

# Controlling High Blood Pressure

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

**Objectives:** Participants will:

1. Understand that control of high blood pressure can reduce risk for cardiovascular disease, especially in those who have diabetes.
2. Be able to identify the foods and beverages and lifestyle habits that increase or decrease blood pressure.
3. Be able to make changes in their food choices and preparation that will help lower their blood pressure.

**Time Required:** Approximately 30 minutes without the optional sodium activities; with the activities, 45–60 minutes; for a 15-minute presentation, you may wish to concentrate on the DASH diet, the need for weight control by consuming fewer calories and becoming more active, and ways to cut the amount of sodium in the diet

**Equipment:** Overhead projector, overheads, flip chart and marker, 3 clipboards with paper or 3 pads of paper, and 3 large marking pens

**Props:** Walking shoes; 5-pound hand weight; sample herb shakers and salt substitutes; wine bottle; fresh lemon; box of Total cereal; can of regular condensed soup; cottage cheese container; frozen low-calorie entrée; fast-food hamburger; diet-soda can; small bag of potato chips; box of microwave popcorn; wine glass filled with grape juice; beer glass filled with root beer; shot glass or other glass filled with iced tea

**Handouts:** “Don’t Salt It—Herb and Spice It!”; “Spice Up Your Life Eat Less Salt and Sodium” (<http://www.nhlbi.nih.gov/health/public/heart/other/chdblack/spice.pdf>); “Choosing Lower Sodium Foods” activity sheet; “Facts About The Dash Diet” ([http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new\\_dash.pdf](http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf)); “If You Have Diabetes, You Are At Risk For Heart Attack and Stroke” ([http://www.ndep.nih.gov/diabetes/pubs/ControlABC\\_broch\\_Eng.pdf](http://www.ndep.nih.gov/diabetes/pubs/ControlABC_broch_Eng.pdf)), “The DASH Eating Plan” (<http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/index.htm>)

## Lesson Plan

*(Note: Text regarding diabetes can be excluded if the audience does not include anyone with diabetes.)*

How many of you have high blood pressure? *(Have participants raise their hands if they have high blood pressure.)* You are not alone. About 50 million people in the United States have high blood pressure. In people with type 2 diabetes, high blood pressure is twice as common as in people without diabetes. In fact, high blood pressure and diabetes are almost like twins. *(Show overhead entitled “Diabetes and High Blood Pressure Are Like Twins.”)* Doctors have coined the name Syndrome X for the condition where a person has diabetes, high blood pressure, high triglycerides (blood fats), and obesity.

High blood pressure increases your risk for heart disease, kidney disease, and stroke. (*Show overhead entitled "Ignoring Your Blood Pressure."*) Even though the symptoms of high blood pressure (and sometimes diabetes) may not be obvious, you can't afford to ignore them. Doing so would be like ignoring the rumblings of a volcano before it blows.

What can you do about your high blood pressure? First, don't ignore it. (*Show overhead entitled "Blood Pressure Levels."*) The National Heart, Lung, and Blood Institute now says even someone with a blood pressure of 120/80 or above should make lifestyle changes that will lower it. If your blood pressure is 140/90 (130/80 if you have diabetes), you will likely need to make the lifestyle changes, as well as take medication to lower your blood pressure. Having a blood pressure of less than 120/80 is best, but any decrease in blood pressure if it is high will help.

What are the lifestyle changes that you should make? First, lose weight if you are overweight. Even losing just a few pounds will make a big difference in your blood pressure.

Second, become more active. Check with your doctor to be sure it's safe for you to exercise. Be careful if you have eye, heart, or kidney disease. If your doctor says it's okay to exercise, do aerobic exercise like walking or biking. (*Show walking shoes and a 5–10 pound hand weight.*) Weight lifting may not be a good idea until your blood pressure (and any diabetic complications you may have) is controlled.

Third, cut down on alcohol if you drink more than one to two drinks a day. Frequent use of alcohol in large amounts will raise your blood pressure. (*Show samples of single portions of alcohol, using tea as distilled liquor, root beer as beer, and grape juice as wine in the appropriate glasses.*) Remember, one drink equals 1-1/2 ounces of hard liquor, 5 ounces of wine, or 12 ounces of beer.

