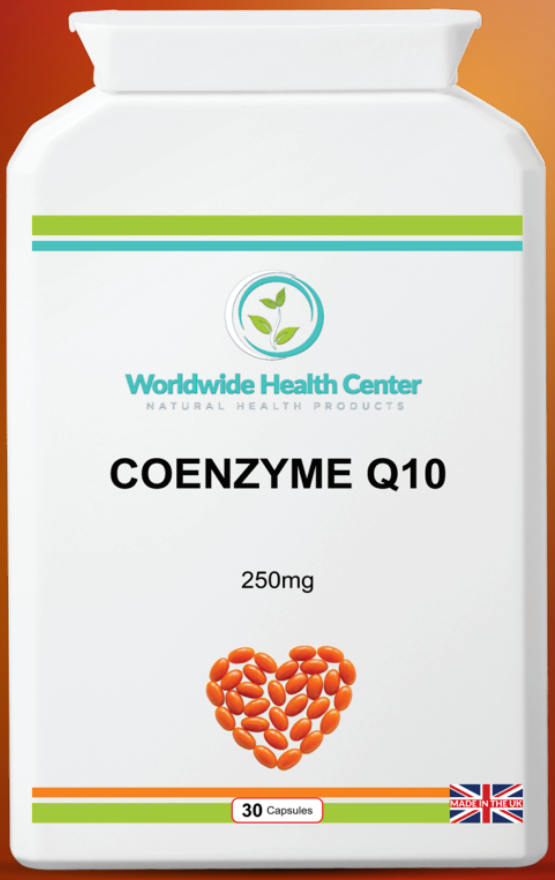
COENZYME Q10



250mg

PRODUCT INFORMATION

Each capsule provides:
Co-enzyme Q10 (Ubiquinine) 250mg

INGREDIENTS: Co-enzyme Q10 (Ubiquinine), vegetarian capsule shell: hydroxypropyl methylcellulose (HPMC), brown rice flour, anti-caking agent: magnesium stearate (vegetable source)

DIRECTIONS

Take 1 capsule, 1 to 3 times per day or as advised.

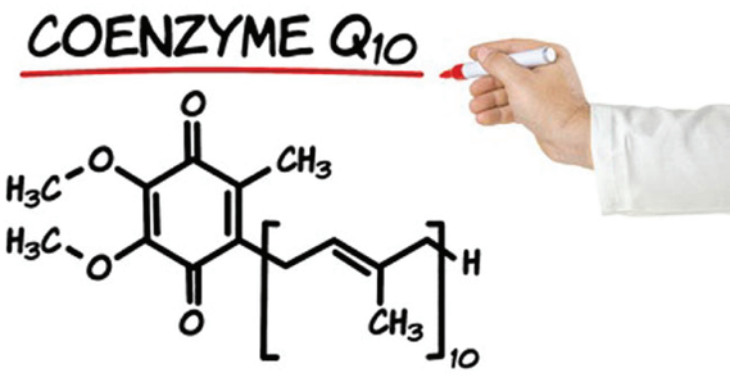
FOR YOUR HEART

CoQ10 (short for Coenzyme Q_{10}) is an essential element for many daily functions and is required by every single cell in the body. As an antioxidant that protects cells from the effects of aging, CoQ10 has been used in medicine practices for decades, especially in the case of treating heart problems.
Still today, one of the most common and thoroughly researched uses of CoQ10 is helping protect the heart and blood vessels from the damaging effects of oxidative stress (also called free radical damage). Many consumers turn to CoQ10 supplements to help manage health conditions, including heart arrhythmia, high blood pressure, coronary artery disease, atherosclerosis and congestive heart failure.

Research shows that patients with other inflammatory health conditions, such as breast cancer, diabetes, viruses and infertility, may also find these supplements helpful for both prevention of complications and treatment of symptoms.

What Is CoQ10?

