

TX
601
U57

ALBERT R. MANN
LIBRARY
AT
CORNELL UNIVERSITY



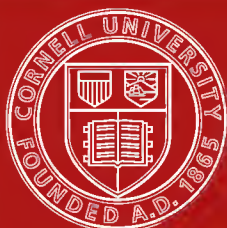
Cornell University Library
TX 601.U59

Preserving vegetables by salting, drying



3 1924 003 570 318

mann



Cornell University
Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

United States Food Administration

DIVISION OF HOME CONSERVATION



PRESERVING VEGETABLES BY
SALTING, DRYING, AND
STORING

A Saving of—

Expensive Equipment
Glass and Tin Containers
Fuel

WASHINGTON

September, 1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

cc

TX
601
4 59

38 38 58

PRESERVING VEGETABLES BY SALTING, DRYING, AND STORING.

SALTING.

Instead of canning you can preserve by salting string beans, beets, tomatoes, cabbage, cauliflower, cucumbers, kohl-rabi, peppers, corn, Swiss chard, and parsley.

They will keep well when packed in alternate layers of dry salt, in earthenware crocks or wooden kegs, until the following winter or spring, provided enough brine is added two days after they are packed to cover them completely.

Brines of different strength or density from those here recommended may be used. Brines weaker than 10 per cent are likely to allow fermentation. The strength of the brine to be used depends largely on the kind of vegetable to be stored. A 15 to 25 per cent brine may be used, but longer soaking is required for freshening vegetables packed in a solution of this strength. In general vegetables of high water content need a stronger brine than those of low water content. The following amounts of water and salt are needed for brines of various strengths:

Water (gallons).	Salt (approximate weight in ounces).	Salt (approximate measure).	Brine (percentage)
1.....	1½	3 tablespoons.....	1
1.....	2½	6½ tablespoons.....	2
1.....	3½	¾ cup.....	3
1.....	5	¾ cup.....	4
1.....	6½	1 cup.....	5
1.....	12½	1½ cup.....	10
1.....	19½	2½ cup.....	15
1.....	32	4½ cup.....	25

Besides the vegetables discussed here, artichokes, celery, kale, onions, spinach, Swiss chard, and possibly other vegetables may be satisfactorily preserved in salt.

Vegetables to be salted should be gathered when they are in the best condition for use in the fresh state, preferably just before they are fully matured. Green tomatoes, however, can be packed in salt and used later in many ways as suggested in the recipes. All vegetables should be washed thoroughly, peeled or trimmed if necessary, and packed in the container while they are crisp and tender. The

top of the vegetables should be covered with a layer of grape, horse-radish, or Swiss chard leaves, and the solution added. The vegetables should be weighted with a large, clean stone resting on an inverted plate, which fits closely inside the container. Mold should not be allowed to form at the top of the container, and the vegetables must be covered with brine continuously.

Cottonseed oil or melted paraffin poured over the surface of the brine to form a layer sufficiently thick to make an air-tight seal will prevent the growth of mold and aid in checking rapid evaporation of the liquid. The surface of the brine should not be covered, however, until all bubbling has ceased, which may be a week after the vegetables are packed. The container should be stored in a cool place and examined once or twice a week for several weeks.

BEANS.

Use only fresh tender beans of green or wax-podded varieties. Snip off the ends, wash the beans, and pack them in an earthenware jar with alternate layers of salt, using 1 part salt to 10 parts beans by weight. Weight the beans down, and two days later add enough 10 per cent salt solution to fill the jar. When removed from the solution, the beans should be firm, although slightly darkened in color.

Beans may also be preserved in a salt-and-sugar solution as follows: Prepare selected, fresh beans as described in the preceding paragraph, and pack them in containers between alternate layers of salt and sugar, 1 part salt and 1 part sugar to 7 parts beans by weight. The liquid produced by the action of the salt and sugar on the beans should cover them in three days after they are packed. Beans preserved in this way retain their original color much better than those preserved with salt alone, but the flavor is considered by some to be less agreeable.

