

CoQ10



Clinical Applications

- Innovative, Soy-Free, Five-Lipid Blend for Enhanced Absorption*
- Support Natural Energy Generation and Mitochondrial Function*
- Support Plasma/Tissue CoQ10 Levels*
- Support Health/Functioning of the Cardiovascular System*
- Support Neuromuscular and Central Nervous System Health*

*CoQ10 is Optimal Wellness' proprietary, micro-emulsified CoQ10 formula that offers unparalleled absorption and bioavailability. This formulation has been shown in clinical trials to be over eight times more absorbable than powdered CoQ10 and more than twice as bioavailable as oil-based or so-called "nano"-dispersed formulas on the market. The proprietary multilipid carrier employed in CoQ10 is unmatched for optimal utilization in the support of cardiovascular and energy-based health needs.**

All Optimal Wellness Formulas Meet or Exceed cGMP Quality Standards

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Discussion

Coenzyme Q10 (CoQ10) is a fat-soluble substance that plays a major role in energy production and antioxidant protection in the body. It is found in the body primarily in its interchangeable ubiquinone and ubiquinol forms. In general, CoQ10 supports mitochondrial energy production, antioxidant activity, cell membrane stabilization, gene expression and apoptosis, and neurological and cardiovascular health.^[1,2] Levels of CoQ10 in the body can be affected by a number of factors. Dietary contribution of CoQ10 is minimal and serum levels tend to decline with age or can be reduced due to drug-induced nutrient depletion.*^[3-5]

Synthesis of CoQ10 in the body is regulated by the enzyme HMG-CoA reductase. A variety of factors can inhibit HMG-CoA reductase and hinder CoQ10 production and availability, resulting in a potential increase in oxidative stress and a decrease in energy generation. In the event of reduced production, or drug-induced nutrient depletion, physicians recommend supplementation with CoQ10 to help maintain normal levels in the body.^[6,7] Supplementation with CoQ10 has been found to promote favorable outcomes for a targeted group of patients^[8] and to improve quality of life, energy levels, neurological health maintenance, exercise tolerance, and muscle comfort for a wide range of individuals.^[1,9] A research study utilizing functional intracellular assay (FIA) suggested that CoQ10 may be a potential peripheral biomarker of antioxidant status in neurological health maintenance.*^[10]

Cardiovascular health is particularly dependent upon CoQ10 because of the heart muscle's exceedingly high energy demand.^[9] The value of CoQ10 supplementation on cardiovascular health has been confirmed by ongoing human research studies.^[6,11-13] A randomized, double-blind, placebo-controlled study utilizing the same bioidentical, naturally yeast-fermented CoQ10 found in CoQ10 formulas was conducted in a select group of 49 patients. Researchers observed that supplementation with 100 mg/d of CoQ10 successfully restored plasma levels and significantly increased total CoQ10 levels by 127%.*^[14]

Results from the highly anticipated Q-SYMBIO research study were reported in May 2013. Prior to the Q-SYMBIO study, researchers had observed that myocardial CoQ10 levels were inversely related to heart health and function.^[15] The Q-SYMBIO results, in fact, supported this association. In the randomized, double-blind, placebo controlled Q-SYMBIO study, 420 patients were assigned to parallel groups to receive either the CoQ10 found in CoQ10 (100 mg three times per day) or placebo. Within three months, researchers observed a reduction in N-terminal pro-brain natriuretic peptide (NT-proBNP), an important marker of heart health, in the CoQ10 supplemented patients. After two years, patients who were supplemented with CoQ10 had significant cardiovascular improvement overall compared to placebo.*^[16,17]

CoQ10 contains a unique, micro-emulsified, highly bioavailable form of ubiquinone and represent a new generation of CoQ10 supplementation. This soy-free formulation contains five lipids that help dissolve CoQ10 crystals into single molecules. This process helps stabilize the formula to prevent re-crystallization and facilitates passive diffusion to enhance absorption. Earlier generation supplements were poorly absorbed (0.6-1.0%), pure crystalline (powdered) forms of CoQ10, which served as the industry standard from

the mid-1970s to the mid-1990s. A variety of forms and delivery systems offered somewhat improved absorption (2.3-5%) after 1995; however, these forms were unstable and crystallized and therefore difficult for the body to absorb. The five-lipid carrier, micro-emulsified CoQ10 in Optimal Wellness' CoQ10 represents innovation and improvement in CoQ10 delivery and bioavailability.*

Relative CoQ10 Absorption^[15]

Figure 1. Plasma CoQ10 Cmax (ug/ml)

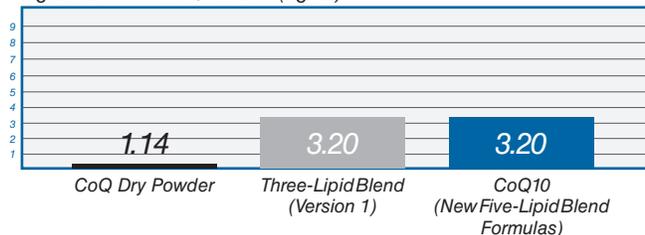


Figure 2. Cmax % Dose Absorbed

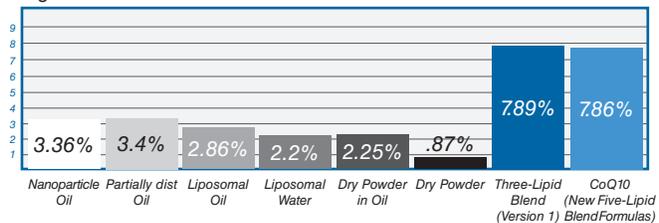
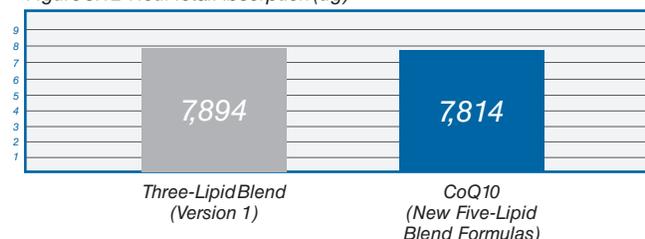


Figure 3. 12-Hour Total Absorption (ug)



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

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Supplement Facts

Serving Size: 1 Softgel
Servings Per Container: 120

	Amount Per Serving	% Daily Value
Calories	10	
Calories from Fat	10	
Total Fat	1 g	1%†
Coenzyme Q10 (as ubiquinone)(Kaneka Q10®)	50 mg	**

†Percent Daily Values are based on a 2,000 calorie diet.
** Daily Value not established.

Other Ingredients: Proprietary blend of palmitic acid, oleic acid, and linoleic acid, safflower oil (non-GMO), medium-chain triglycerides, gelatin, vegetable glycerin, and annatto.

Kaneka Q10® is a registered trademark of Kaneka Corp.

Directions

Take one softgel one to two times daily, or as directed by your healthcare practitioner. Optimal results may be achieved by consuming with meals that contain fat.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

Does Not Contain

Wheat, gluten, corn, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, artificial colors, artificial sweeteners, or artificial preservatives.

References

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