

PREPARATION OF FRUITS AND VEGETABLES IN THE HOME BY DRYING AND BRINING

Extension Service

State College of Washington

Drying is an old and satisfactory method of preserving a limited variety of fruits and vegetables. Used to supplement canning and storage, it is an inexpensive aid in securing a satisfactory variety of foods for winter use.

Methods of Drying

Preserving foods by drying may be done in four ways: by sun drying, by artificial heat in the oven or a special drying apparatus, by an air blast created by an electric fan, or by combining any of the above methods. The method used should be chosen to suit the amount to be dried, the weather conditions prevailing, and the equipment available. The length of time required for drying depends upon the size and texture of the pieces to be dried, the temperature, and the rate of circulation of air over the drying trays.

Points to Consider in Drying

Select food which is in prime condition for immediate table use.

All foods should be dried as rapidly as possible, but the temperature must not be high enough to injure cell structure and cause loss of juices. For most products the temperature should run from about 120° to 150° Fahrenheit. The temperature can be raised slightly in the later stages of the drying process. Test temperature with thermometer placed on lowermost tray.

Small fruits and vegetables may be dried whole; larger products should be cut so as to expose more surface to the air.

Food should be spread $\frac{1}{2}$ to $\frac{3}{4}$ inch thick on drying trays and stirred frequently during the drying process to be sure that it dries evenly.

Always be careful to avoid dust and contamination by insects if food is dried out of doors.

Fruits and vegetables should be dried until leathery but not hard. As they will appear softer when hot, a piece or handful should be cooled and tested for dryness.

"Conditioning" is the last step in drying previous to storage. Pile to distribute moisture, and keep the dried product in a fairly warm dry place for several days after taking it from the drying trays to be sure that it is thoroughly and evenly dried.

Dried food should be stored in sealed paper bags or boxes lined with paraffin paper, in muslin bags dipped in melted paraffin, or in tin containers. They should be kept in a dry place free from insects.

*DIRECTIONS FOR DRYING FRUITS AND VEGETABLES

Fruit	Preparation and Drying
Apples	Wash, pare, core, cut in quarters or $\frac{1}{4}$ " slices. Place for 5 minutes, (or until placed in drier) in salt solution—6 tablespoons salt to 1 gallon water. Dry at temperature of 130° F. to 175° F.
Apricots	Halve and pit. Treat with salt solution and regulate temperature as for apples.
Berries	Handle as little as possible. Temperature 130° to 150° F.
Cherries	Stem, pit or leave whole—Dip one minute in boiling water. Temperature 120° F. to 150° F.
Peaches	Peel, or not, as desired. Cut in halves or smaller. Treat with salt solution as for apples. Temperature 130° F. to 175° F.
Pears	Core and slice, peeled or unpeeled, as desired. Treat with salt solution, as for apples. Temperature same as for apples.
Plums, large prunes	Quarter or slice. Temperature—same as for apples.
Prunes	Wash, pit or leave whole. Whole prunes may be dipped in a boiling lye solution—2 tablespoons lye to 1 gallon water. The fruit is then washed thoroughly in cold water. Temperature 130° F. until skin is wrinkled, then slightly higher.
Rhubarb	Wash, cut in $\frac{1}{4}$ " to $\frac{1}{2}$ " lengths.
Beans, green	Wash, string, cut. Steam or boil 10 to 15 minutes. Temperature 125° F. to 145° F. Dry until hard and brittle.
Corn	Husk, silk, blanch 8 to 12 minutes. Cut off cob. Temperature 130° F. to 140° F. Dry until hard and brittle.
Peas, green	Shell, blanch 3 minutes. Dry as beans.
Pumpkin	Open, remove seeds, slice and peel, steam 5 minutes. Temperature 135° F. to 160° F. Dry until leathery.
Squash	Same as pumpkin.

*Note: Condition all dried products, and store carefully.

