

Introduction

The major focus of the prevention of atherosclerosis and ischemic heart disease during the past decade has been on reduction of serum cholesterol levels and, in particular, low-density lipoprotein (LDL) cholesterol levels. These efforts, which have culminated in the National Cholesterol Education Program (NCEP-II)¹ guidelines, hold promise for a significant and substantial reduction in cardiovascular morbidity and mortality. However, despite dietary and drug-induced reductions in cholesterol levels, there is a relatively long lag phase of 1 to 3 years before cardiovascular events begin to decrease.² The incidence of cardiovascular morbidity and mortality remains relatively high after several years, even with a reduction of LDL cholesterol as great as that achieved by intestinal bypass in the POSCH trial.³ Perhaps of greater importance is the realization that a large percentage of patients with angiographic evidence of coronary artery disease have only moderately elevated (>130 mg/dl) or even "normal" levels of LDL cholesterol.⁴ These findings and the uncertainty as to the effects of cholesterol reduction on noncardiovascular mortality rates have aroused interest and prompted research into possible adjunctive or alternative strategies to lipid lowering.

Immediately prior to the forty-third annual meeting of the American College of Cardiology, a distinguished faculty gathered at a symposium with the

purpose of bringing together information on the mechanisms by which adjunctive and alternative strategies to lower cholesterol may prevent atherosclerosis and its manifestations, as well as to review the current status of clinical investigation in these areas. The presentations at this symposium explored, among other topics, our new understanding of the importance of oxidized LDL cholesterol; the involvement of hormones such as estrogen, norepinephrine, and angiotensin II; the role of calcium in the atherosclerotic process; the pathobiology of platelets and thrombosis; and the importance of exercise and lifestyle changes in preventing or reducing cardiovascular events. These areas provide new opportunities for basic research and clinical investigation in the ongoing attempt to further reduce the morbidity and mortality associated with atherosclerosis and its complications.

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