

What's in Season from the Garden State

Seasonal Highlights from Cooperative Extension, a unit of Rutgers New Jersey Agricultural Experiment Station

November 23, 2010



Gleaning is the collection of leftover crops from farmers' fields after they have been mechanically harvested or on fields where it is not economically profitable to harvest. Gleaning is often practiced by groups which distribute the gleaned produce to food banks.

Above: a Fall, 2010 gleaning of peppers at Giamarese Farms in East Brunswick, NJ was sponsored by the Rutgers Office of Community Engagement and hosted Rutgers undergraduate sustainable agriculture students.

RUTGERS

New Jersey Agricultural
Experiment Station

Perfection of Produce: The Good, the Bad and the Ugly

What's behind all that beautiful produce at the grocery store? Large, unblemished perfect fruits and vegetables in uniform sizes and shapes. As American consumers we demand the best and we've come to expect nothing less.

The perfection of produce has been achieved not only by the demands of consumers, but by produce standards that are in place to assure that fruits and vegetables meet acceptable quality grades. Some of these standards are federal standards developed by the produce industry and implemented by the United States Department of Agriculture (USDA), state marketing orders and agreements, and others are simply imposed by large retailers or trade organizations. This practice has provided some benefits along with some unintended consequences.

What are the federal standards and why are they in place? Jack Rabin, Associate Director of Farm Programs at Rutgers NJAES explains USDA Quality Grade Standards that apply to wholesale produce sales, "Once telegraph, then telephone, then fax, and now e-mail were deployed, buyers and sellers needed an unambiguous way to communicate about the qualities of perishable fresh fruits and vegetables, without ever meeting each other. They depend on straightforward vocabulary so that they can agree on an unbiased price for the transaction. The USDA Standards are a beginning basis for business communication trust."

The standards distinguish between different grades of produce having differing levels of "defects" – blemishes and non-uniform shape, size or coloration.

Jerry Frecon, Agricultural Agent for Rutgers NJAES Cooperative Extension explains how wholesale produce sales transactions standards are often imposed not by the USDA, but by the buyer and retailer. "The very large retailers may have their own grade standards that are more stringent than USDA standards. In turn larger growers and shippers may have their own standards helping them be more competitive in making a sale to the large retailer. These growers will not use USDA standards because they feel their label defines the standard for the product.

Other grower/shippers will use USDA grades and make the sale contingent on both parties agreeing on these standards. The grower may get a shipping point inspection as evidence that when shipped, the product meets the US standards. In the event the buyer rejects or adjusts the price claiming the shipment is not up to grade, the grower has a written document stating his produce has met USDA standards."

In addition to the standards protecting or placing demands on the buyers and sellers in transactions, standards also affect how fruit and vegetable breeders develop crop varieties, how farmers grow, and how consumers buy.

With peaches as an example, Frecon reviews how the market for peaches works. "Standards require uniform grading but allow retail produce buyers to select batches of peaches in any size. Larger size peaches - 2 ½ or 2 ¾ inches in diameter are preferred to maximize the markup and profitability since shelf space for peaches is limited due to competition from an ever increasing variety of produce items. Larger fruit may also be more uniformly mature or ripe while smaller fruit may be the result of harvesting before the fruit could grow larger and be more mature.

Continued on page 2

**Look for these Jersey Fresh items
for your Thanksgiving meal:**

Apples	Sweet Potatoes
Cider	Turkey
Cranberries	White Potatoes
Greens	Winter Squashes
Pumpkins	Wines

The Tale of the Ugly Tomato

Procacci Bros. produce of Philadelphia grows tomatoes on the east coast, including acreage in New Jersey and Florida. Procacci's UglyRipe® tomato, considered a tasty heirloom beefsteak-type tomato, did not conform to USDA shape standards for red round tomatoes. The Florida Tomato Committee (FTC) is empowered to determine all size and shape standards for tomatoes entering the U.S. wholesale market from mid-October to mid-June. The FTC found that the UglyRipe® did not meet its rigorous standards, which are based on size and shape (but not taste). Hence, the FTC rejection meant that the tomatoes were prohibited for sale outside of the Florida growing region during the winter months.

