 pieces of ginger root
1 tablespoon allspice	$\frac{1}{8}$ teaspoon salt

Select large, meaty guavas. If skin is clean and unblemished, do not peel. Cut off stem and blossom ends, cut in halves and scoop out centers. Place fruit in preserving kettle; add other ingredients, and let stand 3 to 4 hours. Then cook until fruit is tender and syrup heavy. Time required depends on type of guavas used. Place boiling hot in hot, sterile jars and seal. If dry ginger is used, remove before serving.

### Sweet Spiced Kumquats

2 pounds whole kumquats	1 cup vinegar
1½ pounds sugar	Whole spice
1½ pints water	

Thoroughly clean well colored kumquats by scraping with a paring knife and a stiff brush. Rinse well and drain. Make a slit with a sharp pointed knife into and across the sections of each kumquat to prevent them from bursting open and to facilitate penetration of the spiced syrup. Drop kumquats into boiling water and cook until tender.

Drain and add to sugar-vinegar mixture. Cook briskly until kumquats are clearing and syrup is becoming thick. Add spices, 1 stick cinnamon broken, 1 tablespoon each of cloves and allspice tied in cheesecloth. Cover tightly and let stand overnight to "plump." Boil again until kumquats are clear, shining and transparent, and syrup is thick. Cover tightly. Let stand again. When cold, pack in clean jars. Add small amount of spice to syrup, heat, strain and pour over fruit, seal and process in water bath 5 minutes for pints.

### Baked Pickled Orange Slices

Grate lightly to break outside surface of rind, and boil whole oranges, in a generous amount of water for one hour or until tender. Change water twice during the hour. Add salt to the first boiling. When oranges are tender, cut into half-inch slices. Prepare the following spiced syrup:

2 cups of sugar	20 whole cloves
¼ cup corn syrup	2 two inch pieces of stick cinnamon
1 cup vinegar	
Contents of 2 cardamon seed pods	12 bruised coriander seeds
½ cup water	

Boil syrup mixture 5 minutes, add orange slices, and boil 15 minutes. Transfer to a casserole and bake ¾ hour in a slightly hotter than moderate oven. If syrup does not completely cover the fruit, baste occasionally. Fill clean jars and seal.

### **Baked Pickled Whole Citrus Fruits**

Proceed exactly as for baked Pickled Orange Slices, except that small whole fruits are needed, such as kumquats, orange-quats or calamondins. Puncture well but do not grate.

Note: A group of 5 or 6 copper nails about 1 to 1¼ inches long, placed in a circle about ⅛" apart in a wood spatula, is convenient and effective for puncturing small fruits like kumquats, limequats, and calamondins. Puncture both blossom and stem ends. Thus treated, the fruit is not as likely to burst or split in cooking as when cut with a knife.

### **Sweet Spiced Grapefruit Pickle**

Select tree ripened fruit of good quality and thick peel. Wash and grate carefully to remove all the yellow rind. Remove peel and cut into convenient quarters or in half inch strips as preferred. To one pound of fruit, add at least 3 pints of water and bring slowly to a boil and boil 10 minutes. Then change water and bring to boil as before. Taste liquid and if very bitter, drain off, add fresh water and bring to boil again. Repeat until liquid tastes slightly bitter. Then boil peel until tender. Drain and add peel to a syrup made by adding ¾ pound sugar to 1 pint of water for each pound of peel taken. Boil until peel is clear and syrup is heavy or thick. Add ½ cup white vinegar to each pound of peel and whole spice—cinnamon and cloves—tied in cheesecloth bag and lightly bruised. Bring to a boil and let stand covered 24 hours. Reheat and pack. The peel should be beautifully clear, tender, yet firm, well-flavored and the syrup heavy. Sweet pickled citrus fruit should be among the most popular of Florida pickles.

### **Tangerine Sweet Pickles**

Choose small, firm tangerines of uniform size and unblemished skins. Wash. Push a fine knitting needle entirely through each fruit six or eight times. Let fruit stand overnight well covered with salt water—weighting down with a plate.

In the morning, put the fruit with an abundance of cold water in a large preserving kettle and boil gently until tender—changing the water twice.

While fruit is boiling, make enough syrup to cover the tangerines well, using 1 cup water and 1 cup vinegar to each two cups of sugar,  $\frac{1}{2}$  stick cinnamon, 10 whole cloves and 1 lemon sliced. Stir until sugar is dissolved.

