

Viewpoint: Does organic food taste better? No, but deceptive marketing can make you think so

I have already illustrated that organic food is no safer or healthier as explained [here](#) and [here](#), but many consumers have an automatic preconceived notion that organics inherently taste better. Taste relies upon the stage of development at the time of harvest as well as the post-harvest handling. While in high school, I picked tomatoes for a large, local grower with a group of friends as brief summer employment. At the time, we could make far more money per hour working seasonal agricultural jobs such as working in the potato or melon sheds or picking produce than any other \$1.65/hour minimum wage work. My crew consisted of high-school-aged males with plenty of initial enthusiasm but little understanding of what was expected of us.

We were handed red buckets, which were to be filled with tomatoes, and returned to the field foreman at the collection trailer. As the foreman dumped out initial buckets, filled with ripe tomatoes, onto the ground, we learned our first lesson: Don't pick the ripe ones, only the green ones. We assumed we were to pick the ripe, tastiest tomatoes, but those tomatoes would never endure all the post-harvest handling and transportation to markets hundreds to thousands of miles away. Spoilage would have resulted in significant losses for the grower. What does all of this have to do with flavor?

Climacteric fruit

Tomatoes, as well as peaches, plums, cantaloupe, bananas, and pears, are examples of what are termed "climacteric fruit." Climacteric fruit can reach a particular developmental stage and continue to develop to maturity even when removed from the plant. [1] They do this by using ethylene, a natural plant hormone, often called the fruit ripening hormone. It is released in the form of gas during the fruit's later developmental stages and is responsible for regulating its ripening process. When climacteric fruit is picked before its fully ripened stage, commercial ethylene gas can be used under controlled conditions to ripen the fruit once it has reached its destination.

Tomatoes, when picked too green, before reaching a specific level of internal development or maturity, will have a poor taste. In the "breaker" stage of development, "when it is about half green and half pinkish-red," a mature green tomato has a layer of cells forming across the stem, sealing the tomato off from the main vine. At this point, nothing more can move from the plant into the fruit. As with other of the climacteric fruit, the tomato can be harvested and ripened off the vine with no loss of flavor, quality, or nutrition once they reach this point of development. [2]



Non-climacteric fruits and vegetables need to stay “on the vine” to reach full physiological maturity. Once removed, they will not continue to mature, gain flavor or sugar. They are best when freshly harvested. Some examples of non-climacteric crops are cherries, grapes, oranges, raspberries, cucumbers, strawberries, and zucchini. [1] For these products, it is post-harvest handling, e.g., proper cold storage and transportation, that are key to maintaining the crop’s flavor until it reaches the consumer, not the growing method.

“Organic food labels create perception of healthier fare.”

As I have pointed out in past articles, many consumers are victimized or deceived by the “health halo effect” surrounding the word organic. Researchers at Cornell University [3] reported on 115 volunteers asked to rate the taste of three different paired foods. All were organically grown, but with one of the pair labeled conventionally grown. Most volunteers felt those foods labeled organic tasted better and were also lower in calories and nutritionally superior. The “organic” label made a difference in the consumer’s perception of the food item’s quality and taste. This deceptive “halo effect” of organics is the foundation of the organic industry. It is not science; it is merely the epitome of deceptive marketing to misinformed consumers.

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On October 20, 2014, two Dutch pranksters pulled off a similar event when they [recorded](#) their attendance at an organic food expo promoting their "new organic alternative to fast food." They had purchased some classic McDonald's food, reconfigured the packaging to appear "natural," and served it to several "experts." The responses were exactly what one would expect from the health halo effect of using the word organic.

The Cornell study and the Dutch video are classic examples of a placebo effect. The repetitive deceptive marketing practices of the organic industry portraying organics as safer, superior nutritionally, and improved taste have created built-in expectations in many consumers. These fabricated presuppositions are the heart and soul of the organic market but have no validity in science.

References

[1] [All fruit and vegetables are not created equal when it comes to proper storage conditions](#). [2] [Harvesting and Ripening Tomatoes](#) Kansas State University Research and Extension. [3] [Organic food labels create perception of healthier fare](#)

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