BEETS.

Select medium-sized smooth roots, wash them, and pack them firmly in a large earthenware crock or jar. Cover them with a 10 per cent solution of salt in which one-twentieth of the water has been replaced by vinegar (about three-fourths cup vinegar to 1 gallon water), weight the beets down, and store the crock in a cellar where the temperature is from 45° to 60° F. When the beets are removed from the solution, they should have a natural red color throughout and be firm and of good cooking quality when freshened. Salting beets is not practical if a cool moist cellar where roots will keep without wilting is available.

CAULIFLOWER.

Select firm tender heads of cauliflower and separate each into parts or branches. Wash and pack the cauliflower firmly in an earthenware jar, and cover it with a 10 per cent solution of salt in which one-twentieth of the water is replaced by cider vinegar (about three-fourths cup vinegar to 1 gallon water). Cover the top with a layer of chard leaves and weight the contents under the solution.

KOHLE-RABI.

Select quickly grown, tender kohle-rabi, and remove the leaves and roots with a sharp knife. Wash the kohle-rabi and pack it in an earthenware jar between alternate layers of salt (1 pound salt to 10 pounds kohle-rabi). Cover the top with grape or Swiss-chard leaves, and weight the kohle-rabi down securely. Three days after packing, add enough 10 per cent salt solution to fill the jar completely.

CUCUMBERS.

Cucumbers, 1 or 2 inches long, known as gherkins, make excellent sweet pickles. Those 3 to 5 inches in length may be pickled as soon as gathered, or they may be put down in brine until more time is available. Use a sharp knife for harvesting and leave a short stem attached to each fruit.

To pack cucumbers in brine, place a layer of them in the bottom of an earthenware jar and cover them with a layer of salt (10 parts cucumbers to 1 part salt by weight). Continue with alternate layers of cucumbers and salt until all the cucumbers are used. Cover the top with well-washed grape or horse-radish leaves to prevent the upper layer from molding. Place a large china plate or earthenware cover on the top and weight it with a clean, heavy stone. After about two days, add sufficient 10 per cent brine to cover the cucumbers completely. Remove the plate and the leaves, and add other layers of cucumbers and salt as the crop is harvested from day to day.

Another method of preserving cucumbers is to use 6 parts of water, 1 part salt, and 1 part cider vinegar. Pack the cucumbers securely in a jar, cover them with the solution, and place horse-radish or grape leaves on the top. Weight the cucumbers with a large stone or an inverted plate.

PEPPERS.

Select medium large, plump, green peppers. Remove the stems and enough of the tops so that the seeds can be taken out. pack the peppers in an earthenware jar, and cover them with a 10 per cent brine. Cover the top with a layer of swiss chard or grape leaves, and weight the peppers down.

A salt and vinegar solution (10 per cent brine in which one-twentieth of the water is replaced with cider vinegar, or about three-fourths cup vinegar to 1 gallon water) may be used in place of 10 per cent brine for preserving peppers. Peppers preserved in this solution, though of practically the same quality, are more palatable than those held in straight salt brine.

GREEN TOMATOES.

Choose well-developed green tomatoes, wash them, pack them in a container, cover them with a 10 per cent brine. place a layer of chard leaves on the top, and weight the tomatoes down under the brine.

Green tomatoes similarly prepared and packed in salt and vinegar solution the same as that used for peppers, are good for salads and relishes.

RIPE TOMATOES.

Select medium-sized ripe tomatoes free from cracks or bruises. Pack them similarly and in the same kind of solutions as recommended for green tomatoes.

CORN IN THE HUSKS.

Select well-filled ears of sweet corn, and remove the loose outer husks and silks. Pack the ears between alternate layers of salt (1 pound salt to 7 pounds corn) in a crock, and cover and weight them securely. Several days after packing them, add enough 10 per cent brine to fill the jar completely.

Corn cut from the cob may be packed in a 10 per cent brine, but since dried corn is better in flavor and requires but little more labor, salting corn cut from the cob is not recommended except as an experiment.

