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Extension Bulletin 340

freezing
and
using prepared foods



Freezing Prepared or Cooked Foods

(With Brief Instructions for Freezing Fruits and Vegetables)

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FREEZING of prepared or cooked foods can save time and energy and mean more variety in the daily meals. But do *not* fill up the freezer with prepared foods. Decide *first* whether these foods will *save time* when you need it. Sometimes it takes longer to get a food ready for serving *after* it has been frozen than it does to prepare fresh foods. Some frozen foods use more heat than freshly prepared dishes and so are less economical.

Since frozen cooked foods often have a “warmed over” flavor, it is generally more satisfactory to freeze uncooked vegetables, fruits, meats and poultry and then prepare meals from these as needed.

Vegetables that do not keep well in common storage (squash and sweet potato examples) may be cooked, mashed, and frozen.

Freezer Space Management

Keep foods moving in and out of the freezer. Avoid holding foods for long periods. Use foods while they are still in first class condition. Keep a record of what goes in and when. Cross out items when used. You will then know what is in the freezer and when to replace certain foods.

Arrange packages orderly so as to save space, and to make it easier to find them when needed. Observe the rule, “first in, first out.”

Prepared Food to Freeze

1. Seasonal foods are appreciated more out of season.
2. Store only high quality foods. Freezing does not improve flavor and quality.
3. Foods that take a long time to prepare (stews, meat pies, chop suey) dishes requiring sauce such as barbecue or Italian tomato sauce, etc.; home-made yeast breads, rolls or coffee cake may be prepared in quantity.
4. Prepare a double recipe or more of food like pies, cookies, and cup cakes or larger cakes.
5. Foods that need only slight thawing before they are served are convenient when one is in a hurry.
6. Soups—vegetable made with stock; purees of bean, pea, etc.; broth, such as beef, and chicken should be concentrated.
7. Cooked meats, such as a ham or turkey may be too much for serving at one time. It is best to cover sliced cooked meat with gravy or sauce. This helps to make a solid pack which excludes the air.

8. Sandwiches with suitable filling may be made in quantity.
9. Ice cream, ices, fruit juices keep well almost indefinitely.

General Suggestions

1. Work quickly. Speed is necessary at all stages to insure "good eating."
2. Avoid overcooking. Freezing softens foods, and any reheating softens them further.
3. Cool quickly. Set pan of food in ice water or running cold water.
4. Package carefully in appropriate wrappings or containers. Some foods require wax paper or cellophane between layers.
5. Label well and date.
6. Freeze food immediately and quickly.
7. Plan to use foods within the time they will store safely.¹
8. Reheat according to directions.

Foods and Seasonings To Avoid

1. Salt and chili gradually lose flavor. Pepper, onion, cloves, and synthetic vanilla may become strong and bitter. It is best to season when reheating.
2. Fried foods lose crispness and often become soggy.
3. Cooked egg white gets tough and rubbery.
4. Meringue toughens and sticks to paper.
5. Raw vegetables lose crispness.
6. Foods which contain even small amounts of fat are likely to become rancid in long storage.
7. Mayonnaise is likely to separate during freezing and thawing. Used in sandwiches it may soak bread.
8. Fruit jelly used in sandwiches soaks into bread.
9. Custards and cream pie filling become watery and lumpy.
10. Sauces made with large proportion of fat or with homogenized milk tend to separate. This separation may be prevented by beating sauce in an electric mixer, set at high speed, just before freezing. Or they may be beaten to a smooth consistency during or after reheating.

Cheese tends to produce a rough texture. The use of eggs in a cheese sauce helps to offset this.

Saving out about $\frac{1}{4}$ of the flour or starch in the recipe and adding it as a paste to the chilled sauce just before packaging helps to prevent separation. This flour or starch absorbs the fat when reheated and seems to be sufficient to prevent any raw taste in the finished product. It is well to do this, too, to prevent separation of fat in gravy.

¹Storage times vary with conditions. Those given are selected from the literature, and are in general the maximum times at which the food should remain at its best. Store baked and other bulky prepared foods only for short periods for best use of freezer space.

In milk sauces the curdling may be prevented by using meat or chicken broth instead of/or for half the milk.