Remove fruit from boiling water with a skimmer and add to hot syrup. Cook until syrup is thickened and tangerines are somewhat clear. Let stand overnight or for several nights.

Boil again until fruit is translucent and syrup heavy. Pack carefully in jars. Process in water bath at simmering 15 minutes for pints. This is a delicious pickle to serve with chicken, veal and other meats.

## Relishes and Chutneys



Relishes consist of mixed, chopped or ground fruits or vegetables or a combination of both fruits and vegetables with the addition of spices and other seasoning agents. As an accessory to the menu, they are prized mostly for their flavor. Just as sweet vegetable pickles, mustard pickles and other pickles are best made from vegetables cured in brine rather than from fresh products, so are all vegetable relishes best made in the same way. Tomato catsup, chili sauce and chutneys are made from the fresh chopped or ground fruits and vegetables, spiced and cooked down to a sauce.

Chutneys are a hot, sweet, spicy mixture of finely minced ingredients and flavored mainly with fresh ginger. Proportions seem very changeable so the pungency and spiciness may be easily regulated to suit the taste.

Whatever the type of relish or chutney the purpose is to get a tart, spicy flavor through the vegetable or fruit, to keep or develop attractive color and to give crispness to those made from vegetables. For quick process pickles, the vegetables are often salted down overnight to draw out the juices. Quick vegetable relishes are **not** as crisp as those made from salt stock and the flavor is different, but they require much less work.

**Flamingo Relish**

8 large white onions	2 cups sugar
12 large sweet red peppers	2 teaspoons mustard seeds
2 hot red peppers, with seeds removed	2 teaspoons celery seeds
1 quart cider vinegar	2 teaspoons salt

Remove skins from onions and seeds from peppers and put through fine blade of food chopper. Combine all ingredients. Let stand one hour. Bring to boil and boil 15 minutes. Fill into hot jars and seal. Serve as catsup with baked beans or cold meats.

**Honey Beet Relish**

Chop together 4 cups peeled raw beets and 2 cups of raw cabbage until quite fine. Add 1 cup of grated horseradish root, 2 cups sugar, 1 cup honey, 3 teaspoons salt, 2 hot red peppers with seed removed, and enough vinegar to cover. Bring to a boil and cook 10 minutes. Pour into hot jars and seal.

**Rosy Radish Relish**

1 pint radish, ground	$\frac{1}{2}$ tablespoon dill seed
1 cup celery, ground	2 hot red peppers with seed removed
1 cup onion, white or red, ground	2 teaspoons salt
1 cup sugar	Vinegar to cover
1 tablespoon mustard seed	

Use fresh, crisp radishes. Wash, remove tops and roots. Put all vegetables through coarse blade food chopper. Combine all ingredients. Let stand a few hours. Bring to a boil and cook 10 minutes. Pack boiling hot in hot jars and seal.

**Sweet Pepper Relish No. 1**

12 red peppers, seeded, and ground coarsely	12 red onions, medium size, ground
12 green peppers, seeded and ground coarsely	2 cups vinegar
	2 cups sugar

The peppers must be fresh; unshriveled. Mix all ingredients and boil about 20 minutes. Pour into hot jars and seal.

### **Sweet Pepper Relish No. 2**

Remove the seeds from 1 dozen large fresh, sweet red peppers. Grind coarsely. Mix with 1 teaspoon of salt, and let stand 3 hours. Drain; add 1 pint of vinegar and 3 cups of sugar; then cook until like jam, usually about 45 minutes. Pour into small, hot containers and seal. This jam is fine for potato and other salads and mixed with cream cheese for sandwiches.

### **Sweet Mango Relish**

Peel green mangos, cut from seed, chop or put through coarse blade of food chopper. Need enough to make one quart or 4 cups. Chop or grind two large onions, six sweet red peppers and two large hot peppers. Add 1 tablespoon of salt, 1 tablespoon each of white mustard seed and celery seed, 4 cups sugar and 1 cup vinegar. Two cups raisins may be added if desired.

Combine all ingredients. Bring to boil and boil 5 minutes. Let stand overnight. Next morning cook until slightly thickened (about 10 minutes). Pack boiling hot and seal. Mango may be combined with sweet fruits as papaya or pineapple for making jams and other products.

### **Fruit Relish**

4 pounds sliced peaches	2 teaspoons salt
1 quart vinegar	1 clove garlic
3 pounds sugar	½ ounce dried chili peppers
2 pounds raisins	2 tablespoons white mustard seed
1 pound preserved ginger	

Juice, pulp, rind of one orange and one lemon, or, 1½ cups sliced kumquats (may be canned kumquat stock).

