

Cold storage of fruits and vegetables was used extensively by our ancestors to keep food after the harvest season. In modern times, the year round availability of fresh produce in the supermarket has reduced the use of home storage. However, even today there are benefits of home storage, which make it a good alternative to buying produce from the store. Most importantly, home gardeners often have excess fruits and vegetables that cannot be consumed immediately but would store well. Even those without gardens can buy food 'in season' when it is fresh and inexpensive and then store it at home until a later date. Both these options are cheaper than buying food in the winter when it is often quite expensive. In addition, stored food harvested at peak maturity from the garden usually has better flavor and a higher nutritional value.

When harvesting your own produce for storage, or buying it locally in season, there are certain guidelines to follow which assure maximum quality and minimum spoilage of your stored food.

1. Harvest fruits and vegetables at peak maturity or as near as possible.
2. Only use produce that is free from all visible evidence of disease.
3. Do not pick any fruit or vegetable that has severe insect damage.
4. Handle food carefully after harvest so that it is not cut or bruised.
5. Leave an inch or more of stem on most vegetables to reduce water loss and prevent infection.
6. Use late-maturing varieties better suited to storage.

In general, use only the best food for storage. Damaged food is more likely to suffer

mold and bacterial decay during storage and thus should be used fresh, processed, or discarded.

Once harvested, fruits and vegetables must be stored under proper conditions, the most important of which are temperature and humidity. Each fruit or vegetable has its own ideal set of conditions at which it will store most successfully for the maximum length of time. These conditions can be classified into four groups:

1. Vegetables which require cold & moist conditions
2. Vegetables which require cool & moist conditions
3. Vegetables which require cold & dry conditions
4. Vegetables which require warm & dry conditions

The tables on the following page list temperature and humidity requirements for most vegetables. In addition to proper temperature and humidity, all fruits and vegetables must be kept in a dark, aerated environment. While most vegetables like moist conditions, standing water must be avoided, as it will quickly lead to rot. Produce must not be allowed to freeze and should be protected from animal pests such as mice. It is important to remember that crops held in storage are still living plants, capable of respiration and affected by their environment. The goal of storage is to keep them in a dormant state.

*One other note, fruits and vegetables should always be stored separately. Fruits release ethylene, which speeds the ripening process of vegetables. Fruits are also very susceptible to picking up the taste of nearby vegetables

Table 1. Fruits & Vegetables that require cold, moist conditions

Vegetable	Temperature (°F)	Relative Humidity (%)	Length of Storage
Asparagus	32-36	95	2-3 weeks
Apples	32	90	2-6 months
Beets	32	95	3-5 months
Broccoli	32	95	10-14 days
Brussels Sprouts	32	95	3-5 weeks
Cabbage, Early	32	95	3-6 weeks
Cabbage, Late	32	95	3-4 months
Cabbage, Chinese	32	95	1-2 months
Carrots, mature	32	95	4-5 months
Carrots, immature	32	95	4-6 weeks
Cauliflower	32	95	2-4 weeks
Celeriac	32	95	3-4 months
Celery	32	95	2-3 months
Collards	32	95	10-14 days
Corn, sweet	32	95	4-8 days
Endive, Escarole	32	95	2-3 weeks
Grapes	32	90	4-6 weeks
Kale	32	95	10-14 days
Leeks, green	32	95	1-3 months
Lettuce	32	95	2-3 weeks
Parsley	32	95	1-2 months
Parsnips	32	95	2-6 months
Pears	32	95	2-7 months
Peas, green	32	95	1-3 weeks
Potatoes, early	50	90	1-3 weeks
Potatoes, late	39	90	4-9 months
Radishes, spring	32	95	3-4 weeks
Radishes, winter	32	95	2-4 months
Rhubarb	32	95	2-4 weeks
Rutabagas	32	95	2-4 months
Spinach	32	95	10-14 days

Table 2. Vegetables that require cool, moist conditions

Vegetable	Temperature (°F)	Relative Humidity (%)	Length of Storage
Beans, snap	40-50	95	7-10 days
Cucumbers	45-50	95	10-14 days
Eggplant	45-50	90	1 week
Cantaloupe	40	90	15 days
Watermelon	40-50	80-85	2-3 weeks
Peppers, sweet	45-50	95	2-3 weeks
Potatoes, early	50	90	1-3 weeks
Potatoes, late	40	90	4-9 months
Tomatoes, green	50-70	90	1-3 weeks
Tomatoes, ripe	45-50	90	4-7 days

Table 3. Vegetables that require cool dry conditions.

Vegetable	Temperature (°F)	Relative Humidity (%)	Length of Storage
Garlic	32	65-70	6-7 months
Onions	32	65-70	6-7 months

Table 4. Vegetables that require warm dry conditions.

Vegetable	Temperature (°F)	Relative Humidity (%)	Length of Storage
Peppers, hot	50	60-65	6 months
Pumpkins	50-55	70-75	2-3 months
Squash, winter	50-55	50-60	2-6 months
Sweet Potato	55-60	80-85	4-6 months