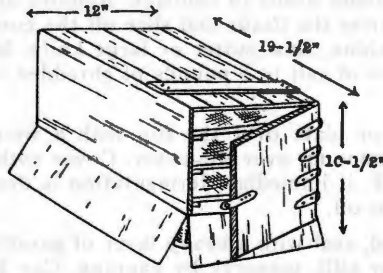
HOME MADE DRIERS

There are several types of satisfactory home-made driers which can be made at small cost. Directions for making one type are given below:

Drier Made from an Apple Box

This evaporator is made from an apple box, 12 inches wide, 10½ inches high, and 19½ inches long. Remove one end of the box, being careful not to split the boards. Strengthen this end by nailing lath across the top and sides of the box. Nail three $\frac{3}{4}$ -inch cleats or similar strips horizontally along the inside of each side of the box, the first one 3 inches from the top, the second 3 inches below the first, and the lowest 3 inches below the second. These cleats give support to three trays.

Next, construct the three trays, $11\frac{1}{2}$ inches by $17\frac{1}{2}$ inches. Each tray is made of a piece of $\frac{1}{8}$ -inch galvanized wire mesh, $11\frac{1}{2}$ inches by 20 inches. The 20-inch length allows for the wire to be folded over the ends, thus strengthening the trays. Make framework of four $\frac{3}{4}$ -inch strips, or similar pieces, side strips being $17\frac{1}{2}$ inches long and end strips a little less than 10 inches long. Fit end strips in between the side pieces and nail. Staple wire mesh on frame and bend edges over.



For the door use the end originally removed from the box. Attach it to the box by means of four 1-inch pieces of leather. (If desired, metal hinges may be used.) The door is fastened by a slitted strip of oiled leather, hooked over a bent nail on the side of the box, if desired.

Raise the box drier about 4" above the stove by supports made by long spikes driven into the four corners, or other metal legs.

Prepare strips of tin to gather the heat from the stove into the box. With a can opener cut out the sides of four no. 10 tin cans—the size commonly used at bakeries and restaurants. Flatten and straighten the tin with pliers. Nail two of these pieces of tin along the sides on the outside of the box. Cut the other two pieces of tin into $11\frac{1}{2}$ -inch lengths. Nail one piece on back of drier in same manner as on sides. Nail the other piece to the brace inside the front end. Cut three strips of tin to cover the lower sides of the two ends and the brace, to prevent charring from heat.

Air circulates at the bottom of the evaporator between the strips of tin at the corners. Slats or holes at the top allow the passage of air.

PRESERVATION OF VEGETABLES IN BRINE

An inexpensive and satisfactory method of preserving a few vegetables, such as string beans, cucumbers and corn is by packing in salt or brine.

String Beans

Select fresh stringless beans. Remove tip from each end and wash thoroughly. Pack in a large earthenware or wooden vessel with alternate layers of salt using 1 part salt to 8 parts beans (by weight). Weight the beans down and two days later add enough brine (1 part salt to 8 parts water by weight) to fill the jar. Seal with paraffin to prevent evaporation of water from the brine. Do not move after sealing as the liquid will loosen the seal.

Corn

Select tender corn at proper stage of development. Cook in boiling water 10 minutes to set milk, and cut off the cob. Pack in an earthenware or glass jar with alternate layers of salt using 1 part of salt to 8 parts of corn by weight. Add enough brine (1 part salt to 8 parts water) to cover the corn. Seal with paraffin to prevent evaporation.

Sauerkraut

Select mature sound heads of cabbage. Remove all decayed, sunburned or dirty leaves. Quarter the heads and slice off the core portion. Shred with hand-shredding machine, slaw cutter or large knife. Mix cabbage with salt (proportion 2 ounces of salt to 5 pounds of shredded cabbage). Pack firmly in container.

Place a board or plate over the top with a weight heavy enough to cause the brine to come up over the cover. Cover with clean cloth. Keep at temperature of 86° F. if immediate fermentation is desired. (take 6-8 days). If scum arises, skim off.

When fermented, seal with a heavy layer of paraffin and place in a very cool place or, better still, preserve by canning. Can by packing in a clean jar, cover with kraut juice or a very weak brine, cook for 15 minutes at boiling temperature, seal and store in a cool place.

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