



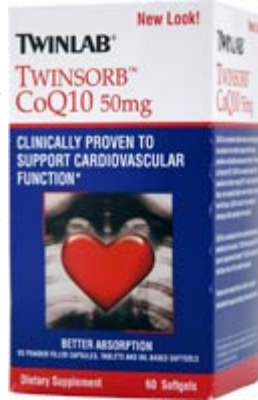
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CO-ENZYME Q-10

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By ROBERT DOWNS, D.C. with ALICE VAN BARK

COENZYME Q10 is a powerful antioxidant that appears to preserve human tissue and restore function following periods of oxygen lack. In tests on animals and humans, it has been observed to stimulate the immune system, help control infection, bring high blood pressure down, quiet angina, help Ischemic heart disease and heart failure, and prevent the cardiac toxicity from certain medications. Coenzyme Q10 also works synergistically with other antioxidants - such as Vitamin E. Furthermore, Coenzyme Q10 has been shown to be practically free of side effects.



that this particular item (a naturally occurring chemical in the human body) has been repeatedly reported to be of benefits in improving oxidation in tissues. It has, for example, been used experimentally in patients with congestive heart failure. One special report was on 17 patients with mild congestive heart failure who received 30 milligrams of CoQ10 a day. All patients showed improvement, and 53 percent showed no more symptoms.

In another study, 20 patients with congestive heart failure, due either to ischemic or hypertensive heart disease, were treated with 30 milligrams of CoQ10 daily for one or two months. Fifty-five percent of the patients reported improvement, 50 percent showed a decrease in the New York Heart Association Classification, and 30 percent showed a remarkable decrease in chest congestion as seen on chest X-rays. Patients with a mild condition or disease tended to improve more often than those with more severe problems.

Bestways: How have your patients responded to this therapy?

Dr. Downs: I have used CoQ10 very carefully on selected patients, taking special care not to alter their current medications in anyway, shape or form, and then documented anecdotal improvements (the patient's perception of well-being). Thus far, we have been elated at some of the reports of improvements, because it is significant to many individuals to promote better myocardial tissue function.

As far as I'm concerned, it seems logical to look for natural nutrients which can help build (or provide better oxygen for) the tissue. CoQ10 appears to be one of these substances which is going to play an important role in improving myocardial tissue, along with other naturally occurring products, such as magnesium and carnitine.

Bestways: In your investigation of CoQ-10, did you find evidence that this substance can help other problems or diseases?

Dr. Downs: Yes. Another interesting fact about CoQ10 is its effect on the immune system. A limited report was published on eight patients who either had cardiovascular disease, cancer or diabetes. They were treated over a long period of time with CoQ10.

and in this particular case were taking 60 milligrams a day. Based on my experience. I would not advise anyone to take that dosage at one time. However, in this study there was a significant increase in the level of amino-globulin G in the serum of these eight patients after 27 to 98 days of treatment. The authors of the article suggested that this can represent correction of an immunodeficiency or an increase in amino-competence. The researchers also stated that immuno-function tends to decline with advancing age. This may be a significant tool in the future for experiments to prevent or reverse some age-related immuno suppression.

At this point I haven't much information on the immune system and CoQ10, but the report I quoted did point out a direction that seems to be very important.

I studied some other articles on this subject, as it relates to Candida albicans, and they reported improvement in that area as well. I have a tendency to overlook "mice" experiments, and pay more attention to the "human" research whenever possible. I firmly believe that Coenzyme Q10 is going to be another link in the list of new nutritional helps, but a lot more research is required.

A further potential role that I found interesting was in the medical treatment of certain tumors. Neither my Clinic nor I are involved in this process, but I frequently see such patients for nutritional reinforcement. There are medications, such as Adriamycin, which are classified medically as effective chemotherapeutic agents, but have the side effect of causing cardio-toxicity after long-term treatment.

I frequently make nutritional recommendations for patients undergoing chemotherapy and radiation therapy - to keep their immune system functioning as correctly as possible, and to maintain their weight. Obviously, I'm interested in doing everything possible to help prevent alterations in their white and red cell counts. I reviewed an article on the use of CoQ10 in helping to prevent some of the cardio-toxicity associated with the use of medication.

This particular report involved 11 cancer patients being treated with Adriamycin. The study stated that their CoQ10 levels were significantly lower than in the control groups. It was also reported that this particular medication inhibits CoQ10 dependent enzymes,



and was probably the main cause of CoQ10 deficiency. In the test animals of this report, CoQ10 reduced the cardio toxicity of the drug. In human trials, CoQ10 was given to seven patients, beginning three to five days before the drug treatment. An additional seven patients received Adriamycin without CoQ10. It was a small group, but the study suggested that CoQ10 may prevent (or help prevent) cardio-toxicity in Adriamycin treated patients.

