Know Your Numbers

Measuring high blood pressure takes only a minute or so and is completely painless. Knowing your blood pressure could save your life!
Do you or a loved one have high blood pressure? You may not know the answer because, unlike many conditions, most people with high blood pressure feel fine and look normal. That is why high blood pressure is known as a “silent” condition. You can have it for years without knowing it!

The good news is that today there are many ways to effectively treat high blood pressure. This may prevent damage to your heart, blood vessels, and other parts of your body. More people than ever are being treated for high blood pressure. Still, in the United States, roughly one in every three adults is affected by high blood pressure. Your risk rises as you get older: even people with normal blood pressure at age 55 have a 90% chance of having high blood pressure later in life.

This booklet and DVD will help you learn about high blood pressure. You’ll see how you can take steps to help control it. You’ll learn what your blood pressure “numbers” mean and why it’s so important to know them. The key is frequent blood pressure tests, following a healthy lifestyle, seeing your doctor regularly, and following his or her advice.
What is High Blood Pressure?

High blood pressure is also called hypertension. That doesn’t mean a person with hypertension is too tense or nervous! It just means that the pressure inside your blood vessels is too high.

Blood pressure is the force of blood pushing against the walls of the blood vessels as the heart pumps. The large blood vessels are like the tube of a garden hose. The small blood vessels are like a nozzle. If the nozzle is kept open, water will flow freely through the hose, and little pressure builds up on the walls of the hose. If the nozzle is clamped down or narrowed, however, pressure builds up against the walls of the hose. If pressure builds up inside blood vessels, then the heart must work harder to pump the blood through the vessels.

There are actually two measures of blood pressure. Systolic pressure is the force created when your heart squeezes while pumping blood. Diastolic blood pressure is the pressure when the heart is relaxed between beats.

Blood Pressure Measures

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Systolic Pressure</th>
<th>Diastolic Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Less than 120</td>
<td>AND Less than 80</td>
</tr>
<tr>
<td>Pre-hypertension</td>
<td>Between 120-139</td>
<td>OR Between 80-89</td>
</tr>
<tr>
<td>Hypertension</td>
<td>140 and above</td>
<td>OR 90 and above</td>
</tr>
</tbody>
</table>

The systolic pressure is usually written above or before the diastolic pressure, such as 120/80, which is currently considered normal.

Pressures between 120-139/80-89 are considered to be “pre-hypertension.” If your systolic blood pressure is above 140 OR your diastolic pressure is above 90, you have high blood pressure.

High blood pressure can hurt your body in many ways:

- Your heart may enlarge and weaken
- Your blood vessels may develop bulges and weak spots, making them more likely to burst
- Blood vessels may also narrow, reducing blood flow and leading to a heart attack, stroke, or kidney failure
- Blood vessels in your eyes may be damaged, leading to vision loss or blindness
FDR and Hypertension

When he was 57, Franklin Delano Roosevelt, the 32nd President of the U.S., found out his blood pressure was high: 170/90. Like most people, he felt no symptoms.

At that time, no medicines for hypertension existed. The President was told to rest (difficult for a President!), eat a low fat, low salt diet, and to take mild sedatives.

But his blood pressure kept rising. In 1942 it was 190/105. In 1944 it was 200/110. He began to feel short of breath, and an exam revealed an enlarged heart and kidney problems. On April 12, 1945, the President died of a massive stroke. He was only 63 years old.

If he had lived today and used available medicines, he may have lived much longer.

What Causes High Blood Pressure (BP)?

For most people (about 95%), no single “cause” of high blood pressure is found. That’s because hypertension is usually influenced by many factors, such as your family history, diet, how much you weigh, and other lifestyle habits.

Certain medical problems, such as kidney disease or thyroid disease, may cause BP to rise. Also, certain medicines—such as those for arthritis or colds—can raise blood pressure.

Some women develop a special type of high BP during pregnancy. This usually goes away after the baby is born, but sometimes it can linger. Women with this kind of high blood pressure in pregnancy are at greater risk of getting hypertension later in their lives.

Did You Know?

For most people, having hypertension means a life-long commitment to a healthy lifestyle and medication.
Who is At Risk for High BP?

Although high blood pressure can affect anyone, certain traits, conditions, or habits may increase your risk:

- Older age
- Being male
- Being black
- Family history of high blood pressure
- Being overweight
- Eating too much salt
- Cigarette smoking
- More than two (alcohol) drinks per day for men, more than 1 drink a day for women
- Not exercising regularly

The more of these traits or conditions you have, the higher your risk!

How Can I Tell if I Have High BP?

High blood pressure is sometimes called “the silent killer” because most people who have it do not have symptoms. Most people find out about it when they visit a doctor and have their BP checked. But some people only learn they have hypertension after it has hurt their health or caused a major problem like a heart attack, stroke, or kidney failure. That’s why it’s so important to have your blood pressure checked regularly and to know your BP “numbers.”
Keeping it Down with Lifestyle Changes

Almost everyone with high BP can bring their numbers down with lifestyle changes, medicines, or both.