DIRECTIONS FOR USING SALTED VEGETABLES.

Salted vegetables should in general be well rinsed in cold water when removed from the brine, and then soaked in three or four times their measure of cold water to draw out the excess salt. The time necessary for soaking varies with the kind of vegetable. If the water is changed occasionally less time will be required for soaking. They should then be drained, rinsed well, put on to cook in cold water, and brought slowly to the boiling point, after which they should be cooked slowly until they are tender, the time required being practically the same as for fresh vegetables.

BEANS.

Soak salted beans for two or three hours, and cook them until they are tender, the time required depending on the condition of the beans when packed. Season with bacon, salt pork, or butter, and serve them as fresh beans or chill them and use them in salad.

BEETS.

Before using salted beets, soak them in cold water for two hours, changing the water once or twice if necessary to remove the salt. Soaking for a longer time is likely to cause loss of color. Cook the beets until they are tender, peel them and serve them as buttered or pickled beets or use them in salads.

CAULIFLOWER.

When removed from the preserving solution, cauliflower should be firm, white, of good quality, and well adapted for pickles and salads with little or no soaking. Or it may be rinsed well in cold water and cooked as fresh cauliflower.

KOHL-RABI.

When removed from the preserving solution, kohlrabi, though rather salt to the taste, should be firm, crisp, and of good color.

When rinsed, peeled, and sliced it is well adapted for salads, or after being soaked in cold water for two hours it may be used as fresh kohl-rabi in soups or stews.

PEPPERS.

When removed from the brine, peppers should be firm, crisp, of good color, and spicy to astringent in taste. After they are freshened for one to two hours, they are well suited for flavoring soups or stews.

GREEN TOMATOES.

When taken from the jar for use, the green tomatoes packed in brine, though probably slightly discolored, will be firm and of good quality. While salt to the taste, they should be suitable for chop pickles, or after being soaked for two hours in cold water they may be floured and browned in a small quantity of hot fat.

Green tomatoes packed in salt and vinegar solution should be soaked for two hours before being used. When minced very fine they are excellent added to tartar sauce, for salad, or sandwiches, in the way olives are used. They also make a good conserve.

RIPE TOMATOES.

When removed from either the brine or the salt and vinegar solution ripe tomatoes should be firm, of good color, and palatable.

Ripe tomatoes preserved in the salt solution generally require soaking for two hours previous to being used. After this soaking the skins slip off easily, and the tomatoes can be used as though fresh. For soups or scalloped or casserole dishes, soaking for one hour is usually sufficient, for the excess salt seasons the other ingredients.

Ripe tomatoes preserved in the salt and vinegar solution require soaking for only about 30 minutes. When used in combination with fresh vegetables they need not be soaked at all. The skins slip off easily and the flesh is firm. The color and the flavor of the tomatoes are practically no different from those of fresh tomatoes. Slices of the tomatoes may be served on lettuce with sliced cucumbers.

RECIPES FOR THE USE OF SALTED VEGETABLES.

GREEN-TOMATO STEW.

1 medium-sized onion.
 $\frac{1}{2}$ tablespoon fat.
 1 cup uncooked meat, diced.
 2 carrots, diced.
 1 pimento.

6 medium-sized salted green tomatoes.
 1 tablespoon cornstarch.
 1 tablespoon butter.
 Pepper.

Slice the onion and sear it in just enough fat to prevent it from sticking to the pan. Add the meat and sear it well. Add the carrots, the pimento, which has been cut in small pieces, and the tomatoes, which have been soaked for two hours and cut in sixths. Add sufficient boiling water to cover the mixture and cook it slowly until the vegetables are tender, about two hours. Then add the cornstarch, moistened in a little cold water, and the butter and pepper. Cook the mixture until it thickens, and serve it as a border around a mound of boiled hominy or hominy grits on a hot platter.

STUFFED GREEN TOMATOES.

