

Alive!

Coenzyme Q10: The Spark of Life

By Karolyn A. Gazella

Our cells need energy to keep us alive and functioning properly. Enzyme molecules speed up chemical reactions that produce this vital cellular energy. All enzymes require assistance from coenzymes.

CoQ10 is considered one of the most important coenzymes discovered. Author and naturopathic physician Michael Murray compares CoQ10 to the spark plug in a car. “Just as a car cannot function without that initial spark, the human body cannot function without CoQ10,” he explains.

CoQ10 is also a powerful antioxidant. Antioxidants offset damage caused by free radicals, which are the “loose cannons” in our cellular system. These highly reactive molecules damage healthy cells and have been linked to a wide variety of illnesses including heart disease and cancer.

Antioxidants help protect us from free radical damage. Some antioxidants like CoQ10 can actually directly destroy free radicals. By enhancing cellular energy and reducing free radical damage, CoQ10 can help prevent and treat a variety of health conditions.

Healthy Heart

The link between CoQ10 and peak heart pumping capacity is clear. Currently, CoQ10 is primarily used to treat heart diseases such as angina, arrhythmia, high blood pressure, and congestive heart failure. The scientific evidence regarding CoQ10 supplementation and heart health is impressive. Over the past several decades, clinical research has demonstrated CoQ10’s effectiveness in the following conditions:

- Arrhythmia
- High blood pressure
- Heart toxicity due to adriamycin (a chemotherapy drug)
- Congestive heart failure
- Cardiomyopathy
- Mitral valve prolapse
- Angina

In addition, research indicates that cholesterol-lowering drugs known as statins significantly lower blood levels of CoQ10. Researchers at the East Texas Medical Center emphasize, “As physicians, it is our duty to be absolutely certain that we are not inadvertently doing harm to our patients by creating a wide-spread deficiency of a nutrient [CoQ10] critically important for normal heart function.”

Studies demonstrate that congestive heart failure may be due in part to a CoQ10 deficiency. Since statin drugs are known to deplete CoQ10 levels, it makes sense to take a CoQ10 supplement. The *PDR for Nutritional Supplements* recommends that individuals taking cholesterol-lowering drugs also take 30 to 100 mg of CoQ10 daily.

Parkinson’s Disease

A fascinating area of study regarding CoQ10 involves patients with Parkinson’s

disease, a nervous disorder causing tremor, weakness, rigidity, and eventual paralysis. Studies indicate that Parkinson's patients have lower levels of CoQ10 than the general population. In the *Textbook of Nutritional Medicine*, Melvyn Werbach, MD, recommends 300 to 600 mg of CoQ10 daily for patients with Parkinson's. Several published studies have demonstrated that CoQ10 can slow the progression of Parkinson's disease.

Look and Feel Younger

A variety of factors influence aging either negatively or positively. The combination of free radical activity and decreased cellular energy is a dangerous one-two punch that can accelerate unhealthy and premature aging and lead to a variety of illnesses. CoQ10 can help protect cells thereby reducing the signs of aging.

“Although I am not aware of any studies specifically evaluating length and quality of life associated with CoQ10 usage,” explains author and integrative pharmacist Sherry Torkos “several studies have confirmed CoQ10 as a powerful antioxidant and protector of optimum mitochondrial function, which we know will help optimize healthy aging.”

In addition, CoQ10 can protect the body from illnesses associated with aging including heart disease, cancer, periodontal disease, and Type II diabetes.

Side bar

Dosage Range = 30 to 150 mg daily

Therapeutic Dosage = 300 to 600 mg daily

Contraindications = None

Interactions = Helps reduce side effects of chemotherapy drug andriamycin

Prevents deficiency when taken with statin drugs

Helps offset side effects of beta blockers