

# Grape Pips

## Proanthocyanidins

**Grape Pips** contain flavonol proanthocyanidin extract from grape seeds, which provides powerful antioxidant activity against peroxy free radicals, and supports capillary integrity.\* Our high quality raw material contains not less than 95% total polyphenols including 83% oligomeric proanthocyanidins. Grape seed proanthocyanidins were originally discovered and patented by the same researcher who discovered pycnogenol in pine bark extract, and are the main phenolic antioxidants found in red wine. They have undergone extensive clinical and toxicological studies, and exhibit powerful antioxidant activity, due to their diphenol components and related structures.\*



#71480

90 vegetarian capsules

### Key Features

- Supports inhibition of peroxidation of ingested lipids during the digestive process\*
- May enhance resistance to oxidative modification of LDL\*
- May support the integrity of collagen structures and the capillaries\*

### The Key to the French Paradox?

The typical modern diet usually includes a high amount of fat. Popular diets that involve low or modified carbohydrate intake, such as the Atkins or Zone diets, involve an even higher fat intake. Yet even a moderate intake of food containing oxidized fats can lead to an increase in lipid hydroperoxides (oxidizing free radicals) in the bloodstream. These reactive substances can readily lead to the oxidation of LDL cholesterol.

Recent studies indicate that key antioxidants in red wine can minimize the postprandial oxidative stress from the fat we ingest.\* The researchers even found a reference to the protective effect of red wine in Villanova's 13th century health compendium, *Regimen Sanitatis Salernitani*, where he suggests, "During meals drink wine happily, little but often..." It turns out that a crucial health promoting aspect of the Mediterranean diet may be that meals loaded with fat are always taken with wine. This may in part account for the French paradox: compared to the standard American diet, the French diet has a higher fat content, but the mortality rate from heart disease in France is significantly lower.

### When LDL Cholesterol Actually Goes "Bad"

LDL cholesterol, though often characterized as the "bad" cholesterol, performs many important functions in the body. But it is important to protect our LDL from oxidizing. The postprandial increase of plasma lipid hydroperoxides overloads the oxidant/antioxidant balance and increases the oxidation of LDL. When LDL is exposed to oxidative radicals such as lipid hydroperoxides, it modifies into LDL-, which contains lipid oxidation products and denatured apoprotein-B-100.

### The Secret of Wine Starts with the Seeds

Proanthocyanidins are the most powerful antioxidants found in wine and in grape seeds, specifically targeting their interactions with peroxy radicals, due to the hydrogen transfer mechanism involved in the radical-scavenging reaction. They can inhibit the peroxidation of ingested lipids during the digestive process, preventing them from being oxidatively degraded before they have a chance to get into the bloodstream.\*

In studies that supplemented meals with grape seed proanthocyanidins, a significant reduction of postprandial plasma oxidative stress was shown.\* In one study, volunteers ate the same test meal containing an abundance of oxidized and oxidizable lipids without (control) or with 300 mg of grape seed extract (GSE), containing proanthocyanidins. Postprandial concentration of plasma lipid hydroperoxides increased only in the control group, and postprandial plasma antioxidant capacity increased only in the GSE supplemented group.\* Also, LDL showed increased susceptibility to oxidation following the control meal, but less susceptibility to oxidation following the GSE supplemented meal.\* Overall, these results strongly suggest that taking GSE with a meal can significantly enhance resistance to oxidative modification of LDL.\* Other studies show that even with a high cholesterol diet, proanthocyanidins can inhibit lipid-laden foam cell deposition.\* Still other studies show that proanthocyanidin flavonoids may support the integrity of collagen structures and the capillaries.\*

Because they can have a powerful effect in the digestive tract, the antioxidant effectiveness of proanthocyanidins is not dependent on bioavailability. However, with their superior water solubility, they are easily absorbed and are generally well tolerated.

#### References:

Natella F, Belelli F, Gentili V, Ursini F, Scaccini C. *J Agric Food Chem*. 2002 Dec 18;50(26):7720-5.  
 Parasassi T, Bittolo-Bon G, Brunelli R, Cazzolato G, Krasnowska EK, Mei G, Sevanian A, Ursini F. *Free Radic Biol Med*. 2001 Jul 1;31(11):82-9.  
 Sevanian A, Bittolo-Bon G, Cazzolato G, Hodis H, Hwang J, Zamburlini A, Maiorino M, Ursini F. *J Lipid Res*. 1997 Mar;38(3):419-28.  
 Sevanian A, Ursini F. *Free Radic Biol Med*. 2000 Aug;29(3-4):306-11. Review.  
 Ursini F, Sevanian A. *Biol Chem*. 2002 Mar-Apr;383(3-4):599-605. Review.  
 Ursini F, Sevanian A. *Ann N Y Acad Sci*. 2002 May;957:200-9. Review.

### Supplement Facts

Serving Size 3 Capsules  
 Servings Per Container 30

Amount Per Serving	% Daily Value
Grape Seed Extract (95% Total Polyphenols, containing 83% Oligomeric Proanthocyanidins)	300 mg *

\* Daily Value not established.

Other ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, L-leucine.

**Suggested Use:** As a dietary supplement, 1 to 3 capsules one to three times daily with meals, or as directed by a healthcare practitioner.

**Note:** We adhere to the industry standard, which indicates that *Oligomeric proantho-cyanidin* content is expressed as *total polyphenols* minus *monomeric polyphenols*.