



MD  
Prescriptives™

## CoQ-CF MD™ Energy Production & Cardiovascular Support

This special crystal free form of CoQ10 supports cardiac function through mitochondrial energy production. It is also supportive of the organs requiring a lot of energy e.g. the heart muscle, periodontal tissues, and the body's defense system.

CoQ10 functions as a powerful fat-soluble antioxidant providing protection against free radical attacks.\* CoQ10 is present in almost all cells, where it is necessary for mitochondrial energy production. The body's highest concentrations of CoQ10 are found in the heart, where constant chemical energy availability is imperative.\*

Specifically, CoQ10 is involved in the production of ATP (Adenosine Triphosphate) which is the driving fuel for our body's processes. CoQ10 levels seem to decrease as we age, and yet we still need energy largely supplied to some of our most energy-demanding organs, such as the heart, kidneys, lungs, and liver.\*

**CoQ-CF MD™** is a unique patent-pending formula of CoQ10, food-grade d-limonene (which serves to solubilize CoQ10), and tocopherol (vitamin E). This combination creates a liquid, crystal-free solution of CoQ10 that provides enhanced bioavailability. By improving dissolution, absorption is enhanced.\*

**Suggested Use:** Take one softgel once per day, preferably with a meal or as directed by your healthcare practitioner.

\*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.

## References

1. Bhagavan HN, Chopra RK. Potential role of ubiquinone (coenzyme Q10) in pediatric cardiomyopathy. *Clin Nutr.* Jun 2005;24(3):331-8.
2. Marriage BJ, Clandinin MT, Macdonald IM, Glerum DM. Cofactor treatment improves ATP synthetic capacity in patients with oxidative phosphorylation disorders. *Mol Genet Metab.* Apr 2004;81(4):263-72.
3. The expanding phenotype of mitochondrial myopathy. DiMauro S, Gurgel-Giannetti J. *Curr Opin Neurol.* Oct 2005;18(5):538-42.
4. Beal MF. Mitochondrial dysfunction and oxidative damage in Alzheimer's and Parkinson's diseases and coenzyme Q10 as a potential treatment. *J Bioenerg Biomembr.* Aug 2004;36(4):381-6.
5. Andrich J, et al. Coenzyme Q10 serum levels in Huntington's disease. *J Neural Transm Suppl.* 2004(68):111-6.
6. Ogasahara S, Engel AG, Frens D, Mack D. Muscle coenzyme Q deficiency in familial mitochondrial encephalomyopathy. *Proc Natl Acad Sci U S A.* Apr 1989;86(7):2379-82.
7. Roffe L, Schmidt K, Ernst E. Efficacy of coenzyme Q10 for improved tolerability of cancer treatments: a systematic review. *J Clin Oncol.* Nov 1 2004;22(21):4418-24.
8. Levy HB, Kohlhaas HK. Considerations for supplementing with coenzyme Q10 during statin therapy. *Ann Pharmacother.* Feb 2006;40(2):290-4.
9. Ferrante KL, et al. Tolerance of high-dose (3,000 mg/day) coenzyme Q10 in ALS. *Neurology.* Dec 13 2005;65(11):1834-6.
10. Molyneux SL, et al. Coenzyme Q10: an independent predictor of mortality in chronic heart failure. *J. Am. Coll. Cardiol.* 2008 Oct;52 (18): 1435-1.
11. Witztum JL. The oxidation hypothesis of atherosclerosis. *Lancet.* 1994;344 (8925):793-5.

