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## **Hypertension: Part II What Can I Do?**

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Anyone can develop high blood pressure. But experts have identified some characteristics that increase the risk. Some of these so-called "risk factors" cannot be changed, but some can. While risk factors don't necessarily cause high blood pressure, they can contribute to it, or make it worse. Your risk is greater if one or more of the following statements apply to you:

### **Risk factors you cannot change:**

- You have a close relative with high blood pressure, especially a brother or sister.
- You are a male younger than 50 years of age.
- You are a postmenopausal woman.
- You are African-American.

### **Risk factors you can change or control:**

- You are overweight.
- You do not exercise regularly.
- Your diet is high in sodium.
- You are a smoker.
- Your cholesterol levels are high.
- Your diet doesn't include enough calcium or potassium.
- You have more than two or three alcoholic drinks a day.
- You are under constant stress.
- You have diabetes.

It is important to recognize your own personal risk factors. While you cannot change some risk factors like your family history or your age, you certainly can change or control other important risk factors like your smoking habits, your weight and diet amongst others, that will effectively lower your risk of developing high blood pressure.

## Hypertension Stages

If your systolic blood pressure readings are consistently greater than 140 mm Hg and/or your diastolic blood pressure readings are consistently greater than 90 mm Hg, your blood pressure is considered high.

Systolic (mm Hg)	Diastolic mm Hg)	Category
Less than 120 120-139	less than <80 80-89	Optimal Prehypertension
Hypertension 140-159 or 160-179 or 180 or greater	90-99 100-109 110 or greater	Stage 1 Stage 2 Stage 3

When the systolic blood pressure and diastolic blood pressure fall into different categories, the higher category should apply. For example, a blood pressure of 165/94 mm Hg should be classified as stage 2 hypertension.

The stage of hypertension alerts you to how critical it is for you to get your blood pressure under control.

## Approximate Reduction in Systolic Blood Pressure (SBP) for Various Lifestyle Changes

- Weight reduction:** Maintain normal body weight (BMI, 18.5-24.9 kg/m<sup>2</sup>) -- Approximate SBP Reduction, Range: 5-20 mmHg/10 kg weight loss.
- Adopt DASH eating plan:** Consume a diet rich in fruits, vegetables, and low fat dairy products with a reduced content of saturated and total fat -- Approximate SBP Reduction, Range: 8-14 mmHg. (More about the DASH Diet in coming weeks)
- Dietary sodium reduction:** Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g sodium or 6 g sodium chloride) -- Approximate SBP Reduction, Range: 2-8 mmHg.
- Physical activity:** Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week) -- Approximate SBP Reduction, Range: 4-9 mmHg.
- Moderation of alcohol:** Limit consumption to no more than 2 drinks (1 oz or 30 mL ethanol; e.g., 24 oz beer, 10 oz wine, or 3 oz 80-proof whiskey) per day in most men and to no more than 1 drink per day in women and lighter weight persons -- Approximate SBP Reduction, Range: 2-4 mmHg.
- For overall cardiovascular risk reduction, stop smoking.**

Lifestyle changes play an important role in managing high blood pressure. Permanent changes in lifestyle and diet are sometimes difficult to achieve, but are worth the effort. Permanent lifestyle and diet changes may eliminate the need for drug treatment, or allow reductions in the dosages of medications.

Lifestyle changes carry other benefits, as well. They can keep high blood pressure from developing in the first place, reduce other cardiovascular risk factors, and improve your overall health.