Soak salted green tomatoes for two hours. Remove a thin slice from the top of each, take out the seeds, and fill the cavity with a mixture of boiled hominy grits, barley, or rice, well seasoned with onion, paprika, and ground peanuts. Place the tomatoes in a baking dish, and add sufficient stock to almost cover them. Cover the dish, and bake slowly until the tomatoes are tender, about one hour.

RIPE-TOMATO SALAD.

Use tomatoes that have been preserved in salt and vinegar solution. Soak them for 30 minutes. Peel them and remove the stem ends and the seeds. Fill the cavities with minced green pepper that has been preserved in salt and vinegar solution and rinsed but not soaked, and with celery moistened with salad dressing. Place a spoonful of the dressing on top and serve the tomatoes on lettuce or finely sliced cabbage.

TOMATO CHUTNEY.

- | | |
|---|--------------------------------------|
| 1 pint salted ripe tomatoes, cut in small pieces. | $\frac{3}{4}$ cup corn sirup. |
| 2 medium-sized onions, minced. | $\frac{1}{2}$ teaspoon whole cloves. |
| 2 salted green peppers. | 1 teaspoon ground cinnamon. |
| 1 cup tart apple, diced, not pared. | $1\frac{1}{4}$ cups vinegar. |

Peel the tomatoes and soak them for 30 minutes. Mince the peppers; they should not be soaked. Combine all the ingredients and cook the mixture until it is thick and clear.

GREEN-TOMATO RELISH.

- | | |
|---|-------------------------------|
| $\frac{1}{2}$ cup salt pork, diced. | Boiling water. |
| 1 small onion. | 2 tablespoons cornstarch. |
| 4 green tomatoes, preserved in salt and vinegar solution. | $\frac{1}{2}$ cup cold water. |
| 2 pimentos, diced. | 1 tablespoon butter. |
| 1 salted green pepper, diced. | Paprika. |

Sear the salt pork well. Add the onion, which has been sliced thin, and cook it until it is light brown. Soak the tomatoes for one hour, dice them, and add them with the pimentos and the green pepper. Add sufficient boiling water to cover the mixture, and cook it until the tomatoes are tender. Thicken the mixture with the cornstarch moistened in the cold water, and add the butter and paprika. Cook the mixture until it is clear. Serve it with fish, hamburger steak, or cheese scrapple. Tomatoes that have been preserved in the salt and vinegar solution should be used in this recipe because of their slightly acid flavor.

MOCK MINCEMEAT.

- | | |
|---------------------------------|-------------------------|
| 3 pounds salted green tomatoes. | 1 cup vinegar. |
| 2 pounds apples. | 1 teaspoon cloves. |
| 1 cup chopped suet. | 2 tablespoons cinnamon. |
| 2 cups molasses. | 1 teaspoon allspice. |
| 1 cup corn sirup. | 1 teaspoon nutmeg. |
| 1 pound raisins. | |

Soak the tomatoes for two hours and chop them fine. Chop the apples. Add the other ingredients and cook the mixture until it is thick. This mincemeat will keep for some time in a covered jar.

GREEN-PEPPER AND CELERY SALAD.

Soak for 30 minutes peppers that have been preserved in the salt and vinegar solution. Cut them in halves lengthwise. Pour over equal quantities of diced tart apple and celery, a dressing made of vinegar and oil, and allow the mixture to stand for 20 or 30 minutes. Fill the peppers with the mixture, sprinkle chopped peanuts over the top, and serve them on lettuce leaves.

STUFFED PEPPERS.

8 to 12 salted green peppers.	1 teaspoon onion.
2 cups cooked rice.	$\frac{1}{2}$ teaspoon sage.
$\frac{1}{2}$ cup chopped peanuts.	

Soak the peppers for two hours. Boil them until they are tender. Combine the remaining ingredients, and fill the pepper cavities with the mixture. Cover the tops with buttered crumbs. Bake the stuffed peppers for 30 minutes. Any kind of left-over meat may be used instead of peanuts.

MIXED PICKLE.