A rice flour made from a variety of rice grown in California has recently been found to produce sauces which remain smooth during storage and thawing.

11. Potatoes used in stews and combination dishes have poor texture and flavor after freezing and thawing. It is better to cook and add them when the frozen food is prepared for serving.

12. For freezing, the "converted" or "malakized" is better than the quick cooking or regular rice.

To avoid the last minute rush in preparing fancy sandwiches for a party—try freezing. Note the types of filling that freeze well and those to avoid. Allow 3 to 3½ hours to thaw at room temperature. To retain moisture keep in freezer packages until ready to serve.



13. Red, white and yellow foods sometimes change color. This may be prevented by adding an acid food such as orange or lemon juice, sour cream or acid milk, wheys—if you can do so without spoiling the flavor.

Containers and Wrapping Materials

It is necessary to package baked products so as to prevent loss of moisture and flavor, and to prevent crushing. Those needing extra protection after wrapping may be placed in a cardboard box of suitable size.

Pies should be put in glass, tin, or cardboard plates with metal edge, covered with a cardboard plate of same size as underplate, then wrapped in cellophane, (heat-sealed) or in aluminum foil, or slipped into plastic bag and tied securely.

On the market are many suitable containers and wrappings which are moisture proof, such as: square or oblong waxed cartons, bag-in-box types,

moisture proof cellophane, plovfilm. Covered shallow metal containers permit one to cool and freeze food rapidly, store it, and reheat it quickly—all in the one container. Glass freezer jars can be completely sealed, do not impart flavors or odors to food, protect from flavors or odors of other foods in freezer. Plastice containers, polyethylene, plastic bags, and metal foil provide a wide choice of containers and wrappings.

Freezing Temperatures

Zero degrees F. is the highest storage temperature that is advisable for frozen cooked or prepared foods. Most instructions say, "Freeze at 0° F. or lower." Keep storage temperature as even as possible.

Freezing and Using Prepared Foods

Yeast Rolls: Use recipe with fairly large amounts of fat and sugar. Prepare and bake as usual. Cool quickly. Wrap in air-tight, vapor-proof wrapper. Protect from crushing in cardboard container. Freeze. Store 2 months or less. To serve—reheat in sealed wrapper at 250 to 300 degrees F. Freezing dough for yeast rolls not recommended. Brown-n-serve rolls offer no advantage over fully baked rolls.

Yeast Breads: Use standard recipe. Prepare and bake as usual. Cool quickly. Wrap in moisture-vapor-proof material, seal. Store 2 months. To serve—thaw in wrapping at room temperature. Use immediately. Freezing yeast bread dough not recommended.

Quick Breads, Biscuits: Use standard recipe. Use double acting baking powder. Mix as for baking. Cut. Separate by double layer of wax paper or cellophane. Pack tightly in moisture- and vapor-proof package. Freeze. Store 2 to 4 weeks. To serve—bake on greased baking sheet. For thawed mixture 12 to 15 minutes at 425 degrees F.; for unthawed 20 to 25 minutes at 425 degrees F.

Muffins: Mix as usual. Place in baking cups. Wrap, seal, and freeze. Store 2 to 4 weeks. To serve—thaw at room temperature 1 hour. Bake as fresh muffins.

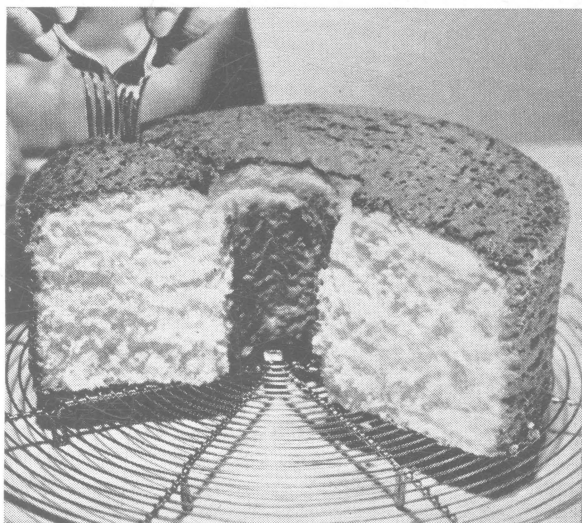
Doughnuts, Bran Muffins, Fruit and Nut Bread: Bake. Cool. Wrap. Freeze and store. To serve—thaw in original wrappings at room temperature or in a 250 to 300 degree F. oven.

