Has blood cholesterol been overemphasized as a risk factor for heart disease?

Elevated blood cholesterol levels, particularly the bad form of cholesterol—low-density lipoprotein (LDL)—is definitely a risk factor, but it is just one piece of the puzzle. After all, more than half of the people who die as a result of a heart attack or stroke have normal to low cholesterol levels.

Little-known risk factors

The major risk factors for heart disease include smoking, elevated cholesterol levels, diabetes, high blood pressure, and physical inactivity. However, there are other factors that, in some cases, are more significant than the "major" risk factors in causing heart disease (see sidebar).

Much of the current research has focused on the central role that inflammatory processes play. In particular, C-reactive protein (CRP), a substance associated with inflammation and insulin resistance, has been identified as an independent risk factor for coronary artery disease. Fortunately, CRP levels can be lowered effectively with diet, lifestyle, and nutritional supplements.

"One of the most powerful dietary interventions in the prevention and treatment of heart disease is the traditional 'Mediterranean diet'."

Hearts love the Mediterranean diet

One of the most powerful dietary interventions in the prevention and treatment of heart disease is the traditional "Mediterranean diet," shown to lower CRP levels. This diet reflects...
Lower your risk for heart disease

There is little doubt that in most cases heart disease is directly related to diet and lifestyle. Treatment and prevention include reducing all known risk factors, not just cholesterol. Here’s a general approach for lowering CRP levels.

Dietary recommendations
Follow the Mediterranean diet.

Lifestyle recommendations
Achieve and maintain a healthy body weight.
Do regular aerobic exercise.
Don’t smoke.

Supplements
High potency multiple vitamin and mineral formula
Vitamin C: 500 to 1,000 mg three times/day
Vitamin E: 400 to 800 IU/day
Fish oil supplement: Minimum 1,000 mg/day of combined EPA and DHA.

food patterns typical of some Mediterranean regions, such as Greece and southern Italy, in the early 1960s. It has the following characteristics:
• Olive oil is the principal source of fat.
• It emphasizes plant foods (fruit, vegetables, breads, pasta, potatoes, beans, nuts, and seeds).
• Foods are minimally processed, and there is a focus on seasonally fresh and locally grown foods.
• Fresh fruit is the typical daily dessert, with sweets containing concentrated sugars or honey consumed a few times per week at the most.
• Dairy products (principally cheese and yogourt) are consumed daily in low to moderate amounts.
• Fish is consumed on a regular basis.
• Poultry and eggs are consumed in moderate amounts (one to four times weekly) or not at all.
• Red meat is consumed in small amounts.
• Wine is consumed in low to moderate amounts, normally with meals.

While several components of the Mediterranean diet have been evaluated independently, it is important to stress that the total benefits reflect the interplay among the many beneficial compounds rather than any single element. Nonetheless, the importance of omega-3 fatty acids deserves special mention.

The Omega-3 Index
The higher the omega-3 fatty acid intake, the lower the likelihood of coronary heart disease. In particular, the level of the omega-3 fatty acids eicosapentaenoic (EPA) and docosahexaenoic (DHA) within red blood cells has been shown to be a highly significant predictor of heart disease. This laboratory value has been termed the Omega-3 Index. An Omega-3 Index of greater than or equal to 8 percent is associated with the greatest protection, whereas an index of less than or equal to 4 percent is associated with the least. Researchers have determined that taking 1,000 mg of EPA and DHA daily from pharmaceutical-grade fish oil is required to achieve or surpass the 8 percent-plus Omega-3 Index target.

Michael T. Murray, ND, is widely regarded as one of the world’s leading authorities on natural medicine. He is a faculty member at Bastyr University in Seattle, Washington.