ANTIOXIDANT CAPACITY AND POLYPHENOL CONTENT IN AVOCADO VARIETIES IN CHILE

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Epidemiological evidences indicate that fruits and vegetables consumption prevents chronic diseases and degenerative processes such as cancer, cardiovascular disease and diabetes. There is general agreement in the theory considering that the antioxidants present in these foods are main contributors to the beneficial effects of fruits and vegetables. In the case of avocado some specific characteristics would be responsible for their role in the prevention of cardiovascular disease: rich in monounsaturated fatty acid content, vitamin E, vitamin C, Carotenoids, Flavonols and phenolic acids. We studied the antioxidant capacity (ORAC and FRAP), vitamin C content and total polyphenol content in 5 avocado varieties (Hass, Fuerte, Reed, Esther, Mexicola) that grow in Chile. For the Hass variety we measured two groups of samples (in summer and in winter). The results obtained show that the antioxidant capacity, vitamin C and polyphenol content show large differences among varieties and also in Hass avocados at different times of the year. With regards to polyphenol content, summer Hass are better than winter Hass, and both better than the other varieties. As for vitamin C, Mexicola

The relative contribution of avocado consumption to the total nutrient intake suggests that a systematic study of nutritional markers should be undertaken in a large group of persons with a daily avocado consumption approaching 100 grams. These data plus chronic disease risk factor measurements would be key elements to implement evidence based on avocado consumption recommendations.

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