

## **Vegetable Harvest and Storage**

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Timely harvest and proper storage help to maintain the quality and freshness of garden vegetables. This publication gives information on how and when to harvest vegetables, special harvest preparations and storage requirements, and appropriate length and kinds of storage.

The following terms are used in this publication:

- Light freeze 28 to 32 degrees Fahrenheit
- Moderate freeze 24 to 28 degrees Fahrenheit
- Severe freeze Less than 24 degrees Fahrenheit

You should recognize that "ideal" storage conditions for many vegetables are not attainable around the average home or farm. It is important, therefore, to recognize the limitations of the best storage available.

Refrigerators can be used for storage. If two refrigerators are available, one can be kept at a cold temperature (32 to 40 degrees) and the other at a cool temperature (45 to 50 degrees). If there is only one refrigerator with the control set for normal operation, the temperature in the center storage section is usually between 38 and 42 degrees Fahrenheit. 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 also possible storage places. Temperatures in most heated (air-conditioned) basements will usually be 65 degrees Fahrenheit or warmer in summer and 60 degrees Fahrenheit or cooler in winter. Separate sections can be partitioned to vary the temperature and humidity. You can use outdoor air, dirt floors or wetted sacks to vary the temperature and humidity needs. Unheated basements, if well ventilated, can provide good storage conditions for some vegetables.

Different vegetables require different temperature and humidity levels for proper storage.

**Cold, moist storage 32 to 40 degrees Fahrenheit 90 to 95 percent relative humidity**

### **Root crops**

- Beets Begin harvest when beet is 1 inch in diameter or smaller for baby beets. Main harvest is when beets are 2 to 3 inches. Tender tops make excellent greens regardless of the size of the root ball. Harvest spring-planted beets before hot weather (July). Harvest fall beets before the first moderate freeze. For storage, wash roots, trim tops to 1/2 inch, place in perforated plastic bags and store in refrigerator, cold moist cellar or pit. Storage life is 2 to 4 months.

- Carrots Harvest spring carrots before hot weather (July). Baby carrots may be harvested when roots are 3 inches long. Fall-planted carrots should be harvested before the first moderate freeze. For storage, wash roots, trim tops to 1/2 inch, place in perforated plastic bags and store in refrigerator, cold moist cellar or pit. Storage life is 2 to 4 months. With a heavy layer of mulch, carrots may also be overwintered outdoors in the ground.
- Horseradish Harvest after several severe freezes. Store in the ground all winter; mulch with straw or leaves and dig when needed.
- Parsnips Harvest in late fall after several moderate freezes. Exposure to cold develops the sweet flavor. For storage requirements, see carrots.
- Potato, Irish Harvest in July when the tops have yellowed or died. Do not leave in ground exposed to high soil temperatures from sun. Wash potatoes and remove the diseased or damaged ones. Cure for about a week in a shaded, well-ventilated place (open barn, shed, garage). Avoid exposing tubers to light. Store in as cool a place as possible at this time of year. You are not likely to find ideal storage conditions (40 degrees Fahrenheit, 85 to 90 percent relative humidity) at this time of year other than commercial cold storage. Cool basements are probably the best storage available. Keep humidity high and provide good ventilation. Storage time is 2 to 4 months.
- Radish Harvest when 1/2 to 1 inch in diameter. Wash roots, trim both taproot and tops and store in plastic bags in a refrigerator for up to a month. Winter or black radishes are stored the same as carrots.
- Salsify See parsnips for harvest and storage.
- Turnip Turnips can be harvested from the time they are 1 inch in diameter. They are best as a fall crop and can withstand several light freezes. Store the same as carrots. Turnip greens may be harvested and used the same as beet greens.

### **Cole crops (cabbage group)**

- Broccoli Harvest terminal head while florets are still tight and of good green color. Smaller side heads will develop. Store in perforated plastic bags for up to one week in the refrigerator. Freeze any surplus. Best quality will be found in shoots that are harvested during cool weather.
- Brussels 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 3 weeks. Freeze any surplus.
- Cabbage Harvest when heads are solid. Remove loose outer leaves. Store cabbage in refrigerator, cold cellar or outdoor pit in plastic bags for up to 2 months.
  - Cauliflower Tie outer leaves above the head when curds are about 1 to 2 inches in diameter (except colored types). Heads will be ready for harvest in about 2 weeks. Cauliflower may be stored in perforated plastic bags in the refrigerator for up to 2 weeks. Freeze any surplus.
  - Chinese cabbage Grows best in the fall, although varieties that mature in less than 55 days can be planted in early spring. Harvest head after the first moderate frost in the fall and store in perforated plastic bags in the refrigerator, cold cellar or outdoor pit. Chinese cabbage will keep for up to 2 months. Harvest spring cabbage when heads solidify but before a seed stalk forms.
  - Kohlrabi For standard types, harvest when the swollen stems are 2 to 3 inches in diameter. Stems become woody if left too long before harvest or if grown under poor conditions. Giant, heirloom types may reach 1 foot in diameter and still retain high quality. Cut off root and leaf stems and store in plastic bags as indicated for carrots. Storage life is 2 to 4 weeks.

