High Absorption CoQ10 + PQQ with PureQQ™ and BioPerine®

INGREDIENTS

CoQ10 plus PQQ contains two key nutrients to boost energy production at the cellular level: Pure, vegetarian source Coenzyme Q10 and PQQ. BioPerine®, a natural extract derived from black pepper, is included in CoQ10 plus PQQ as an evidence-based means of increasing nutrient absorption1. Doctor's Best CoQ10 products featuring BioPerine® are designed to help restore the body's depleted CoQ10 stores quickly and efficiently. CoQ10 taken with BioPerine® enhances nutrient absorption in the gastrointestinal tract, achieving a 30% increase in CoQ10 blood levels versus CoQ10 taken with placebo2.

CoQ10 is required to convert fats and sugars into usable cellular energy. CoQ10 is a versatile antioxidant, stabilizing cell membranes (helping to protect them from free radical damage) and contributing to their fluidity3. Coenzyme Q10 levels decrease with age, a factor that may actually contribute to the aging process4. Since food content of CoQ10 can be very low, many healthcare providers recommend supplementing with Coenzyme Q10.

CoQ10 plus PQQ is also a source of Pyrroloquinoline Quinone (PQQ from PureQQ™). PQQ is a vitamin-like nutrient central to energy production at the cellular level, essential for generating metabolic energy in the form of ATP. Research demonstrates that PQQs unique nutritional profile supports heart health and brain function – alone, and especially in combination with CoQ10.5-8 The optimal dose of PQQ is 20 mg per day.

BENEFITS

**CoQ10 + PQQ:**

- Helps Enhance Cardiovascular Health and Support Endothelial Function9
- Helps Enhance Healthy Brain Function
- Helps Support the Production of New Mitochondria10
- Helps Replenish CoQ10 Losses from Statins
- Helps Provide Protection for the Central Nervous System

CoQ10’s ability to act as an antioxidant and support mitochondrial function makes it a powerful tool in the battle for cardiovascular health10. The highest concentration of Coenzyme Q10 is found in heart muscle tissue where it helps supply the extraordinary energy demands of our hardworking heart. CoQ10 is known to support the heart through mitochondrial bioenergetics, the process of cellular energy transformation. On top of this, CoQ10 helps to promote overall cardiovascular health by confronting oxidative stress in heart and endothelial (blood vessel wall) cells11,12.

There has been research in the use of CoQ10 supplementation to work against the oxidative stress that takes a toll on circulating blood lipids, specifically as it relates to cardiovascular health. Clinical studies seem to demonstrate that CoQ10 directly with peroxyl radicals. CoQ10 indirectly helps quench radicals by regenerating antioxidant vitamins, specifically the active forms of vitamin E, A, C, and beta-carotene13. CoQ10 has also been shown to modulate oxidation rates of key lipids during supplementation. This type of antioxidant activity may enhance the structural integrity of lipids and supporting healthy blood vessels and circulation, potentially creating a more favorable cardiovascular environment. Clinical studies seem to demonstrate that supplementation of CoQ10 supports these effects in addition to endogenously produced CoQ1014.

In terms of bioenergetics, CoQ10 supplementation acts to preserve energy turnover in mitochondria – our cellular powerhouses – by keeping ATP synthesis at optimal levels15. Maintenance of normal energy utilization and supply is crucial for maintaining the cell's ideal biochemical state. Due to the large amounts of energy requirements for the heart, there is a high density of mitochondria in cardiac tissues. According to researchers, these mitochondria play a vital role in heart health16,17.

**Supplement Facts**

<table>
<thead>
<tr>
<th>Serving Size</th>
<th>1 Veggie Capsule</th>
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<tbody>
<tr>
<td>Servings Per Container</td>
<td>60</td>
</tr>
<tr>
<td>Coenzyme Q10 (Ubiquinone)</td>
<td>100 mg†</td>
</tr>
<tr>
<td>PQQ (Pyrroloquinoline quinone)(PureQQ)</td>
<td>20 mg†</td>
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<tr>
<td>Black Pepper Ext. (Piper nigrum)(fruit)</td>
<td>5 mg†</td>
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† Daily Value not established.

Other Ingredients: Rice Powder, modified cellulose (vegetarian capsule), silicon dioxide, magnesium stearate (vegetable source).

**Suggested Adult Use:** Take 1 capsule daily preferably with food for maximum absorption, or as recommended by a nutritionally-informed physician.

**USP Verified, Naturally Fermented CoQ10**

**Non-GMO / Gluten Free / Soy Free / Vegan**

Store in a cool dry place.

PureQQ is a trademark of Nascent Health Sciences, LLC. BioPerine® is a registered trademark of Sabinsa Corporation.

* 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.
PQQ is able to complement and enrich the benefits of CoQ10 through its own independent action as mitochondrial support and an antioxidant. PQQ is a nutrient that is present in many types of foods, from fruits and vegetables to milk and tea. PQQ supports mitochondrial function as a biochemical growth factor and through the induction of mitochondrial biogenesis. Ingestion of PQQ, even in trace amounts, has been shown to stimulate mitochondriogenesis, the creation and support of new mitochondria.

Beyond promoting the creation of new mitochondria, PQQ also aids in the protection of mitochondria through its antioxidant activity. PQQ also promotes mitochondrial function by aiding in energy utilization, improving the performance of mitochondria in vital activities. Preservation of mitochondrial integrity is important because damage or mutations to the mitochondria DNA can have a cascade of negative health effects such as raising serum triglycerides, fatty liver, and impaired neurological function. The complete exclusion of PQQ from the diet appears to create problems for the healthy function of numerous functions and pathways.

CoQ10 levels in the heart and body may begin to naturally decline after age 40. Further evidence that CoQ10 supplementing our endogenous production of CoQ10 can be beneficial. In addition to the natural decline of endogenous CoQ10, many widely used statin drugs that are taken to alter cholesterol levels have also been suggested to drain the body's CoQ10 levels. For example, from 1990-2004, thirteen controlled trials demonstrated significant reductions in CoQ10 levels secondary to statin therapy. Aging, poor absorption, and statin drugs may combine to create a CoQ10 deficiency. Statin-induced CoQ10 loss may be reversed with CoQ10 supplementation without having an adverse impact on the cholesterol-lowering or anti-inflammatory properties of the statin drugs.

**Distribution in the Body**

The concentration of Coenzyme Q10 in the body decreases year by year, indicating that it has a close relationship with aging.

**SCIENTIFIC REFERENCES**