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Abstract

Do Statin Users Adhere to Dietary Recommendations for Cardiovascular Disease Prevention? †

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Abstract: Emerging evidence suggests that there is an interplay between the effects of diet and lipid-lowering therapy in primary and secondary prevention of cardiovascular disease. All prevention strategies focus on modifiable risk factors, with special attention on dietary behavior. Lifestyle and dietary recommendations usually precede or accompany the prescription of statins. However, there is limited evidence of patients' adherence to dietary recommendations. The aim of this study was to investigate the dietary behavior of statin users, taking into account the intake of specific food groups. Data on clinical, demographic, health, and lifestyle factors were collected using a series of interviewer and self-completion questionnaires. Food group intake was calculated using 24 h dietary recalls for three non-consecutive days. The average daily intake for each subject was calculated as the mean of the three 24 h recalls. Food groups of interest included vegetables, fruits, grains, protein foods, and dairy products. Data were analyzed for 30 participants aged > 40 years. Patients with hypertension, diabetes, and current smokers represented 90%, 17%, and 27% of the study population, respectively. Almost 65% of the patients had a history of ischemic heart disease and were eligible for the secondary prevention of cardiovascular events. Mean daily dietary intake was 3.8 servings of protein, 4.1 servings of grains, 1.7 servings of vegetables, 1.4 servings of fruit, and 1.2 servings of dairy products. Red and processed meats contribute 50% of total protein intake and are the main source of protein in the patients' diets. In terms of grain consumption, only one-quarter of intake comes from wholegrain products. The reported consumption of fruits and vegetables ranged from 1.6 to 5.9 servings per day, but still, their average intake was below the recommendation of 4.5 servings per day. However, at the individual level, 20% of the study population met the fruit and vegetable consumption recommendations. The obtained results suggest sub-optimal dietary behaviors in people undergoing chronic statin therapy. Thus, public health efforts, along with ongoing diet monitoring, are definitely needed to improve the current knowledge on the impact of massive dietary habits on the overall health of cardiovascular patients.

Keywords: prevention; statin; dietary intake; food groups; recommendations

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