12. Parthasarathy S, Steinberg D, Witztum JL. The role of oxidized low-density lipoproteins in the pathogenesis of atherosclerosis. *Annual Rev Med.* 1992;43:219–25.
13. Heller FR, Descamps O, HondekJijn JC. LDL oxidation: therapeutic perspectives. *Atherosclerosis.* 1998;137 Suppl: S25–31.
14. Mohr D, Bowry VW, Stocker R. Dietary supplementation with coenzyme Q10 results in increased levels of ubiquinol-10 within circulating lipoproteins and increased resistance of human low-density lipoprotein to the initiation of lipid peroxidation. *Biochim Biophys Acta.* 1992 Jun;1126(3):247–54.
15. Alleva R, Tomasetti M, Battino M, Curatola G, Littarru GP, Folkers K. The roles of coenzyme Q10 and vitamin E on the peroxidation of human low density lipoprotein subfractions. *Proc Natl Acad Sci.* 1995 Sep;92(20):9388–91.
16. Rozen TD, et al. Open label trial of coenzyme Q10 as a migraine preventive. *Cephalalgia.* 2002;22(2):137–41.
17. Sándor PS, et al. Efficacy of coenzyme Q10 in migraine prophylaxis: a randomized controlled trial. *Neurology.* 2005;64(4):713–5.
18. Sakano K, Takahashi M, Kitano M, Sugimura T, Wakabayashi K. Suppression of azoxymethane-induced colonic premalignant lesion formation by coenzyme Q10 in rats. *APJCP.* 2006;7(4):599–603.
19. ClinicalTrials.gov NCT00096356 Coenzyme Q10 in Relieving Treatment-Related Fatigue in Women With Breast Cancer
20. Damian MS, et al. Coenzyme Q10 Combined With Mild Hypothermia After Cardiac Arrest: A Preliminary Study. *Circulation.* 2004;110(19):3011–6.
21. Tracy MJ. Ch. 4: Coenzyme Q10 (Ubiquinone, Ubidecarenone). *Dietary supplements: toxicology and clinical pharmacology.* Humana Press. 2003;pp. 53–85. ISBN 978-1-58829-014-4.
22. Rosenfeldt FL, et al. Coenzyme Q10 in the treatment of hypertension: a meta-analysis of the clinical trials. *Journal of Human Hypertension* 2007;21(4):297–306.
23. Watts TLP. Coenzyme Q10 and periodontal treatment: is there any beneficial effect? *Brit Dental J.* 1995;178:209–13.
24. Folkers K, Hanioka T, Xia L, McReeJR J, Langsjoen P. Coenzyme Q10 increases T4/T8 ratios of lymphocytes in ordinary subjects and relevance to patients having the aids related complex. *Biochem Biophys Res Comm.* 1991;176(2):786–91.
25. Littarru GP, Nakamura R, Ho L, Folkers K, Kuzell WC (October 1971). Deficiency of Coenzyme Q10 in Gingival Tissue from Patients with Periodontal Disease. *Proc Natl Acad Sci.* 1971 Oct;68(10):2332–5.
26. Nakamura R, Littarru GP, Folkers K, Wilkinson EG. Study of CoQ10-Enzymes in Gingiva from Patients with Periodontal Disease and Evidence for a Deficiency of Coenzyme Q10. *Proc Natl Acad Sci.* 1974 Apr;71(4):1456–60.
27. McRee JT, Hanioka T, Shizukuishi S, Folkers K. Therapy with coenzyme Q10 for patients with periodontal disease. *J Dent Health.* 1993;43(5):659–66.
28. Hanioka T, Tanaka M, Ojima M, Shizukuishi S, Folkers K. Effect of topical application of coenzyme Q10 on adult periodontitis. *Mol Aspects Med.* 1994;15(Suppl):S241–8.
29. Wilkinson EG, Arnold RM, Folkers K. Bioenergetics in clinical medicine. VI. adjunctive treatment of periodontal disease with coenzyme Q10". *Res Comm Chem Path Pharm.* 1976;14(4):715–9.
30. Karsten K, Verhoeve D, Bruno Loos en Sacha Eikenboom. Fabrikant misleidt parodontitis patiënten met Q10. Wetenschappelijke onderbouwing van vermeend effect ontbreekt. *Nederlands Tandartsenblad* 1997;(7):52.
31. Kees Karsten, Dennis Verhoeve, Bruno Loos en Sacha Eikenboom. Fabrikant Bio-Quinon Q10 veroordeeld. KAG, consumentenbond en NVvP tevreden over uitspraak rechter. *Nederlands Tandartsenblad* 52/21/1997
32. Quiles J, Ochoa JJ, Huertas JR, Mataix J. Coenzyme Q supplementation protects from age-related DNA double-strand breaks and increases lifespan in rats fed on a PUFA-rich diet. *Exp Gerontol.* 2004;39(2):189–94.
33. Coles L, Harris S. Coenzyme Q-10 and Lifespan Extension. *Advan Anti-Aging Med.* 1996;1(1):205–15.
34. Lönnrot K, Holm P, Lagerstedt A, Huhtala H, Alho H. The effects of lifelong ubiquinone Q10 supplementation on the Q9 and Q10 tissue concentrations and life span of male rats and mice. *Biochem Mol Bio Int'l.* 1998;44(4):727–37.
35. Lee C, et al. The impact of  $\alpha$ -lipoic acid, coenzyme Q10 and caloric restriction on life span and gene expression patterns in mice". *Free Radical Biol Med.* 2004;36(8):1043–57.
36. Sohal RS, et al. Effect of coenzyme Q10 intake on endogenous coenzyme Q content, mitochondrial electron transport chain, antioxidative defenses, and life span of mice. *Free Radical Biol Med.* 2006;40(3):480–7.
37. Ishii N, et al. Coenzyme Q10 can prolong *C. elegans* lifespan by lowering oxidative stress. *Mech Ageing Dev.* 2004;125(1):41–6.
38. Koryagin AS, Krylova EV, Luk'yanova LD. Effect of ubiquinone-10 on the blood system in rats exposed to radiation. *Bull Exp Biol Med.* 2002;133(6):562–564.
39. "Study Suggests Coenzyme Q10 Slows Functional Decline in Parkinson's Disease". 2002.
40. Shults CW, et al. Effects of Coenzyme Q10 in Early Parkinson Disease: Evidence of Slowing of the Functional Decline. *Arch Neuro.* 2002;59(10):1541–50.