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Controlling High Blood Pressure: A Woman's Guide

You may not know it--but you have what it takes to control high blood pressure. This Guide Will Show You How. You may be surprised to learn that it's as easy as eating a variety of healthy foods, being active, and taking prescribed medication. It's a day by day way to live healthier and feel better and it's something every woman can do.

If that sounds like good news, you're right. High blood pressure does not have to be a health problem. In fact, if you do not have high blood pressure, you can use this guide to help you prevent it. If you do have it, you can manage it. So, read on. And find out how to take control!

Who gets high blood pressure?

Nearly 50 million Americans have high blood pressure. Older women are particularly likely to develop high blood pressure. More than half of all women over age 60 have it. Others who are at a high risk of developing it are African Americans, the overweight, those with a family history of high blood pressure, and those with a high-normal blood pressure.

What is high blood pressure?

Blood is pumped by the heart through vessels to bring oxygen and nutrients to the body. Blood pressure is the force of the blood against the vessel walls. The more the pressure, the harder the heart is working. Blood pressure often goes up and down during the day. When it goes up and stays high, then it is high blood pressure. The medical term is hypertension.

How is blood pressure measured?

An easy test measures blood pressure. It uses an inflatable cuff around an arm. If the pressure is high, the test will be repeated on several days to get an accurate reading. You probably have had such a test on a visit to your doctor. The test gives two numbers: The systolic pressure is the pressure of blood in the vessels as the heart beats. The diastolic pressure is the pressure of the blood between heartbeats. The numbers are usually written like a fraction with the systolic above or to the left. An example is 120/80 mm Hg (millimeters of mercury), a normal adult blood pressure. Both numbers count. Your blood pressure is high if the systolic pressure is 140 or above, or the diastolic pressure is 90 or above, or both are high.

Who should have their blood pressure checked?

If you do not know your blood pressure, you should have it taken. Those with high blood

pressure often do not feel sick. In fact, high blood pressure is often called "the silent killer," because it may cause no symptoms for a long time. But untreated, it can damage the kidneys and raise the chance of stroke, heart attack, or other cardiovascular ("heart and vessels") problems. It causes three of every five cases of heart failure in women. ("Heart failure" is a severe condition in which the heart cannot adequately supply the body with blood.) Women who have both diabetes and high blood pressure are at an even higher risk of stroke and heart and kidney problems than those who have only high blood pressure.

Are you in control of your blood pressure?

You may be surprised to learn that many women take blood pressure drugs but still have high blood pressure. This is especially true for older women. Why? There are various causes. Some women may not take their drugs as prescribed--in the right amount and at the right times. For others, a drug may not lower blood pressure enough. To prevent stroke, heart attack, or heart failure, blood pressure must be controlled to below 140/90.

So make sure you're in control of your high blood pressure. Talk with your doctor. Ask about your blood pressure level. If it is too high, ask about adjusting your drug and making lifestyle changes that will bring your blood pressure to below 140/90.

Blood Pressure Categories for Adults*

<u>Category</u>	<u>Systolic**</u>	<u>Diastolic**</u>
Normal	< 130	< 85
High Normal	130-139	85-89
High Blood Pressure		
Stage 1	140-159	90-99
Stage 2	160-179	100-109
Stage 3	180-209	110-119
Stage 4	>= 210	>= 120

Key: < means less than, >= means equal to or more than

*These categories for those 18 and older are from the National High Blood Pressure Education Program. The categories are for those not on a high blood pressure drug and with no short-term serious illness.

**If your systolic and diastolic pressures fall into different categories, your overall status is the higher category.

Take control of your blood pressure:

Three of every four women with high blood pressure know they have it. Yet fewer than one in three are controlling it. All women can and should take steps to control their high blood pressure. This is especially important for women who have heart disease. When blood pressure is lowered, the heart does not work as hard. Women who have had a heart attack are less likely to have another if they reduce their high blood pressure.

You can control your blood pressure with these steps:

- * Lose weight if you are overweight
- * Become physically active
- * Choose foods low in salt and sodium
- * Limit your alcohol intake
- * If prescribed, take high blood pressure pills

Each of these steps is described more fully on the next few pages. There's also a special section on how to eat the heart-healthy way. These lifestyle steps also help prevent high blood pressure --so you and your family can follow them together.

Advice about smoking:

If you smoke, stop. Smoking usually does not affect blood pressure. But quitting is the most important step you can take for your health. Ask your doctor for advice on how to quit.

