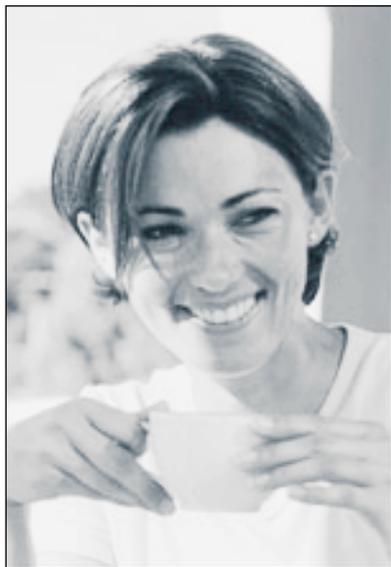


GREEN COFFEE EXTRACT

Powerful Natural Antioxidant



According to the National Coffee Association's 2001 National Coffee Drinking Trends survey, 52 percent, or 107 million, U.S. adults drink coffee each day. Although you may already enjoy coffee as your favorite way to begin the morning, new studies are revealing its impressive health benefits. GREEN COFFEE EXTRACT (GCA®) is a newly discovered powerful antioxidant that helps protect against oxidative stress caused by free radicals - a major cause of accelerated aging.

Source Naturals GREEN COFFEE EXTRACT (GCA®) is a patent-pending, all-natural green coffee bean extract derived from raw, unroasted coffee beans. It is high in chlorogenic and caffeic acids, two primary compounds responsible for its antioxidant activity. GREEN COFFEE EXTRACT is naturally low in caffeine and contains at least 65 percent total polyphenol antioxidants.



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The Coffee Story

The history of coffee dates back more than a thousand years. Originally, coffee beans were used as food. East African tribes would grind the coffee berries together, mixing the results into a paste with animal fat. Later, around 1000 AD, Ethiopians made a type of wine from coffee berries, fermenting the dried beans in water. Coffee also grew naturally on the Arabian Peninsula where it was first developed into a hot drink.

Despite decades of research on coffee and caffeine, there are many misconceptions about the potential health risks associated with coffee, while many of the beneficial aspects have gone unnoticed.

Polyphenols: Powerful Antioxidants

Phenolic compounds, or polyphenols, are a widespread family of compounds found in all plants including grapes, coffee and tea. They possess outstanding antioxidant and free radical scavenging properties, which may help defend cells and protect the body against the effects of aging. The high antioxidant activity observed in research on coffee is believed to be mostly due to the phenolic acids. GREEN COFFEE EXTRACT contains a number of polyphenols called hydroxycinnamic acids, with the two most prominent being chlorogenic and caffeic acids. Caffeic acid is the most abundant phenolic compound in coffee. *In vitro* and *in vivo* studies show that these acids protect against low-density lipoprotein (LDL) oxidation and lipid peroxidation.

Glucose Metabolism

There is accumulating evidence that certain dietary polyphenols, such as chlorogenic acid, may have biological effects in the small intestine that alter patterns of glucose uptake. Chlorogenic acid has been shown to inhibit glucose 6 phosphate (Glc-6-Pase) activity. Glc-6-Pase is an enzyme that has a key role in regulating glucose metabolism. An *in vivo* study on rats demonstrated that chlorogenic acid improved glucose tolerance.

Natural Wellness

Nature provides us with special compounds that allow us to explore safe alternatives to support our health. Your local health food outlet is a great resource for nutritional education and effective, advanced natural products. Source Naturals is pleased to partner with these outlets to bring you innovative products like GREEN COFFEE EXTRACT.

References:

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- Rodriguez de Sotillo, Delcy V. & Hadley, M. 2002. Chlorogenic acid modifies plasma and liver concentrations of: cholesterol, triacylglycerol, and minerals in (fa/fa) Zucker rats. *J. Nutr Biochem* 13:717-726.



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