

Selecting and Storing Fruits and Vegetables

SELECTING THE BEST

With satiny yellow skin and a rosy blush, it looks like the perfect peach. But how will it taste once you get it home? Choosing fresh and flavorful produce can sometimes be your greatest challenge in the supermarket. Here are some tips to find great-tasting fruits and vegetables and increase your enjoyment of these healthful foods.

FIND IT FRESH

With modern farming, processing and delivery, many stores are able to put produce out for sale within a day or two after it is picked. Ask your store's produce manager for delivery days so you can get to your favorite fruits and veggies before quality declines.

SELECT WISELY

Vegetables that are characteristic color, shape and size generally have the best taste and texture. However, good produce doesn't have to be picture perfect. Some of the best products don't look very good. Most bananas, for example, have a fuller flavor if they are speckled.

USE YOUR SENSES

Contrary to some consumer practices, thumping or shaking a melon does not indicate ripeness. Instead, authorities recommend feeling a product. In general, produce that's too soft is too ripe; if it's too hard, it's not ripe enough. Try the sniff test, too. With certain fruits, like peaches and melons, a strong scent means they're ripening nicely.

GET THE GRADE

The United States Department of Agriculture (USDA) has established grade standards for most fresh fruits and vegetables. The grades are most often seen on pre-packaged apples, potatoes and

onions. "U.S. Fancy" is the top grade, while "U.S. No. 1" is the most common designation. "U.S. No. 2" and "U.S. No. 3" mean lower quality.

LOOK FOR LOCAL PRODUCE

Fruits and vegetables grown by local farmers may be fresher and tastier than those shipped long distances from larger farms. Once again, ask your grocery store's produce manager if any is in stock.

GO TO MARKET

Many communities sponsor weekly farmers' markets to provide a central, in-town site for small farms to sell their produce directly to consumers. Contact your local Extension office for information about local markets.

TAKE A STAND

Take a weekend drive into the country to look for roadside stands where farm families sell their produce, usually picked just hours before you buy it. Or visit a farm that allows you to pick your own strawberries, blueberries, peaches and apples. Your local county Extension agent can direct you to such places.

SHOP SEASONALLY

Probably one of the most important tips for finding great-tasting produce is to buy in season, when possible. Here's a guide to when certain fruits and vegetables are at their peak.

Summer: apricots, blueberries, cherries, eggplant, fresh herbs, green beans, hot peppers, melon, okra, peaches, plums, sweet corn, sweet peppers, tomatoes, zucchini.

Fall: apples, broccoli, brussels sprouts, cauliflower, collards, grapes, kale, pears, persimmons, pumpkins, winter squash, yams.

Winter: beets, cabbage, carrots, citrus fruits, daikon radishes, onions, rutabagas, turnips, winter squash.

Spring: asparagus, blackberries, green onions, leeks, lettuces, new potatoes, peas, red radishes, rhubarb, spinach, strawberries, watercress.

WAX COATINGS

Why are wax coatings used on some fruits and vegetables? Are they safe? Many fruits and vegetables make their own natural waxy coating to help retain moisture because most produce is 80 to 95 percent water. After harvest, but before the produce is packed and sent to the supermarket, it is repeatedly washed to clean off dirt and soil. Such extensive washing also removes the natural wax. Therefore, waxes are applied to some produce items at the packing shed to replace the natural ones that are lost. Waxes are applied in order to:

- help retain moisture in fruits and vegetables during shipping and marketing;
- help inhibit mold growth;
- protect fruits and vegetables from bruising;
- prevent other physical damage and disease;
- enhance appearance.

By protecting against moisture loss and contamination, wax coatings help fresh fruits and vegetables maintain wholesomeness and freshness. Waxing does not improve the quality of any inferior fruit or vegetables; rather, waxing — along with proper handling — contributes to maintaining a healthful product.

Waxes by themselves do not control decay; rather, they may be combined with some chemicals to prevent the growth of mold. The Food and Drug Administration and the Environmental Protection Agency strictly regulate the safety and use of these substances.

Waxes are also used on candies, pastries and gum and come from natural sources. Wax sources generally are plants, food-grade petroleum products or insects (similar to honey from bees).

Some waxes can be made from dairy or animal sources, but we are not aware of any such coatings being used on fruits and vegetables in this country. This is particularly important for people following

Kosher or vegetarian diets and who don't want any animal-based wax on their produce. Any commodities that do have this type of coating must be labeled "Coated with animal-based wax."

Waxes are used only in tiny amounts. In fact, each piece of waxed fruit only has a drop or two of wax. Waxes may be mixed with water or other wetting agents to ensure they are applied thinly and evenly.

