MN 2000 FSY-103

AGRICULTURAL EXTENSION SERVICE—UNIVERSITY OF MINNESOTA

Harvesting and Storing Garden Vegetables

FACT SHEET 103 C. GUSTAV HARD

Harvest your vegetables when they are at the peak of maturity. When the produce has reached its optimal size, when the flavor is fully developed, when the texture is just right, and when it keeps best and produces a quality processed productthat's when to harvest.

The following table will give you some tips on when to harvest:

sure to keep large fruit from forming; otherwise

fewer cukes will be formed. For pickles, harvest

when fruits have reached the desired size. Pick

with a short piece of stem on each fruit.

to Hai vest.		Onions	For fresh table use, when they are ¼ to
Vegetable	When to Harvest		diameter. For boiling, select when bul 1½ inches in diameter. For storage, w
Asparagus	Not until third year after planting when spears are 6 to 10 inches above ground while head is still tight. Harvest only 6 to 8 weeks to allow for sufficient top		over, shrivel at the neck of the bulb, and Allow to mature fully, but harvest be frost.
	growth. The "fern" which then develops should be left to grow for the rest of the summer.	Parsnips	Delay harvest until after a sharp frost. left safely in ground over winter and us
Snap beans	Before pods are full size and while seeds are about % developed, or 2 to 3 weeks after first bloom.		ing spring before growth starts. They an ous if left in ground over winter.
Lima beans	When the seeds are green and tender, just before they reach full size and plumpness, and when pods	Peas	When pods are firm and well-filled, bu seeds reach their fullest size.
D	first reach the stage when they open easily.	Peppers	When fruits are solid and have almost re For red peppers, allow fruits to become
Beets	When 1¼ to 2 inches in diameter.	_	
Broccoli	Before the individual flowers in the head begin to open their yellow flowers. The dark green head should be tight and flat-topped. Side heads will develop after central head is removed, but will be	Potatoes	When tubers are large enough. Tubers grow until vines die. Skin on unripe tul easily rubs off. Such tubers will not sto storage, potatoes should be mature and
	smaller at maturity.	Pumpkins and squash	Summer squash are harvested in early in when skin is soft and before seeds ripen
Carrots	When 1 to 1½ inches in diameter.	54555	and pumpkin should be well-matured or should be hard and not easily punctured
Cabbage	When heads are solid and before they split. Splitting can be prevented by cutting or breaking off roots on one side with a spade after a rain.		nail. Cut fruit off vine with a portion of Harvest before heavy frost.
Cauliflower	Before heads are ricey, discolored or blemished.	Rutabagas	After exposure to frost but before he
	Tie outer leaves together above the head when curds are 2 to 3 inches in diameter; heads will be ready about 12 days after tying.	Turnips	When 2 to 3 inches in diameter. Large coarse-textured and bitter.
Sweet corn	When kernels are fully filled out and in the milk stage as determined by the thumbnail test. Use before the kernels get doughy. Silks should be dry and brown, and tips of ears filled tight. Generally,	Tomatoes	When fruits are a uniform red, but befo soft. High quality fruit can be obtained at any time after pink color is evident a fruits to sit indoors for a few days.
	corn is ready at 19 or 20 days after silking, unless weather is cool.	Watermelon	When the underside of the fruit turns ye snapping the melon with the finger pro
Cucumbers	When fruits are slender and dark green before color becomes lighter. Harvest daily at season's		muffled sound instead of a metallic ring tendrils on fruit stem probably will be t
	peak. If large cucumbers are allowed to develop	In h	arvesting produce from some vegetab
	and ripen, production will be reduced. If you have more cukes than you need at a particular time, be	peas, beans, and cucumbers, take care not to dam	
		pour, souris, a	to dani

Eggplant When fruits are half grown, before color becomes

Kohlrabi When balls are 2 to 3 inches in diameter.

Muskmelons When stem easily slips from the fruit, leaving a

clean scar.

For fresh table use when they are 1/2 to 1 inch in A - ! - - ulbs are about when tops fall nd turn brown. efore heavy

Roots may be sed the follow-

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vellow or when roduces a dull,

g. Also, curly turning brown,

able plants like peas, beans, and cucumbers, take care not to damage plants. Injured plants may be killed and stop producing fruit. Never harvest vegetables when foliage is wet, as this practice may spread plant diseases.

How to Store

Many garden vegetables that are not canned or frozen may be stored. With proper storage, you can assure yourself a supply of fresh vegetables during the winter.

For successful storage, however, you must have well-matured, good-quality vegetables. Your storage room must have proper moisture and temperature conditions. Before storage you should sort vegetables into uniform maturity and quality. Frequent sorting and removal of decayed vegetables during the storage period also will help preserve your supply.

Harvested vegetables are not dead but still are living organisms, and they continue to grow or develop in storage. If growth is rapid, the food stored in the vegetable soon will be used, the quality will disappear, and the vegetable will break down and rot. Proper control of temperature and moisture will retard growth and prolong the storage life of the vegetable. Homes with central heating have basement areas that are too warm to store some vegetables.

