



Nutrition Corner: Avocados - Rich in Phytonutrients

New research published in Journal of Agricultural and Food Chemistry, reported that University of California, Los Angeles (UCLA) researchers were able to identify four additional carotenoids in the California Hass avocado, which had not been quantified until this study. In addition, the researchers reported that the total carotenoid concentrations were greatest in the dark green flesh of the avocado closest to the peel. Carotenoids are the class of phytonutrients thought to help prevent many chronic diseases.

The research, led by David Heber, M.D., Ph.D., Director of the UCLA Center for Human Nutrition, studied California Hass avocados harvested in January, April, July and September 2008 from San Luis Obispo, Ventura, Riverside and San Diego and analyzed the fruit for total fat content, fatty acid profile, carotenoids and vitamin E.

Avocados are virtually the only fruit that has monounsaturated fat; the fruit also contributes polyunsaturated fat (0.5 grams poly- and 3 grams mono- per 1 oz. serving). According to the American Heart Association, mono- and polyunsaturated fats (good fats), when consumed in moderation and eaten in place of saturated or trans fats can help reduce blood cholesterol levels and decrease risk for heart disease.

“Consumers should be reassured that avocados from different growing areas in California have a remarkable constancy of carotenoid content per gram of fat during the growing season,” said Heber. “And, that they can get the most nutrients out of an avocado by peeling the fruit before slicing it in order to

capture the maximum amount of carotenoids from the darker green flesh found directly under the skin.”

The carotenoids that were uniquely characterized in California Hass avocados through this study include trans neoxanthin, neochrome, lutein-5, 6-epoxide and chrysanthemaxanthin. The scientists also confirmed the presence of lutein, zeaxanthin, b-cryptoxanthin, a-carotene and b-carotene.

The researchers noted that California Hass avocados grown in different regions of California have a similar phytochemical profile. However, there are increases in both total fat and carotenoids in fruit harvested later in the season. Ninety-five percent of American avocado production is located in California.

This research was supported by the California Avocado Commission through an unrestricted educational grant. The California Avocado Commission was created in 1978. Their activities benefit the state’s 6,000 avocado growers. The California Avocado Commission serves as the official information source for California avocados and the California avocado industry.

A Slice of Avocado History

The avocado (*Persea americana*) has an ancient history as noted by archaeologists.





In Florida, Native to the tropics of Central America, the avocado tree originated in southern Mexico and Colombia around 5,000 B.C.E.

Spanish conquistadors were presented with avocados upon their arrival in Central America by the Aztecs and Incas in the 16th century.

Avocado is an evergreen fruit tree of the flowering plant family Lauraceae. Originally called ahuacatl by the Aztecs of ancient Mexico, the fruit later became known as aguacate by the Spanish in the 16th century and nicknamed the “alligator pear” by English colonists who mistakenly substituted “alligator” for aguacate and added “pear” for the fruit’s shape. The term aguacate eventually evolved into avocado by Americans who could not pronounce the Spanish name.

The avocado tree was first introduced to the United States in 1833 by Judge Henry Perrine who sent trees from Mexico to Florida and it is believed this was the first domestic avocado planting in the United States.

Most of the avocados grown in Florida are produced in Miami-Dade County, which has the ideal tropical climate for the fruit.

There are more than 56 different varieties of Florida avocados. Varieties are classified as either summer, fall, or winter. The summer fruit has bright green, smooth, thin skin. The fall or winter varieties are also bright green but have thicker, rough textured skins.

Reasons to Eat Florida Avocados

Nutrition Facts:

One serving of avocado provides:

A source of monounsaturated fat and omega-3 fatty acids, antioxidants, fiber, Vitamin K, folate, and many essential minerals including potassium, thiamin, iron, riboflavin, niacin, magnesium and manganese.

One quarter cup of a Florida avocado (approx. ¼ lb, pureed) contains:

- 69 calories
- 6 grams fat
- 1.3 grams protein
- 5 grams carbohydrate
- 200 milligrams potassium
- 3 grams fiber

Creamy Avocado Gazpacho Recipe

- 1 cup water
- Flesh of 1 medium avocado, reserving 1 T. for garnish
- 2 cup chopped cucumber
- 1 1/2 cup chopped tomatoes
- 1/2 to 1 Serrano chile, with seeds, sliced (optional)
- 1 large clove garlic, minced
- 1 sprig mint leaves
- Juice of 2 lemons or limes
- 1/2 tsp. salt
- 1 tsp. maple syrup
- 2 small mint leaves
- Paprika (optional)

Combine all ingredients in a blender in the order listed. Start blender on low speed for a few seconds, then switch to high. Blend until creamy and smooth, about 1 1/2 minutes.

Pour into 2 soup bowls. Dice reserved avocado and gently drop them into the center of the bowl. Add a mint leaf and sprinkle diced avocado with paprika if desired. Serves 2.