Advice about weight:

Losing extra pounds helps reduce high blood pressure. Talk to your doctor about what a healthy weight is for you. If you have to lose, do so slowly. To lose weight, you need to take in fewer calories than you burn. So you can either eat fewer calories or increase your physical activity--and preferably do both. You may find it helpful to get advice from your doctor, a registered dietitian, or a qualified nutritionist. They can help you plan a sensible, balanced eating pattern to lose weight slowly and then keep it off.

If You Have Diabetes:

In diabetes mellitus, the body does not use sugar as it should. It gets sugar when it changes food into glucose, a form of sugar. Two main types of diabetes are non-insulin-dependent (NIDDM) and insulin-dependent (IDDM). NIDDM accounts for 90-95 percent of diabetes. It usually develops after age 40. About 80 percent of those with NIDDM are overweight. NIDDM often can be controlled through diet and exercise, but sometimes insulin and/or a pill are needed. IDDM is controlled by diet and exercise and taking insulin. Diabetes is a chronic condition. If you have it, you're more likely to have certain health problems than women without it. You're 2 to 4 times more likely to develop cardiovascular disease, and 2.5 times more likely to have a stroke. As many as 65 percent of those with diabetes have high blood pressure.

Become physically active:

Physical activity is good for your heart and blood vessels and helps control weight. It makes you look and feel better. Luckily, you don't have to run marathons to benefit from physical activity. Try to do at least 30 minutes of a moderate physical activity on most, and preferably all, days. A moderate activity would be a brisk walk. Other activities include gardening, bicycling, and swimming. You do not have to do 30 minutes at one time. You can break it into periods of at least 10 minutes each. This may help you get started. Many women can start without seeing a doctor first. But if you take a high blood pressure medication, have heart disease, have had a heart attack or stroke, or have another serious health problem, you should check with your doctor before starting.

Otherwise, get out and get active. Work up to a comfortable pace and schedule. It may be hard to stick with an activity, particularly if you feel pressed for time. But remember: It doesn't need much time and the reward is better health. It may help you keep going if you do an activity with a friend or family member. Or, you can try switching activities. For instance, use a stationary bicycle three days a week and walk the other days. Being physically active has many benefits. You'll sleep better. And, you'll feel a sense of accomplishment from having taken charge of your health.

Reduce salt (sodium) in your diet:

Studies show that salt and sodium affect blood pressure. Cutting back on salt and sodium can cause blood pressure to drop. Some people are very sensitive to salt and sodium. Many African Americans and older persons are especially sensitive to salt and sodium.

Here are some tips to help you cut back on salt and sodium:

- * Add less salt at the table and in cooking. Try reducing the amount a little at a time until you use none.
- * Season with black or green pepper, garlic, ginger, minced onion, or lemon juice.
- * Use fewer prepared sauces, mixes, and "instant" products, such as flavored rices, pasta, and cereals. These usually have salt added.
- * Use vegetables that are fresh, frozen, or canned without added salt.
- * Check nutrition labels for a product's amount of sodium. Cans, boxes, bottles, and bags have these labels. Look for products that say "sodium free," "low sodium," "reduced sodium," "less sodium," "light in sodium," or "unsalted."
- * Ask your doctor before trying salt substitutes. These contain potassium chloride and may help some women. But they can be harmful for women with certain medical conditions.

Sodium is found naturally in many foods. It also is used in cooking. It is in a wide range of products, including baking soda, bouillon, catsup, soy sauce, monosodium glutamate (MSG), seasoned salts, soda drinks, and some antacids. It also is in such foods as many breads, pickles, canned items, frozen prepared meals, and salty chips. In fact, processed foods account for most of the salt and sodium Americans consume.

Salt is sodium chloride. So you have to be careful about how much of both salt and sodium you consume. Most women--even those with high blood pressure--should have no more than 2,400 milligrams of sodium a day. This comes to 6 grams of salt--about 1 teaspoon. Consuming even less salt and sodium will probably give an added benefit. The amount includes all of the salt and sodium you consume, including that in processed foods, added during cooking, and used at the table.

Being careful about salt and sodium is equally important whether you have high blood pressure, have a high-normal blood pressure, or want to prevent high blood pressure. The information below and in the box on page 7 can help you cut back on salt and sodium.

