CoQ10 100

CLINICAL APPLICATIONS

- Enhances Cellular Energy Production and Physical Performance
- Supports Cardiovascular Health
- Supports Blood Sugar Balance Already Within Normal Levels
- Promotes Neurological Health

What is CoQ_{10}?

Coenzyme Q_{10} (CoQ_{10}), also known as ubiquinone, is a proenzyme produced naturally within the body. CoQ_{10} plays a critical role in energy (ATP) production and is one of the most powerful known lipidsoluble antioxidants, protecting cells, organs and tissues from damage caused by oxidative stress and free radicals. CoQ_{10} inhibits protein and lipid oxidation and protects mitochondrial DNA from oxidative damage. This CoQ_{10} formulation is delivered in an oil-based proprietary form and includes natural vitamin E for enhanced absorption and maximum stability.

Overview

CoQ_{10} is a lipid-soluble antioxidant found in every cell in the body. CoQ_{10} is abundant in the mitochondrial membrane and plays an important role in the synthesis of adenosine triphosphate (ATP), a molecule of chemical energy upon which all cellular functions depend. The synthesis of ATP within the mitochondria is a multi-step series of biochemical reactions called the electron transport chain. As a coenzyme, CoQ_{10} is required for several enzymatic reactions required to produce cellular energy and to protect the body against free radicals produced during this process. To maintain energy production, mitochondrial CoQ_{10} is continuously recycled from ubiquinone, its ATP production state, to ubiquinol, its antioxidant state. After the age of 35 to 40 years, endogenous synthesis of CoQ_{10} begins to decline.[1] CoQ_{10}, an essential component of cellular energy production, has been shown to extend cell life and benefit high-energy systems, namely the cardiovascular, neurological and immune systems.

CoQ_{10} Depletion†

The body's ability to produce and metabolize CoQ_{10} has been reported to decrease with age. CoQ_{10} deficiency may be caused by insufficient dietary intake of CoQ_{10}, impairment in CoQ_{10} production, drug-induced CoQ_{10} depletion, gene mutations and oxidative stress. HMG-CoA reductase is an enzyme required for the synthesis of cholesterol and CoQ_{10}. Cholesterol lowering medications inhibit this enzyme in order to reduce cholesterol synthesis, but may also simultaneously deplete CoQ_{10} status. Thirteen controlled studies conducted between 1990-2004 demonstrated significant CoQ_{10} depletion, secondary to use of statin medications used to lower cholesterol levels.[2] These studies demonstrated a range of 19-54% decrease in CoQ_{10} levels in patients on statin therapy. In the event of CoQ_{10} depletion, supplementation can improve CoQ_{10} status and help maintain optimal levels in the body.

Cardiovascular Health†

CoQ_{10} is important for all energy-dependent processes, and is especially helpful in strengthening contraction of the heart muscle. CoQ_{10} is also important for protection against free radical damage to the arterial vessels. In a double-blind, cross-over trial 19 patients received 100 mg CoQ_{10}/day or placebo for 12 weeks. Compared with placebo, patients receiving CoQ_{10} demonstrated significant support of cardiac function and increased tolerance for physical activity.[3] In another study, 109 patients received an average dose of 225 mg of CoQ_{10} per day. After a mean treatment period of 4.4 months, CoQ_{10} helped in maintaining healthy blood pressure levels in more than half of the patients.[4] CoQ_{10} has been shown to be a preventive factor in reducing low-density lipoprotein (LDL) oxidation- a major factor for supporting healthy cholesterol levels.[5]

Blood Sugar Balance†

The electron transport chain, a biochemical pathway in which CoQ_{10} plays a major role, significantly impacts carbohydrate metabolism. CoQ_{10} has been shown to support blood sugar

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†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.

balance already within normal levels.[7] In one study, 39 subjects received 120mg of a CoQ_{10} analog for 2-18 weeks. Fasting blood sugar levels were maintained in the normal range, along with a 30% decrease of ketone bodies in 59% of patients- an indicator of healthy blood sugar metabolism.[8]

Neurological Health†

Neurons are characterized by high rates of metabolic activity and the need to respond quickly to energy demanding fluctuations in the brain. Mitochondrial alterations, leading to reduced ATP production, can promote neuronal dysfunction and degeneration via increased production of reactive oxygen species in the central nervous system. As an effective carrier with strong antioxidant properties, CoQ_{10} has been shown to promote neurological health.[9]

Directions

1 or more soft gel capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, artificial colors or flavors.

Cautions

If you are pregnant or nursing, consult your health care professional before taking this product.

Supplement Facts V4

Serving Size 1 Soft Gel Capsule
Servings Per Container 30

	Amount Per Serving	% Daily Value
Vitamin E (from 100 IU as d-Alpha Tocopherol)	64 mg	427%
Coenzyme Q10	100 mg	*

* Daily Value not established.

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