While the FTC's standards ensured a uniform quality product shipped to wholesalers and retailers from Florida, their standards were not inclusionary for heirloom tomatoes. Owner Joe Procacci made an appeal for the tomato and after a several-year battle, the USDA intervened in the national debate over the UglyRipe®, freeing the heirloom beefsteak variety tomato from the shape restrictions imposed by the Florida Tomato Committee. Procacci did not win the battle alone; his tomato was backed up by enormous support from none other than retail produce managers who communicated in droves their customers' preferences for the tasty UglyRipe® tomato.

For these reasons growers try to grow larger size fruit. While it is more costly to grow this larger fruit, growers try to meet the demands of wholesale buyers."

Fruit breeders and researchers develop varieties that will satisfy the size preferences (although with many varieties the smaller fruit may have higher sugar and flavor at full ripeness than larger fruit of the same variety). And how does it affect consumers? We buy with our eyes and reach for the big beautiful peach!

But what about consumers who prefer tasty smaller-sized peaches? Many people also associate smaller fruit with intensity of flavor, or may prefer a handier size for snacking, especially for children. While USDA Grading standards don't necessarily limit ripe marketing of smaller fruits, this packaging by distinctive size grades enables some retailers to only select uniformly large peaches to maximize their dollar returns on shelf space. Smaller size peaches, along with lower grades of peaches (blemishes or less desirable color) in the wholesale market, may offer equal or better flavor and be purchased and sold at a lower or affordable price by discount retailers, specialty stores, and farmers markets.

Growers who sell directly to the public via farm markets do not have to meet USDA Grade or retailer standards, since there is no wholesale buyer involved (unless the grower advertises the produce as meeting USDA Grade standards). At farmers markets, consumers may find fruits and vegetables that have what may be considered undesirable traits in the wholesale trade, but otherwise do not affect flavor or quality of the produce, and in some cases may offer better flavor. The selection of produce at a farm market is more determined by growers having to sell everything they grow rather than just what the wholesale buyer demands. Buying at a farmers market may render riper fruit with more variety because it can be picked closer to tree ripeness since it doesn't have to travel very far.

In retail markets, consumer purchasing behavior is affected by the quality of the product available. According to Rabin, "Research shows the initial purchase of fruit or tomatoes is based on cosmetic eye appeal. Subsequent purchases from the same source can be based on flavor or other qualities. If the vendor has different produce sources every week, the consumers' choice sadly always falls back to cosmetic eye appeal."

And finally, the inability to market undesirable or irregular sizes and shapes leads to disposal by farms of "culls" or unmarketable discards. These may be plowed under in the field, or are thrown away at the packing house. A small portion of these may be donated to food pantries through a process called gleaning (see sidebar on page 1).

As consumers, we can appreciate the aesthetic quality of produce that the standards ensure. When encountering produce not under the realm of the USDA or major retailer standards, such as at a farm market, we can adjust our purchasing habits. Fruits or vegetables that are small, misshapen or otherwise "flawed" may render some great tastes within. Organically grown produce may carry some insect damage otherwise not seen on conventionally grown produce. As shown in the case of ugly tomato (see sidebar), produce managers do listen to their customers, so talk to your retailer and local farmers and let them know what you want – otherwise the buyers will decide for you!

**Where to find Jersey Fresh? Ask for it
where you shop or dine or go to:
<http://www.jerseyfresh.nj.gov>**

**To receive these reports by e-mail:
njfarmfresh@njaes.rutgers.edu**

Web: <http://www.njfarmfresh.rutgers.edu>

**For your county Rutgers Cooperative
Extension office go to:**

<http://www.njaes.rutgers.edu/county>