Peel fruit and slice. Add sugar and vinegar and boil 10 minutes. Grind the lemon, orange, garlic and chili peppers. Add with all other ingredients to the fruit and boil the mixture until thick, stirring as needed. Let stand overnight. Bring to a boil and boil 10 minutes. Pack into hot containers and seal. Guavas,

pears, pineapple, mango and other fruit may be used in place of peaches or in combination.

### **Palm Beach Pineapple Relish**

4 cups pineapple crushed	3 cups granulated sugar
1 cup tarragon vinegar	1 teaspoon cloves
1 tablespoon stick cinnamon	

Cook the pineapple with the vinegar and spices (tied in cheesecloth) until fruit is clear and syrup thickens—about 45 minutes. Remove spices and seal. A good sauce for cold meats.

### **Pineapple Chutney Relish**

1½ quarts shredded pineapple	1 cup grape juice
12 large green mangos	2 cups brown sugar
4 onions	Juice of 3 lemons or limes
4 sweet red peppers	¼ cup mustard seed
2 hot red peppers	1 tablespoon ginger
6 medium size green tomatoes	2 cups raisins
1 cup cider vinegar	1 tablespoon salt

Chop or grind the mangos, onions, peppers, and tomatoes. Add the other ingredients in the order given and cook all together until thick, stirring carefully. Place in hot jars and seal.

### **Guava Chutney No. 1**

3 pounds prepared guavas	1 pound green ginger
3 pounds brown sugar	1 tablespoon each ground allspice, cloves, cinnamon and salt
2 pounds raisins	1 pound onions
1 pint pimiento	¼ cup mustard seed
3 pounds tamarinds	¼ cup celery seed
3 pods chili pepper, dried	¼ tablespoon pepper
2 cloves garlic	

To prepare guavas, remove fibrous hulls and soak pulp in 2 quarts of vinegar, stirring often to dissolve the pulp from the seed. When pulp is dissolved, run through fruit press or colander

to remove seed. Then put guavas and raisins through the medium blade of the food chopper. Use the finest blade for the green ginger, peppers, garlic or onions and mustard seed. Mix all ingredients and boil 30 minutes. Let stand overnight. Reheat to boiling and add extra seasoning if needed. Pour in hot jars and seal.

### Guava Chutney No. 2

3 pounds guavas	1 clove garlic
3 pounds sugar	1 pound onions
2 quarts vinegar	1½ tablespoons mustard
2 pounds seeded raisins	1½ tablespoons powdered ginger
2 tablespoons salt	3 small hot peppers
2 teaspoons each cinnamon and cloves	

Put clean, ripe guavas through fruit press or colander to remove seed. Boil guava pulp until smooth and thick. Put raisins, onion, garlic through food chopper. Add these and sugar, vinegar, and seasonings to guava pulp. Cook until thick, stirring occasionally. Let stand overnight. Reheat. Pack in hot jars while boiling hot and seal. Seal boiling hot. Hold several weeks before using.

Peaches, pears, pineapple, carissa, Surinam cherries, mangos may be used in place of guavas in above recipe.

### Mango Chutney No. 1

4 pounds sliced and peeled green mangos	3 pounds brown sugar
1 quart vinegar	2 ounces yellow chili
2 pounds currants	½ pound green ginger
2 pounds raisins	1 tablespoon salt
½ pound onions	2 cloves garlic

Chop all ingredients fine except raisins and currants. Chop raisins and currants medium or leave whole. Mix all ingredients well. Let stand overnight.

Cook until thick as desired. Pack in clean jars while boiling hot and seal. Can be made with sweet budded mangos, using the juice of 5 limes or lemons.

**Mango Chutney No. 2**

3 pounds green mangos, peeled and sliced	¼ ounce cloves
3 pounds tamarind	4 large cloves garlic
2 pounds raisins	¼ ounce pimiento
8 pounds brown sugar	4 tablespoons salt
½ pound chilies	3 pints strong vinegar
2 pounds green ginger	¼ ounce mace

Remove hull from ripe tamarinds and soak the pulpy pods in all except ½ cup of the vinegar. Stir pods with a wooden spoon to get the pulp off the seed; then remove seed and the leathery parts in which they are enclosed. Scrape the ginger and grate it. Pound the chilies, garlic, and mustard seed in a mortar, using a little of the vinegar to moisten. Mix all ingredients thoroughly. Let stand five days. Bring to a boil. Pack in containers and process in water bath at simmering 25 minutes for pints.

