About Ambrotose AO® Capsules

MANNATECH

Insights from Mannatech's R&D Department

What Is the Ambrotose AO Product?

Every day, our bodies are exposed to harmful toxins, ultraviolet (UV) light and other environmental and dietary stressors, which can produce free radicals that may damage our DNA, cells and tissues. Antioxidant supplements can help reduce the amount of free radicals and oxidative stress that may damage or even kill cells.

Mannatech's Ambrotose AO capsules contain a synergistic blend of carefully selected water-soluble and fat-soluble antioxidant compounds (MTech AO Blend® formula), plant extracts and fruit and vegetable powders. Mannatech's MTech AO Blend formula includes the potent antioxidant quercetin and natural sources of powerful antioxidants, including grape skin extract, green tea and Australian bush plum. Ambrotose AO capsules, which also contain an Ambrotose® blend, are not a substitute for Mannatech's Ambrotose® complex or Advanced Ambrotose® products.

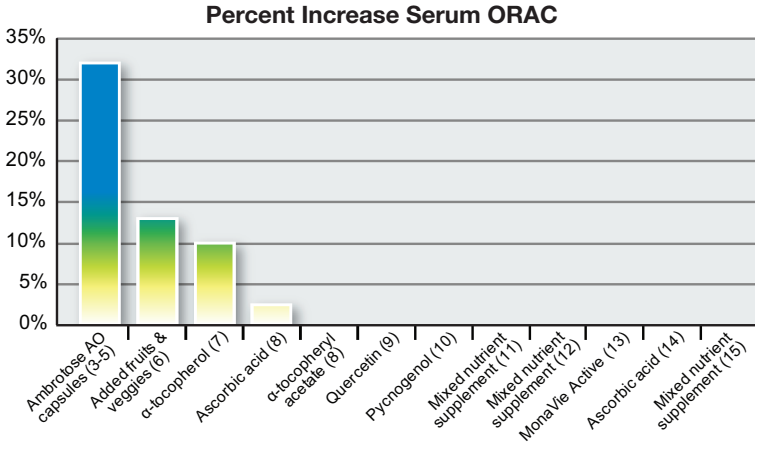
Why Are Ambrotose AO Capsules a Superior Antioxidant Supplement?

The antioxidant activities of foods, beverages and dietary supplements can be measured using the Oxygen Radical Absorbance Capacity (ORAC) method, a widely accepted test developed by scientists affiliated with the USDA (1). Trolox Equivalent Antioxidant Capacity (TEAC) is another accepted method for assessing the antioxidant status of blood (2). Most antioxidant supplements base claims of product efficacy on ORAC values of the products themselves, which may not give an accurate indication of their antioxidant activity in the body. Believed to be a more biologically meaningful approach, the *serum* ORAC method is used to measure the blood's ability to quench free radicals. Ambrotose AO capsules are the only dietary supplement shown to increase serum ORAC (up to 37.4%) in three human clinical studies performed by independent research laboratories (3–5)†. Ambrotose AO capsules also increased serum TEAC by 19% following intake of 4 capsules/day (5).

Questions have arisen regarding the safety of high-dose antioxidant supplements. Ambrotose AO capsules' effect on human serum ORAC levels is greater than the addition of five servings of fruits and vegetables or numerous (frequently high-dose) supplements to the diet.* Compared with other products (see graph), it's clear that Ambrotose AO capsules are a superior supplement containing prudent amounts of antioxidant nutrients.*

What Safety Information Is Available?

The ingredients in this product have been traditionally consumed as either foods (e.g., fruits and vegetables), nutrients in food (e.g., mixed tocopherols), widely used dietary supplements (e.g., aloe vera) or regulated food additives (e.g., gum ghatti, gum tragacanth). Thus, there



are no known health risks associated with the consumption of this product. No adverse effects were seen in product clinical studies (3–5). More than 4 million units have been sold since the product's introduction in 2003. Mannatech's Product Safety Monitoring Program continues to document that Ambrotose AO capsules are safe for daily consumption. Ambrotose AO capsules are also NSF-Certified, gluten-free and suitable for vegetarians.

REFERENCES

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3-5. 2–4 Ambrotose AO capsules for 7–21 days (mean % increase)

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8. **833% DV ascorbic acid or 1333% α-tocopheryl acetate for 56 days.** Huang HY et al. Effects of vitamin C and vitamin E on in vivo lipid peroxidation: results of a randomized controlled trial. Am.J Clin.Nutr. 2002;76:549-55.
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11. **666% DV ascorbic acid, 750% DV α-tocopheryls, 500% DV manganese and other nutrients for 35 days.** Nelson JL et al. Dietary modification and moderate antioxidant supplementation differentially affect serum carotenoids, antioxidant levels and markers of oxidative stress in older humans. J Nutr 2003;133:3117-23.
12. **Multivitamin with 416% DV ascorbic acid for 56 days.** McKay DL et al. The effects of a multivitamin/mineral supplement on micronutrient status, antioxidant capacity and cytokine production in healthy older adults consuming a fortified diet. J Am Coll.Nutr 2000;19:613-21.
13. **MonaVie Active, 1-2 hours after a single serving.** Jensen GS et al. In vitro and in vivo antioxidant and anti-inflammatory capacities of an antioxidant-rich fruit and berry juice blend. Results of a pilot and randomized, double-blinded, placebo-controlled, crossover study. J Agric Food Chem 2008;56:8326-33.
14. **2000% DV ascorbic acid, 1-4 hours after a single dose.** Cao G et al. Serum antioxidant capacity is increased by consumption of strawberries, spinach, red wine or vitamin C in elderly women. J Nutr 1998;128:2383-90.
15. **2166% DV mixed tocopherols, 550% DV ascorbic acid, 238% DV selenium, ~18 mg β-carotene and other nutrients for 24 days.** Schmidt MC et al. Oxidative stress in humans training in a cold, moderate altitude environment and their response to a phytochemical antioxidant supplement. Wilderness.Environ.Med 2002;13:94-105.

*** These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.**

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NSF-Certified according to the NSF/ANSI 173 Dietary Supplement Standard—the only American National Standard for dietary supplements. This certification ensures that this product contains only the ingredients indicated on the label and is free of impurities, and that current Good Manufacturing Practices (cGMPs) were used in the manufacturing facility.