1 pint salted string beans.	2 teaspoons celery seed.
2 salted green peppers.	2 teaspoons white mustard seed.
$\frac{1}{2}$ cup salted corn.	$\frac{1}{2}$ teaspoon paprika.
$\frac{1}{2}$ cup salted parsley.	2 cups vinegar.
2 medium-sized onions.	$\frac{2}{3}$ cup corn sirup.
2 pimentos.	$\frac{1}{2}$ teaspoon turmeric.

Soak the beans, peppers, corn, and parsley for about two hours. Dice the peppers and cook them with the other salted vegetables until they are tender. Add the other ingredients, and cook the mixture until it is clear.

CAULIFLOWER AU GRATIN.

Rinse cauliflower that has been preserved in salt solution, and cook it until it is tender. Drain it, and cover the bottom of a greased baking dish with a layer of the cauliflower. Add medium thick white sauce to which has been added four tablespoons of grated cheese to each cup of milk. Add another layer of cauliflower and one of sauce. Cover the top with buttered crumbs. Brown the dish in a moderate oven for about 20 minutes.

DRYING.

All means of preserving surplus stores of vegetables and fruits must be used to insure the necessary supply for the winter months. The most economical method is particularly advantageous at the present time. Drying requires no sugar, no air-tight containers, no special apparatus, less heat than most other methods, and less storage space. When sugar is scarce and containers for canning limited, dry-

ing is a good way to save the surplus. It is an old method, proven satisfactory by our grandmothers before modern canning was known.

METHODS OF DRYING.

1. *Sun drying*.—The prepared food on wire netting or on an earthen platter protected from insects by screen-cloth coverings may be dried in the open air. This is an economical method in dry, hot weather. It is not suitable for localities where, although it is very hot, there is great humidity. Good ventilation—natural air currents—speed the process. A sunny window or a tin roof are useful places.

2. *Artificial heat drying*.—(a) In an oven; (b) by special drying apparatus.

(a) The prepared food on platters or trays is placed in an oven. The oven door should be left ajar to allow for ventilation. The temperature should be hot enough to dry but not sufficient to cook the food.

(b) The prepared food placed on wire-netting trays or baskets may be suspended over the stove so that the heat from the stove dries the material. In winter the trays may be placed on a steam radiator if it is found necessary to dry a surplus of winter apples or vegetables.

3. *Artificial air currents, the electric-fan drying*.—The air blast insures more rapid evaporation.

4. *Combination of above methods*.—The above methods may be combined either at the same time or in sequence. For instance, the drying may be started in the oven and completed in the sun, or the electric fan may be used with sun or oven drying.

A HOME-MADE DRIER.

There are many commercial driers on the market which are very good. An inexpensive tray may be made by taking wire netting of fine mesh and cutting at the corners so as to turn up each side about $1\frac{1}{2}$ inches and either pinching or wiring the corners together. This may be used in the oven or suspended over the stove. Drying is quicker on this than when done on plates.

WHAT TO DRY.

Successful drying depends much on wise selection of materials.

It is not economy to dry vegetables which will not be found satisfactory for table use later. When canning containers are limited, can the products less suitable for drying and dry those which are known to give good results. Store such vegetables as potatoes, carrots, and beets, and dry them only when necessary. If there is danger of spoilage, or storage space is limited or lacking, dry them.

The vegetables whose seeds are eaten as food, such as corn, peas, beans, lentils, and the green leafy vegetables, also such vegetables as pumpkin, squash, and nearly all fruits—apples, peaches, plums, and berries—are suitable for drying. Vegetables of high water content, of which tomatoes are a good example, require careful, rapid drying to insure success; otherwise, before the large amount of water is evaporated the vegetable begins to spoil.

1. Select good material, firm and sound. Inferior fruit and vegetables give inferior dried products. Prepare them carefully. Remove skins from fruits if desired. Hot dip vegetables and fruits 3 to 10 minutes to destroy the enzymes which are responsible for the change in flavor called staleness. Enzymes also cause the change of sugar to starch in corn or peas during ripening which makes them less sweet when mature. This action continues after the fruit is picked, unless the enzymes are killed. Hot dipping insures better flavor in the dried product. It also sets the "milk" in corn pulp, decreases the bulk of greens, and helps to preserve color. Cold dip to cool vegetables or fruit then drain and dry. Some vegetables—potatoes, pumpkins, squash—may be cooked and greens may be steamed 10 minutes before drying.

