

# The Nutrition Benefits of Eating Locally

*Corilee Watters*

In recent years, the idea of eating food grown and produced in close proximity to your home has gained a lot of attention and inspired many people to dramatically change the way they choose their meals and obtain their ingredients. In Hawaii this is especially important since imported food travels a minimum of 2,500 miles and transportation costs increase the price of fresh fruits and vegetables.

## Nutrition

Evidence shows that locally grown produce can have a higher nutritional value than produce transported long distances. Dr. Adrian Franke at the Cancer Researcher Center of Hawaii studying the vitamin C and flavonoid levels of fruits and vegetables found local common mangos contained 117% more vitamin C than imported mangos and the flavonoid levels in local Ka'u oranges are 150% higher than out-of-state Navel oranges. This can be the result of several factors, including plant variety, growing methods, ripeness when harvested, and handling, storage and transportation post-harvest.

## Plant Variety

Top breeders who grow produce for distribution across the country choose varieties for high yield, fast growth rate, and ability to withstand long distance transport. Although this allows them to produce low-cost, hardy fruits and vegetables, research indicates higher yielding varieties can be lower in nutrients. In contrast since local farmers aren't distributing their crops across the country, they are more likely to choose varieties for flavor rather than yield. Mark Suiso, owner of Mākaha Mangoes on Oahu, tends seventy mango trees representing numerous varieties- each with unique taste profiles - diversity you can't get from out-of-state growers.



*Photos by Adriana Torres Chong courtesy of Whole Foods Market*

## Ripeness

Produce picked ripe from the plant has been found to have higher total vitamin C content than when picked before ripening, but is more susceptible to bruising and has a shorter post-harvest life. To reduce loss due to damage and spoilage, produce transported over long distances is usually harvested as soon as possible after it reaches physical maturity. Local farmers can sell their produce in markets within a day or two of harvest, giving them the option to ripen their crops on the plant.



### Post-harvest Treatment

Handling, processing, and transportation also play a key role in the nutritional quality of fruits and vegetables. Careless handling, mechanical harvesting methods, storage at improper temperatures, and lengthy or rough transport can all reduce the quality and nutritional value of fresh produce. It is less likely locally grown fruits and vegetables will suffer nutrient losses from exposure to these conditions, but improper storage and handling can still reduce the nutritional quality of produce. Learning about the harvesting methods and handling procedures of the farmers in your area can help you to choose the highest quality produce for your family.

### Local and Global Environment

One of the most compelling reasons for buying locally produced food is the reduction of greenhouse gasses released during transportation. However, some advocate mass transportation by efficient diesel powered ships, airplanes, and trucks which may not contribute as much to greenhouse gas emissions than the many small volume car trips individual families make from their homes to stores and markets. Therefore, if you are trying to eat locally to support environmental protection, do your best to reduce your greenhouse gas emissions by walking, biking, taking public transportation or car-pooling.

Finally, money spent on locally produced food stays in the community longer, supporting farmers, creating jobs, supporting economic growth locally, and preserving green space in Hawaii. It also promotes control over our own food supply, as food production and distribution is controlled by those living and working in our community.

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