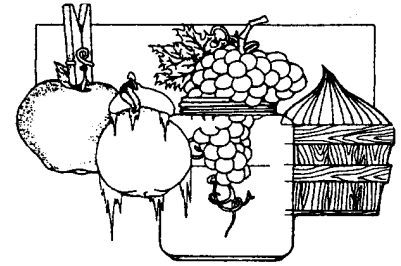


Quality for Keeps



Information for those who produce and preserve food

Savor the flavor of fresh garden peas

Peas in their dried form have been used since ancient times, but it was not until the sixteenth century that fresh forms of peas became popular.

Today, most peas are canned or frozen. Peas retain their color, flavor and nutrients better when frozen, rather than canned. If just thawed and not cooked, frozen peas can be substituted for fresh peas in salads and uncooked dishes.

English peas have large, bulging pods filled with round, sweet peas. The pods are not eaten. Baby green peas are sweet and tender, while early or June peas are larger and starchier. Shelled peas may be canned or frozen. Snow peas and sugar snap peas are meant to be eaten with the pod.

Selection. Look for firm, glossy pods with a slightly velvety feel, filled almost to bursting. Choose medium size pods rather than overlarge ones. The leaves, stem, and tip should be soft and green. Avoid puffy, dull, yellow or speckled pods. Avoid peas that rattle in the pod.

Snow peas should be shiny and flat with tiny peas barely visible through the pod. Small ones will be sweetest and most tender.

Sugar snaps should be bright, plump and firm. The pod should tightly encase small peas. Avoid limp or yellow sugar snaps.

Storage. Peas are best used the day they are picked. If peas must be stored, place in perforated plastic bags and store in the refrigerator for one to two days. **If kept at room temperature, peas will lose half their sugar content in six hours.** Store unwashed. Do not shell peas until just before cooking or eating them.

Wash English peas just before shelling. Wash sugar snaps and snow peas just before using them. Remove tips of snow peas and remove the string from sugar snaps before preparing.

A pound of peas in the pod will yield about one cup of shelled peas; a quarter pound of snow peas or sugar snaps will provide one serving.

Freezing. One bushel peas in pods (30 pounds) will yield about 12 to 15 pints. 2 to 2-1/2 pounds peas in pods will yield about 1 pint.

Green or English. Harvest peas when pods have filled. For tender peas, harvest when a bit immature; for "meaty" peas, harvest when mature. Wash and shell. Water

blanch 1-1/2 minutes. Cool promptly in cold water and drain, package, seal and freeze.

Snow peas. Also called sugar or Chinese peas. Pick when pods are full-sized, and peas are just barely visible in the pods. To freeze, water blanch in boiling water for 2 minutes. Cool, drain, package, seal and freeze.

Sugar snap peas. Select bright green, tender pods. Wash, remove stems and blossom ends and any strings, leave whole. Pick when the pods are round and fully mature, but before peas inside become starchy. Pods will be about 2 to 3 inches long. To freeze, water blanch in boiling water for 2 to 3 minutes. Cool, drain, package, seal and freeze.



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Blanch vegetables before freezing

For the best quality vegetables, blanch before freezing. Onions and green peppers are the only vegetables that should not be blanched before freezing.

What is blanching and why is it a must. Blanching is the scalding of vegetables in boiling water or steam. Blanching slows or stops the action of enzymes. Up until harvest time, enzymes cause vegetables to grow and mature. If vegetables are not blanched, or blanching is not long enough, the enzymes continue to be active during frozen storage; causing off-colors, off-flavors and toughening.

In addition, blanching cleanses the surface of dirt and spoilage organisms, brightens the color and helps retard loss of vitamins. It also wilts or softens vegetables and makes them easier to pack.

Blanching time is crucial and varies with the vegetable and size of the pieces to be frozen. Under-blanching speeds up the activity of enzymes and is worse than no

blanching. Over-blanching causes loss of flavor, color, vitamins and minerals. Follow recommended blanching times for specific vegetables (see page 3).

Boiling Water Blanching. The most convenient way to blanch vegetables is in a large kettle of boiling water. Allow one gallon of water per pound of vegetables. Bring the water to a boil and lower vegetables into the water, allowing the water to continue boiling. Cover and start counting the blanching time.

As soon as blanching is complete, drain the vegetables in a strainer, then plunge the vegetables into a container of ice water. Drain thoroughly and freeze.

Steam blanching. Heating in steam is the recommended method for grated summer squash and sprouts. For broccoli, pumpkin, sweet potatoes and winter squash, both steaming and boiling are satisfactory methods. Steam blanching takes about 1-1/2 times

longer than water blanching.

To steam, use a pan with a tight-fitting lid and a basket that holds the food at least three inches above the bottom of the pan. Use 1 to 2 inches of water in the pan, bring to a boil and leave on high throughout the blanching process.

Place vegetables in the basket, in a single layer, so that steam reaches all parts quickly. Cover the pan and start counting time as soon as the lid is on. Drain and cool.

Microwave blanching. Research has shown that microwave blanching is not always an effective method, as some enzymes may not be inactivated. This could result in low-quality frozen vegetables with off-colors, off-flavors and poor texture.

If blanching is done in a microwave oven, follow individual manufacturer's instructions. Microwave blanching does not save time or energy.