2. Dry as rapidly as possible with good ventilating currents.

3. Dry small fruits, berries, mature seeds, whole.

Cut large fruits and vegetables in thin slices or rings to expose more surface for rapid evaporation. Food choppers may also be used for cooked vegetables, such as potatoes.

4. Watch the temperature if drying in the oven. It should not exceed 140° Fahrenheit or 60° centigrade. The use of a thermometer is the safe guide to avoid overheating.

5. Stir or turn the material occasionally to insure even drying.

6. Protect food from insects, dust, and dampness. Keep material covered with screen cloth when drying in the sun. A place free from dust should be selected. Do not allow food to gather dampness at night.

7. "Condition" dried fruit before storing. This means after food is dried to keep it in a dry place for several days, turning frequently or pouring from one container into another. This permits more complete drying and even distribution of moisture. Insects' eggs which may have been deposited on the material develop in a few days. These may be detected by careful inspection during conditioning.

8. Store dried fruit in paper bags, boxes, or tin containers. Small containers are suggested, as it prevents opening a large amount at a time and the possible contamination of the remainder, which might result in spoilage.

DRIED BERRIES.

Examine berries carefully; wash if necessary. Many wild berries may not require washing. Spread on trays and dry in oven rather slowly at first, then at higher temperatures. Berries may be dried in the sun.

DRIED APPLES.

Prepare fruit, pare, core, and slice one-fourth inch thick. Put in slightly salted water to prevent discoloration. Drain, spread on trays, and dry until leathery. Dry apricots, pears, peaches in the same way. Dry plums whole or in halves.

FRUIT LEATHER.

Mash ripe prepared fruit (berries, cherries, figs, apricots, peaches, and blue plums may be used) to a pulp, heat slowly to concentrate the juice a little, then spread on lightly oiled platters and dry in the sun or dryer. When dry, pack away in jars or very tight boxes lined with wax paper.

Peaches, or half-and-half peaches and figs, make delicious leather and need only a sprinkling of sugar.

Serve this leather in winter instead of candy or with cream cheese and nuts for dessert. Fruit leather may be soaked in water and used for pies, shortcakes, puddings, and sauces. When intended for this purpose omit the sugar.

DRIED CORN.

Use corn as soon after picking as possible. After husking and silking, place in boiling water for five minutes to set the "milk." Cold dip to cool. Drain and wipe dry. Score or cut down with a sharp knife the center of each row then cut kernels from the cob, being careful not to cut too close to the cob. Then scrape with dull edge of knife. Dry by any of the suggested methods, preferably in the oven.

Another method for drying corn is to cut the corn from the cob before hot dipping and partially cook the corn in a double boiler until the mixture thickens, then remove to pans or platters and finish drying. This is very good for soup or scalloped dishes.

DRIED PEAS.

Shell freshly picked peas. Steam them 10 minutes or boil them 5 minutes in a small amount of water. Cold dip, drain, and dry by artificial heat.

DRIED STRING BEANS.

String and wash beans. Hot dip five minutes, then cold dip. Cut in 1-inch pieces if desired. Dry by artificial heat.

DRIED GREENS.

All greens, such as spinach, beet tops, chard, lettuce, dandelions, and other wild greens, require careful looking over and washings in several waters. Steam 10 minutes. Then dry in oven. The use of a fan is apt to blow the greens, as they are so light when dried.

DRIED HERBS.

Save celery tops, parsley, and onion tops and wash carefully and dry. Then powder by rubbing between the fingers. Use for seasonings and for cream soups.

The old-fashioned herbs have always been dried by home methods. Marjoram, summer savory, thyme, mint, sage, caraway seeds improve the "substitute" dishes as well as the contents of the soup pot.

