

## HARVESTING & STORING VEGETABLES

Harvesting vegetables at the right stage of maturity results in high quality, nutritious produce that will store well if conditions are right.

## STORAGE CONDITIONS

Refrigeration is not necessary. Basements, cellars and outbuilding can be used for storage as long as they have good ventilation.

Store only healthy, fresh produce, free from disease, insects, and others damage. Use damaged produce immediately. You may want to plan ahead and select late ripening cultivars with late planting dates, for late harvests.

Be careful produce doesn't freeze during extremely cold weather. Temperature should be cool but not freeze.

## HUMIDITY CONTROL

Stored vegetables quickly shrivel and lose quality without proper moisture. Most storage areas must have the humidity raised to reach the ideal 90-95% relative humidity which most vegetables need. A simple humidity gauge is the best way to measure relative humidity. Use a humidifier to raise the humidity.

## STORAGE STRUCTURES

A properly regulated basement storage area is economical to use and holds a large quantity of vegetables.

Locate your long-term storage room in the northeast or northwest corner of the basement. Insulate inner walls and ceiling to prevent entrance of heat or chilling of the floor above the room; if possible. Insulate heating pipes or close the ducts running through the room.

An outside window may help keep the room cool and should have a screen on it. Provide a shade to keep the room cool and dark.

Equip the room with shelves so produce will be kept off the floor to increase air circulation.

Asparagus - Cut or break stems at the soil when shoots are 6-8 inches tall and before tips start to open. Discontinue harvest by early June in southern Iowa/Nebraska and June 15 in northern Iowa/Nebraska for best flavor and plant health. (Use these areas as a guide for your area). Eat or process asparagus with- in a few hours after harvest for highest guality.

**Beans(green or wax, snap)** - Harvest when pods are almost full-sized but before seeds begin to bulge. Pick often to keep plants bearing longer.

**Beans(broad, green shell & lima)** Pick when seeds and pods reach full size but before pods turn yellow. Store in pods.

**Beets** - Use as greens when the leaves are 4-6" tall; as tops and small beets when roots are  $1-1 \ ^{1/2"}$  in diameter; and as roots only when they are  $11^{1/2-3"}$  in diameter. Remove tops to 1/4-1/2"and store.

**Broccoli** - Cut when flower heads are blue-green and 6-7" across but before small yellow flower buds start to open. Tender side shoots (1-3" across) should develop after the central head is removed.

**Cabbage** - Cut when heads become large and solid. Avoid splitting of heads not to be harvested immediately by pulling the plant upward or twisting it enough to break a few roots. Remove loose cover leaves and store. Plants can be stored outdoors by pulling up the plants and covering them with a layer of straw and several inches of soil.

**Carrots** - Dig when roots are 3/4" or more across. Remove tops to 1/4 -1/2". If they are to be stored, plant for a late harvest and leave them in the ground until just before heavy frost.

**Cauliflower** - Harvest when heads are full sized (6-8" across) but still compact, smooth, and before head opens up. When heads are 2-3" across, shut out sunlight by tying tips of outer cover leaves close above the curd. Heads exposed to sunlight become cream colored, rough looking and coarse.

**Chard, Swiss** - Use outer, older leaves as they become 8-10" inches long but are still young and tender. New leaves growing from the center of the plant produce a continuous harvest.

**Cucumbers** - Pick when fruits are  $1^{1/2}$ -3" long for pickling and 3-4" long for dills. Slicing cucumbers should be 6-9" long and  $1^{1/2}$ -2" in diameter but still bright green and firm. Remove by pulling up and giving it a quick snap.

**Eggplant** - Harvest any time after fruits are 2" across until they are 4-6" in diameter but still firm and shiny. Light thumb pressure will leave a dent at the proper harvest stage. Old fruit is dull, seedy, and tough. Store with an inch of stem on fruit.

**Garlic** - Pull when tops become dry and begin to fall over or just before frost if not mature. Cure the bulbs in a warm, well ventilated place for 10 days. Then remove the tops about 1 inch above the bulb and trim roots close to bulb.

**Gourds** - Before fall frosts, pick when fruits are large and fully colored. Leave 1-2"of stem on the fruit and wash in a 10 percent chlorine bleach solution. Dry in a warm room for 3-4 months. After they become hard, shellac or varnish.

**Kohlrabi** - Will have mildest flavor when thickened stems are 2-3" in diameter. Store with leaves and roots removed. **Leek** - Pull when less than 1" in diameter for use in salads. Use large ones in stews and soups.

**Lettuce** - Leaf lettuce is crispiest when outer leaves are 4-6" long. Harvest largest plants and allow small ones in between to develop. Harvest head lettuce when heads are full size and moderately firm but before seed stalks form. Outer leaves may be removed from leaf or head lettuce when leaves are 4-6". New inner leaves will provide continuous harvest. Hot weather causes bitter flavor and seed stalk formation.

**Muskmelon or cantaloupe** - Muskmelon is most tasty when fully ripe. Fruit is nearly ripe when the base of the fruit stem starts to separate from the fruit. It is fully ripe when a crack appears completely around the base of the fruit stem allowing easy separation from the fruit. At the same time, the skin between the netting will turn from green to yellow and the fruit begins to give off a muskmelon aroma.