Sandwiches and Hors d'Oeuvres: Spread bread with butter. Avoid mayonnaise, for it separates and soaks into the bread.² Protect so they are not mashed. Do not store too long. To serve—thaw in original wrapping. 3 to 3½ hours are required under usual lunch box conditions for thawing sandwiches. Serve hors d'oeuvres immediately.

² Sandwich fillings good—cheddar or cream cheese, fish, cooked egg yolk, peanut butter, sliced or ground meat or poultry. Do not freeze raw vegetables; they lose crispness; egg whites become tough; jellies make bread soggy.

Cake: Butter and sponge or angel cakes freeze well. Vanilla may give "off" flavor to frozen cakes. Mix and bake as usual. Cool. Wrap in amounts to be used at one time. Keep wrappings from touching frosting until it is frozen.³ May freeze before wrapping. Freeze. Store where it will not be mashed or in a box. Store 2 months. Quality and volume decrease after 2 months. To serve—thaw sealed in original wrapping at room temperature, in front of a fan, or in a slow oven 250 to 300 degrees F. Do not heat long enough

Cut cakes into portions that will be just sufficient for serving at a single meal. Wrap each portion separately. After freezing cake will not remain fresh as long. The one-meal portions insure freshness.



to scorch wrapping. If frosted or filled, thaw in refrigerator. Frostings thawed at room temperature become grainy. Thawed icings are less glossy than fresh. If paper sticks to frosting, loosen it while frosting is still solidly frozen.

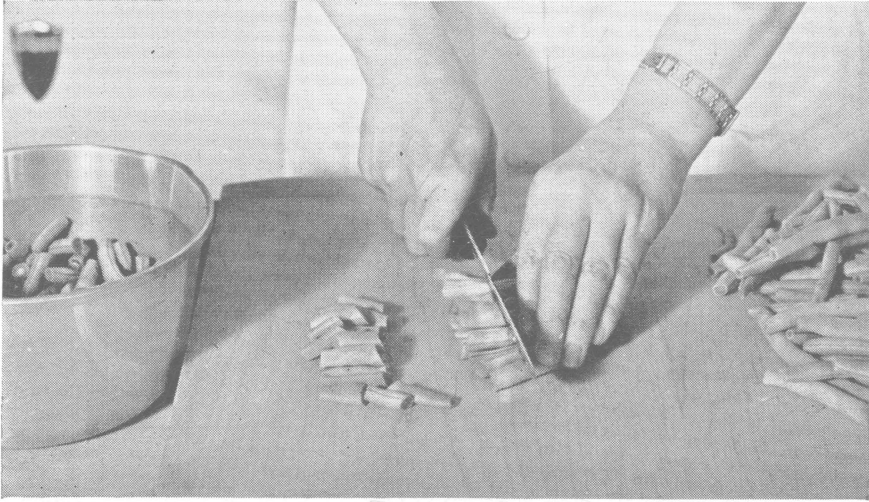
Cake Batter: Mix. Place in cartons or in baking pans. If tin pans are used, line with wax paper. Package in moisture-and vapor-proof packaging. Freeze immediately. Store 2 months. To serve—thaw dough in cartons just enough to transfer to baking pan. Bake immediately as fresh cake. Completely thaw loaf cake batters. Layer cakes need not be completely thawed before baking. Allow longer baking time.

Cookies: Bake. Cool. Package so they do not break. Freeze. Store 6 to 12 months. To serve—thaw in original wrappings, if cookies are thick or crispness is desired. Thin cookies usually may be served without thawing.

Cookie Dough: All refrigerator and almost all drop or bar cookie doughs freeze well. Prepare as for baking. Cut, or freeze in bulk. Freeze. Store 6 to

³ Cake fillings and frostings for freezing—penuche, fudge, raisin, nut, apricot fillings freeze well. Confectioner's sugar frostings freeze well, especially if they contain much fat. Candy type frostings as penuche, fudge, etc., crack and crumble after 3 to 4 weeks of storage. Use honey, syrup or molasses in these frostings to keep them moist. Do not use 7-minute type frostings. They become frothy and spongy. Avoid cream fillings.