DRIED PUMPKIN.

Slice raw pumpkin and dry; or it may be steamed or baked before drying; then mash and spread on platters. Stir frequently while drying. Dry squash in the same way.

SOUP MIXTURE.

Dried vegetables may be combined to form a soup mixture. Since vegetables differ in rate of drying, it is usually best to dry the vegetables separately. If pieces are made uniform in size, drying may be carried out in same amount of time for all.

The advantage of drying separately is that when they are to be used those requiring a longer time for soaking, such as carrots or turnips, may be started first and the potatoes and seasoning added later. Peas and beans require more time for soaking.

OTHER VEGETABLES.

Many other vegetables may be dried successfully by following directions of methods given.

DIRECTIONS FOR USING DRIED VEGETABLES.

Soak all dried vegetables overnight before cooking to allow the absorption of water which was lost in drying. In warm weather it may be necessary to place bowl in refrigerator to prevent fermentation. Cook the vegetable in water in which it has been soaked. If this is not done, the soluble nutrients which are so easily removed from the finely divided or sliced material, are lost. Concentrate the water in which dried food is cooked. In the case of vegetables, the water may be absorbed by the vegetable or evaporated to small bulk or used in soup or white sauces. With fruits, the water should be served with the fruit. Often it is not necessary to add any sweetening agent if the fruit is cooked slowly so that the natural sweetness is developed.

WAYS TO USE DRIED PRODUCTS.

Fruits, apples, peaches, apricots, plums, cherries, berries may be used for sauces, pies, fruit tapioca puddings, jellies, and frozen desserts, etc.

Vegetables have not been as extensively dried as fruits but they are very successfully used in many dishes. Among these are the following:

Cream of vegetable soup.
Purees.
Clear vegetable soup.
Vegetable chowder.
Vegetable soufflé.

Scalloped dishes.
Creamed vegetables.
Baked loaf.
Pie fillings.

CREAM OF CORN SOUP.

$\frac{1}{2}$ cup dried corn.
2 cups water.
2 cups milk.

2 tablespoons flour.
2 tablespoons butter.
Salt and pepper.

Soak corn overnight; cook slowly until soft, adding more water if necessary; put through a strainer or colander. Make a white sauce of remaining ingredients and add corn pulp to it.

SCALLOPED CORN.

1 cup dried corn.
2 cups water.

Buttered bread crumbs.
Seasonings.

Soak corn overnight, cook slowly until soft, adding more water as needed. Place a layer of corn in greased baking dish, then a layer of crumbs; repeat until dish is filled. Heat and brown in oven.

POTATO CHOWDER.

1 cup dried potato.
 $\frac{1}{2}$ pound salt pork.
1 quart of milk.

2 tablespoons of dried onion.
4 tablespoons of flour, salt and pepper.

Soak potatoes and onion in enough water to cover overnight and cook until tender. Add more water if necessary. Cut pork into small pieces and fry until brown and crisp. Add flour to the fat and stir until mixture bubbles, then add milk to make white sauce. Add sauce to potatoes, season and heat for serving.

CREAMED CARROTS.

Soak carrots overnight in water to more than cover. Cook until tender. Make a white sauce, using liquid in which carrots were cooked, together with an equal amount of milk. Concentrate liquid before using if volume is more than that desired for sauce. Pour over carrots, season, and serve.

VEGETABLE SOUFFLÉ.

4 tablespoons fat.
4 tablespoons corn or rice flour or any other.
 $\frac{1}{2}$ cup milk.
1 cup vegetable pulp, carrots, turnips, spinach, etc.

$\frac{1}{2}$ cup vegetable liquid.
2 or 3 eggs.
Seasonings.

Prepare dried vegetables and put through a sieve. When cooked make a white sauce of fat, flour, milk, and water in which the vegetable was cooked. Add vegetable pulp and beaten egg yolks; fold in the stiffly beaten egg whites. Put in an oiled baking dish and bake in a slow oven until it is set.

STORING.