If this is true, it would allow desperate cancer patients to tolerate an effective chemo-therapeutic agent, instead of having to withdraw because of side effects.

Another series of reports that I studied presented some evidence that CoQ10 deficiency has been found in cardiac and skeletal muscles of animals with hereditary muscular dystrophy. As I remarked earlier, I frequently have difficulty accepting animal research as being the same as human research and therapy. However, it was intriguing to note that deficiencies of CoQ10 have been found in muscles of humans with muscular dystrophy.

In one double-blind study, 100 milligrams of CoQ10 was given daily for three months to 12 patients with progressive muscular dystrophy. The report related that CoQ10 treatment resulted in significant improvement of cardiac output and stroke volume, as well as increased physical well-being in four out of the eight subjects.

Subjective improvements (according to the report) included reduced leg pain, better control of leg function, less fatigue and increased exercise tolerance. I think a great deal of research is needed in this specific area, because if even a small percentage of individuals with this devastating condition could be helped by a naturally occurring component, it should be deeply investigated. In my opinion, numerous other studies should be made before CoQ10 can be recommended and any use should be professionally supervised.

Bestways: Would you discuss one of your cases involving the successful use of CoQ10?

Dr. Downs: I have a middle-aged patient who was previously diagnosed as having a virus, severe indigestion and bloating. During a course of treatment with another doctor, she had a severe reaction to medication. She even went to the emergency room where the medication was withdrawn.

Prior to this, she had suffered from "...CoQ10 treatment resulted in significant improvement in cardiac output ... as well as increased physical well-being indigestion, which I thought was due to massive coffee ingestion and from chronic sinitis congestion." Whatever had happened to her before she came to me,



it appeared that the virus had initially caused her major symptoms to develop. These symptoms were chronic fatigue and severe depression.

The lady I'm discussing had always been extremely energetic. Then suddenly, about four months before she came to me, she became unbelievably exhausted. My Center did the normal testing procedures, and found that she had no infection that was residual no specific reason for the debilitating fatigue from which she was suffering. Her irritation and depression were simply a result of feeling rotten.

The only thing we found, after a complete battery of tests, was a red blood cell magnesium deficiency, which was probably due to not eating well during her illness. This was corrected with a fortified calcium/magnesium product, which is a specially pH-adjusted and balanced formulation that minimizes gastric irritation.

I bring up that point because when you have a patient who has a history of viral irritation of the gastrointestinal mucosa, and has been treated with medications, sometimes the virus or bacteria causes sensitivity in the gastrointestinal tract. This predisposes the person to more gas and bloating from conventional mineral products, and more risk of diarrhea from conventional magnesium substances. So, in this particular instance, we used the special calcium/magnesium formula to minimize irritation, and it worked well.

Because there appeared to be no reason for this lady's complete exhaustion, after being under the care of several doctors, we chose the calcium/magnesium formulation for correcting the magnesium deficiency, and a between-meal dosage of CoQ10, plus carnitine, for the fatigue and muscular exhaustion.

Within a week on the appropriate supplements she reported a 90 percent improvement both physically and mentally. After another week, we curtailed the dosage, because she was feeling so energetic. It sounds strange, but in that short time she appeared to be corrected to the point where the nutrients were no longer necessary. I requested that she completely stop the CoQ10, which she did, and she continues to feel fantastic.

A thorough search of the literature on both of these nutrients supports the theory that improving oxygen uptake, muscle metabolism, and general cell energy, is (or could be) an important treatment mode for scores of people with unexplained exhaustion. CoQ10 would not help all of these cases, as some are caused by a mononucleosis type virus, along with other ailments, but in this particular instance the lady just needed a push. This was one of the quickest cases of CoQ10/carnitine partnership improvements that I have ever experienced, even though I've used the combination on many, many individuals for a variety of purposes.



Bestways: Based on your experience what is the most beneficial dosage of Coenzyme Q10?

Dr. Downs: In reviewing research on CoQ10, I noted that the dosages ranged from an average of 30 milligrams a day to over 100 milligrams per day. I found, in our clinical application, that a high dosage created a situation almost like too much oxygen - like being on a high. Even 20 milligrams, twice a day, proved to be too much for several patients. I have chosen to use a dosage starting at 10 milligrams, slowly moving it upward, while being a careful observer of patient response,

rather than going into some of the dosages suggested in the literature. I think more care has to be taken from a clinical standpoint.

I also have a strong feeling that Coenzyme Q10, taken in conjunction with the naturally occurring nutritional factor carnitine, makes each one work better synergistically than separately. This is also something for future study.

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