For good eating: (1) Harvest at peak quality
(3) Chill (4) Pack in moisture



Prepare vegetables and fruits for freezing as for table use. Work with amounts that can be handled easily and quickly. Select the recommended varieties when planning your garden. Harvest when crops are just mature enough to give you top quality.

Blanch to arrest chemical changes due to enzymes. Blanching wilts vegetables and makes it easier to pack containers.

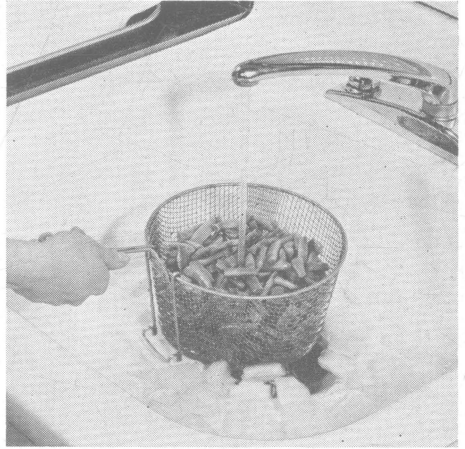


First requirement of a freezer container is that moisture-vapor cannot pass through walls or seal of the package. Straight-sided packages take less space in the freezer. A good space for marking product and date is desirable. Leave some head space for expansion. Place filled containers next to cold plates for quick freezing.

2) Blanch to stop chemical change

moisture-proof container

Cool blanched vegetables in cold running water, or in a water bath chilled with ice. Cool for the same time used for blanching. Drain vegetables before packing in freezer containers.



Container is that
walls or the
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tick freezing.

12 months. To serve—thaw only if necessary to make cutting, dropping or spreading possible. Bake as fresh cookies.

Creamed Meat, Chicken or Fish: Be extremely careful to keep food and containers clean. Use sterile containers. Follow a good recipe with a small amount of fat, or add $\frac{1}{4}$ teaspoon gelatin to each quart of sauce before cooking. Place pan of cooked food in ice water to cool rapidly. When cold, place in sterile containers. Place in layers separated by double thicknesses of cellophane or foil to help separate food for reheating. Seal and freeze. Store 2 to 4 months preferably (8 to 12 months possible). To serve—place in double boiler in the frozen state. Heat over boiling water, stirring occasionally. About 30 minutes is required for thawing and heating a pint. All sauces and gravies tend to separate or to curdle and lump during thawing and reheating. Stir until smooth.

Pies: Unbaked preferred. Fruit, mince meat pies freeze well. Custard pies do not. Fillings of cream pies tend to become grainy and crack. Some curdle and become lumpy and watery when thawed. Meringue shrinks and toughens when frozen. Use frozen or fresh fruits. Thicken juice or fillings. (4 T. flour per pie is usually enough to thicken the juiciest fruit.) Cool rapidly. Treat light-colored fruits to prevent darkening. Leave top crust whole. Seal crust well. Use up to 20 per cent soya flour in pastry to lengthen storage life. Avoid soggy undercrust by making deep dish pies. Use glass, tin, aluminum or thin paper plates with metal rims. Wrap. Freeze. Store plain pastry 2 months. Fresh hydrogenated fats are less likely to become rancid. To serve—cut holes in upper crust. Bake in 475 degree F. oven for 15 to 20 minutes. Reduce heat to 375 degrees F. until done.

Prebaked Pies: Chocolate and lemon chiffon with gelatin freezes well. Bake. Cool. Wrap. Freeze. Store 2 weeks. To serve—thaw in original wrappings at room temperature or in oven at 250 to 300 degrees F. Thaw chiffon pies in refrigerator.

Roasted or Stewed Meats and Poultry⁴: Prepare as for serving. Cool quickly. Remove bones and extra fat. Package dressings separately. Pack solidly into containers or wrap in large pieces. If small pieces must be used, cover with a sauce or gravy to keep air out. Seal. Freeze. Store 2 to 4 months. To serve cold—thaw quickly in containers. Serve immediately. To serve hot—heat in covered greased baking dish or heavy pan, or in the broiler. Carve before heating. Reheat dressings separately. Add a small amount of boiling water. Cover and heat at 350 degrees F. Uncover the last few minutes of heating.