### **Greens**

- Chard (Swiss) This is a summer green that is harvested continuously. Merely break off the outer leaves. Swiss chard is a beet relative developed for its top. A spring planting will provide greens from early summer to the first moderate freeze. Store in plastic bags up to 2 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. Greens do not store well, but may be kept in plastic bags in the refrigerator for up to 2 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 3 weeks.
- Lettuce Head, semi-head and leaf lettuce can be stored for up to 2 weeks in perforated plastic bags in the refrigerator. Individual leaves may be harvested at any stage of development before the plants bolt (go to seed). For best quality, successive plantings at two-week intervals are suggested.

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

### **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. Oriental or snow pea types are harvested when pods are full-sized but before the peas inside begin to swell. Edible podded or snap peas are harvested when pods have filled out but before the peas inside become starchy.
- 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.

### **Other vegetables**

- Asparagus Harvest by snapping 6- to 12-inch spears off at ground level but before the top begins to fern out. Store in plastic bag in refrigerator for up to one week. Freeze or can any surplus.
- Onions, green Harvest green onions when they attain sufficient size. Cut off roots; remove top, leaving an inch of green. Place in plastic bag and store in refrigerator for up to 2 weeks.
- Rhubarb Harvest leaf stalks when 1/2 to 1 inch in diameter. Do not use leaves. Rhubarb can be stored in perforated plastic bags for up to 3 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 and press a few kernels with thumbnail. If milky juice exudes, it is ready for harvest. Harvest at peak of quality, husk to conserve space, and store in plastic bags for no more than two days in the refrigerator. The new super sweet varieties will store for a week or more. Freeze or can surplus corn. Baby corn may be harvested just as silks emerge, before the ear is 3 inches long.

**Cool, moist storage 45 to 50 degrees Fahrenheit 80 to 90 percent relative humidity**

**Vine crops**

- Cantaloupe (muskmelon) Harvest when the stem slips easily from the fruit. Lift the melon; if ripe it should separate easily from the vine. Store ripe melons in the refrigerator in a plastic bag for up to 10 days. Try a few boxes of frozen melon balls.
- Squash, summer Harvest when fruit is young and tender. Skin should be easily penetrated with the thumbnail. Store for up to a week in a perforated plastic bag in the refrigerator.
- Cucumber Harvest cucumbers before seeds become half-size. This will vary with variety. Most varieties will be 1-1/2 to 2-1/2 inches in diameter and 5 to 8 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 (45 to 50 degrees). Place in 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.
- 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 and at a temperature of 45 to 50 degrees Fahrenheit for 2 or 3 weeks.

**Other vegetables**

- Eggplant Harvest when fruits are nearly full-grown, but color is still bright. Eggplants are not adapted to long storage. Keep in warmest part of refrigerator (45 to 50 degrees) for about a week.
- Beans, green Bean pods will be most tender when the small seed inside is one-fourth normal size. The pods become more fibrous as the beans mature. Harvest before pods begin to swell because of the developing bean seeds inside. Store green beans up to one week in perforated plastic bags in the warmest part of the refrigerator. Can or freeze surplus.
- Okra Harvest okra pods when they are 2 to 3 inches long. Over-mature pods are woody. Store in plastic bags in the warmest part of the refrigerator for about one week. Freeze surplus.
- Peppers, sweet Harvest when fruits are firm and full size. If red, yellow or other colored fruits are desired, leave on plant until mature color develops. Mature peppers will be sweeter than green peppers.

Sweet peppers can be stored for 2 to 3 weeks in the warmest part of the refrigerator in plastic bags.

**Cool, dry storage 32 to 55 degrees Fahrenheit 50 to 60 percent 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 3 to 4 weeks. Store in mesh bags in as cool a place as can be found in midsummer (32 to 35 degrees). 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 a dry cool place (usually a basement).

**Warm, dry storage 55 to 60 degrees Fahrenheit 60 to 70 percent relative humidity**

- Pumpkins, winter squash 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 a single layer so air can circulate around them.

**Warm, moist storage 55 to 60 degrees Fahrenheit 80 to 85 percent relative humidity**

- Sweet potatoes Harvest in fall before frosts and freezing temperature. Handle carefully in the digging process. Cure for one week at temperature of 80 to 85 degrees Fahrenheit. Ideal storage is at 55 degrees Fahrenheit and 85 percent relative humidity. (This might be accomplished in a basement with ventilated boxes covered with periodically moistened burlap sacks.)
- Tomato Ripe tomatoes will keep for a week at 55 to 60 degrees Fahrenheit. Green, mature tomatoes, harvested before frost, should be kept at a temperature between 55 and 70 degrees Fahrenheit. For faster ripening, raise temperature to 65 to 70 degrees Fahrenheit. Mature green tomatoes should approach normal size and have a whitish green skin color. Keep mature green tomatoes from 3 to 5 weeks by wrapping each tomato in newspaper and inspecting for ripeness each week. Do not store tomatoes in the refrigerator.