Managing Cholesterol with Exercise
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APPROXIMATELY 38 PERCENT OF Americans have excessively high blood cholesterol levels. The National Cholesterol Education Program (NCEP ATP III, 2001) states that a sound diet, weight loss and physical activity are the cornerstones of therapy for many individuals with cholesterol disorders.

(Colsterol-lowering drug therapy is reserved for those who have very high lipid levels or for those who have diabetes or coronary disease.)

Atherosclerosis is a costly and fatal disease. Although there is no known cure, new evidence suggests that intensive lowering of serum total cholesterol, or more specifically, LDL cholesterol may retard the progression of coronary artery disease.

The box, right, contains the NCEP cholesterol guidelines authored in 2001 by a panel of physicians and lipid experts.

Reducing cholesterol through exercise, particularly LDL cholesterol, can be quite labor intensive. When individuals accumulate a sufficient weekly volume of exercise they can lower both total cholesterol and LDL cholesterol and increase HDL-cholesterol (the “good” cholesterol).

Exercise itself does not “burn off” cholesterol like it can with fat tissue. However, when exercise is of sufficient volume, for example, an adequate weekly frequency and duration, it can significantly reduce triglycerides and stimulate several metabolic enzyme systems in the muscles and liver to convert some of the cholesterol to a more favorable form, such as HDL-cholesterol.

Reducing triglycerides decreases triglyceride-rich particles that are known to promote the growth of fatty deposits on artery walls.

For many people with cholesterol disorders the first choice of therapy is dietary modification. In general, reducing high glycemic carbohydrates reduces triglycerides, and reducing saturated and trans-fat foods decreases LDL-cholesterol. If LDL cholesterol (the “bad” cholesterol) is high enough, dietary therapy is often supplemented with cholesterol-lowering drug therapy. Exercise is of tremendous benefit when used in combination with either of these two forms of therapy.

For those who maintain a frequent and sufficient level of exercise, it is possible that their physician will reduce their cholesterol-lowering medication and in some cases stop it altogether.

Here are guidelines that outline a systematic approach for favorably altering cholesterol levels with regular exercise:

- If you have a less-than-desirable cholesterol level, or your doctor has indicated that you have a cholesterol disorder, have your physician establish your cardiovascular health status before engaging in a vigorous exercise program. Your physician may elect to perform additional blood tests (e.g., C-reactive protein) and/or a graded exercise test with an ECG (eletrocardiogram) in order to assess your cardiac reserve.

- If you have achieved a “desirable” level of exercise and you are not at risk of coronary artery disease, your physician may elect to perform additional blood tests (e.g., C-reactive protein) and/or a graded exercise test with an ECG (eletrocardiogram) in order to assess your cardiac reserve.

The Healthy Environments Partnership (HEP) is an affiliated project of the Detroit Community-Academic Urban Research Center. Funding from The National Center for Minority Health and Health Disparities R24MD001619

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