Meat Balls with Tomato Sauce: Prepare by usual method. Cook until done. Cool quickly and package. Freeze immediately. Store 3 months. To serve—heat in top of double boiler for about 45 minutes, stirring occasionally or defrost over night in refrigerator and heat in saucepan. Serve with cooked spaghetti.

Stews and Soups: Be extremely careful to make, cool, and package under

⁴ Broiled or fried meats or poultry: Freezing not recommended. They lose crispness and take on a warmed-over flavor.

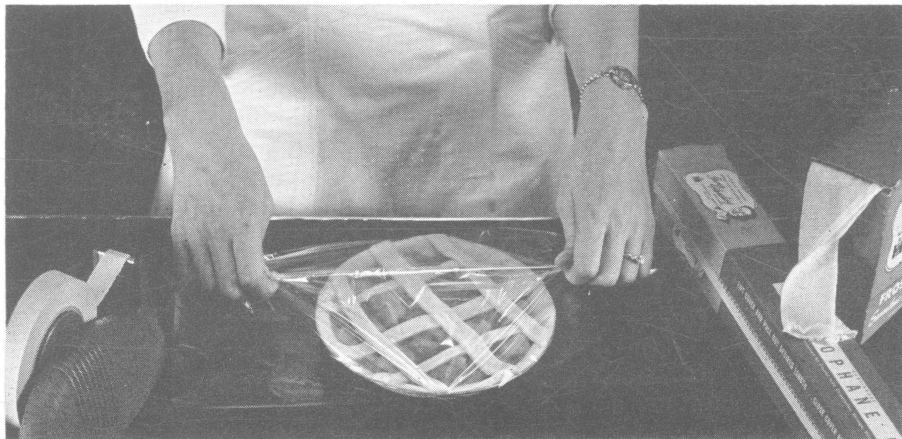
sanitary conditions. Select vegetables that freeze well. Carrots, celery, soybeans are good. Avoid potatoes. Onions lose flavor. Green peppers and garlic become more intense in flavor. Omit salt and thickening if stew is to be kept more than 2 months. Do not completely cook vegetables. Freeze only concentrated mixtures to save space. Package in leak-proof air-tight containers. Pureed vegetables make the best soup. Store 2 to 4 months. To serve—heat quickly from frozen state. Do not overcook. Separate particles with a fork as they thaw. Do not stir enough to make mushy.

Baked Beans with Tomato Sauce: Prepare baked beans by the usual method. Cook until barely tender. Add pork, mustard, molasses, sugar, salt, tomato juice, and onion. Bake 6 to 8 hours at 250 degrees F. Chill quickly. Package in moisture-vapor-proof cartons. Store 6 months. To serve—partially thaw at room temperature in package to prevent overcooking. Heat to serving temperature in casserole or double boiler.

Italian or Spanish Rice: Prepare as usual, but use “converted” or “malakized” rice. Cook until rice is tender, but not mushy. Cool quickly, package and freeze. Store 3 months. To serve—heat in top of double boiler for about 50 minutes. Add a little water if necessary.

Salads: Frozen fruit salads preferred. Use only fruits that freeze well. Blend with whipped cream and cream cheese. Mayonnaise and cooked dressings often separate. Nuts sometimes discolor and become bitter in mixtures. Raw vegetables lose crispness. Mix. Package in amounts wanted for one meal. Freeze. Do not store too long. To serve—serve while still frozen. May be mellowed in the refrigerator, for an hour or more before it is cut for serving.

This information has been compiled from: (1.) “Foods From the Freezer—Precooked or Prepared”—Fenton and Darfler. Cornell University, Bulletin 692, March 1946; revised August 1951. (2.) Freezing Fruits, Vegetables and Prepared Foods—Iowa State College, H. E. 23—February 1952.



Moisture-vapor wrapping is sealed first. To prevent crushing a paper pie plate with metal rim may be used as cover and taped to the lower pie plate, or use a cardboard carton.

