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Showdown:
Açaí vs. Goji

Nutrient Face-off, Part 1 of 4

Açaí

Goji ("wolfberry")

We'll make comparisons of these two "superfruits" in 4 parts

1. macronutrients
2. micronutrients
3. phytochemicals
4. antioxidant strength and product applications

When two superstars are on stage at the same time, what more can one do than compare their features to see how they stack up against one another?

This is a fascinating contest for looking deeper into açaí (Brazilian palmberry, *Euterpe oleracea Mart.*) and goji (Chinese wolfberry, *Lycium barbarum L.*) because each has

1. at one time or another, been called the world's most nutrient-rich plant food and/or

2. been called the most antioxidant-potent food on Earth

3. centuries of use as a medicinal plant by peasants and shamans in their respective land

4. rapidly growing market interest in many countries

5. taste and nutrient qualities making it "exotic" and included among the emerging "superfruits" emphasized for their

antioxidant qualities

6. diverse applications as a *"functional" ingredient* in new foods and beverages

Macronutrients

"Macro" refers to gram quantities in a typical 100 gram serving.

Here are some data

	Açaí (a)	Dietary Reference Intake (DRI)	Goji "Wolfberry" (b)
Nutrients in g per 100 g; % DRI	*Euterpe oleracea*	*USDA (adults)*	*Lycium barbarum*
Energy, cal	534; ~27%	~2000 *	370; ~19%
Total fats, g	32.5; ~100%	20-35 g	8.2; ~30%
Protein, g	8.1; ~16%	46-56 g	11.7; ~23%
Carbohydrates, g	52.2; 40%	130 g	67.7; 52%
Dietary fiber, g	44.2; >100%	25-38 g	10.0; ~32%
Total, g	137 (?)		97.6

a. freeze-dried pulp and skin powder as reported by Schauss et al., 2006
b. dried berries as reported by Gross et al., 2006
USDA, US Department of Agriculture Food and Nutrition Information Center, Dietary Guidelines
? -- variations in assays for individual macronutrients may account for total exceeding 100
* approximate average for men and women depending on age, weight and caloric need due to exercise frequency

[Note: although different preparations were used for assays of the two berry species, these data represent a reasonable benchmark for comparing them. Given their growing popularity, more research is expected]

That's a brief table, but it tells us a lot about açaí and goji, such as

1. just 100 grams of either açaí pulp powder or dried goji berries provides a significant amount of a day's caloric needs, 27% and 19%, respectively

2. remarkable for a fruit, açaí fulfills the day's DRI for fat.
Its fats are comprised mainly of oleic and linoleic acids ("heart-healthy", "good" unsaturated fats) and palmitic acid (undesirable saturated fat)
(see Schauss et al., 2006)

3. both berries are good sources of protein

4. the high content of carbohydrates in goji (52% of DRI) comes primarily from its rich concentration of polysaccharides (component of "resistant starch") , a goji signature nutrient implicated in preclinical laboratory studies with extensive possible health benefits
(chapter 4, Gross et al., 2006)

5. undefined about the type(s) of fibers in açaí by the study of Schauss et al., açaí's fiber content is exceptionally high (>100% DRI, 3x goji), even though goji's dietary fiber content is considered excellent at 32% DRI

There are five distinct *macro*nutrient features of these two superfruits.
So who wins the first round?

I give the nod to açaí based on its exceptional caloric, oleic acid ("good" fat) and high fiber contents.

More next time on *micro*nutrients.

Dr. Paul
The Berry Doctor

References

* information on açaí: 1) The Super Berry Site; 2) Sambazon; 3) Bomdia
* information on goji: The Goji Site