



Vegetable Harvest and Storage

Good eating! That's the ultimate reward of growing vegetables **but** good eating depends on good **quality**. And food quality depends on timely harvest and proper storage. That's what this fact sheet is all about.

Tips are given on: When to harvest, How to harvest, Special harvest preparations, Special storage requirements, Length of storage, Kinds of storage's.

A few terms used in the Harvest-Storage Chart should be defined. Mention is made of types of freezes in relation to harvest. Consider the following: **Light Freeze** -- 28 – 31° F.; **Moderate Freeze** -- 24 – 28° F.; **Severe Freeze** -- below 24° F.

It should also be recognized that "ideal" refrigerated storage conditions for many vegetables are not attainable around the average home or farm, especially in summer months. So, simply use the best storage available and recognize its limitations. Cool, but nonfreezing temperatures retard vegetable deterioration.

The refrigerator is suggested as one storage place. If there are two refrigerators available, one can be kept at a cold temperature (32 – 40° F.) and the other at a cool temperature (45 – 50° F.). If there is only one refrigerator, with the control set for normal operation, the temperature in the center storage section is usually between 38° F. and 42° F. The temperature above or below the freezing unit is lower -- often between 30° F. and 35° F. Check the setting of the temperature control by placing a thermometer in different places in the refrigerator. Remember also that frequent opening of the refrigerator door raises the temperature inside.

Basements are suggested as possible storage places. Temperatures in most heated (air conditioned) basements will usually be 65° F. or greater in summer and 60° F. or less in winter. Separate sections can be partitioned to vary the temperature and humidity. One can use outdoor air, dirt floors, wetted sacks, etc., to vary the temperature-humidity needs. Unheated basements, if well ventilated, can provide good storage conditions for some vegetables.

If you have a large quantity of one or more vegetables and desire to build a special storage structure or use outdoor pits, obtain a copy of *Home Storage of Fruits and Vegetables*. Contact Cornell Cooperative Extension of Suffolk County for information on ordering a copy.

COLD, MOIST (32-40° F., 90-95% relative humidity)

ROOT CROPS

Beets. Begin harvest when beet is one inch in diameter. Beet tops at this time make excellent tender greens. Main harvest when beets are two to three inches. Harvest spring-planted beets before hot weather (July). Harvest fall beets before the first moderate freeze. For storage, wash roots, trim tops to one-half inch, place in perforated plastic bags, and store in refrigerator, cold moist cellar, or pit. Storage life -- two to four months.

Carrots. Harvest spring carrots before hot weather (July). Fall-planted carrots should be harvested before the first moderate freeze. For storage, wash roots, trim tops to one-half inch, place in perforated plastic bags and store in refrigerator, cold moist cellar, or pit. Storage life -- two to four months.

Horseradish. Harvest after several severe freezes. Store in the ground all winter -- mulch with straw or leaves and dig when needed. Horseradish can also be stored in cool cellars.

Parsnips. Harvest in late fall after several moderate freezes. Exposure to cold develops the sweet flavor. Same storage requirements as for carrots.

Potato (Irish). Harvest when the tops have yellowed and/or died. Do not leave in ground exposed to high soil temperatures from sun because this will accelerate over-ripening. Wash potatoes and remove those diseased or damaged. Cure for about a week in a shaded, well-ventilated place (open barn, shed, garage). Avoid exposing tubers to light. They

will turn green with even small amounts of light. Store in as cool a place as possible. Ideal storage conditions are hard to find at this time of year other than commercial cold storage (40° F.). Cool basements are probably the best storage available. Keep humidity high and provide good ventilation. Storage time -- two to four months.

Radish. Harvest when one-half to one inch in diameter. Wash roots, trim both tap root and tops, store in plastic bags in refrigerator for up to one month. Winter or black radishes are stored the same as carrots.

Salsify. Same harvest and storage as for parsnips.

Turnip. Turnips can be harvested from the time they are one inch in diameter. They are best as a fall crop and can withstand several light freezes. Store same as carrots.

