Role of policosanols in the prevention and treatment of cardiovascular disease.

Varady KA, Wang Y, Jones PJ.

School of Dietetics and Human Nutrition, McGill University, Ste-Anne-de-Bellevue, Quebec, Canada.

Policosanols are a mixture of aliphatic alcohols derived from purified sugar cane. When administered at 5 to 20 mg/day, policosanols have been shown to decrease the risk of atheroma formation by reducing platelet aggregation, endothelial damage, and foam cell formation in animals. Additionally, policosanols have been shown to lower total and low-density lipoprotein (LDL) cholesterol levels by 13 to 23% and 19 to 31%, respectively, while increasing high-density lipoprotein (HDL) cholesterol from 8 to 29%. Policosanols are thought to improve lipid profiles by reducing hepatic cholesterol biosynthesis while enhancing LDL clearance. When compared with statins, policosanols exhibit comparable cholesterol-lowering effects at much smaller doses. The mixture is well tolerated when administered to animals; however, a more precise safety profile is needed for humans. In summary, policosanols are a promising resource in the prevention and therapy of cardiovascular disease (CVD), but these results need to be confirmed in independent laboratories.

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