From the Freezer to the Table

ENOYMENT and economical use of frozen foods depends not only on the correct handling before freezing and during storage but on correct preparation after freezing. It is important to keep all products frozen until ready to use them.

Frozen Vegetables

Frozen vegetables should be cooked only until just tender. They may be cooked in a small amount of water, steamed or baked. Or they may be cooked in a pressure saucepan or a covered skillet.

Most frozen vegetables may be cooked without thawing them first. Corn on the cob should be partially thawed before cooking so that the cob will be heated through by the time the corn is cooked. Leafy vegetables like kale or spinach cook more evenly, if thawed enough to separate the leaves before cooking.

In cooking the vegetable in a small amount of boiling water while it is frozen, let the solid mass partially thaw in cooking. Then break it apart with a fork for more uniform heating. When vegetables are completely thawed first, the cooking time is shorter.

Put the frozen vegetable in the boiling water, cover the pan and bring the water quickly back to a boil. When the water is boiling throughout the pan, reduce the heat and start counting time. Cook gently until vegetables are tender. Add table fat and seasonings. Serve immediately. The time for cooking and the amount of water is given in the following time table.

Timetable for Cooking Frozen Vegetables in a Small Amount of Water*

<i>Vegetable</i>	Time to allow after water returns to boil Minutes	<i>Vegetable</i>	Time to allow after water returns to boil Minutes
Asparagus	5-10	Cauliflower	5-8
Beans, lima:		Chard	8-10
Baby type.....	6-10	Corn:	
Large type.....	15-20	Whole-kernel	3-5
Beans, snap, green, or wax:		On-the-cob	3-4
1-inch pieces.....	12-18	Kale	8-12
Julienne	5-10	Kohlrabi	8-10
Beans, soybeans, green.....	10-20	Mustard greens.....	8-15
Beet greens.....	6-12	Peas, green.....	5-10
Broccoli	5-8	Spinach	4-6
Brussels sprouts.....	4-9	Squash, summer.....	10-12
Carrots	5-10	Turnip greens.....	15-20
		Turnips	8-12

* Use one-half cup of lightly salted water for each pint of vegetable with these exceptions: Lima beans, 1 cup; corn-on-the-cob, water to cover.

Timetable for Cooking Frozen Vegetables In a Pressure Saucepan at 15 Pounds Pressure*

<i>Vegetable</i>	Time after pres- sure reaches 15 pounds Minutes	<i>Vegetable</i>	Time after pres- sure reaches 15 pounds Minutes
Asparagus	1/2	Brussel sprouts.....	1
Beans, lima.....	2	Cauliflower	1/2
Beans, snap, green, or wax (1-inch pieces).....	1/2	Corn:	
Beet greens.....	3/4	Whole-kernel	1/2
Broccoli	3/4	On-the-cob	2 1/2-3
		Peas, green.....	1/4
		Spinach	3/4

When using a pressure saucepan, thaw the vegetable enough so that it can be easily broken apart. Heat the water in pressure saucepan to boiling. Add the vegetable and fasten cover. Time the cooking carefully to prevent overcooking. As soon as cooking time is up bring the pressure down as quickly as possible. Add seasonings and table fat and serve immediately.

Partially thawed vegetables may successfully be baked. Put the vegetables in a greased casserole, add butter or other fats, and seasoning. Cover and bake until tender. Most thawed vegetables require about 45 minutes at 350° F.

Many find pan frying is a good way to prepare frozen vegetables. Use a heavy skillet. Place about 1 tablespoon melted fat in skillet. Add 1 pint of partially thawed vegetables. Cover and cook over moderate heat. Stir occasionally. Cook until just tender. Season to taste and serve immediately.

Frozen Fruits

Frozen fruits need no further preparation for the table. If the fruit has been well selected and prepared for freezing, the flavor is almost the same as that of fresh fruit.

Fruit should be thawed in the container in which it was frozen. Turn package several times during thawing to keep fruit coated with syrup and to prevent darkening. It takes 6 to 8 hours to thaw a pound package of fruit in a refrigerator, and 2 to 3 hours at room temperature. Even thawing retains the best quality, appearance, and flavor of fruit.

Most fruits are best when served while a few ice crystals are still present. Frozen fruit collapses rapidly after it has thawed and cannot be refrozen satisfactorily.