Storage requirements for different vegetables vary widely. Some vegetables are easily kept. If the parsnip and salsify are merely left in the ground, oncoming spring will find them not only well preserved but actually improved in quality. On the other hand, the sweet potato and the squash are kept successfully only when the temperature is high and uniform and the humidity is low.

The important factors to consider are temperature, moisture, and ventilation. A temperature that is too high, favors decomposition; a temperature that is too low causes freezing, with the subsequent breaking down of vegetable tissue. A dry atmosphere causes fruits and vegetables to dry out and shrivel; while undue moisture, especially when combined with warm temperature, favors the growth of molds and other destructive organisms. Ventilation is not only a means of regulating these conditions, but it is also important in itself in removing gaseous products that may be more or less injurious.

Proper condition of the produce is essential for successful storage. Vegetables should be nearly mature when stored, but overripeness is to be avoided, as it favors early decay. Ripening processes continue, though slowly, after storage, and due allowances must be made for these in determining the maturity of the vegetable stored.

Only the very finest specimens should be selected—those that are firm and of good size and shape. It is at injured spots that decay begins, and even bruises that can be found only by careful examination are serious; hence the necessity for the greatest care.

There are wide differences among varieties of vegetables in their adaptability to storage. In general, the late-maturing sorts are the most suitable.

THE HOUSE CELLAR.

Many methods of providing the conditions necessary for successful storage have been devised. The first place to suggest itself is the basement of a house, barn, or outbuilding. The house cellar, however, is likely to be too warm and dry, particularly if there is a furnace in it. It is likewise undesirable to have a large amount of vegetable matter beneath the dwelling. However, these objections may be partly overcome. Small quantities of fruits or vegetables may be stored in a corner of the cellar away from the furnace, and may be protected from drying out by moss or by soil, preferably of a sandy type. If a large quantity is to be kept, a separate compartment may be boarded off by a double partition filled with some nonconductor of heat, such as dry sawdust. This compartment should be ceiled, and should be provided with ventilating openings or flues so that it may be quite independent of the rest of the house. Vents should be arranged at both ceiling and floor. Since warm air rises and cold

air falls, it is possible to control the temperature by means of these vents. While the weather remains warm in the fall, the flues are closed during the day and opened at night. When the weather becomes more severe, the plan is reversed, and the warmer air of mid-day is admitted.

THE SPECIAL PIT.

Special cellars and pits for storage of vegetables may be constructed at small cost and are very satisfactory. A pit one or two feet deep is dug in a well-drained spot, and a foundation wall of stakes and boards, or, better, concrete, is built around it. On this wall, rafters are erected for the support of roof boards. The roof is covered with soil and sod, or with straw and a light covering of earth. A permanent concrete cave or pit may be built with little expense and trouble. No matter what the form of construction, one or two small ventilators should be provided at the top of the cave, and one at the bottom of the door. These should be arranged to open and close.

BURYING.

Burying vegetables is one of the easiest, as well as one of the most successful methods of storing them. It keeps them in good condition and involves no expense. One objection to this method is that it is often difficult or impossible to get at the vegetables at certain times during the winter. However, a considerable quantity may be taken out at one time and kept in the cellar for a week or two. A site, preferably on sandy soil, well drained and well protected from surface wash, should be chosen. An oblong pit of the required size and about a foot deep should be made. The bottom of the pit should be lined with straw, and the vegetables carefully heaped on it. They should then be covered with a layer of leaves and straw for protection and to make their removal easier. Lastly, soil should be added to a depth of from 4 to 8 inches. Wisps of straw may be set at intervals in the peak for ventilation. Great care must be taken early in the season not to cover the vegetables too closely, as speedy decay will result from heating and sweating. As the weather becomes severe, manure may be piled on to give additional protection.

When several vegetables are to be stored, or when they are to be removed at different times during the winter, it is well to make the pit very long and narrow. Earth partitions may then be built, as the work progresses. The different compartments may be marked with stakes. One compartment can be opened without disturbing the others.

