

FITNESS HANDOUT

BY IRENE LEWIS

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Preventing Heart Disease

Sue's mom died of heart disease at the age of 45. Sue herself has quit smoking and follows a low-fat eating plan. Her cholesterol level is 180 milligrams per deciliter (mg/dl), and she exercises aerobically at least three days per week. Sue's husband, Ken, has no immediate-family history of heart disease; however, he has smoked a pack of cigarettes a day for 10 years, eats a high-fat diet and doesn't exercise.

Which person has a higher risk of developing heart disease? How can *you* lower your risk? To answer these questions, let's look at the risk factors that contribute to this major health problem.

Unalterable Risk Factors

Multiple risk factors are responsible for the development of heart disease, and evidence suggests that the longer the risk factors are allowed to operate, the greater their impact will be. The *bad* news is you *cannot* change the following factors:

Family History. If your father or a brother had heart disease before age 55, or your mother or a sister did before age 65, you're at risk. Focus on controlling any alterable risk factors you have.

Gender. Men have a higher risk of developing heart disease than women.

Age. Men 45 years or older and women 55 years or older are at increased risk. Researchers think estrogen plays a protective role for women until they reach menopause. Once levels of naturally occurring estrogen decrease, the risk of developing heart disease seems to be as high for women as it is for men.

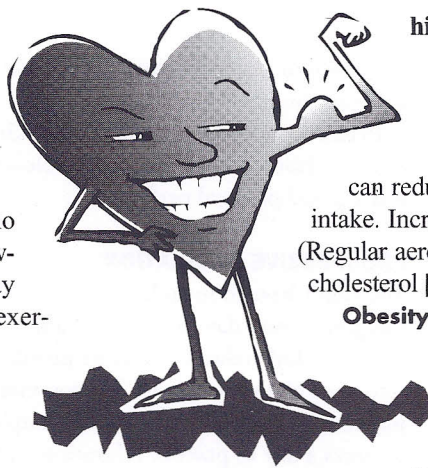
Risk Factors You Can Change

The *good* news is you *can* alter these risk factors:

Hypertension or High Blood Pressure. Three blood pressure readings of 140/90 millimeters of mercury (mm Hg) or higher in one month indicates hypertension. Have your blood pressure checked regularly.

Cigarette Smoking. Smoking is the number-one preventable cause of heart attacks in the United States. Smokers have a 70 percent greater risk than nonsmokers. However, if you stop smoking, your risk level drops after five years to a level close to that of a nonsmoker.

Cholesterol. For most people, a blood cholesterol level of less than 200 mg/dl is **desirable**, whereas a level of 200 to 239 mg/dl is **borderline** and one of 240 mg/dl or greater is



high. Several studies show a correlation between high serum cholesterol levels and heart disease; other risk factors further magnify this risk. Dietary factors are thought to be one of the causes of a high cholesterol level, so you can reduce your risk by limiting fat and cholesterol intake. Increasing daily physical activity helps as well. (Regular aerobic activity can also *elevate* levels of HDL cholesterol [considered "good" cholesterol].)

Obesity. With rare exceptions, obesity is a result of eating too much and exercising too little. Deaths due to heart disease appear to result chiefly from the influence of obesity on high blood pressure, high cholesterol levels and the risk of adult-onset diabetes.

Physical Inactivity. Several studies show that sedentary adults can reduce disease risks by increasing their physical activity levels. Some exercise is better than none, so if you don't exercise, direct your efforts toward becoming more active more often.

Primary risk factors—such as family history, cigarette smoking, high blood pressure, high blood cholesterol and physical inactivity—have the strongest relationships to heart disease. **Secondary risk factors**, such as obesity, are magnified in the presence of primary risk factors. When two or more risk factors are present, the likelihood of heart disease greatly increases. It is therefore important to correct all modifiable cardiac risk factors.

Heredity vs. Lifestyle

Now that we understand the risk factors, who is at greater risk of developing heart disease—Sue or Ken?

While Sue *does* have a genetic risk because of her mother's death, her lifestyle habits (not smoking, keeping her blood cholesterol level below 200 mg/dl, eating a low-fat diet and doing regular aerobic exercise) will work to reduce her risks. Ken, on the other hand, is headed down a high-risk path. His high dietary cholesterol intake, his gender, the fact that he smokes and his lack of regular exercise put him at a much higher risk than Sue. ■

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This handout is a service of IDEA, the international association of fitness professionals serving personal trainers, exercise instructors and business operators.