

Taking Good Health to Heart

Target Audience: People with diabetes; people wishing to prevent or control cardiovascular disease

Objectives: Participants will:

1. Understand how to reduce risk for cardiovascular disease.
2. Make changes in their lifestyles that will reduce that risk.

Time Required: 30 minutes; for a 15-minute presentation, cut first two activities

Equipment: Flip chart and magic marker; overhead projector and overheads

Props: Pack of cigarettes; can of shortening; box of butter; regular cheese; full-fat ice cream box; whole milk; canola oil; olive oil; peanut oil; soybean oil; safflower oil; tub or liquid margarine; bathroom scale; baby aspirin bottle; blood pressure cuff; bottle of red wine

Handouts: “How Are You Doing on Reducing Your Risk for a Heart Attack or Stroke?” “Be Smart About Your Heart: Control the ABC’s of Diabetes: A1C, Blood Pressure and Cholesterol, “ available at www.ndep.nih.gov.

Lesson Plan

There are many risk factors for heart disease and stroke. Can you tell me some of the risk factors you know about?

Possible answers: smoking, sedentary lifestyle, too much salt, eating foods full of cholesterol and saturated fat, eating trans fatty acids from foods made with shortening or partially hydrogenated oil, being overweight, being stressed, male gender, having diabetes.

Most of these risk factors except being male can be modified. Have any of you made changes in your daily habits to reduce your risk for stroke and heart attack? (*Write down changes participants have made on the flip chart.*)

Many of you obviously have heard about and adopted some of the strategies I will discuss today to reduce cardiovascular risk. Hopefully your success will inspire others to make similar changes to reduce their risk.

(*Hold up a pack of cigarettes.*) Some of you proudly said that you quit smoking to reduce your risk. I whole-heartedly congratulate you for this effort. While stopping smoking is one of the most difficult things to do, it has been proven over and over again to be probably the most important way to reduce risk for cardiovascular disease. (*Show overhead entitled “[The Harm Smoking Does](#).”*) Smoking increases the heart rate and blood pressure. It damages the arteries. It lowers HDL-cholesterol, the good type of cholesterol that helps remove cholesterol from the body. Plus it increases the tendency for the blood to form clots that can block the narrowed arteries to the heart and brain resulting in a heart attack or stroke. Research has shown that even if a person doesn’t

stop smoking until after having a heart attack, there is an immediate benefit because the harmful effects of smoking happen every time a person smokes. After just 1 year of not smoking, the risk of a heart attack goes down 50 percent.

Some of you also mentioned that you cut fat from your diet to reduce risk. We know that certain fats increase risk for cardiovascular disease more than others. The types that are more solid or creamy at room temperature increase risk the most. Here are some examples of foods high in saturated and trans fatty acids. (*Show examples of some sources of saturated fat and trans fatty acids—can of shortening, box of butter, regular cheese, full-fat ice cream box, whole milk.*) Oils and liquid or soft margarines tend to be lower in saturated and trans fats. (*Show canola oil, olive oil, peanut oil, soybean oil, safflower oil, and tub or liquid margarine that is labeled as trans fatty acid free.*)

But any fat or oil will make you fat if you eat too much of it. Fat has very concentrated calories. Too many calories will cause weight gain. Being overweight will increase risk for a heart attack by increasing blood cholesterol levels and blood pressure.

Even oils that are high in unsaturated fat contain some saturated fat. You will get more saturated fat than you need if you eat too much of them as well. The goal is to eat less fatty food of all kinds and to substitute nonfat dairy products; small portions of lean poultry, fish, and meat; and plenty of fruits, vegetables, and whole grains for those high-fat foods. (*For people with diabetes, “plenty” should probably be replaced with “appropriate amounts of fruits, vegetables, and whole grains.”*)

A few of you have also tried to control your weight. (*Show a bathroom scale.*) Just 10–20 pounds of weight loss, especially if you also become more physically active, can raise the good HDL-cholesterol, lower the bad LDL-cholesterol, lower your triglycerides, and reduce your blood pressure. High levels of LDL-cholesterol and triglycerides seem to speed up the narrowing of arteries and increase risk for heart attack and stroke.