The name may not sound very natural, but CoQ10 is in fact an essential nutrient that works like an antioxidant in the body. In its active form, it's called ubiquinone or ubiquinol. It's synthesized within the body naturally and used for important functions, such as supplying cells with energy, transporting electrons and regulating blood pressure levels. (1) The reason it's not considered to be a "vitamin" is because all animals, including humans, can make small amounts of coenzymes on their own even without the help of food.



How CoQ10 Works:

- To sustain enough energy to perform bodily functions, inside our cells tiny organelles called mitochondria take fat and other nutrients and turn them into useable sources of energy. This conversion process requires the presence of CoQ10.
- As a "coenzyme," CoQ10 also helps other enzymes work to digest food properly.
- CoQ10 is not only necessary for producing cellular energy, but also for defending cells from damage caused by harmful free radicals.
- Coenzyme Q10 can exist in three different oxidation states, and the ability in some forms to accept and donate electrons is a critical feature in its biochemical functions that cancel out free radical damage.
- As a powerful antioxidant, CoQ10 can increase absorption of other essential nutrients. It's been shown that it helps recycle vitamin C and vitamin E, further maximizing the effects of vitamins and antioxidants that are already at work in the body.
- Although the body has the ability to make some CoQ10 on its own, production naturally declines as we age — just when we need our cells to help defend us most. This means we can all benefit from consuming more CoQ10, both naturally within from our diets, and also from high-quality supplements.

Who Should Take CoQ10?

According to work done by Oregon State University, natural synthesis of CoQ10, plus dietary intake, appears to provide sufficient amounts to help prevent deficiency in healthy people — however as explained above, the body produces less CoQ10 as someone gets older.
The natural ability to convert CoQ10 into its active form called ubiquinol declines during the aging process. This decline is most apparent in people over the age of 40, particularly those taking statin drugs. It's also been found that people with diabetes, cancer and congestive heart failure tend to have decreased plasma levels of coenzyme Q10.

For these reasons, CoQ10 is recommended most for people with heart problems. This can include anyone suffering from:

- A history of heart attacks or coronary heart disease
- High cholesterol (especially when taking statin drugs!)
- High blood pressure
- Atherosclerosis
- Angina
- Mitral valve prolapse

In addition to supporting a healthy cardiovascular system, CoQ10 has also been found to have the following benefits:

- Helps lower fatigue and boosts stamina
- Defends against free radicals and typical signs of aging, including muscle loss and skin changes
- Restores the power of antioxidants, including vitamin E and vitamin C
- Stabilizes blood sugar
- Supports healthy gums
- Reduces muscular dystrophy
- Helps treat cognitive disorders, including Parkinson's disease and Alzheimer's
- Results in metabolic improvement in patients with hereditary mitochondrial disorders
- May be able to help treat other conditions, including cancer, hormone imbalances, diabetes, viruses and infections.

CoQ10 is a MAJOR ENERGY MOLECULE AND ANTI-OXIDANT

Where does research show benefit?

- ✔ Cardiovascular health
- ✔ Aging
- ✔ Dental health
- ✔ Renal health
- ✔ Neural and brain health
- ✔ Chemotheraphy
- ✔ Male infertility
- ✔ Hypertension
- ✔ Fatigue
- ✔ Eye health
- ✔ Migraine
- ✔ Statin therapy
- ✔ Genetic CoQ10 deficiencies