Not all vegetables require the same conditions for successful storage. They can be separated into the following three groups: warm and dry for winter squash and pumpkin; cool and dry for onions, dry peas and beans; cool and moist for root crops, potatoes, cabbage, apples and leafy vegetables.

Warm, Dry Storage

Furnace rooms or upstairs storage rooms ordinarily are warm and dry. Humidity between 50 to 70 percent and temperatures between 40° and 50° F would be ideal.

Before placing pumpkins and squash in storage, be sure they are fully matured and cured. Keep them in a heated, well-ventilated room at 75° to 85° F for about two weeks after harvest to harden the shell. If weather is warm, this can be done by placing them in small piles in the field. Cover the piles if frost is predicted. Avoid bruising or scratching the skin.

Cool, Dry Storage

Unheated storage rooms such as attics or closets are suitable for storing dry beans and peas. Onions can be stored in similar places if the temperature does not fall below freezing.

Harvest peas and beans after the pods are mature and before rainy weather discolors the seed. Spread them out, dry, and shell. Place in bags, cans, or jars, and store at 25° to 32° F and 70 to 75 percent humidity.

Popcorn should be thoroughly mature when placed in storage. It is best stored at 25° to 32° F. It may be stored shelled in airtight containers or on the cob. If too dry to pop well, add a tablespoon of water to one quart of corn an hour or two before popping.

Bulb onions should be thoroughly mature and tops dried. Twist off the tops, place onions in shallow boxes or trays with ventilated bottoms, and cure outdoors or in an airy shed or room for three or four weeks. Place in storage at 32° to 36° F and 70 to 75 percent humidity. Onions may be stored in mesh bags hung from the ceiling of the vegetable storage room. Never store onions in sealed bags. They need air circulation.

Cool, Moist Storage

Most homes do not have cool, moist places for vegetable storage. Basements are usually too dry or warm unless there is a special cool, dark, ventilated room that is insulated from frost on the outside and the heat of the furnace on the inside. Such a room may be built in the basement by insulating walls and ceiling and ventilating through a cellar window.

A ventilating flue may be extended from half of the window down to the floor. The remaining half of the window can be replaced with a small wooden door. Outside openings should be covered with wire screen to keep out insects and rodents. In the fall, the storage room may be kept cool by opening the ventilators on cool nights and closing them on warm days. Once it is cool, the temperature can be held easily between 32° and 40° F during the winter months. Sprinkle the floor with water frequently to help keep the air moist. A slatted floor is useful in providing floor drainage and ventilation

Carrots and beets store very well in 10 gallon crocks or any container that will prevent excessive shriveling. Low storage temperatures between 32° and 40° F apparently are the key to successful carrot and beet storage. Containers should be covered with a burlap sack or piece of cloth to keep the air moist. If carrots are stored at higher temperatures, completely remove the carrot crown and store carrots in damp sand. Do not trim beets too closely. They will bleed unless at least one-half inch of the top is left.

Rutabagas, turnips, and parsnips may be waxed and stored at temperatures between 32° and 40° F. If not waxed, they should be placed in containers or buried in sand to prevent shriveling. Parsnips may be left in the garden all winter and used the following spring.

Potatoes should be free from dirt and disease and blighted tubers destroyed. Seed potatoes may be stored at 32° F but should not be allowed to freeze.

Waxing

Waxing vegetables such as turnips, rutabagas, and parsnips will prevent shriveling during storage. The temperature of the storage room, however, must be between 32° and 40° F after they are waxed.

Wash, dry, and trim the vegetables. Heat a large pail of water that is deep enough to cover the vegetable completely. Float a layer of paraffin, similar to that used in sealing jelly, on top of the water. The addition of 10 to 20 percent clean beeswax will toughen the layer and prevent wax from becoming brittle and cracking off.

If vegetables are very cold when waxed, they may take up too thick a layer of wax. Roots should be dry and at room temperature before waxing. Dip each root through the layer of wax and remove immediately. Do not leave in paraffin bath for more than three seconds. If the layer of wax is too thick, add salt to the water to raise the boiling point. This will give a thinner film.

Carrots should not be waxed.

Processing—Canning and Freezing

As suggested earlier, harvest at the peak of maturity. Process as soon as possible. The quality of harvested vegetables can deteriorate quickly unless the produce is refrigerated. Don't lose the opportunity for quality by mismanagement after harvest. See your County Extension Office for other publications on freezing and processing.

Editor: Dave McAllister Designer: Rose Mauch

12/80/15M

Some of the material for this publication was taken from Extension Folder 172 by Orrin C. Turnquist, retired extension horticulture specialist.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Norman A. Brown, Director of Agricultural Extension Service, University of Minnesota, St. Paul, Minnesota 55108. The University of Minnesota, including the Agricultural Extension Service, is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, creed, color, sex, national origin, or handicap.

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