Sensible snacks:

To help cut back on sodium, snack on:

- * Bagels, raisin toast, or English muffins
- * Air-popped popcorn with no salt or butter
- * Unsalted pretzels and crackers
- * Low-fat cookies (animal crackers, fig bars, ginger snaps)
- * Fruit juices and drinks
- * Nonfat frozen yogurt, sherbet, and popsicles
- * Hard candy or jelly beans

Limit alcohol:

Drinking too much alcohol can raise blood pressure. But most women with high blood pressure can have an occasional drink. And those trying to prevent high blood pressure can drink if they do so in moderation. If you are trying to lose weight, keep in mind that alcoholic drinks have calories--about 70-180 calories per drink, depending on the type. Women who drink alcohol should have no more than one drink a day. One drink is 12 oz. of beer, or 1.5 oz. of 80-proof whiskey, or 5 oz. of wine.

Eat for a healthy heart:

How do you eat for a healthy heart? It's easy. Choose a variety of foods low in saturated fat, total fat, cholesterol, and calories.

A word about fats:

Scientists are not certain that fats or cholesterol in foods raise blood pressure. But dietary fats and cholesterol definitely affect your heart and blood vessels. Fats, especially saturated fat, play a big role in increasing the cholesterol in your bloodstream.

And that increases your chance of developing heart disease. Saturated fat is often found in foods from animals. This includes fatty meats, the skin of poultry, and whole-milk dairy products, such as butter, cheese, cream, and ice cream. It also is in coconut, palm kernel, and palm oils. These oils are found mostly in processed foods, such as baked goods, snack foods, and crackers. If you use a food high in saturated fat, keep the amount small. Or, instead of butter, try tub or liquid margarine, or liquid vegetable oils such as canola, corn, olive, peanut, safflower, sesame, soybean, and sunflower. Keep in mind, all fats have the same amount of calories. If you need to lose weight, limit the amount of fats you consume.

Fat is the richest source of calories. So foods lower in fat also are more likely to be lower in calories--if you limit the serving size. Research shows that eating a lot of fruits and vegetables and low fat dairy products can lower blood pressure--as much as some medicines. Such foods supply plenty of potassium and calcium. Potassium is especially important for blood pressure.

Here's more on those and other key nutrients:

Potassium--Eating foods rich in potassium seems to prevent high blood pressure. Most women get enough potassium in foods. Good sources of potassium are many fruits and vegetables, some dairy foods, and fish.

Calcium--Some populations with low intakes of calcium have more high blood pressure. Scientists don't know if the higher rates are from a lack of calcium or an as-yet-unknown cause. Women also need calcium to prevent osteoporosis, a severe thinning of bones that can lead to fractures. Osteoporosis tends to develop after menopause. You should try to get 1,000-1,500 milligrams of calcium each day. Good sources are dairy foods, such as milk, yogurt, and cheese--but be sure to choose low or nonfat types. They have as much or more calcium but with less fat and fewer calories. If milk causes you digestive discomfort, try yogurt or some lactose-free dairy products.

Magnesium--Scientists think a diet pattern low in magnesium may cause blood pressure to rise. But they are not sure whether the increase is from the lack of magnesium or some unknown factor. You should get enough magnesium if you follow a healthy diet pattern. Good sources are whole grains, green leafy vegetables, nuts, and dry peas and beans.

Help your medications work:

For some, lifestyle changes lower high blood pressure enough. For others--and especially those with heart disease--medication may also be needed. Even if you need medication, be sure to continue your lifestyle changes. The changes help the drug work better. Over time, you may be able to reduce the medication. Fortunately, there are many blood pressure drugs today. Although you may have to take the drug for a long time, you will get big health benefits from controlling your high blood pressure.

When the doctor prescribes a high blood pressure drug, be sure you understand the instructions. Know the amount you should take, if you should take it each day, and what times you should take it during the day. If you are not sure about the instructions, ask while you are at the doctor's office or clinic. Write down the instructions. Later, if you do not remember something or are confused, call back and ask. Even if you are having the prescription filled and are unsure about the instructions, call. Do not be embarrassed. You cannot take the drug properly if you don't understand the instructions.

As with all drugs, those for high blood pressure can cause side effects. For example, some can make you sleepy or tired; others can cause a rash or cough. Pay attention to how you feel. If you think you have a side effect, do not stop taking the drug. That can cause trouble. Instead, tell your doctor as soon as possible about what you feel. The doctor will see if the drug is the cause. If the drug is causing a side effect, your doctor will probably change its dose or give you a different drug. It may take some adjustments to find the best amount or drug for you.

High blood pressure drugs:

High blood pressure drugs work in various ways. They can affect:

- * How hard the heart pumps
- * How much the blood vessels widen and narrow
- * How much fluid is in the body

Your doctor will choose the drug that best suits you. Often, two or more drugs work better than one drug.

