Abstract


Dietary and plasma lipid, lipoprotein, and apolipoprotein profiles among elderly Hispanics and non-Hispanics and their association with diabetes.

Bermudez OI, Velez-Carrasco W, Schaefer EJ, Tucker KL.

Jean Mayer US Department of Agriculture Human Nutrition Research Center on Aging at Tufts University, Boston, MA 02111, USA.

BACKGROUND: There are limited data about dietary intakes and plasma lipids of elderly US Hispanics.

OBJECTIVE: The disparity in prevalence of type 2 diabetes among population groups underscored our need to assess dietary and plasma risk factors for cardiovascular disease.

DESIGN: Plasma lipids and apolipoproteins and dietary intakes of macronutrients were measured in elderly subjects (60-98 y): 490 Hispanics of Caribbean origin (Puerto Ricans and Dominicans) and 163 non-Hispanic whites. Plasma values were related to ethnicity and to macronutrient intake. Differences in plasma lipids due to diabetes were assessed among the Hispanics.

RESULTS: Intakes of carbohydrate and polyunsaturated fatty acids were higher and intakes of cholesterol and saturated and monounsaturated fatty acids were lower in Hispanics than in non-Hispanic whites. Concentrations of total cholesterol, HDL cholesterol, and apolipoprotein A-I were significantly lower among Hispanic women than among non-Hispanic white women; a similar trend was seen in men. Dyslipidemia (high triacylglycerols and low HDL cholesterol) was more prevalent among Hispanics with than without diabetes.

CONCLUSIONS: Ethnic differences in serum lipids exist and appear to be associated with differences in dietary intakes. However, both Hispanics and non-Hispanic whites had lipid profiles indicating a high risk of cardiovascular disease. Hispanics with diabetes were at higher risk of dyslipidemia than were those without diabetes. Our data suggest that lifestyle changes, including diet modification and exercise, could be of significant benefit to both ethnic groups.

PMID: 12450885

FREE FULL TEXT