Anyone with high BP can help lower their pressure and reduce their risk by taking some simple steps to change their lifestyle. Making heart-healthy changes to your lifestyle and following your doctor’s advice can make a big difference!

Here are some things that might help.

- Lose weight if you are overweight
- Reduce salt in your food
- Eat at least 5 servings of fruits and vegetables daily
- Be physically active (after talking with your doctor)
- Quit smoking (and avoid other people’s smoke)
- Maintain normal blood sugar levels
- Lower your cholesterol levels

High Salt Foods to Avoid or Limit

- “Fast” food
- Olives
- Potato chips
- Pretzels
- Many canned soups
- Salted crackers
- Bouillon
- Biscuits
- Ham
- Pancakes
- Sausages
- Hot dogs
- Most commercial pastries or cakes
- Smoked meats or fish
- Pickles
- Sauerkraut
- Sardines
- Soy sauce
- Tomato juice
- Ketchup
- Many canned vegetables
- Many kinds of cheese
A Word About Salt

On average, the more salt you eat, the higher your blood pressure may be. So reducing the amount of salt in your diet may lower your blood pressure. In general, the benefits of salt reduction are greater for older people, and those with existing hypertension, diabetes, or kidney disease.

The American Heart Association recommends eating less than a teaspoon of salt a day. Since food labels measure salt in terms of “milligrams of sodium,” you should know that a teaspoon of salt equals 2300 milligrams (mg) of sodium. That might sound like a lot, but it’s not. For example, many kinds of prepared soups contain about 650 mg of sodium per serving—and there are two servings in an average-size can. Eat a can of soup for lunch, and you “use up” more than half the suggested total daily sodium intake. Get in the habit of reading food labels. You may be surprised at how much salt common foods—such as ketchup—contain. If you have high BP, it’s best to avoid foods with more than 150 mg of sodium per serving.

Tasty, Healthy Eating

You don’t have to go on a special diet or deprive yourself of good-tasting food to help lower your blood pressure! Old-fashioned, home-cooked meals made with “real” ingredients are often fine—just reduce the amount of salt and fat. “Slow” food is usually better for you than “fast” food!

Here are some tips for healthy eating from the American Heart Association:

- Balance how much you eat with your physical activity to maintain a healthy body weight
- Eat a diet rich in vegetables and fruits
- Choose whole-grain, high-fiber foods
- Eat fish at least twice a week
- Limit your intake of saturated fat
- Use fat-free (skim), 1%-fat, and low-fat dairy products
- Avoid drinks and foods with added sugars
- Choose and prepare foods with little or no salt
- If you drink alcoholic beverages, do so in moderation
The Importance of Exercise

Physical activity is important for your health. Not only may it help control your blood pressure, it may improve your cholesterol levels, help maintain normal blood sugar levels, boost oxygen to your brain and body, and improve your mood.

If you do not exercise regularly, talk to your doctor before starting an exercise program. You can start slow: just 5 or 10 minutes of walking twice a week for example. Then you can gradually build up to at least 30 minutes every day.

You don’t have to go to a gym or do anything fancy. Walking can be a fine exercise, particularly if it involves hills. Yard work such as mowing the lawn or raking leaves also counts. There are lots of ways to “sneak in” exercise. You can get off a bus or a subway a few stops from your destination and walk the rest of the way. You can take the stairs instead of an elevator. The main thing is to simply get moving!

Do I Need to Measure My Blood Pressure at Home?

Some people may benefit from measuring their BP at home. For example, some people have high readings at the doctor’s office but normal readings at home. This is called “white-coat hypertension.” Measuring BP at home can reveal if you’re one of those people with “white-coat hypertension” or whether your high blood pressure is really a problem. Home BP measurements may also be helpful in the early phase of starting treatment. It can help you and your doctor know if your treatment plan is working.

Talk to your doctor about which type of blood pressure monitor you should use at home. Consider bringing your monitor to your doctor’s office to learn how to use it properly. Once a day is usually suggested.
Medicines for Hypertension

Many people with high blood pressure need at least two types of medicines to lower their BP. Such medicines can prevent or delay the problems linked to hypertension. There are dozens of medicines available. Some work better for certain types of patients, such as those with diabetes. However, pregnant women with high BP cannot take certain types of BP medicines. If you are taking medications for high blood pressure and become pregnant, be sure to tell your doctor immediately. If you develop high blood pressure while you are pregnant, review with your doctor the medications that will be safe for both you and your baby.

Blood pressure medicines work in different ways. Some remove extra fluid and salt from the body. Others slow down your heartbeat, or relax and widen your blood vessels. Your doctor will work to find a medicine or medicines that are best for you. Don’t be afraid to ask questions! Patients who are assertive and fully engaged with their health care do better than those who are not taking an active role in managing their health.

Like all medicines, blood pressure medicines can produce side effects. Some of the more common side effects include:

- Increased urination
- Difficulty getting or maintaining erections
- Dizziness
- Tiredness
- Muscle cramps
- Cough
- Swelling of the ankles

If you have side effects from your medicines, talk to your doctor. She or he may be able to adjust the dose or prescribe different medicines.