The government regulates wax coatings to ensure their safety. Coatings used on fruits and vegetables must meet the food additive regulations of the U.S. Food and Drug Administration. Extensive research by governmental and scientific authorities has shown that approved waxes are safe to eat. Waxes are indigestible, which means they go through the body without breaking down or being absorbed.

Produce shippers and supermarkets are required by federal law to label produce items that have been waxed so you will know whether the fruits and vegetables you buy are coated. Consumers will see signs in produce departments that say "Coated with food-grade vegetable-, petroleum-, beeswax-, and/or shellac-based wax or resin, to maintain freshness." None of these coatings are animal-based, and they all come from natural sources. Any consumers who have questions about wax coatings should talk to their grocers.

Waxes may turn white on the surface of fruits or vegetables if they have been subjected to excessive heat and/or moisture. This whitening is safe and is similar to that of a candy bar that has been in the freezer.

Consumers do have choices. Waxes generally cannot be removed by regular washing. If consumers prefer not to consume waxes — even though the waxes are safe — they can buy unwaxed commodities or can peel the fruit or vegetable, thereby removing any coating.

Commodities that may have coatings applied include apples, avocados, bell peppers, cantaloupes, cucumbers, eggplants, grapefruits, lemons, limes, melons, oranges, parsnips, passion fruit, peaches, pineapples, pumpkins, rutabagas, squash, sweet potatoes, tomatoes, turnips and yucca. However, they are not always waxed.

STORAGE TIMES FOR FRUITS AND VEGETABLES

<u>Food</u>	<u>Refrigerator</u>	<u>Freezer</u>	<u>Food</u>	<u>Refrigerator</u>	<u>Freezer</u>
FRUITS:			Broccoli	3-5 days	8-12 months
Apples	1 month	8-12 months	Brussels Sprouts	3-5 days	8-12 months
Apricots	3-5 days	8-12 months	Cabbage	1-2 weeks	8-12 months
Avocados	3-5 days	8-12 months	Carrots	2 weeks	8-12 months
Bananas	*	8-12 months	Cauliflower	1 week	8-12 months
Berries	2-3 days	8-12 months	Celery	1 week	8-12 months
Cherries	2-3 days	8-12 months	Chilies	1 week	8-12 months
Grapes	3-5 days	8-12 months	Cilantro	2-3 days	*
Grapefruit	2 weeks	4-6 months	Corn	use immediately for best flavor	8-12 months
Guavas	1-2 days	8-12 months	Green Beans	1 week	8-12 months
Kiwis (Chinese Gooseberry)	3-5 days	4-6 months	Greens (spinach, collards, swiss chard, kale, mustard, etc.)	3-5 days	8-12 months
Lemons/limes	2 weeks	4-6 months	Jicama	2-3 weeks	8-12 months
Mangoes	*	8-12 months	Kohlrabi (leaves)	2-3 days	8-12 months
Melons	1 week	8-12 months	Kohlrabi (stem)	1 week	8-12 months
Nectarines	3-5 days	8-12 months	Lettuce	1 week	*
Oranges	2 weeks	4-6 months	Lima beans	3-5 days	8-12 months
Papayas	1-2 days	8-12 months	Mushrooms	1-2 days	8-12 months
Peaches	3-5 days	8-12 months	Onions, green	3-5 days	*
Pears	3-5 days	8-12 months	Okra	1-2 days	8-12 months
Pineapples	2-3 days	4-6 months	Parsley	2-3 days	*
Plantains	*	8-12 months	Peas	3-5 days	8-12 months
Plums	3-5 days	8-12 months	Peppers	1 week	8-12 months
Rhubarb	3-5 days	8-12 months	Radishes	2 weeks	*
FRUIT JUICES:			Squash, hard	*	8-12 months
Concentrate	*	2 years	Squash, summer	3-5 days	8-12 months
Fresh or Reconstituted	5-7 days	8-12 months	Tomatillos	1 week	8-12 months
VEGETABLES:			Tomatoes	1 week	8-12 months
Artichokes	1 week	*	Yuca (Cassava)	1-2 days	8-12 months
Asparagus	2-3 days	8-12 months	Zucchini	3-5 days	8-12 months
Beets	2 weeks	8-12 months			
Bok Choy	2-3 days	8-12 months			

* Storage here not recommended due to safety or quality issues.

SOURCES:

1. National Food Safety Database. *Wax Coatings on Fruits and Vegetables* [WWW document]. URL <http://www.foodsafety.org/sf/sf003.htm>
2. American Institute for Cancer Research. Newsletter 56 *Selecting the Best*. [WWW document]. URL <http://www.aicr.org/156tasty.htm> (Summer 1997).
3. Minch, Daryl L. *Home Storage of Foods, Part I: Refrigerator and Freezer*. Rutgers Cooperative Extension Service.

This information has been reviewed and adapted for use in South Carolina by E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

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