COLE CROPS (CABBAGE GROUP)

Broccoli. Harvest terminal head while florets are still tight and of good green color. Smaller size heads will develop. Store in perforated plastic bags for up to one week in the refrigerator. Freeze any surplus.

Brussel sprouts. Harvest the sprouts (small heads) when they are firm -- begin from the bottom of the plant. Sprouts can stand several moderate freezes. Harvest all sprouts prior to the first severe freeze and store in the refrigerator in perforated bags for up to three weeks. Freeze any surplus.

Cabbage. Harvest when heads are solid. Store cabbage in refrigerator or cold cellar in plastic bags or in outdoor pit for up to two months.

Cauliflower. Tie outer leaves above the head when curds are about one to two inches in diameter (except purple types). Heads will be ready for harvest in about two weeks. Cauliflower may be stored in perforated plastic bags in the refrigerator for up to two weeks. Freeze any surplus.

Chinese cabbage. Grow only in the fall. Harvest heads after the first moderate frost in the fall and store in perforated plastic bags in the refrigerator, cold cellar, or outdoor pit. Will keep for up to two months.

Kohlrabi. Harvest when the swollen stems are two to three inches in diameter. Stems become woody if left too long before harvest or if grown under poor conditions. Cut off root and leaf stems and store in plastic bags as indicated for carrots. Storage life is two to four weeks.

GREENS

Chard (Swiss). A green that may be harvested continuously. Merely break off the outer leaves. Swiss chard is a beet developed for its top. A spring planting will provide greens from early summer to the first moderate freeze. May be stored up to two weeks in refrigerator.

Collards, Kale, Mustard, Spinach. Harvest the leaves and leaf stems of greens when they reach suitable size. Either harvest the whole plant or the outer, larger leaves. Wash and trim. Greens do not store well, but may be kept in plastic bags in the refrigerator for up to two weeks. Freeze any surplus.

SALADS

Endive (Escarole).

Harvest whole plant. Wash thoroughly to remove soil and sand. Gather leaves together and tie with rubber band. Store in plastic bags in refrigerator for up to three weeks.

Lettuce. Head, semi-head, and leaf lettuce can be stored for up to two weeks in perforated plastic bags in the refrigerator. Refrigeration is highly desirable, but do not freeze.

Parsley. Parsley will overwinter if planted in a protected place such as a cold frame. If planted in the open, it can be lifted carefully with a ball of soil just before the soil freezes, potted and taken into the house to a cool, sunny room, and harvested for several weeks. Parsley will keep in plastic bags in the refrigerator for one or more weeks.

LEGUMES

Lima beans. Harvest when pods have filled. For tender limas, harvest when a bit immature; for "meaty" limas, harvest when mature. Shelled limas can be stored in perforated plastic bags in the refrigerator for about a week. Surplus limas can be canned or frozen.

Garden peas. Harvest when pods have filled. For tender peas, harvest when a bit immature; for "meaty" peas, harvest when mature. Unshelled peas can be kept in a perforated plastic bag in the refrigerator for about a week. Freeze or can surplus.

Southern Peas (Crowder, Purple Hull, Etc.)

For fresh use, freezing or canning, harvest when seeds are large and plump, but moist. Either shelled or unshelled peas may be stored in the refrigerator for several days.

VINE CROPS

Cantaloupe (muskmelon). Harvest when the stem slips easily from the fruit. Lift the melon -- if ripe, it should separate easily. Store *ripe* melons in the refrigerator in a plastic bag for up to ten days. Try freezing a few boxes of melon balls.

Squash (summer). Harvest when fruit is young and tender. Skin should be easily penetrated with the thumbnail. Can be stored for up to a week in a perforated plastic bag in the refrigerator.

OTHER VEGETABLES

Asparagus. Harvest by snapping 10- to 12-inch spears off at ground level. Store in plastic bags in refrigerator for up to one week. Freeze or can any surplus.

Onions (green). Harvest green onions when they attain sufficient size. Wash and cut off roots; remove part of top leaving an inch or more of green. Place in plastic bags and store in refrigerator for up to two weeks.

Rhubarb. Harvest leaf stalks when one-half to one inch in diameter. *Do not use leaves.* Rhubarb can be stored in perforated plastic bags for up to three weeks in the refrigerator. Surplus rhubarb can be frozen.