**Okra** - Cut when pods are 3" long but are still bright green (or purple on some cultivars). Remove all pods to keep plant producing.

**Onion, green** - Any standard variety of onion can be used as a green onion when the bulbs are small. Harvest when 6-8" tall.

Shallots are a multiplier type of onion that divide into clumps of small bulbs. Harvest shallots as green onions in summer or as dry onions in fall when the tops fall over.

**Onion, dry** - Onions for storing are usually started from seeds or plants because mature onions grown from sets do not keep well. Harvest when tops fall over and begin to dry. Pull with tops on and dry them in a protected place for 3-4 days, then cut tops 1 inch above the bulb and place in mesh bags for further curing. Cure for 2-3 weeks at room temperature until the neck tightens up and outer scales begin to rustle. Then store onions in a well-ventilated place.

**Parsnips** - Dig from late fall until early spring. Parsnips need frost to give them the sweet nut-like flavor. If the roots are to be left in the soil during winter, cover after early frost with a layer of straw and 3-5" of soil to prevent winter injury.

**Peas** - Peas are tender and flavorful if picked when pods are well filled but not hard and starchy. Pick often and don't miss any – overripe pods retard production. Store peas in shell. Harvest podded peas (snow and Chinese) when pods reach nearly full size (about 3" and while the seeds are still small. If seeds only are to be eaten, harvest when seeds are fully developed but pods are still fresh and bright green.

**Pepper** - Harvest when fruits are large, firm, crisp and dark green. In 2-3 weeks, ripe peppers will be fully colored if left on plant.

**Potatoes** - Dig potatoes for immediate use when tubers are more than 1<sup>1/4"</sup> in diameter. Plant early cultivars for immediate use and late ones for storage. Harvest after vines turned brown, tubers are full sized, and the skin is firm. If skin comes off easily, wait longer before harvesting. Cure at 45-60°F with high relative humidity for 2 weeks, then store at 40-45°F.

When stored below 40°F, potatoes develop a sugary, sweet taste. If this condition occurs during winter, store at room temperature for a week and they will return to normal. If storage temperatures are too warm, potatoes shrivel and sprout. Pumpkins - See squash, winter.

**Radishes** - Pull when roots are 1-1<sup>1/2"</sup> in diameter, remove tops, and store up to 15 days. Large winter radishes store 2-4 months.

**Rhubarb** - When stalks are 10-15" long, grasp the stalk below the leaf blade and pull upward and slightly to one side to harvest. Discard leaf portion – eating this material can cause illness. Harvest 8-10 weeks ending in mid-June.

**Spinach** - Harvest when large leaves are 6-8" long. Early spring plantings go to seed as days get longer. August 1<sup>st</sup> seedlings do not go to seed during the shorter days of fall.

**Squash, summer** - Harvest long fruited cultivars when 6-12" long and flat or scalloped types when 3-5" in diameter. The rind should be easy to puncture with a fingernail and seeds should be soft and edible.

**Squash, winter** - Harvest pumpkins and winter squash at full size when the rind is firm and glossy and the bottom of the fruit (portion touching the ground) is cream to orange. Place squash in a single layer, not touching each other, to prevent rot in storage. Pumpkins and acorn squash will keep 2-3 months. Most winter squash can be stored 3-6 months.

**Sweet corn** - Pick when kernels are fully rounded but still filled with milky juice. Sweet corn is seldom stored because the quality decreases rapidly after harvest – even with cold storage. Store excess supplies up to 10 days.

**Sweet potatoes** - Harvest late in fall before frost. Dig carefully to avoid cuts, bruises, broken roots. Sweet potatoes do not store well unless the growing season is long and roots are large. Use small, younger roots soon after harvest. When mature, a broken or cut surface dries on exposure to air, while an immature one remains moist and turns dark in color. If vines are damaged by frost, harvest immediately to prevent entrance of decay organisms from dead stems.

Sweet potatoes must be cured after harvest for good storage. Cure 1 week at 85°F and 85% relative humidity, then store at 55-60°F. Increase curing time if temps are lower.

**Tomatoes** - For fresh, ripe tomatoes, pick from the plant when the fruit has fully developed its color. Pick only ripe but firm tomatoes for juice or canning to ensure proper acidity, full flavor, and good color. Overripe tomatoes should be stored at 45-50°F, 80-85% humidity. Harvest green tomatoes before frost and keep at 55-70°F while allowing to ripen.

Green tomatoes can easily be ripened on the kitchen counter until ready to use. Ripen large quantities by wrapping individual fruits in newspaper and stacking in bushel baskets. Check ripening every few days. Light is not necessary for ripening of immature tomatoes.

**Turnips** - Dig when fruits are 2-2<sup>1/2"</sup> in diameter but before heavy frosts. Store with tops for 4-5 months.

**Watermelon** - Harvest when fruits are full sized, dull in appearance and the bottom part (portion touching the soil) turns from greenish white to cream. Leave 2 inches of stem on the watermelon for storage.



IMB# 907964