Fourth, cut down on sodium. Most people think about not adding salt to their food, but in reality most of the sodium in our food is hidden. Convenience foods and restaurant meals provide most of the sodium we eat. (*Show overhead entitled "Where We Get Our Sodium."*) Certainly if you salt your food at the table, stop doing it. Use an herb shaker or, if your doctor approves, a salt substitute. (*Show samples of the herb shakers and salt substitutes available in local stores.*) Never use a salt substitute with potassium chloride without checking with your doctor first. If you have any kidney problems, a potassium-based salt substitute might make it worse.

Season your food with herbs and spices rather than salt. Usually 1/4-teaspoon of dried herb or spice, or 3/4-teaspoon of fresh herb flavors a dish that serves four. (*Give out the "Don't Salt It—Herb and Spice It!" handout and show the various commercial herb mixtures available in local markets, a bottle of wine, and a lemon.*) If you don't like to mix your own herbs and spices, there are several commercial herb-spice preparations on the market. You may also add a small amount of regular, not cooking, wine to your food, or a squeeze of lemon juice. All these options will enhance the flavor of your food without adding sodium.

Most of our sodium, however, comes from convenience foods and from eating away from home. Let's see how well you know the sodium content of some popular foods. (*Show the overhead entitled "Nutrition Facts" and point out where the sodium information is usually listed before doing the activity.*)

## Activity

**1. “The Salt's Too High” Optional.** *Before the lesson, arrange for four volunteers from the audience to come forward and help with this activity. Give three of them a pad of paper and a large marker or crayon. Give out the food props (Total cereal, condensed soup, cottage cheese, a frozen low-calorie entree, a hamburger from Hardees, a can of diet soda, a small bag of potato chips, a dill pickle, a serving of microwave pop corn) to different people in the audience who will act as “judges.” Each judge will take turns holding up his or her food container. Each contestant writes down his or her guess about the sodium amount for one serving of each food. Each judge then reads the label for the sodium content, and the contestant who comes closest to the actual sodium content for each item will get one point for each correct answer. The fourth volunteer keeps score for each contestant on a large flip chart, and the contestant with the most points wins. The winner may then receive an award like a commercial herb shaker or other low-sodium food. (You may need to have a magnifying glass available so the judges can see the print on the label better.)*

Now you see that you cannot just look at a food and tell whether it is high or low in sodium. The foods that are lowest in sodium generally are fresh or unprocessed foods, like fresh meat, fish, and poultry, and fresh vegetables and fruits. There are, however, processed foods that are low sodium, such as unsalted canned vegetables, canned fruits, and some frozen unseasoned vegetables. The only way to know is to read the label. Usually, if the label on a food says it provides 5 percent or less of the Daily Value of sodium, it is a low-sodium food. If the label says it contains 20 percent or more of the Daily Value for sodium, then it is a high-sodium food. Use foods carefully that contain more than 5 percent but less than 20 percent of the Daily Value. They are not terribly high, but if you eat a lot of them you may get too much sodium. Again, fresh foods are usually the lowest in sodium, so try to use them more often.

Recently, a special meal plan called the DASH diet was tested and found to lower blood pressure in a matter of 2 weeks. This diet emphasizes nonfat and low-fat dairy products and plenty of fruits and vegetables. (*Show overhead entitled “The DASH Diet” and give out the “Dash Diet” handout. Additional optional handout—“The DASH Eating Plan—is available at <http://www.nhlbi.nih.gov> or by calling 301-592-8573.*) This diet promotes up to 10 servings of fruits and vegetables per day. The DASH diet seems to work even better when the foods chosen are low in sodium. Changing to this diet should be done gradually. If you make the change too quickly, you may experience stomach discomfort. (You would need the help of a registered dietitian to adjust your meal plan to be like the DASH diet if you have diabetes. The dairy products, fruits, and vegetables contain carbohydrates. Carbohydrates raise your blood glucose the most, so they must be added with care.)

So now tell me what you should do, if you have high blood pressure, to lower your risk for heart disease, kidney disease, and stroke? (*Have audience members summarize the steps to lowering high blood pressure. Write their responses on the flip chart.*)

**2. Optional Final Activity:** *Distribute the “Choosing Lower Sodium Foods” handout and have audience members fill it out. They can place it on their refrigerators.*