Tips for successful freezing

- Select varieties suitable for freezing. Check a seed catalog or ask the grower.
- Work under sanitary conditions.
- Select young, tender vegetables of good quality that are fresh from the garden. Freezing does not improve quality. Sort for size, ripeness and color.
- If the vegetables cannot be frozen immediately, refrigerate them.
- To prevent loss of quality and nutrients, work in small quantities, enough for only a few containers at a time.
- Wash and drain all vegetables before removing skins or shells. Wash small lots at a time through several changes of cold water. Lift the produce out of the water so the dirt washed off will not get back on the food. Do not let the vegetables soak.
- Remember that yields vary depending on the condition of the produce, as well as the preparation and packing methods used. See page 4 for the approximate yield of frozen vegetables from fresh.
- Prepare each vegetable as directed in this guide and refer to MU publication GH 1501 Freezing Basics for more detailed information on the freezing process and recommended storage times.

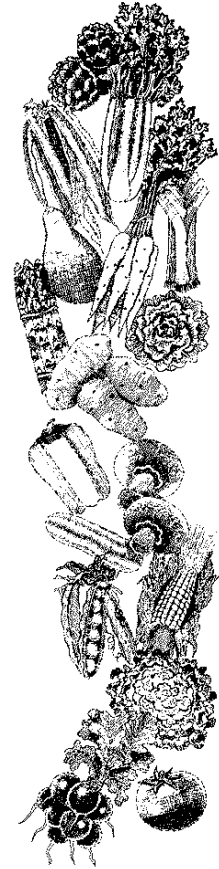
Source: University of Missouri Extension Guide, Freezing Basics GH1501 <http://muextension.missouri.edu/xplor/hesguide/foodnut/gh1501.htm>

How long do I blanch my vegetables

The University Extension Guide, Freezing Vegetables GH 1503, gives more specific directions, along with approximate yields of frozen vegetables from fresh quantity, a timetable for cooking frozen vegetables, and blanching instructions for vegetables from asparagus to zucchini (Summer Squash). Copies are available at your local extension center or you can view on-line at: <http://muextension.missouri.edu/xplor/hesguide/foodnut/gh1503.htm>

Blanching times for popular vegetables:

- Green Beans, 3 minutes
- Broccoli, chopped or stalks, 3 minutes
- Beets, small 25-30 minutes; medium 45-50 minutes
- Brussels Sprouts, small 3 minutes; medium 4 minutes; large 5 minutes
- Carrots, tiny, whole, 5 minutes; diced or strips 2 minutes
- Cauliflower 3 minutes
- Corn on the cob to freeze on the ear, small ears 7 minutes; medium ears 9 minutes; large ears 11 minutes
- Corn on the cob to cut for whole kernel corn, 4 minutes-cool and cut from ear.
- Corn on the cob to cut for cream style corn, 4 minutes-cool and cut from ear, scraping the cobs.
- Greens, like spinach, 2 minutes
- Shelled Peas, 1½ minutes
- Snow or Sugar Snap peas, 2-3 minutes
- Summer Squash, like zucchini, slices or chunks, 3 minutes; grated 1-2 minutes



IMPORTANT! Cooling.

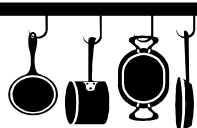
As soon as blanching is complete, cool vegetables quickly and thoroughly to stop the cooking process. To cool, plunge the basket of vegetables immediately into a large quantity of cold water. Change water frequently or use cold running water or iced water. If ice is used, about one pound of ice for each pound of vegetable is needed. Cool vegetables for the same amount of time as they are blanched. Drain vegetables thoroughly after cooling. Extra moisture can cause a loss of quality when vegetables are frozen.

Types of packs

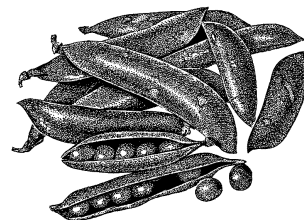
Dry pack. Dry packing is recommended for all vegetables because it results in a good quality product and preparation for freezing and serving is easier. After vegetables are blanched, cooled and drained, package quickly in rigid freezer containers or freezer bags. Remove as much air as possible from bags. Leave 1/2-inch headspace for rigid containers. Seal tightly, label and freeze.

Tray pack. A variation of dry packing is tray packing. After vegetables are blanched, cooled and drained, spread in a single layer on shallow trays and freeze. Leave in the freezer just long enough to freeze firm. Longer exposure to dry freezer air will result in moisture loss and quality changes. When frozen, promptly package leaving no headspace, seal tightly, label and return to the freezer. The advantage of tray packing is that vegetable pieces remain loose and can be poured from the container and the package reclosed.

THE RECIPE BOX



Canned Peas, Green or English (shelled)



Quarts: Approximately 31-1/2 pounds (in pods) is needed per canner load of 7 quarts

Pints: Approximately 20 pounds is needed per canner load of 9 pints
(Note: A bushel weighs 30 pounds and yields 5 to 10 quarts – an average of 4-1/2 pounds per quart)

Select filled pods containing young, tender, sweet seeds. Discard diseased pods. Shell and wash peas. Add 1 teaspoon of salt per quart jar, if desired.

Hot pack. Cover with boiling water. Bring to a boil in a saucepan, boil 2 minutes. Fill jars loosely with hot peas, add cooking liquid, leaving 1-inch headspace.

Raw pack. Fill jars with raw peas, add boiling water, leaving 1-inch headspace. Do not shake or press down peas. Adjust lids.

For both hot or raw packs:

In a dial gauge pressure canner, process pints and quarts for 40 minutes at 11 pounds of pressure.

In a weighted gauge canner, process pints and quarts for 40 minutes at 10 pounds of pressure, if at 0 to 1000 ft in altitude, if above 1000 ft in altitude, process for 40 minutes at 15 pounds of pressure.

Source: University of Missouri Extension, *Quality for Keeps, How to Can Fresh Vegetables* <http://muextension.missouri.edu/xplor/hesguide/foodnut/gh1454.htm> *Fruitful Canning* <http://muextension.missouri.edu/xplor/hesguide/foodnut/gh1455.htm>

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