You should take all BP medicines that your doctor prescribes. Be sure you know the names and amount of your medicines and how to take them. And take your medicines exactly as your doctor directs—don’t skip days or cut pills in half unless your doctor says to!

Did You Know?

People with high blood pressure should be careful about taking certain cold, cough and flu medications. Decongestants have been reported to increase blood pressure and may interfere with some blood pressure medications.

The Bottom Line

You’ve learned that having high blood pressure puts you at serious risk for many health problems, such as heart and kidney disease or stroke. Most people can’t tell they have high blood pressure. So it’s important to get checked. It’s a quick, painless, and simple measurement. Everyone should “know their numbers” and get regular BP checkups.

Today, BP can be controlled for some people with lifestyle changes. But for most, a combination of lifestyle changes and blood pressure medicines is required. In the end, you are responsible for your own health. By learning about high blood pressure and how it can be treated, you’ve taken the first step toward successfully managing this condition!

Resources

American College of Physicians
www.acponline.org
800-523-1546

American Heart Association
www.americanheart.org
800-242-8721

Hypertension Education Foundation
www.hypertensionfoundation.org

National Heart, Lung, & Blood Institute
www.nhlbi.nih.gov
301-592-8573


**Sponsor**

**Daiichi Sankyo, Inc.**

Daiichi Sankyo, Inc., headquartered in Parsippany, New Jersey, is the U.S. subsidiary of Daiichi Sankyo Co., Ltd. A global pharma innovator, Daiichi Sankyo Co., Ltd., was established in 2005 through the merger of two leading Japanese pharmaceutical companies. This integration created a more robust organization that allows for continuous development of novel drugs that enrich the quality of life for patients around the world. A central focus of Daiichi Sankyo’s research and development is thrombotic disorders, malignant neoplasm, diabetes mellitus, and autoimmune disorders. Equally important to the company are hypertension, hyperlipidemia or atherosclerosis and bacterial infections. For more information on Daiichi Sankyo, Inc., please visit www.dsus.com.

**Partners**

**American College of Physicians**

The American College of Physicians (ACP) is a national organization of internists—physicians who specialize in the prevention, detection and treatment of illnesses in adults. Established in 1915, ACP is the largest medical-specialty organization and second-largest physician group in the United States. Its membership of 126,000 includes internists, internal medicine subspecialists, medical students, residents, fellows, and allied health professionals. Members are physicians in general internal medicine and related subspecialties, including cardiology, gastroenterology, nephrology, endocrinology, hematology, rheumatology, neurology, pulmonary disease, oncology, infectious diseases, allergy and immunology, and geriatrics. Internists treat the majority of adults in the United States.

**Hypertension Education Foundation**

The Hypertension Education Foundation, Inc. was incorporated in 1977 for the purpose of increasing both physicians’ and the general public’s awareness of the problems of treatment, and promoting research and teaching efforts, in the field of hypertension. HEF has been active in informing the general public about the consequences of untreated high blood pressure, and has also promoted methods to improve physician management of this disease. The President of HEF is Marvin Moser, M.D., F.A.C.P., Clinical Professor of Medicine, Yale University School of Medicine.
Credits

Know Your Numbers: A Guide to Managing High Blood Pressure has been made possible through the expertise, time, and effort of many individuals.

Sponsor
Daiichi Sankyo, Inc.

Partners
American College of Physicians
Patrick C. Alguire, M.D., F.A.C.P.
Director, Education and Career Development

Hypertension Education Foundation
Marvin Moser, M.D., F.A.C.P.
President

Contributors to the Video
Eric H. Green, M.D., M.Sc., F.A.C.P.
Assistant Professor of Medicine
Course Director, Patients, Doctors and Communities
Albert Einstein College of Medicine
Medical Director, Pre-op Evaluation Service
Attending Physician, Primary Care Clinic C
Montefiore Medical Center
Bronx, New York

Marvin Moser, M.D., F.A.C.P.
Clinical Professor of Medicine
Yale University School of Medicine
New Haven, Connecticut

Suzanne Oparil, M.D.
Professor of Medicine, Physiology and Biophysics
Director of the Vascular Biology and Hypertension Program, Cardiology Division
University of Alabama, Birmingham

Project Manager
Carol Brandenburg
Executive Producer
Conrad & Associates, LLC

Guidebook Author
Stephen R. Braun
Medical Writer
Amherst, MA

Guidebook Designer
Cinda Debbink
Design Partners
www.dgdesignpartners.com
Know Your Numbers

Do you have high blood pressure (BP)? Unless you’ve had it checked, you probably don’t know. That’s because this serious condition is usually “silent”—most people have no obvious symptoms. But roughly one in every three adults has high BP. This raises their risk for heart and kidney disease, stroke, and many other medical problems.

The good news? The test for high blood pressure is simple, quick, and painless. And the range of treatment options has never been greater. Almost everyone with high BP can bring their numbers down with lifestyle changes, medicines, or both.

This booklet and DVD will help you learn about high blood pressure. You’ll see how you can take steps to control it, and lower your risk of heart and blood vessel problems. The keys are:

- Follow a healthy lifestyle
- See your doctor—take medications as prescribed
- Get your BP checked regularly