How many of you have been told by your doctor to take aspirin to lower your risk for heart disease? (*Show a baby aspirin bottle.*) Research has also found that even a baby aspirin taken every day or a regular aspirin taken every other day reduces the risk of blood clots blocking the arteries and may lower inflammation that causes the deposits of cholesterol and fat along the arteries to rupture and produce a heart attack or stroke. (*Note: Aspirin can cause problems for some people. Talk with your doctor to make sure it is safe for you.*)

Some of you have also lowered your blood pressure. (*Show a blood pressure cuff.*) You may have done this by taking blood pressure medicine, losing weight, exercising more, not smoking, and eating fewer salty foods. (*Show overhead entitled “DASH Diet.”*) New research has shown that a special eating plan called the DASH diet can dramatically lower blood pressure in just 2 weeks. This meal plan recommends eating eight or more vegetables and fruits a day and a two to three servings of nonfat or low-fat dairy products along with a low-fat low-sodium diet. In some cases, the change in blood pressure produced by this diet may be enough to allow people to discontinue or at least lower their blood pressure medicine.

For those who have diabetes, control of blood glucose, as well as blood pressure, and cholesterol and triglyceride levels appears to lower risk for heart disease and stroke. That is why monitoring your blood glucose often each day and having your doctor perform a blood test—called an A1C—two to three times a year is so important.

Another reason to eat those fruits, vegetables, lean red meats, chicken, fish, and whole grains and cereals is to help lower homocysteine levels. (*Show overhead entitled “High Homocysteine Levels.”*) Homocysteine is a substance in the blood that becomes elevated when inadequate intakes of vitamin B12, B6, and folate are consumed. High levels of homocysteine seem to increase risk for heart attack and stroke. Eating those heart-healthy foods helps provide more of the vitamins that will lower homocysteine levels.

Some of you also might be consuming more Vitamin E or other vitamins that are called antioxidants. (*Show overhead entitled “Antioxidants.”*) There still is controversy over whether supplements should be used, but we do know eating more food sources may be helpful in lowering cardiovascular risk. Vitamin E is found in vegetable oils and other foods that have unsaturated fats like nuts and whole grains. Of course the other antioxidants like Vitamin C and A tend to be plentiful in fruits and vegetables. The antioxidants may prevent harmful LDL-cholesterol from damaging artery walls and may reduce your risk for developing blood clots that block the arteries.

Two controversial methods for reducing cardiovascular risk are drinking 1–2 drinks of alcohol per day and reducing stress. (*Show bottle of red wine.*) Moderate intake of alcohol seems to raise the good HDL-cholesterol. Too much alcohol, however, can raise blood pressure and increase risk for cardiovascular disease. It may also lead to alcoholism.

There seems to be some question about how stress affects cardiovascular disease. (*Show overhead entitled “Stress Effect.”*) The clinically proven cardiovascular disease education program advocated by Dr. Dean Ornish in California emphasizes relaxation exercises, meditation, group support, and other methods for reducing stress, along with strict dietary recommendations and regular exercise.

One study found that depression increased the risk of dying after a heart attack. Other researchers have shown that those who feel hostile, lack social or emotional support, or believe that they have little control over their lives may have a higher risk for developing cardiovascular disease.

(*Show overhead entitled “Any Change Will Improve Your Quality of Life.”*) The more risk factors for cardiovascular disease that you can control or eliminate, the lower your risk for a heart attack or stroke will be. Even if you can’t be sure these changes will help you live longer, most of them will certainly improve your quality of life and help you enjoy your life more no matter how long you live.

(*Pass out “How Are You Doing on Reducing Your Risk for a Heart Attack or Stroke?” handout.*)