

## **Excerpt from Açai (*Euterpe oleracea*): The Nutritional and Antioxidant-Rich Amazonian Palm Tree Fruit**

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I research products that might explain why the incidence of certain diseases and conditions is lower in some parts of the world than in the United States. Nutrients in our diet can have an impact on social, psychological, and physiological behavior, so this is a logical place to look for explanations for differences in the incidence and prevalence of health disorder.

Hundreds of years ago when the Europeans made contact with the New World, certain groups of indigenous populations became extinct within a very short period of time because of the lack of resistance to diseases brought over from Europe. Some populations did survive, and for that reason, their tribes exist to this day. Quite a number of these groups are found in and around the tributaries and estuaries of the Amazon River. This is an area rich in a palm that bears a fruit called "acai."

The acai fruit grows biannually in only three species of palm trees. This fruit is remarkably rich in a very large range of macronutrients, micronutrients, and trace elements. It has a broad range of essential amino acids, carbohydrates, fatty acids, and vitamins and minerals. So rich in nutrients is the acai fruit that it is possible someone could survive on it alone for quite a period of time without showing signs of malnutrition.

A few years ago I had the opportunity to go to Portugal and visit the anthropology department of a prominent university. I wanted to find certain watercolors that were drawn by naturalists and botanists who went to the Amazon in the 18th century. The drawings were in impeccable condition and showed natives holding small, berry-sized fruit in their hands and baskets against a backdrop of local fauna, including the acai palm tree. This provided hard evidence of its traditional use as a food source by natives over 200 years ago.

Some years ago I was the first scientist to determine the antioxidant activity of acai fruit using the oxygen radical absorbance capacity (ORAC) assay. This assay and others allowed me to discover that acai had unusually high antioxidant and scavenging activity in vitro against hydroxyl, peroxy, peroxy nitrite, and superoxide anion free radicals, compared to all of the common fruits and vegetables consumed in the United States.

The results were so striking in comparison to other food sources of antioxidants that we ultimately determined how to preserve this antioxidant activity so that the fruit could be exported in a form that would retain its benefits.

The Açai fruit has a very broad nutritional value to humans. It has remarkably high antioxidant activity. Based on new data about the antioxidant levels of American foods that was published in early 2005 by US government, data shows that Açai has significantly greater antioxidant activity on a gram to gram comparative basis than any of the common fruits or vegetables Americans consume.

Resource: Açai (*Euterpe oleracea*): The Nutritional and Antioxidant-Rich Amazonian Palm Tree Fruit By Dr. Alex Schauss.