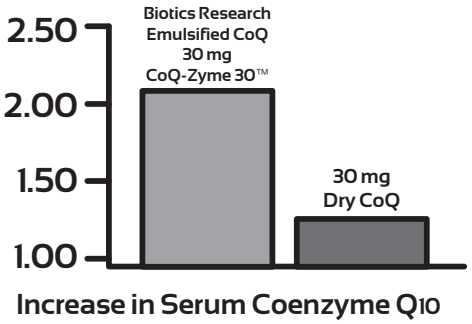
CoQ-Zyme 30™ and CoQ-Zyme 100 Plus™

CoQ-Zyme 30™ and **CoQ-Zyme 100 Plus™** each supply a highly bioavailable dose of ubiquinone coenzyme Q10 (CoQ10) due to the proprietary emulsification process used for delivery. In a double-blind clinical study, daily ingestion of 1 tablet (30 mg) of Biotics Research Corporation's emulsified CoQ10 for 4 weeks was shown to increase plasma CoQ10 levels by 210%, equivalent to 90-100 mg of dry CoQ10. Furthermore, dry CoQ10 powder increased serum levels in only 57% of subjects, while the Biotics Research emulsified CoQ10 produced an increase in serum CoQ10 levels in 80% of the subjects.[1,2]

Importantly, Biotics Research uses no soy byproducts, no artificial flavors or colorants, no propylene glycol, and no detergents or other artificial surfactants in our proprietary emulsification process.



CoQ10 is a fat-soluble, high molecular weight compound produced by the body for the basic functioning of cells. As a cellular component, CoQ10 has two primary functions in the body; first, to act in the transfer of electrons as a necessary part of ATP production, and second, to function as an essential antioxidant. In the body, CoQ10 is ubiquitous in all cells (thus its name "ubiquinone"); however, in humans, the highest concentrations are found in the heart, liver, muscle, kidney and brain.

Nutritional Support for Energy Production

A necessary component of ATP production, CoQ10 plays a critical role in mitochondrial respiration. In addition to intra-mitochondrial processes, it plays a vital role in extra-mitochondrial processes, including its regulatory action in the NADH oxidoreductase (complex I) function of the plasma membrane [3,4] as well as its function in the redox potential of both the Golgi complex and the plasma membrane.[5,6] Consequently, its role is vital to the cellular energy generating systems.[7] Often termed "the hub around which life processes revolve in the human body", CoQ10 participates in all energy processes. As the only lipid-soluble antioxidant synthesized endogenously,[8] its absence or inadequate supply results in diminished energy production and suboptimal cellular function.

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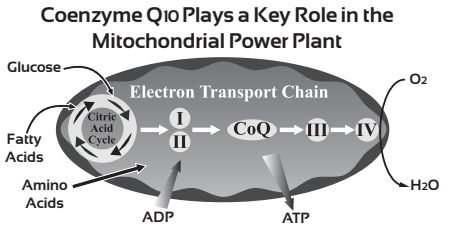

CoQ10 and Cardiac Health

Over eighty drugs, the most notable being statin drugs, are known to have a negative impact on the body's ability to produce CoQ10.[9] Statins block the enzyme HMG-CoA reductase, which is a functional component in the body's ability to synthesize CoQ10. With statin therapy, reductions in CoQ10 between 16-54% have been documented.[10] As a result, there is often a need to increase the daily intake of CoQ10.

CoQ10 supplementation has demonstrated numerous cardiovascular benefits via its action to increase both myocardial and cardiac mitochondrial competence, as well as 'myocardial tolerance' towards the stress of hypoxia/reoxygenation.[11] Because the cells of the heart have a high dependence on ATP, they contain a large quantity of mitochondria, which support both the contractile role and the cardiac output.[12] Therefore, a depleted supply of CoQ10 may result in a negative impact on mitochondrial energy,[13] and supplemental CoQ10, therefore, exerts a positive influence on the performance of the heart.[14] In addition, CoQ10 is also speculated to improve the integrity of the vascular tissue indirectly via its inhibition of oxidative damage to LDL.[15]

CoQ10 as an Antioxidant

Exogenous CoQ10 has been shown to protect cells against oxidative stress,[16] as well as to improve arterial endothelial function of the peripheral circulation in patients with Type II diabetes and dyslipidemia.[17] The body readily converts CoQ10 (ubiquinone) to the reduced form, ubiquinol, which predominates when there is a net generation of ATP in the cell. In addition to improving oxidation via its production of high energy phosphates, and as a consequence to its free radical scavenging activities,[18] CoQ10 functions as a potent intracellular antioxidant, and possesses powerful activity against free radical species.[19] Numerous studies have demonstrated the antioxidant benefits of CoQ10 supplementation, including its role in reducing the level of mitochondrial reactive oxygen species and decreasing DNA damage.[20]