6 BENEFITS OF COQ10

1 Sustains Natural Energy

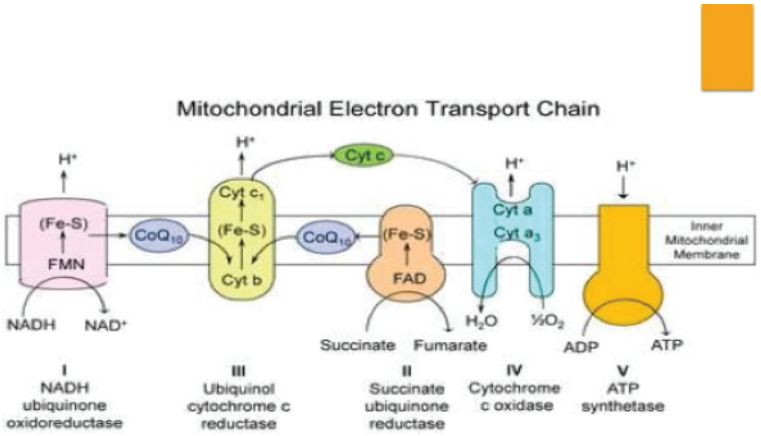
CoQ10 plays a role in "mitochondrial ATP synthesis," which is the conversion of raw energy from foods (carbohydrates and fats) into the form of energy that our cells use called adenosine triphosphate (ATP). This conversion process requires the presence of coenzyme Q in the inner mitochondrial membrane. One of its roles is to accept electrons during fatty acid and glucose metabolism and then transfer them to electron acceptors. (3) The process of making ATP has many benefits, from preserving muscle mass to helping regulate appetite and body weight.

2 Reduces Free Radical Damage

Oxidative damage (or free radical damage) of cell structures plays an important role in the functional declines that accompany aging and cause disease. As a fat-soluble antioxidant, CoQ10 has been found to inhibit lipid peroxidation, which occurs when cell membranes and low-density lipoproteins are exposed to oxidizing conditions that enter from outside the body.

3 Can Improve Heart Health and Offset Effects of Statin Drugs

Although experts feel that additional well-controlled clinical trials are still needed to prove its effects, CoQ10 has strong potential for prevention and treatment of heart ailments by improving cellular bioenergetics, acting as an antioxidant and boosting free radical-scavenging abilities. A 2015 report published in **Frontiers in Bioscience** referenced earlier stated that "CoQ10 deficiencies are due to autosomal recessive mutations, mitochondrial diseases, aging-related oxidative stress and carcinogenesis processes, and also a secondary effect of statin treatment."



4 Slows Down Effects of Aging

Mitochondrial ATP synthesis is an important function for maintaining a fast metabolism, strength of muscles, strong bones, youthful skin and healthy tissue. Tissue levels of coenzyme Q10 have been reported to decline with age, and this is believed to contribute to declines in energy metabolism and degeneration of organs, such as the liver and heart, and skeletal muscle.

5 Helps Maintain Optimal pH Levels

Within cells, CoQ10 helps transport proteins across membranes and separate certain digestive enzymes from the rest of the cell, which helps maintain optimal pH. It's believed that diseases develop more easily in environments that don't have proper pH levels, specifically those that are not overly acidic.

6 Protects Cognitive Health

In those with cognitive impairments, such as Parkinson's disease, increased oxidative stress in a part of the brain called the substantia nigra is thought to contribute to symptoms. CoQ10 has been shown to offset decreases in activity of mitochondrial electron transport chains that affect nerve channels and brain function, and studies show that people with cognitive disorders tend to have reduced levels of CoQ10 in their blood.

Several studies have investigated the effects of CoQ10 in individuals with Parkinson's disease. One randomized, placebo-controlled trial that evaluated the efficacy of 300, 600 or 1,200 milligrams a day given to 80 people with early Parkinson's disease found that supplementation was well-tolerated and associated with slower deterioration of cognitive functions compared to the placebo. Other trials have shown that around 360 milligrams a day taken for four weeks moderately benefited Parkinson's disease patients.

CoQ10 Supplement Dosage:

- According to a survey done by ConsumerLab.com including over 50 CoQ10 products tested, the suggested daily serving size ranges from 30 milligrams to 1,000 milligrams daily.
- Most experts recommend that adults take at least 200 milligrams daily to experience benefits.
- Those on statins or weighing over 200 pounds should consider a higher dose.