Frozen Meats

Meats may be cooked in the frozen state or thawed before being cooked. Allow an additional 20 to 30 minutes for each pound of meat if cooked before it is thawed.

The method of cooking frozen meat is the same as for fresh meat. A meat thermometer is the most accurate means of knowing when a roast is done. Roast all meat except pork at 300° F to 325° F. Overcooking should be avoided. Pork should be roasted at 350° F and always until well done.

* Use 1/3 cup water to each pint of vegetable, except lima beans, which need 1/2 cup water.

Ready Reference Chart—Preserving by Freezing

<i>Vegetable</i>	<i>Suggested Varieties</i>	<i>Selection</i>	<i>Preparation</i>	<i>Blanching</i>
Asparagus	Martha Washington	Select well-colored, tender stalks of moderate length, with tight, compact tipped spears. Avoid woody stalks	Handle quickly. Clean thoroughly. Discard tough ends by hand snapping. Cut into $\frac{3}{4}$ " lengths or use $4\frac{1}{2}$ " spear for whole stalk pack	2-3 minutes in live steam or $1\frac{1}{2}$ -2 minutes in boiling water. Cool rapidly and drain
Beans, Snap	Rival, Stringless Green Pod, Tender Green, Kentucky Wonder, Pencil Pod Black Wax, Top Crop, Woodruff's High Score	Use only immature pods with seeds less than $\frac{1}{2}$ " long and pods that snap easily when broken	Handle quick. Clean thoroughly. Snip ends. Snap in $\frac{3}{4}$ " length or leave whole. If used whole, sort for size	2-3 minutes in live steam; $1\frac{1}{2}$ minutes in boiling <i>soft</i> water. Cool rapidly and drain
Beans, Lima	Fordhook 242, Fordhook, King of the Garden or other thick seeded varieties	Select when beans are full size but seed still green in color. Avoid white seeds	Handle rapidly. Shell, wash and remove discolored split and white beans	2 minutes in live steam; $1\frac{1}{2}$ minutes in boiling <i>soft</i> water. Cool rapidly and drain
Beans, Soy	Bansei, Aoda, Giant, Green, Sousei	Select well developed pods which contain green beans	Handle quickly. Boil soybean pods 5 minutes. Chill thoroughly and shell. Discard blemished and over-ripe beans	No further blanching necessary
Broccoli	Italian Green Sprouting, other market gardening types	Select bright and uniform green, tender stalks with compact heads	Handle quickly. Trim off large leaves, wilted parts and woody stem ends. Wash thoroughly and separate into serving pieces. Large stalks may be cut lengthwise in uniform sizes about $\frac{1}{2}$ " to $\frac{3}{4}$ " in diameter	Steam small stalks 3 minutes; large stalks 5 minutes. In boiling water small stalks 3 minutes and large stalks $4\frac{1}{2}$ minutes, Cool quickly
Brussels Sprouts	Long Island Improved	Select firm, compact, bright green, medium sized sprouts	Handle quickly. Wash thoroughly. Sort according to size	Small sprouts in boiling water 3 minutes, medium 4 minutes, large 5 minutes
Cantaloupe (and Watermelon)		Mature fruits from healthy vines	Cut balls from best tasting portions of fruits—pack	Do not blanch
Cauliflower	Snowball Early Snowball	Select firm, compact heads with white, tender curd	Trim off leaves and divide the cauliflower head into pieces about 1" in diameter at the stem. Cut stalk about $1\frac{1}{2}$ " from curds and discard stalk end	4 minutes in steam; 3 minutes in boiling water. Cool in ice water 3 minutes and drain

