

Coenzyme Q10

Cellular Energy Support*

Coenzyme Q10 (CoQ10) belongs to a family of lipid soluble ubiquinones, present throughout the body, and in the cells of all plants and animals. Among the coenzyme Q compounds that exist in nature, coenzyme Q10 is the predominant form found in humans. It is most concentrated in cells of the heart, liver, kidney and pancreas. The body's production of CoQ10 peaks around age 20 and then declines. For many decades, supplemental CoQ10 has been used throughout Europe, Asia, and the United States for its support of cellular energy, antioxidant function and cardiovascular health.*



#51220 • 50 mg
75 vegetarian capsules

Key Features

- Involved with the production of cellular energy (ATP)*
- Helps provide lipid antioxidant activity in the mitochondrial membrane*
- CoQ10 is a key metabolite for cardiovascular health*



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CoQ10 plays an essential role in the mitochondrial electron transport chain (ETC), the major metabolic pathway for making energy in every cell of the body. The ETC is the third step in the process of cellular respiration, following glycolysis and the Krebs cycle, the step where most of the energy locked in the original glucose molecule is released. The ETC is a "bucket brigade" of electron-carrying proteins located in the inner membrane of the mitochondria, which transfer electrons from one to another down the chain. This eventually produces water and a gradient through which ATP, our cellular energy currency, is made. CoQ10 functions as an electron carrier in the ETC, linking the various enzymes of the chain. Every pair of electrons processed by the chain must first interact with CoQ10, making the production of ATP dependent on sufficient levels of CoQ10 in the mitochondrial membrane.*

In addition to being essential for generating energy, CoQ10 is an important antioxidant. Because it is fat-soluble, CoQ10 is well-suited to protect the mitochondria from free radical damage.* The process of electron transport produces oxygen free radicals, which are then trapped by CoQ10 and vitamin E. CoQ10 works synergistically with vitamin E, helping to spare it. Studies have shown that CoQ10 reduces the initiation and propagation of lipid peroxidation in cell membranes and in lipoprotein fractions, and under normal conditions, it is found at higher concentrations in the mitochondria than is vitamin E.* As with other antioxidant nutrients, CoQ10 is subject to increased turnover in the body as a result of stress or other situations that tend to increase free radical load in the body, such as smoking, alcohol intake, or exposure to toxic chemicals or radiation.*

CoQ10 has been extensively studied for its ability to support cardiovascular function.* Studies suggest that CoQ10 may strengthen the heart muscle, and enhance such things as quality of life, breathing, and heart rate.* It supports blood pressure within normal levels, and it may be of benefit to those taking cholesterol-lowering medications, which can reduce blood levels of CoQ10.*

Coenzyme Q10 is well tolerated, with an extensive history of study and safe use.

References:

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Coenzyme Q10 50 mg

Supplement Facts

Serving Size 2 Capsules
 Servings Per Container 37

Amount Per Serving % Daily Value*

Vitamin C (as Ascorbic Acid) 100 mg 111%

Coenzyme Q10 100 mg †

† Daily Value not established

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

Suggested Use: As a dietary supplement, 1 or 2 capsules two or three times per day with meals, or as directed by a healthcare practitioner.

Note: These are the dry form of CoQ10 and would be best absorbed when taken with fat.