



Professional Education Series 5004/2005

Information contained in this bulletin is for informational and educational purposes only and is not intended as a substitute for advice from your physician. This information should not be used for diagnosis or treatment of any health problem. You should consult with a health care professional for treatment of any health issue.

Mega Pro PLUS Antioxidant Power Formula



(2058) 60 capsules
**Orac Value 350 Units
per capsule**

Antioxidants have been shown to prevent cellular degradation caused by unstable oxygen molecules called free radicals. It is this process that is believed to accelerate the aging process, which includes the body's decline into many of our population's most debilitating diseases.

Research has shown that many antioxidants are more effective and better able to ward off cellular damage when present in balanced combinations. There are reasons why you need a balanced mix.

- 1) Antioxidants work on different parts of the cell, from its watery interior to its fatty outer membrane. Some antioxidants such as alpha lipoic acid protect both inside and out. Other antioxidants concentrate in certain areas of the body.
- 2) A full network of antioxidants strengthens the body's entire antioxidant network, making each more effective. Why? Some antioxidants are spent the first time they give up a precious electron and need to be recharged, a critical job of well-known antioxidants such as vitamin C.

Mega Pro PLUS is a powerful antioxidant complex that not only draws on powerful proanthocyanadins (OPC), but incorporates many other antioxidants to provide broad support for body's antioxidant system.

Ingredients:

- **Muscadine**
America's first grape
(seed and skin extract)
- **Proanthocyanadins (OPC)**
Source: Standardized grape seed extract,
muscadine extract, and cranberry extract
- **Polyphenols**
Source: Green tea extract (catechins)
- **Carotenoids:**
Lutein & Lycopene
- **Cucuminoids**
Curcumin C₃ complex
- **Bioflavonoids & Terpenes**
Source: Citrus peel

- **Chlorophyll**
Source: Wheat grass juice and
broccoli
- **Phytosterols**
Source: Tomato extract
- **Isothiocyanates &
Sulforaphanes**
Source: Broccoli extract

PLUS

- **Alpha Lipoic Acid**
The dual fat and
water soluble antioxidant
- **N-Acetylcysteine**
Antioxidant shown to scavenge
hydroxyl radicals and hydrogen
peroxide (H₂O₂)

Suggested use: One to three capsules daily.

For therapeutic use: Use 1 capsule for each 30 lbs. of body weight for 30 days then reduce to 1 capsule for each 50 lbs. of body weight.

Proanthocyanadins (Muscadine & Grapes)

A number of studies have investigated the protective benefits of anthocyanadins, natural antioxidants found in fruits and vegetables. Anthocyanadins are the main class of flavonoids found in red wine, providing not only brilliant color, but contributing to its powerful antioxidant properties. Two additional phytochemicals found in muscadines and grapes are resveratrol and ellagic acid. Muscadines (*Vitis rotundifolia*) were first discovered in 1854 by English explorer Sir Walter Raleigh when he landed on the coast of North Carolina. (Stanley 1997)

Polyphenols (Grape seed and skin)

Professor Joe Vinson of the University of Scranton, Pennsylvania, in a paper presented to the American Chemist National Society meeting, asserted that the benefits from eating diets high in fruits and vegetables may be the result of synergism between polyphenols and better known vitamin antioxidants such as vitamin E and vitamin C. Vitamin C and polyphenols protect each other (Ennen 2003).

Carotenoids (Lutein & Lycopene)

Carotenoids are a class of natural fat-soluble pigments found in plants and algae. They play a critical role in photosynthesis. Carotenoids are responsible for many of the red, orange, and yellow hues of plants, fruits, and flowers, as well as the color of some birds, fish, and crustaceans.

Carotenoids also play an important role in human health by acting as biological antioxidants, protecting cells and tissue from damaging free radicals and singlet oxygen. Lutein functions as a protective antioxidant in the macular region of the human retina (Snodderly 1990). Lycopene (from tomatoes) is particularly effective at quenching the destructive potential of singlet oxygen (DiMascio, Kaiser and Seis 1989).