Note: The tamarind (*Tamarindus indica*), a beautiful leguminous fruit tree whose brown pods contain a pulp rich in sugar and acid, is used as an important ingredient in chutneys and for making a delightful drink.

**Tropical Mince Meat**

4 quarts green tomatoes (ground)	1 pint vinegar or ½ pint vinegar and ½ pint grape, plum, pine- apple, mango, or other fruit juice
3 oranges and 3 lemons or 2 pints kumquats (ground)	
1 pint coconut, grated	1 teaspoon cloves
1 pound raisins, seedless	5 pounds sugar (brown)
3 teaspoons cinnamon	1 glass tart jelly or jam
1 pint figs	1 teaspoon mace
1 pound pineapple shredded	1 teaspoon allspice
	Salt

Select oranges and lemons with clear, well ripened skins. (Oranges artificially colored have tough, undesirable peeling.) Scrub thoroughly and cut into convenient pieces for putting through food chopper. Grind all portions except seeds. If kumquats are used, clean and cut in halves to remove seed before

putting through chopper. Grind tomatoes and seeded raisins. Combine all materials. Let stand several hours. Boil 20 minutes. Let stand overnight, add more seasoning if desired. Boil again 10 minutes, pack hot in jars, and process in water bath, at boiling, 10 minutes for pints, 15 minutes for quarts. This mince-meat serves not only as a choice filling for the pie but may be used as a filling for cakes and sandwiches. As a thick spread on Angel cake, topped with whipped cream and a surinam cherry for garnish, it serves as a dessert for any special occasion.

### **Pear Relish**

1 peck pears	2 pounds sugar
6 medium peppers (3 red and 3 green)	1 tablespoon turmeric
2 tablespoons mixed whole spices	1 tablespoon salt
5 medium size onions	4 cups vinegar

Remove seed from peppers. Grind using medium coarse blade on food chopper. Drain juice from peppers but allow the juice of other ingredients to remain in mixture. Grind pears and onions in food chopper. Combine all ingredients and cook 30 minutes. Pack in hot jars and seal.

## Catsups and Sauces



Catsups and sauces differ considerable in texture and appearance from pickles and relishes but are used in much the same way as relishes. Catsups made from acid, juicy varieties of fruits are preferred to very sweet fruits. Catsups should be cooked to a very thick consistency to prevent separation.

### Chili Sauce

1 gallon red-ripe tomatoes ground	1 quart vinegar
2½ cups sweet red peppers, or pimientos	1 tablespoon white mustard seed
1 hot pepper	1 bay leaf
1 cup brown sugar	1 teaspoon garlic finely minced
2 tablespoons celery seed	½ ounce stick cinnamon
2 tablespoons salt	1 teaspoon cloves (whole)
	¼ teaspoon nutmeg, grated
	1 tablespoon ginger

Select sound, fresh, red-ripe tomatoes. Wash, scald and remove skins, cores and any green or yellow spots. Tomatoes, onions and peppers are put through food chopper using a fine blade. Tie spices loosely in a cheesecloth bag. Boil the spices with the vegetables until the mixture is reduced one-half. Stir well to prevent scorching. Add the vinegar, sugar and salt. Boil mixture rapidly and stir well for 5 minutes. Pour the boiling chili sauce into clean, hot jars and seal.

### **Bordeaux Sauce**

3 quarts green tomatoes	6 tablespoons mustard seed
3 quarts cabbage	4 tablespoons celery seed
1 pint celery	2 tablespoons each of black pepper, cloves, allspice, ginger and turmeric
1 pint onions	
6 tablespoons salt	2 quarts of vinegar
1 cup sugar	
1 clove garlic	

Put tomatoes, cabbage, celery and onions through food chopper using fine blade. Mix well and boil rapidly for 20 to 25 minutes. Tie spices in a cheesecloth bag. Pour boiling hot into hot jars and seal.

### **Pepper Sauce No. 1**

Wash small cherry or chili peppers (red and green), prick with a needle. Pack into bottles. Cover with cider vinegar, and cork. It will be ready for use within a few days. As the sauce is used, more vinegar may be added to the peppers.

### **Pepper Sauce No. 2**

4 dozen red tabasco or chili peppers	1 clove of garlic (finely chopped)
	½ cup spiced vinegar

Boil the garlic and peppers until tender, drain, rub through sieve. Add enough spiced vinegar to make it of a creamy consistency. Place in jars and seal. Onions may be used in place of garlic if desired. Use spiced vinegar. Recipe on page 13.

