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PRESERVATION OF FRUITS AND VEGETABLES BY FREEZING  
(Abstract From Station Circular 116)

by

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Freezing affords one of the simplest methods of preserving foods. Its use by farmers and housewives provides products closely approximating the fresh.

The use of storage lockers in communities where these are available afford a means for the farmer or housewife to preserve products in season to be used throughout the year.

**FREEZING TEMPERATURES.** Products such as fruits and vegetables should be frozen at temperatures from a minus 5° Fahrenheit to a plus 5° Fahrenheit. These temperatures are the best for most products.

**STORAGE TEMPERATURES.** The temperatures above can likewise become storage temperatures. It is best to maintain locker storages at zero degrees Fahrenheit at all times. Such a temperature will not only prove best for freezing, but is exceptionally good for storage. Temperatures up to 10° Fahrenheit, however, can be used for storage but in locker storages there are always new products being frozen as well as old ones stored.

**CONTAINERS FOR STORAGE.** Tin cans in sizes from a No. 2 to a No. 10 meet all requirements. Glass jars and paraffined paper cups are likewise suitable. Parchment or cellophane-lined waxed boxes provide suitable containers for this purpose with the exception of liquid packed products.

**BLANCHING VEGETABLES.** Blanching, a process of partially cooking and softening the vegetable before freezing, is essential to obtain high quality in the frozen product. Follow Directions for Each Product Carefully.

**SUGAR AND SALT.** Sugar can be used on fruit dry or in solution. Directions are given in each case. Sugar solutions are determined by weight and are indicated in percent or degrees. A 50 degree or percent solution is equal parts of sugar and water. A 60 degree or percent solution is 60 parts of sugar to 40 parts of water. This is a simple way to determine densities.

**FILLING CONTAINERS.** Allow from a half to one inch space in most containers in which liquid is used. The expansion of the liquid will tend to break the glass if the jar is overfilled.

**COOKING FROZEN PRODUCTS.** Cooking frozen products requires a little more attention until the operator is familiar with the difference in fresh and frozen products. Due to the freezing process, the tissue is softened and only a short cook is necessary. In many cases only half the time is required. Watch the cook.

#### **SPECIAL METHODS OF PREPARATION FOR FRUITS AND VEGETABLES**

**BERRIES.** This includes Blackberries, Blueberries, Cranberries, Loganberries, Black and Red Raspberries, Strawberries and Youngberries. Prepare the fruit by sorting and washing carefully. Pack into containers, mixing with dry sugar in the proportion of 3 parts of berries to 1 part of sugar, or cover the fruit with a 50 degree syrup using equal parts of sugar and water. Seal carefully and freeze at zero degrees.

**CHERRIES.** Sweet cherries can be packed in syrup using a 40 to 50 degree strength. Sour cherries are best pitted, then dry sugar at the rate of 5 parts fruit to 1 part of dry sugar or a 60 degree sugar solution can be added. The containers are then sealed and frozen at zero degrees Fahrenheit.

**STONE FRUITS.** Apricots, peaches or prunes are best frozen pitted. The peaches can be peeled by dipping in boiling water for about 1 minute, then chilled in cold water. The fruit is then packed in containers and covered with a 40 or 50 degree sugar solution, sealed and frozen at zero degrees Fahrenheit.

**BEANS.** The green or wax beans can be successfully frozen. These vegetables should be snapped, then blanched in boiling water for 2 to 3 minutes and promptly chilled in cold water. Pack in containers asparagus style, seal carefully and freeze at zero degrees Fahrenheit at once.

**ASPARAGUS.** This product is very satisfactory frozen but is best frozen at very low temperatures. Freezing at a minus 20° Fahrenheit improves the flavor. Prepare and pack quickly to avoid shriveling. Blanch from 2 to 3 minutes in boiling water, pack lightly in containers without further treatment, seal tightly, freeze and store.

**LIMA BEANS.** Succulent green lima beans can be shelled and blanched in boiling water for 2 or 3 minutes. Pack into containers without brine, seal and freeze at zero degrees Fahrenheit.

**BROCCOLI.** This vegetable makes an excellent product for freezing. Trim, wash and blanch carefully for 3 or 4 minutes, dip in cold water. Drain carefully, and pack in airtight containers to avoid moisture loss. Freeze at zero degrees Fahrenheit and store.

**SWEET CORN.** Freezing corn on or off the cob has been found satisfactory. When the husk is left on, cut the ends to permit easy blanching. Boil in water for at least 6 minutes. If the cob is husked, four minutes should be ample. Do not select thick ears; the smaller ears are best. After blanching, pack upright in containers or wrap in parchment paper to prevent drying out. Freeze at zero degrees Fahrenheit.

**PEAS.** Garden peas are excellent for freezing. They should be picked when tender; hull, wash, blanch for 1/2 to 1-1/2 minutes, dip in cold water then pack in containers. They can be frozen dry or a 2 percent brine can be added. Seal tightly and freeze at zero degrees Fahrenheit, then store.

**SPINACH.** The important points in spinach handling are to pick at the right stage, sort the leaves carefully, wash out the sand and grit then blanch for 2 to 2-1/2 minutes. Rinse well in cold water, drain and pack without liquid; seal containers tightly then freeze at zero degrees Fahrenheit.

**CAULIFLOWER.** Trim the product carefully by removing all green leaves. Cut the larger curds apart then soak for a short time in a weak brine solution. Blanch in boiling water for 2 to 3 minutes, chill in cold water, then pack. Pack in air-tight containers; cover with a 2 percent brine solution, then seal and freeze at zero degrees Fahrenheit.

#### CAUTION

When handling products for freezing, be sure that they are fresh. As soon after harvesting as possible, prepare the product, pack and freeze to obtain the best results.

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