CoQ10 and Immune Function

Because cells and tissues involved in immune function are highly dependent upon energy, they require an adequate supply of CoQ10. In studies with elderly animals, immune function is shown to decline with age. In these studies, a suppression of the immune response was associated with a marked decline in CoQ10 levels in thymic tissue.[21] Studies have also demonstrated an immune-supportive role with the use of oral CoQ10. For example, a suboptimal concentration of CoQ10 has been observed in asthmatic patients. They postulated this low level of CoQ10 yielded an antioxidant imbalance, which increased the incidence of asthma.[22] In another study, corticosteroid-dependent bronchial asthmatic patients exhibited a decrease in CoQ10 levels and CoQ10 supplementation resulted in a reduced corticosteroid requirement for symptom relief.[23]

In addition, oral administration of CoQ10 has been shown to enhance the phagocytic activity of macrophages, and to increase the proliferation of granulocytes in response to infection.[21]

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CoQ-Zyme 100 Plus™

Each capsule of CoQ-Zyme 100 Plus™ supplies 100 mg of emulsified CoQ10, as well as a full complement of important B vitamins. Each capsule also supplies 100% of the Daily Value of B-complex vitamins, along with 80 mcg each of SOD and Catalase from our exclusive Vegetable Culture.

CoQ-Zyme 30™

Each tablet of CoQ-Zyme 30™ supplies 30 mg of emulsified CoQ10, as well as 30 mcg each of Superoxide Dismutase (SOD) and Catalase, key antioxidant enzymes from our exclusive Vegetable Culture.

CoQ-Zyme 100 Plus™ is available in 60 count bottles (#2617)

Supplement Facts

Serving Size: 1 Capsule

	Amount Per Serving	% Daily Value
Thiamin (B1) (as cocarboxylase chloride)	1.5 mg	125%
Riboflavin (B2) (as riboflavin-5-phosphate)	1.7 mg	131%
Niacin (as niacin & niacinamide)	20 mg	125%
Vitamin B6 (as pyridoxal-5-phosphate)	2 mg	118%
Folate (as calcium folinate)	400 mcg DFE	100%
Vitamin B12 (as methylcobalamin)	6 mcg	250%
Biotin	300 mcg	1,000%
Pantothenic acid (as calcium pantothenate)	10 mg	200%
Coenzyme Q10 (emulsified)	100 mg	*
Superoxide Dismutase (from vegetable culture†)	80 mcg	*
Catalase (from vegetable culture†)	80 mcg	*

*** Daily Value not established**

Other ingredients: Capsule shell (gelatin and water), gum arabic and magnesium stearate (vegetable source).

† Specially grown, biologically active vegetable culture containing naturally associated phytochemicals including polyphenolic compounds with SOD and catalase, dehydrated at low temperature to preserve associated enzyme factors.

This product is gluten, dairy and GMO free.

RECOMMENDATION: One (1) capsule each day as a dietary supplement or as otherwise directed by a healthcare professional.

CAUTION: Not recommended for pregnant or lactating women.

KEEP OUT OF REACH OF CHILDREN
Store in a cool, dry area.
Sealed with an imprinted safety seal for your protection.

Product # 2617 Rev. 07/18

CoQ-Zyme 30™ is available in a 60-count bottle (#2616)

Supplement Facts

Serving Size: 1 Tablet

	Amount Per Serving	% Daily Value
Coenzyme Q10 (emulsified)	30 mg	*
Superoxide Dismutase (from vegetable culture †)	30 mcg	*
Catalase (from vegetable culture †)	30 mcg	*

*** Daily Value not established**

Other ingredients: Cellulose, stearic acid (vegetable source), gum arabic, magnesium stearate (vegetable source), modified cellulose gum, silica and food glaze.

† Specially grown, biologically active vegetable culture containing naturally occuring and/or organically bound phytochemicals including polyphenolic compounds with SOD and catalase, dehydrated at low temperature to preserve associated enzyme factors.

This product is gluten, dairy and GMO free.

RECOMMENDATION: One (1) tablet each day as a dietary supplement or as otherwise directed by a healthcare professional.

KEEP OUT OF REACH OF CHILDREN
Store in a cool, dry area.
Sealed with an imprinted safety seal for your protection.

Product # 2616 Rev. 09/18

To place your order for **CoQ-Zyme 100 Plus™ or CoQ-Zyme 30™** please contact us below.

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