**Florida Cranberry Catsup**

(Roselle)

5 pounds roselle (use calyx only)	½ tablespoon paprika
1 cup water	3 tablespoons cinnamon
1 pint vinegar	½ tablespoon ground cloves
2 pounds brown sugar	½ tablespoon salt

Cook roselle in water until tender. Rub through a sieve. Add other ingredients and cook rapidly until thick. Reduce to about  $\frac{1}{3}$  the original quantity. Put boiling hot in sterilized containers and seal.

**Tropical Catsup**

4 pounds prepared guavas	1 clove garlic
1 quart vinegar	2 tablespoons chilies or hot peppers
2 pounds sugar	¼ cup each white mustard and celery seed
1½ pounds raisins	
1 pound preserved ginger	
1 teaspoon salt	

Cut blossom and stem ends from guavas; peel if blemished, and remove seed. Put through food chopper with raisins, garlic, ginger, mustard seed and chili. Use fine blade on food chopper. Add remaining ingredients and boil 30 minutes. Let stand overnight. If too heavy, dilute with vinegar. Reheat, place in jars while boiling hot and seal. Allow to season several weeks before using.

Carissa, mangos, tamarinds—may be substituted for guavas.

**Spiced Youngberry Catsup**

3 quarts barely ripe Youngberries	2 sticks cinnamon
3 cups sugar	1 dozen whole cloves
	½ to ¾ cup vinegar

Wash, drain and mash berries. Tie the spices loosely in a cheesecloth bag. Add vinegar, spices, and sugar to the berries

and cook rapidly until the mixture is thick. Pour into clean, hot jars and seal.

### **Grape Catsup**

4 pounds grapes	¼ teaspoon cayenne pepper,
2 tablespoons cinnamon	or one hot red pepper
1 tablespoon cloves	1 cup vinegar
and allspice	2 pounds sugar
	1 teaspoon salt

Use firm but fully ripe fruit. Wash, stem, and separate skin and pulp. Heat pulp until soft enough to free seeds. Rub through fruit press and combine with skins. Cover and steam until tender. Put through fruit press again. Add remaining ingredients and cook rapidly until thick. Use whole spices. Tie them loosely in cheesecloth bag to prevent darkening the product, and remove bag before placing in jar. Pour in hot, sterile jar to within 2 inches of top. Seal and process in water bath at boiling for 10 minutes.

Grape catsup is a pleasing sauce to serve with cold meats. In making catsup the juicy varieties and an acid juicy variety are preferred to sweet varieties.

The bunch grapes may be used in the same manner as the members of the muscadine family.

## Florida Bulletins

Florida Bulletins containing information in relation to pickles, relishes, etc., are:

- 155A "Canning Florida Fruits and Vegetables"
- 167 "Using Florida Citrus Fruits"
- 180 "Using Florida Fruits—Limes"
- 229 "Using Florida Citrus Fruits—Citrus Salads"
- 230 "Using Florida Citrus Fruits—Citrus Beverages"
- 231 "Using Florida Citrus Fruits—Citrus Desserts and Cookies"
- 232 "Using Florida Citrus Fruits—Citrus Bread"
- 233 "Using Florida Citrus Fruits—Citrus Pies and Cakes"
- 234 "Using Florida Citrus Fruits—Citrus Garnishes and Seasonings"
- 235 "Using Florida Citrus Fruits—Marmalades, Jellies, and Preserves"
- 236 "Using Florida Citrus Fruits—Canning and Freezing Citrus Fruits"
- 159R "Honey in the Home"
- 163 "Jellies, Jams and Preserves"
- 62R "Making and Using Sauerkraut"
- 150 "Freezing Prepared Foods"
- 161 "Using Florida Fruits—Mango"
- 162 "Using Florida Fruits—Papaya"
- 163 "Using Florida Fruits—Coconut"
- 164 "Savory or Aromatic Herbs"
- 165 "Using Florida Fruits—Avacado"
- 167 "Using Florida Fruits—Berries"
- 207 "Using Florida Fruits—Guava"
- 214 "Using Florida Fruits—Pineapple"
- 215 "Using Florida Fruits—Strawberries"
- 216 "Using Florida Fruits—Pears"

### ACKNOWLEDGMENTS

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References for the revision were:

*Pickles and Relishes*, Texas Agricultural Extension Service, B-188 revised 1962.

*Making Pickles and Relishes*, Kentucky Cooperative Extension Service, Circular 464.