Sweet corn. Harvest sweet corn when kernels are plump and tender. Silks will be dry and kernels filled. Check a few ears for maturity -- open top of ear, press a few kernels with thumbnail. If milky juice exudes, it is ready for harvest. Sweet corn has a very short storage life. Harvest at peak of quality, husk to conserve space, and store in plastic bags for no more than two days in the refrigerator. Freeze or can surplus corn.

COOL, MOIST (45-50° F., 80-90% relative humidity)

Cucumber. Harvest cucumbers before seeds become half-size. This will vary with variety. Most varieties will be one and a half to two and a half inches in diameter and five to eight inches long. Pickling cucumbers will be a bit more blocky and not as long as slicers. Store slicing cucumbers in the warmest part of the refrigerator. Place in a plastic bag. Storage life is about one week. Pickling cucumbers should be cooled quickly in ice water and can be kept up to two days in a plastic bag in the refrigerator.

Eggplant. Harvest when fruits are nearly full grown, but color is still bright. Eggplants are not adapted to long storage. Keep in warmer part of refrigerator for about a week.

Beans (green). Bean pods will be the most tender when the small seed inside is one-fourth normal size. From this stage the pods become more fibrous, as the beans mature. Store green beans up to one week in perforated plastic bags in the warmer part of the refrigerator. Can or freeze surplus. Cool cellar storage is also possible.

Okra. Harvest okra pods when they are two to three inches long. Over-mature pods are woody. Store in plastic bags in the warmer part of the refrigerator for about one week. Freeze surplus.

Peppers (sweet). Harvest when fruits are firm and full size. If red fruits are desired, leave on plant until red color develops. Sweet peppers can be stored for two to three weeks in the warmer part of the refrigerator in plastic bags. Cool cellar storage is also possible.

Tomato

Ripe tomatoes will keep for a week in the refrigerator at 45-50° F. Green, mature tomatoes, harvested before frost, should be kept at a temperature between 55° and 70° F. For faster ripening, raise temperature to 65-70° F. Mature green tomatoes should approach normal size and have a whitish green skin color. Mature green tomatoes can be kept from three to five weeks by wrapping each tomato in newspaper and inspecting for ripeness each week. A cellar where temperatures are about 55 to 58° F. is satisfactory for holding mature green tomatoes.

Watermelon. Harvest when underside of fruit turns from whitish to yellowish. The tendril at the juncture of the fruit stem and the vine usually dies when the fruit is mature. Thumping an immature melon gives a ringing metallic sound, while a

mature melon gives a dull thud. Watermelons will store at room temperature for about a week; at temperature of 45-50° F. for two to three weeks.

COOL, DRY (45-55° F., 50-60% relative humidity)

Onions (dry). Harvest onions when the tops have fallen over and the necks have shriveled. Remove tops, place in shallow boxes or mesh bags, and cure in open garage or barn for three to four weeks. Store in mesh bags in as cool a place as can be found in midsummer. During humid (muggy) weather, keep ventilated.

Peppers (hot). Pull plants late in the season and hang to dry in sun or a warm place. Store in dry, cool place (usually a basement).

WARM, DRY (55-60° F., 60-70% relative humidity)

Pumpkins and Squash (winter). Harvest pumpkins and winter squash when the skin is hard and the colors darken. Both should be harvested before frost. Remove the fruit from the vine with a portion of the stem attached. Store on shelves in single layer so air can circulate around them.

WARM, MOIST (55-60° F., 80-85% relative humidity)

Sweet potatoes. Harvest in fall before frosts and freezing temperature. Handle carefully in the digging process. Cure for one week at a temperature of 80-85° F. Ideal storage is at 55° F. and 85% relative humidity. (This might be accomplished in a basement with ventilated boxes covered with periodically moistened burlap sack.)

Resource: *Vegetable Harvest and Storage*, USDA Agriculture Fact Sheet 8-13-1, A.E. Gaus, H. DiCarlo and R. Zuroweste, Department of Horticulture, College of Agriculture, University of Missouri.

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