# Going Local – Does it Really Impact Nutrition?

Creating seasonal recipes and menus with fruits and vegetables harvested during the peak of their growing season has potential to inspire the freshest, tastiest and most nutrient rich meals. It is, in fact, becoming more common for food service operators and chefs to look for these fresh ingredients through their own back door by working with local farmers, community-based producers and cooperatives, or even working with distributors that will help source local ingredients.

But, what constitutes local? How close to your back door does this farmer have to be? That's truly up to you when defining locally grown for your food service operation. You can limit it to growers within a 50 mile radius, a 100-mile radius, or limit it to growers in your state.

## Understanding the farm-to-kitchen process is crucial.

Some people are skeptical about locally grown produce being more nutrient dense — and with good reason — there are many factors that affect the nutrient content of fruits and vegetables, and many of them can be practiced on any farm, at any location. The plant varietal, how it is grown, when it is harvested during the growth cycle, and post-harvest considerations like how it is harvested, stored and transported.

• Plant Varietal - commercially grown fruit and vegetable varieties are selected due to their optimal ability to produce a higher crop yield, grow and produce fruit at a faster rate that stands up to handling and transport. Unfortunately, these qualities don't always promote the most nutrient dense varieties.

Foods harvested before they are ripe will not provide the same nutrient quality as they would have had they been left to mature on the plant. Growing Conditions - plants take many of their nutrients from the soil, so
managing and maintaining soil quality is important. Using 'compost manure' to
enrich the soil has been shown to increase nutrient uptake by the plant versus
artificial chemical fertilizers.

• Harvesting - to ensure that the food has started its journey fully stocked with nutrients, it should be harvested at the peak of its growth cycle – when it is fully ripe. The longer the fruit or vegetable is attached to the plant, or is left in the ground, the more nutrients it can take from the earth.

Storage & Transport - in the farm-to-kitchen process, some of the most important controls happen after the harvest. Storage temperatures are considered to be potentially the most damaging to nutrient quality if not controlled, therefore, having the ability to modify temperature, atmosphere and humidity are very important if produce is to be stored and transported for any length of time. Gentler harvesting methods are favorable for protecting nutrients as bruising the fruit is detrimental to nutrient quality.

## Your choices matter - climacteric vs. non-climacteric fruits and vegetables.

Climacteric fruits and vegetables are able to continue maturing after they have been picked from the plant. Picked before full ripeness, they can still achieve the color, texture and aroma of a 'ripe' fruit. However, increase in nutrient content would be limited, if any at all.

- In the case of 'climacteric' fruits and vegetables, produce that must be shipped further, are picked before full ripeness. Foods harvested before they are ripe will not provide the same nutrient quality as they would have had they been left to mature on the plant. Common varieties include apples, pears, peaches, apricots, plums, melons, tomatoes, avocados, bananas, mango and papaya.
- 'Non-climacteric' plants can only reach full maturity on the plant. *Common varieties include cherries, grapes, strawberries, cucumber, citrus and pineapple.*

Although produce variety, soil maintenance, harvesting and storage procedures can certainly be done in a manner to enhance and protect nutrient quality at any location, regardless of distance, there are some potential advantages to working with local growers.

- Locally grown produce is more likely to have been harvested later in the growth cycle when it's ripe and full of nutrients.
- Typically locally grown fruits and vegetables are sold within 24 hours of being picked.
- Smaller scale farms are more likely to be growing less common produce varieties, using manual harvesting methods and have fewer middle-men



#### Getting started doesn't have to be daunting.

There is a distinct advantage to being able to interact with your local growers and cooperatives to understand where your food comes from, what their practices are, and being able to visit their site to monitor them over time. There is even the potential to build a relationship with your growers, and influence the types of seasonal fruits and vegetables they grow for your menu.

However, if the notion of working with local growers is intriguing, but daunting at the same time, you can start small. Consider introducing whatever is 'in season' that week to a salad bar. That way, your core menu isn't dependent on sourcing those exact ingredients every week. Or, perhaps decide to make the biggest initial impact by choosing climacteric fruits and vegetables that can be grown locally and are therefore more likely to have a higher nutrient density because they benefitted from being on the vine/plant/tree longer.

If pricing of local produce is a concern, consider that Washington County Health System, Inc. implemented a local food purchasing program and found that they actually increased sales with patients, staff and visitors by promoting local ingredients on menus and tags on the salad bar. In their dining facilities, they highlighted the local star ingredients and the farm that the ingredients came from.

Buying local produce can be a way to boost nutrient quality of the foods being served, create excitement about fruits and vegetables, and increase fruit and vegetable consumption.

Implementation may need to start small, or may not be a viable option for all food service facilities, but if you're interested in learning more about offering fresh seasonal vegetables in your dining room, here are a few places to look further:

- To find local food suppliers and farmers markets in your area, check: <a href="www.usda.gov/FarmersMarkets/">www.usda.gov/FarmersMarkets/</a> and <a href="www.localharvest.org">www.localharvest.org</a>.
- More information on purchasing local produce can be found at the USDA's "Know Your Farmer" site (<a href="www.usda.gov/knowyourfarmer">www.usda.gov/knowyourfarmer</a>), including information on promoting healthy eating, strengthening rural communities, and protecting natural resources.



#### Sources:

- Diamond, Adam et al. Emerging Market Opportunities for Small-Scale Producer. Proceedings of a Special Session at the 2008 USDA Partners Meeting .U.S. Department of Agriculture, Agricultural Marketing Service Marketing Services Program. April 2009
- FAO Corporate Document Repository. "Production is only half the battle ". June 25, 2011. http://fao.org.Wairdocs/X5014E/X5014e04.htm
- Harvard Medical School Center for Health and the Global Environment. Healthy and Sustainable Food: "Is Local More Nutritious?" It Depends. June 20, 2011. <a href="http://chge.med.harvard.edu/programs/food/nutrition.html">http://chge.med.harvard.edu/programs/food/nutrition.html</a>
- United States Department of Agriculture. "Eat Smart Farm Fresh! A Guide to Buying and Serving Locally-Grown Produce in School Meals." USDA Food and Nutrition Service. December 2005.
- Photography courtesy of Sharon Davidson, R.D.

