

Multivitamin May Reduce Risk of Cardiovascular Disease

Source: American Journal of Clinical Nutrition

Cardiovascular disease or heart disease is a class of diseases that involve the heart or blood vessels (arteries and veins). There are several risk factors for cardiovascular disease that are essentially immutable. These are older age, male gender, and a family history of CVD. Additionally, three major risk factors identified include cigarette smoking, dyslipidemia (high cholesterol), and hypertension. Other identified factors associated with increased risk for cardiovascular disease include physical inactivity, sleep problems, diabetes mellitus, rheumatoid arthritis, obesity, excessive intake of alcohol, thrombotic and fibrinolytic factors, elevated homocysteine levels, certain infections and inflammation, exogenously administered estrogens and androgens, certain psychosocial factors, increased fasting glucose, and frequency of migraines. The synergism of the presence of multiple risk factors must also be considered.

A multivitamin is a preparation intended to supplement a human diet with vitamins, dietary minerals and other nutritional elements. A multivitamin/mineral supplement is defined in the United States as a supplement containing 3 or more vitamins and minerals but does not include herbs, hormones, or drugs, with each nutrient at a dose determined by the Food and Drug Administration and the maximum daily intake that will not cause a risk for adverse health effects. People with dietary imbalances may include those on restrictive diets and those who cannot or will not eat a nutritious diet. Pregnant women and elderly adults have different nutritional needs than other adults, and their physicians may indicate it would be beneficial for them to take a multivitamin.

According to recent research, women who take a multivitamin may be at reduced risk for heart attack. The study, which was published in the American Journal of Clinical Nutrition, included 31,671 women with no history of cardiovascular disease and 2,262 women with a history of cardiovascular disease. The women were between the ages of 49 and 83 years. The participants completed a questionnaire regarding their use of dietary supplements, diet and lifestyle factors. After an average of follow-up of over ten years, a total of 932 cases of heart attack were noted in the cardiovascular disease-free group and 269 heart attack cases in the group with a history of cardiovascular disease. The results of the trial revealed that in women with no history of cardiovascular disease the use of a multivitamin alone was associated with a 27 percent reduced risk of heart attack as compared with those who did not take any multivitamin. It was also found that those who took a multivitamin along with other supplements had a 30 percent lower risk. Long-term use of multivitamins (over five years) was more strongly linked with lowering the risk of heart attack, but there was no difference noted between regular and occasional users of multivitamins. Unfortunately, women with cardiovascular disease were not found to be at a reduced risk of heart attack even with multivitamin supplementation. These results suggest women may be able to reduce their risk of heart attack by supplementing with a daily multivitamin.¹

1 Rautiainen S, Akesson A, Levitan EB, et al. Multivitamin use and the risk of myocardial infarction: a population-based cohort of Swedish women. *Am J Clin Nutr.* Sep2010.