Storing Garden Vegetables

The planning, sweat, and hard work of gardening can result in an abundance of fresh fruits and vegetables this time of year. Perhaps one of the greatest rewards is being able to take your home grown tomatoes from the garden and placing them on the table for a meal in just a few minutes. Another advantage of having a home garden is being able to pick and enjoy your produce when it has its optimal flavor. However, you often have an abundance of fruits and vegetables all coming ripe at the same time. Harvesting and storing the "fruits" of your labor properly can help you enjoy them for longer. Ensuring a longer shelf life for your fruits and vegetables begins in the garden at harvest time.

Harvesting vegetables requires careful handling. Be careful not to bruise, nick, or break the produce as you remove them from the plant. The less you handle the produce, the longer they will last in storage. Sort through the vegetables and select those of high quality. If you place overripe or rotting vegetables in storage for very long, you can spread diseases to the other stored vegetables. Vegetables vary in their optimal storage conditions. In their publication titled "Harvesting and Storing Home Garden Vegetables", the University of Minnesota Extension Service identifies three different storage conditions that would be best for various produce:

- 1) Cool and dry (50 60°F and 60% relative humidity)
- 2) Cool and dry (32 40°F and 65% relative humidity)
- 3) Cold and moist (32-40°F an 95% relative humidity)

Even though 32°F is the optimal temperature for "cold" storage, it isn't easy to maintain in most homes. For this reason, you will experience shortened shelf-lives for your vegetables – in some cases, as much as 25% for every 10°F increase in storage temperature. Vegetables such as cucumbers, peppers, and tomatoes require cool and moist storage.

Where can you store vegetables in your home in a way that promotes longer shelf life? In the pioneer days, they used root cellars. This was a critical storage space on the farms of those times. They were used to keep carrots, turnips, beets, parsnips, potatoes and other root vegetables long into the winter months. Our snowy winter months in Kansas helped ensure that the vegetables remained cold and moist. Today, some basements can serve in a similar capacity, depending on the construction and design of the space. If storing vegetables in the basement, make sure you have good ventilation. The Old Farmer's Almanac recommends that you store vegetables along the foundation walls on the northeast corner of the basement. You can build an interior wall, ceiling and door around the storage area to keep out the heat from the house. Again, make sure you include a ventilation system that brings in cool, fresh air to the space and stale air to be exhausted out. To ensure good air circulation around your vegetables, make sure your shelving is spaced 1 – 3 inches away from the walls and floor. Mount a thermometer and hygrometer (to measure the humidity) inside the storage area and check regularly, if not daily.

There are resources available that explain how to build a modern-day root cellar or how to create a space in the basement (usually as the house is being built!) Keeping a close watch on the temperature, humidity, and appearance of the vegetables is key to making this storage approach a success!

Home refrigerators can serve as another option for storing fruits and vegetables after being picked from your home garden. They are generally provide a cool and dry storage environment (40°F and 50-60% relative humidity.) This works well for long-term storage of onions, but most other vegetables will not store well in a refrigerator long-term. If this is the method you choose, you can reduce the loss of shelf-storage time by placing vegetables in perforated plastic bags. When you put them in the refrigerator in plastic bags that have no holes for ventilation, condensation occurs and that leads to mold or bacteria growth.

Here are some common Kansas garden vegetables and their recommended storage guidelines:

Vegetable/Fruit	Storage	Expected Shelf Life
Apples	Cold and moist	1-6 months
Beets	Cold and moist	3-5 months with tops trimmed to ½"
Cucumbers	Cool and moist	1 week – do not store with tomatoes or apples
Melons • Cantaloupe, Honeydew, Watermelon	Cold and moist	1 week in perforated plastic bag
Onions – dry	Cold and dry	Cure at room temperature for 2-4 weeks to dry tops, stores 3-4 months
Pears	Cold and moist	Store at room temperature until fully ripe, then refrigerate in perforated plastic bag; stores 1-3 months
Peppers, sweet	Cool and moist	3 days in perforated plastic bag
Potatoes – Irish	Cold and moist	1 – 6 months, keep away from light, cure before storing
Potatoes – Sweet	Cool and dry	Cure 1 week, then store in warmer area (50°F or above) for up to 4 months
Squash (Winter) • Acorn, Butternut, Pumpkin	Cool and dry	2-6 months depending on variety
Sweet Corn		
Tomatoes		

Keeping the freshness of your garden produce for as long as possible into the fall will help you enjoy the flavors of the gardening season for months. A big thank you to Chuck Otte for his expertise with local vegetables to include in this article. For more information on this topic, stop by the Geary County K-State Research and Extension office to request bulletin #MF661, Harvesting and Storage of Fruits and Vegetables, or call us at 238-4161. Until next time, keep living resourcefully!