Curcuminoids

Curcuminoids are natural plant phenolic compounds that guard cellular tissue and the organs of the body from detrimental influences both “inside” and “outside” of the cell. Unlike other antioxidants which have more of a policing effect on such errant molecules, the turmeric curcuminoids merge with potential free radicals before they form. The antioxidant properties of curcumin in prevention of lipid peroxidation, another process that generates free radicals, is well recognized. (Sharma 1976)

Phytosterols

Plant sterols and plant stanols are collectively known as phytosterols. This group of compounds so closely resemble cholesterol that they can actively block food based cholesterol from being absorbed into the bloodstream. The result is that both phytosterols and dietary cholesterol end up excreted in waste matter. As such, food manufacturers have begun to incorporate them into “functional foods” such as vegetable oil spreads. Over 5000 research papers have been published, all demonstrating the positive benefit of phytosterols (Cargill Health Food & Technology).

Isothiocyanates & Sulforaphanes

These groups of biologically active compounds are found in the Brassica family of vegetables (i.e. broccoli, cauliflower, Brussels sprouts, kale, turnips, bok choy, radishes, watercress, and rutabaga). They are known to induce phase II detoxification, boost antioxidant status, and protect animals against chemically induced cancer.

Basically, they work in three ways: (1) They do not allow carcinogens to be activated; (2) They counteract the poisonous effects of carcinogens that have been activated; (3) They speed up the removal of carcinogens from the body (Drewnowski 2000).

Chlorophyll

Chlorophyll is the molecule that traps the most elusive of all powers, “light energy,” and is called a photoreceptor. It is found in the chloroplasts of green plants and is what makes plants green. Chlorophyll's structure is very similar to the heme group found in hemoglobin. In heme, however, the central atom is iron, whereas in chlorophyll, it is magnesium. Chlorophyll synthesizes carbohydrates and produces oxygen as a by-product. (Streitweiser and Heathcock 1981; Stryer 1975)

Bioflavonoids (Lemon and lime citrus peel, grape seed extract, cranberry extract, broccoli and green tea extract)

Flavonoids refer to a group of over 800 compounds found in plants, fruits, and vegetables that have been found to demonstrate antioxidant activity, scavenging free radicals and inhibiting lipid peroxidation. They are essential for the processing of vitamin C and the maintenance of capillary walls. Flavonoids can be found in grapes, grape juice, wine, green tea, ginkgo, soy products, cherries, blueberries, onions, apples, and the juice and peel of citrus fruits (i.e., orange, grapefruit, lemon, and lime (Wincor 1999).

****The statements in this brochure have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.***

References

Cargill Health & Food Technologies, Minneapolis, MN.

DiMascio, P., Kaiser, S., Sies, H., 1989. *Lycopene as the most efficient biological carotenoids singlet oxygen quencher*. Arch Biochem Biophys (274):532-528.

Drewnowski, A, Gomer-Careros, C, 2000. *Bitter taste, phytonutrients, and the consumer*. Am J Clin Nutr (72):1424-35.

Ennen, Steve, 2003. *A Toast to Polyphenols*. Wellness Foods (Jan/Feb) p.18-22.

Sharma, O.P., 1976. *Antioxidant activity of curcumin and related compound*, Biochem, Pharmacol (25): 1811-1812.

Snodderly, D.W., 1995. *Evidence for protection against age-related macular degeneration, carotenoids, and antioxidant vitamins*. Am J Clin Nutr 62(suppl):1448S-1461S.

Stanley, D., 1997. *The Muscadine*. Agricultural Research (Nov).

Streitweiser and Heathcock, 1981. *Organic Chemistry*. MacMillan, New York; Stryer, L. *Biochemistry*, W.H. Freeman and Co San Francisco, 1975.

Wincor, Michael Z., Pharma, D., 1999. *Bioflavonoids*. University of Southern California School of Pharmacy and Medicine, Los Angeles, California, Continuing Education Module (Sept).

©New Spirit Naturals 2005