

Cardiovascular Disease - Beyond Cholesterol

For several decades the nutritional approach of conventional medicine towards cardiovascular disease has been dominated by the classic diet-heart hypothesis, which predicts an adverse effect from high dietary intake of saturated fat and cholesterol and a beneficial effect from polyunsaturated fat. Recent research, however, suggests that the diet-heart relationship is much more complex than previously recognized. Antioxidants, especially vitamin C, vitamin E and Coenzyme Q10, are emerging as potentially useful protective factors. There is also increasing evidence that hyperhomocysteinemia is a risk factor which may be modified by dietary changes or supplementation.

Substantial data also support the notion that the trans fatty acids contained in partially hydrogenated vegetable oils adversely affect the risk of heart disease. Other nutritional questions, such as the role of selenium and iron and the ideal amounts of dietary omega-6 or omega-3 fats (including fish oil) are also beginning to be addressed.

This issue of **Alternative Medicine Review** contains several important articles dealing with aspects of cardiovascular disease that move beyond the traditional concerns of elevated serum cholesterol levels and dietary fat intake. Dr. Alan Miller's article (*Alt Med Rev 1996;1(3):132-147*) provides a comprehensive discussion of the relationship between cardiovascular disease, antioxidants and homocysteine metabolism, as well as the connections that these issues may have to endogenous production of important cardiovascular nutrients such as L-carnitine, coenzyme Q10, pantethine and taurine.

An extremely thorough review of the relationship between dietary fatty acid balance and atherosclerosis is presented by Dr. Parris Kidd (*Alt Med Rev 1996;1(3):148-167*), exploring both the initiating events which lead to atherosclerosis and the prostaglandin-mediated effects of dietary fatty acids on cardiovascular disease. Dr. Alan Gaby concludes his two-part article on the clinical uses of Coenzyme Q10 (*Alt Med Rev 1996;1(3):168-175*) with a discussion focusing on cardiovascular disease and hypertension.

Despite aggressive treatment of hypercholesterolemia over the last several decades, cardiovascular disease remains the number one cause of death in the United States. Only by broadening our view of prevention of this disease to incorporate comprehensive nutritional guidelines (including increasing the woefully inadequate RDA's for folic acid and vitamins B6 and B12 as well as addressing dietary fatty acid balance between omega-3, omega-6 and omega-9 oils), and by instituting specific nutritional interventions, will we succeed in reducing mortality from cardiovascular disease.

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