

## CoQ10 - Alternatives For Cardiovascular Health

*CoQ10 is necessary for energy production in every cell of the human body. This naturally occurring, vitamin like substance is found primarily in the heart. CoQ10 is a nutrient necessary to the functioning of every cell in our bodies. If body levels start dropping, so does our general health.*

Scientists estimate that once levels drop below the 25% deficiency level, many disease states begin to flourish including high blood pressure, heart attack, angina, immune depression, periodontal disease, lack of energy, weight gain and even early death.

### CoQ10 and Energy

CoQ10 is also known as ubiquinone. It is a member of the quinone cyclic compounds that may be considered a relative of some potent anti-cancer drugs. CoQ10 can add or remove oxygen from biologically active molecules. Every cell of the body contains many subcellular components called mitochondria, which produce 95% of the total energy of the body. CoQ10 is an integral part of the membranes of the mitochondria where it is involved in the production of ATP, the basic energy producing molecules of the cells.

### The Heart and Blood pressure

CoQ10 can be synthesized within the body, none the less deficiency states have been reported. Deficiency could be a result of impaired CoQ10 synthesis due to nutritional deficiencies, a genetic or acquired defect in CoQ10 synthesis, or increased tissue needs. Cardiovascular diseases, including angina, hypertension, mitral valve prolapse and congestive heart failure are examples of diseases which require increased tissue levels of CoQ10.

CoQ10 deficiency is common in individuals with heart disease. Heart tissue biopsies in patients with various heart diseases showed a CoQ10 deficiency in 50-75 % of cases. Being one of the most metabolically active tissues in the body, the heart may be unusually susceptible to the effects of a CoQ10 deficiency.

Accordingly CoQ10 has shown great promise in the treatment of heart disease. In one study 12 patients with stable angina pectoris were treated with CoQ10 (150mg/day x 4 weeks) in a double-blind crossover trial. Compared to the placebo, CoQ10 reduced the frequency of angina attacks by 53%. In addition, there was a significant increase in treadmill exercise tolerance (time to onset of chest pain and time to development of electrocardiogram abnormalities) during CoQ10 treatment. The results of this study and others suggest that CoQ10 is a safe and effective treatment for angina pectoris and other heart disease.

### CoQ10 and Weight Loss

It has been shown at the University of Texas and the University of Antwerp, Belgium, that obese people can lose weight simply with the addition of CoQ10 to the diet. This research showed that obese people can have as much as a 50% deficiency of CoQ10 in their tissues. People who eat a lot and yet stay slim have significantly higher levels of CoQ10 in their blood. This great nutrient can increase metabolic fuel efficiency within your cells stimulating natural weight loss.

### CoQ10 and Periodontal Health

CoQ10 exerts its protective and strengthening action in all tissues. Working from the cellular level, it strengthens the gums as well as the heart muscle. Many scientists believe that periodontal (gum) disease is a good indicator of low levels of CoQ10 in other tissues. The American Dental Assn., states that at least 87% of the American population has some sort of gum disease. This has been shown to be somewhat related to nutrition and particularly to levels of CoQ10, which has been shown to have a good protective effect on gum tissue.

## The CoQ10 Family

There are at least 10 common CoQs, that is, different sized molecules from CoQ1 to CoQ10. The liver can utilize other CoQs to make CoQ10. If the liver is not functioning efficiently, body levels can be too low, especially with advancing age or if disease is present. Our internal ability to produce CoQ10 declines with age, and as we get older, we must rely more on our diet. Since most people do not eat the perfect diet we must rely on supplementation to ensure wellness.

## Is CoQ10 Safe

In tests of thousands of people, no toxicity has ever been shown no matter how high the amount. Plants and animals get it from the soil, but we get it from the plants and animals that contain various CoQs. Taking a supplement, for most people, would seem to be the best way and to know you are getting adequate coverage of CoQ10.

A tip for using Co-Enzyme Q10. Always check the bio-availability of the CoQ10 you are purchasing. The bio-availability percentage will give you an idea of the body's ability to absorb the CoQ10 in the supplement.

Most CoQ10 powder capsules have a bio-availability somewhere in the range of 15% to 20%. **Oral Spray** designed to be applied under the tongue boasts a much greater bio-availability percentage, somewhere in the 60% to 80% range.

Information taken from:  
Encyclopedia of Natural Medicine  
By Michael Murry N.D and Joseph Pizzirno N.D 1991

Amino Acids  
By Dr. Donsbach, DC, N.D, Ph.D., 1994

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Liquid form has much higher bio-availability rate than above.  
Oxyfresh CoQ10 in liquid form with vitamin A, C, D, E and Aloe Vera is available.