

## Cholesterol: Overview and History

High cholesterol is a concern for everyone, and with good reason. High levels of cholesterol can create serious risks to an otherwise healthy person. Monitoring cholesterol through diet and exercise is important, but the first step is having a clear understanding of the facts.

In May 2001, the National Cholesterol Education Program (NCEP) issued important clinical cholesterol guidelines. This update was the first in ten years, and was prepared with hopes of helping adults manage their cholesterol levels, and prevent an increase.

The NCEP, in cooperation with the National Heart, Lung and Blood Institute, developed new cholesterol guidelines through research and study. The guidelines show significant changes in the following areas:

- \* More insistent cholesterol-reducing treatments
- \* Identification of patients at high risk of heart disease
- \* A new stage at which low high-density lipoprotein (low HDL) poses a major high risk factor for heart disease
- \* New therapeutic lifestyle changes that increase the ability to improve cholesterol levels
- \* A greater focus on the cluster of risk factors in heart disease called "the metabolic syndrome", as related to insulin resistance
- \* Increased awareness concerning the treatment, and more aggressive treatment of high triglycerides.

Under these new guidelines, the NCEP anticipated a considerable increase in the number of Americans undergoing treatment for high cholesterol. The numbers did, in fact, increase. The cases of patients taking dietary treatments rose from 52 million to 65 million. An estimated 36 million patients were taking cholesterol-reducing drugs, up from the previous number of 13 million.

The 2001 report showed that diabetes poses a great risk of heart disease, and suggests that people with diabetes should undergo the same intensive treatment as those suffering heart disease. These treatments include medication and lifestyle changes.

As a result of the new cholesterol guidelines, there is now a widely used tool that can help to predict a patient's chance of developing heart disease within a ten-year span. The tool can calculate the risk of women and men separately. It is highly recommended by a group called the Adult Treatment Patients (ATP), and is used to assess patients who present two or more risk factors of heart disease.

Other changes presented in the new cholesterol guidelines include:

- \* A more high cholesterol treatment for diabetics. Type 2 diabetes poses a high short-term risk of having a coronary episode, and a higher risk of heart attack fatality
- \* Using a lipoprotein profile as the first step in testing for high cholesterol. This is the measurement of the levels of HDL, LDL, total cholesterol, triglycerides and other fatty substances found in the bloodstream.
- \* Increased use of nutrition, weight control and physical activity to act as treatments of high blood cholesterol levels.
- \* The identification of a "metabolic syndrome" of the risk factors relating to insulin resistance.
- \* Advising patients to stop using hormone replacement therapy (HRT) as a substitute for cholesterol-reducing medicines.

Over a ten-year span, great advances were realized in the areas of high cholesterol treatments. Because of the findings of the 2001 National Cholesterol Education Program, we now have a greater understanding of the effects of high cholesterol, and doctors can take advantage of better treatment options.