Experts recommend the following lifestyle modifications for the prevention and management of hypertension:

- Lose weight, if you're overweight
- Increase aerobic physical activity – walking, jogging, cycling, swimming
- Reduce your sodium intake
- Maintain an adequate intake of dietary potassium and calcium
- Reduce your intake of dietary saturated fat and cholesterol
- Limit your alcohol intake
- Stop smoking
- Manage stress

## **What You Can Do to Control Your Blood**

### **Pressure Losing Weight Safely**

Being overweight goes hand in hand with high blood pressure. Excess abdominal fat is also associated with high cholesterol levels, diabetes, and heart disease. Fortunately, most people with high blood pressure can significantly reduce their blood pressure by losing as little as 10 pounds. Weight loss also reduces the risk of heart disease and enhances the effects of some medications used to treat high blood pressure. Any overweight individual who has high blood pressure should take steps to reduce body weight. These measures include dietary changes and exercise. A nutritionist can also help you develop a healthful weight loss diet.

Here are some guidelines for losing weight and keeping it off:

- Lose weight slowly. Plan to lose no more than two to four pounds a month.
- Cut down on fatty foods. Eat a balanced diet that includes lots of fruits and vegetables.
- Get more exercise. Exercise will help you to burn calories, and it will also help you to lose fat, not muscle.

### **Becoming Physically Active**

Besides reducing the risk of high blood pressure and other cardiovascular disease, physical activity can enhance weight loss and general health. The best type of exercise for preventing and reducing high blood pressure is regular aerobic physical activity, which includes things like walking, cycling, swimming, jogging, aerobic dance classes, rowing, dancing, and skating - in short, anything that raises your heart rate for an extended period of time. Whatever activity you choose, make sure to start slowly and build up gradually.

People with high blood pressure can effectively lower their blood pressure with moderate physical activity (such as 30 to 45 minutes of brisk walking most days). People with normal blood pressure can also benefit from exercise. Compared with people who are fit and

physically active, sedentary people with normal blood pressure have a 20% to 50% greater chance of developing high blood pressure.

Most individuals can safely increase their physical activity without an extensive medical evaluation. But those with cardiovascular disease or other serious medical problems may need a thorough evaluation and referral to a medically supervised exercise program. Talk to your doctor about what is recommended for you before starting to exercise.

It is true that your heart rate will speed up when you exercise, causing your blood pressure to rise temporarily. But normally your body compensates by causing blood vessels to relax. With regular exercise, your heart will pump blood more efficiently. However, you should always check with your doctor before exercising. Some individuals (such as those with heart disease) may need to take special precautions, including a thorough medical evaluation, before beginning an exercise program. The hearts of some individuals are also more susceptible to increased stress associated with exercising.

To make sure that you are not placing too much strain on your heart, you should monitor your heart rate by checking your heart rate. To determine your heart rate, use your index and third finger to find the pulse at your wrist or neck, count for six seconds, and add a zero. Since heart rates that are generally safe for people who are exercising vary with different factors (including age and state of health), you should ask your doctor what is a safe range for you.

Walking is one of the simplest, cheapest, and easiest ways to increase your physical activity level. For most people, walking is a good starting point,

- Start by buying a comfortable, well-fitted pair of walking shoes.
- Take short walks whenever you can fit them in. That might mean walking to the post office at lunch, or taking the dog for a walk in the evening.
- Later, aim for longer exercise sessions:
- Start by walking for at least 15 to 20 minutes several times a week.
- Gradually build up to at least 30 minutes, five times a week.

Exercise is one of the best ways to enhance your overall health and decrease blood pressure. However, exercise also puts additional strain on your heart. Here are some safety rules to follow when exercising:

- Do not get out of breath. If you find it hard to hold a conversation while you are exercising, slow down.
- If you have any symptoms such as chest pain or extreme shortness of breath, stop immediately and contact your doctor.
- If you want to try more vigorous activity, check with your doctor first. He or she may first want you to take a stress test.
- Do not engage in muscle-building types of exercise (e.g., weight lifting) without checking with your doctor first. These types of exercise may raise your blood pressure.

It may seem to be redundant, but every medical condition which we address in the clinic every day is improved or resolved by proper diet and exercise. It can be overstated, over emphasized or over done: diet and exercise. Like “please” and “thank you,” are taught to us as children for politeness, so “diet” and “exercise” need to be preached to us for health.

Remember, it is your life and it is your health.