<i>Vegetable</i>	<i>Suggested Varieties</i>	<i>Selection</i>	<i>Preparation</i>	<i>Blanching</i>
Sweet Corn	Golden Cross Bantam, Iowa Tendermost, Victory Golden; Tender Freezer or Frost Gold (for trial on cob)	Select ears with well filled kernels that are sweet, milky, and succulent	Husk, silk, wash, and trim ears. Blanch on cob and then either cut off cob or leave on cob	2-3 minutes in steam, 1½ minutes in water. Then cut from cob, cool rapidly and drain. 8-10 minutes in steam, or 6-8 minutes in water, for corn on cob. Cool quickly and drain
Peas	Thomas Laxton, Laxton's Progress, Alderman, and Freezonian	Select when peas are well filled but not tightly filled. Peas should be bright green in color, tender and sweet.	Shell peas and wash thoroughly. Discard immature and tough peas	2 minutes for tender immature peas and 3 minutes for mature peas in steam. 1½ minutes for immature and 2½ minutes in boiling water. Cool quickly and drain
Spinach and Other Greens	Spinach; Long Standing Bloomsdale, King of Denmark; Turnips: Dwarf Scotch Curled; Mustard: Tendergreen; Beet tops: Detroit Dark Red and Ohio Canner	Select fresh, tender leaves of deep color and free from woody stems	Wash thoroughly in cold running water. Discard discolored leaves and tough stems	3 minutes in boiling water. Cool quickly and drain
Root Crops	Carrots: Nantes, Red Cored Chantenay; Beets: Detroit Dark Red, Ohio Canner; Parsnips: Hollow Crown; Rutabaga: American Purple Top; Sweet Potatoes: Jersey, Nancy Hall or Puerto Rico	Select when vegetable is young and tender	Wash, trim, and prepare as for table use	Precook until tender crisp. cool quickly and drain
Squash and Pumpkin	Squash: Golden Delicious and Hubbard varieties; Pumpkin: pie varieties	Select only fully mature, rich colored pumpkin or squash	Wash, cut into ¾" pieces, remove seeds and fibers	Cook in steam or bake in oven until tender. Scoop pumpkin or squash from rind or put through a food press or strainer. Cool by putting pan of squash or pumpkin in ice water
Rhubarb	McDonald or other pink variety	Tender, crisp stalks only	Remove leaves, wash, cut inch pieces, pack in 40 to 50 percent sugar syrup or 1 lb. sugar to 4-5 lbs. fruit	A 10-second blanch diffuses color. Longer blanch softens stalks

Ready Reference Chart—(Continued)

<i>Fruit</i>	<i>Variety</i>	<i>How to Prepare</i>	<i>How to Pack</i>
Apples	Baldwin, Rhode Island Greening, Northern Spy, Jonathan, Staymen, Rome Beauty, Winesap, Golden Delicious, Grimes Golden (Frozen apple cider is an excellent product.) For sauce—Transparent, Wealthy, Cortland, McIntosh	Peel, core, slice, treat with ascorbic acid or SO ₂ , pack, calcium chloride (1%) solution can be added to the SO ₂ solution to firm the apples. Steam can be used (1-2 minutes to inactivate enzymes, but causes excessive wilting)	Cover with syrup or 1 part by weight of sugar to 3 or 4 parts by weight of fruit
Blackberries Black Raspberries Red Raspberries Purple Raspberries	Eldorado—use fully mature berries Logan, Morrison, Cumberland, Bristol Lathan, Taylor, Milton Marion, Sodus	Sort, wash, drain, pack	1 part by weight sugar to 4 parts by weight of berries or cover with syrup. Syrup better for raspberries
Blueberries	Pioneer, Rubel, Stanley, Adams, Rancocos, Cabot, Jersey, Concord	Sort, wash, drain, pack	Pack in 50 per cent syrup
Cherries (sour) (sweet)	Montmorency Schmidt, Windsor (red) Napoleon, Royal Anne (yellow)	Wash, drain, pit, pack	1 part by weight sugar to 3 or 4 parts by weight cherries
Peaches	Redhaven, Sunhigh, Halehaven, Elberta, J. H. Hale (yellow) Champion, Cumberland (white)	Sort, scaled 1-3 minutes in steam or boiling water, peel, pit, slice, pack	Pack in syrup containing ascorbic acid
Plums	Yakima, Italian Prune, Imperial Epineuse, Stanley Prune	Sort, wash, halve, and pit	Pack in heavy syrup containing ascorbic acid
Strawberries	Gem*, Temple, Sparkle (Red stele resistant), Premier, Red Crop, Catskill *Everbearing varieties	Cap and sort, wash, drain, slice, pack	Use 1 part by weight sugar to 3-4 parts weight of berries

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