The main types of high blood pressure drugs are:

Diuretics--These are sometimes called "water pills" because they work in the kidney and flush excess water and sodium from the body through urine. This reduces the amount of fluid in the blood. And, since sodium is flushed out of blood vessel walls, the vessels open wider. Pressure goes down. There are different types of diuretics. They are often used with other high blood pressure drugs.

Beta blockers--These reduce nerve impulses to the heart and blood vessels. This makes the heart beat less often and with less force. Blood pressure drops and the heart works less hard.

Angiotensin antagonists--These are a new type of high blood pressure drug. They shield blood vessels from a hormone called angiotensin II, which normally causes vessels to narrow. As a result, the vessels are wider and pressure lowers.

Angiotensin converting enzyme (ACE) inhibitors--These prevent angiotensin II from being formed. They relax blood vessels and pressure goes down.

Calcium channel blockers (CCBs)--These keep calcium from entering the muscle cells of the heart and blood vessels. Blood vessels relax and pressure goes down. One short-acting type of CCB has been found to increase the chance of a repeat heart attack. Short-acting CCBs are taken several times a day. If you are on such a drug, you should talk with your doctor about other medication choices. The finding does not apply to the longer-acting types of CCB, which are taken once a day.

Alpha blockers--These work on the nervous system to relax blood vessels, which allows blood to pass more easily.

Alpha-beta blockers--These work the same way as alpha blockers but also slow the heartbeat, as beta-blockers do. As a result, less blood is pumped through the vessels.

Nervous system inhibitors--These relax blood vessels by controlling nerve impulses.

Vasodilators--These open blood vessels by relaxing the muscle in the vessel walls.

What questions should I ask about blood pressure medications?

- * When it should be taken
- * What you can eat or drink with the drug, or how long you must wait before and after a meal to take it
- * What other drugs can or cannot be used at the same time -this includes both prescription drugs and over-the-counter items, such as pain relievers, vitamins,

- and
 skin-protection products
- * What to do if you run out of your drug
 - * What to do if you forget to take a dose
 - * If there are any special instructions

Generic names of high blood pressure drugs:

Type of Medicine Generic Name

Diuretics

- amiloride
- bendroflumethiazide
- benzthiazide
- bumetanide
- chlorothiazide
- chlorthalidone
- furosemide
- hydrochlorothiazide
- hydroflumethiazide
- indapamide
- methyclothiazide
- metolazone
- polythiazide
- spironolactone
- torsemide
- triamterene
- trichlormethiazide

Beta Blockers

- acebutolol
- atenolol
- betaxolol
- bisoprolol
- carteolol
- metoprolol
- nadolol
- penbutolol
- pindolol
- propranolol
- timolol

ACE Inhibitors

- benazepril
- captopril
- enalapril
- fosinopril
- lisinopril
- moexipril
- quinapril
- ramipril

	trandolapril
Angiotensin Antagonists	losartan valsartan irbesartan
Calcium Channel Blockers	amlodipine diltiazem felodipine isradipine nicardipine nifedipine nisoldipine verapamil
Alpha Blockers	doxazosin prazosin terazosin
Alpha-Beta Blockers	labetalol carvedilol
Nervous System Inhibitors	clonidine guanabenz guanadrel guanethidine guanfacine methyldopa reserpine
Vasodilators	hydralazine minoxidil

You are in charge of your high blood pressure!

High blood pressure can be controlled. Make healthy lifestyle changes and always take your drug as prescribed. Remember: You have what it takes to control your high blood pressure.

For More Information

If you want more information about heart-healthy eating, physical activity, and other topics, contact:

National Heart, Lung, and Blood Institute
Information Center
P.O. Box 30105

Bethesda, MD 20824-0105
(301) 251-1222

American Heart Association (AHA)
National Center
7272 Greenville Avenue
Dallas, TX 75231
1-800-AHA-USA1
or (214) 373-6300

The American Dietetic Association
216 W. Jackson Blvd., Suite 800
Chicago, IL 60606-6995
1-800-366-1655

Record Your Blood Pressure

Use this chart to record your blood pressure readings. You may want your doctor or nurse to write the numbers and add special notes.

Date	Reading 1	Reading 2	Average
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Notes:

This guide is part of a public health collaboration of the
Alliance for Aging Research

National Heart, Lung, and Blood Institute
National Institutes of Health

Sponsored by a Professional Grant from
Hoechst Marion Roussel, Inc.

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