

# Hypertension and Heart Disease

Hypertension means high blood pressure. Consistently high blood pressure damages your blood vessels and the organs.

Blood pressure (BP) is like the force of water coming out of a garden hose. If the pressure is too high, the water jet will destroy the flowers. The pressure might also damage the hose tube from the inside. This is what happens to your blood vessels; they get damaged. Cells in your blood, known as platelets, stick to the damaged wall to form plaques. These plaques can get bigger over time and cause a heart attack or stroke.

Your blood pressure can fluctuate during the day. It is normal for your BP to vary during the day. Your BP will go up when you are drinking caffeine, smoking, feeling anxious, or exercising. Your BP should go down while sleeping and within a few hours of exercising.

We can't feel our blood pressure, so we have to check it. A single high BP reading in the physician's office doesn't always mean you have hypertension. Some people tend to have higher BP readings in the office than at home. This is known as "white coat hypertension." If your BP is high both in the office and at home, then you likely have "true" hypertension.

If you have hypertension, you can measure your blood pressure at home. You should measure your BP sitting in a chair, arm supported (on an armrest or table), in a quiet place, free from distractions, with your feet planted on the ground. Relax before starting the BP machine. Take deep breaths in between each measurement.

Your BP has two numbers – the systolic (top number) and diastolic (bottom number). The systolic BP measures the force of blood that is pumped out of your heart, and the diastolic BP measures the tightness of your blood vessels. Canadian Guidelines say that your home systolic pressure should be below 135 and your diastolic pressure below 85 most of the time. There are a few exceptions where we might want the blood pressure lower.

We treat hypertension with a combination of medications and a change in diet and lifestyle. It is essential to take your medicines every day.

There are several categories of medications that we can use depending on how your body takes to them. The DASH diet is a low-fat diet, rich in vegetables, fruit, whole-grains, and low-fat dairy foods. It is more specific than the Canadian Food Guide and makes serving size recommendations.

If you have hypertension, salt can make your BP go up. Guidelines recommend less than 2000 mg of sodium per day. Learning to read food labels can help you figure out which

food items have too much sodium. Reducing salty foods like chips, processed meats, soy sauce, and canned soups, and not using the salt-shaker will help lower your blood pressure.

## **Action Plan**

- Talk to your doctor about the appropriate BP goal for you.
- Either buy a home BP monitor or have it checked at the local drugstore.
- Measure your blood pressure out of the office, preferably at or around the same time. Write it down on a piece of paper.
- If most of your readings are above 135/85, identify and cut down on salty foods.
- Quit smoking. Nicotine in smoke narrows your blood vessels and raises blood pressure (See smoking)
- If you are overweight, set a weight loss goal of around 5-10% of your body weight; aim to lose about 0.5 – 1 lb per week. (See Diet and Losing Weight)
- Exercise for at least 30 minutes a day (See Activity)
- If your readings are still above 135/85, your doctor may add or change your pills.

## **Links**

[High Blood Pressure](#)

[Blood Pressure Action Plan](#)

[Measuring your Blood Pressure at Home](#)

[Hypertension Canada Approved Devices](#)

[DASH diet](#)