

# Vegetable Storage Tips

Proper Storage Protects Harvested Vegetables

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September is National Fruits & Veggies month! In past articles, we've shared quite a bit of information about the benefits of eating vegetables. So, this time, let's direct our attention to storage. We all have to store vegetables to some degree some of the time. It's rare that people shop for fresh produce on a daily basis. And if you live in a cold climate like Minnesota, you don't just run out to the backyard to grab salad fixings at lunch time especially during the winter.

Once vegetables have been harvested, they are much more susceptible to oxidative damage. Because they are no longer alive, they can't replenish their natural defenses. Therefore, proper storage is necessary to take the place of the plants' natural protection methods. Vegetables will deteriorate much more quickly if not stored properly.

Vegetables have a reserve of protective nutrients available for a period after harvest. But since breakdown of the vegetable begins immediately, the reserve nutrients begin to get used up right away. The rate at which a vegetable uses up the reserve nutrients is called the respiration rate. Different vegetables have different respiration rates.

## Understanding Respiration Rates

The faster a vegetable respire, the more quickly and easily it will spoil after harvest. Without even understanding respiration rates, you probably get the basic concept: a potato lasts much longer than spinach leaves. Rates are measured in terms of how much carbon dioxide is given off in mg per kg every hour for vegetables stored at room temperature. See the chart for a few examples:

Vegetable	MG/KG/HR
Onions	8 mg/kg/hr
Potatoes	17 mg/kg/hr
Carrots	25 mg/kg/hr
Cabbage	42 mg/kg/hr
Lettuce	101 mg/kg/hr
Green Beans	130 mg/kg/hr

Reducing respiration rate is the best way to prolong vegetable freshness and nutrient retention.

## Refrigeration

Refrigeration is one of the most effective methods for keeping vegetables fresh. Generally, vegetable shelf life is doubled when stored in the fridge. Cooling vegetables can help retain vulnerable nutrients such as vitamin C. For example, cabbage can lose up to 30% of its vitamin C content in just two days when stored at room temperature.

How much respiration rate is reduced by refrigeration is dependent upon the vegetable, how it is stored in the fridge (storage container, wrapped in plastic, or open), and where it is kept in the fridge (different areas in the refrigerator have different temperatures).

## Containers

Some plastic vegetable storage bags have tiny air holes which help reduce surface moisture. This minimizes spoilage by providing a small amount of air flow. On the other hand, tightly lidded glass containers help reduce exposure to air. This works as long as there is not excess moisture. You could consider purchasing produce specialty bags that will extend the shelf life of your perishables even longer.

## Cool and Dark

Some vegetables are best left at room temperature such as: tomatoes, potatoes, garlic, onion, winter squash, avocados, and eggplant. Refrigeration of these vegetables will have an adverse effect on their taste and quality. Tomatoes will lose their flavor, avocados will rot, potato starch will turn to sugar, and garlic will get mushy. These items can (and probably should) be refrigerated if they have been cut. Avocados can be refrigerated once they have ripened.

## Other Tips

Do not wash vegetables prior to storage. Water encourages accelerated spoilage. Handle your vegetables with care. Produce that gets dropped or smashed will cause bruising making it vulnerable to rotting.

## The Right Vegetables for You

A to Zinc Nutrition specializes in reducing inflammation with foods and nutrients unique to individuals. You might be eating a diet rich in vegetables that have all been stored properly, but you are still not able to optimize your health. That's where we come in!

To learn more about optimizing your health, schedule a free Discovery Call:  
<https://atozincnutrition.com/schedule/>