How is blood pressure lowered?

Making certain changes to your lifestyle can lower blood pressure. These are described in detail below. If lifestyle and diet changes are not enough to lower blood pressure to target levels, antihypertensive medication may be prescribed, but lifestyle and diet modifications should be maintained.

Compare your target BP to your current BP, and discuss with your physician which of the following changes might be useful to you in your blood pressure management program.

Lifestyle change	How does it help?	How much could it affect my BP	
		Up toin SBP?*	Up toin DBP?*
Exercise regularly 30-60 minutes of dynamic exercise, 4 or more times per week Includes walking, swimming, cycling, etc.	 Promotes weight loss by burning fat and increasing metabolism Increases cardiovascular fitness 	Exercising only 3x/week can result in 10.3 mmHg	Exercising only 3x/week can result in 7.5 mmHg
Eat a low-fat, high-fiber diet (e.g., the DASH diet) 4-5 servings of fruits and vegetables per day Low in cholesterol and saturated fat Low-fat dairy	Reduces BP in people with and without hypertensionStarts to show benefits within 2 weeks	↓ 11.4 mmHg	↓ 5.5 mmHg
Lose weight, if overweight "Overweight" involves having a Body Mass Index higher than 25	The heart doesn't have to work as hardReduces the risk of dyslipidemia, diabetes and fatal heart attack	Losing 4.5 kg can result in 4.7.2 mmHg	Losing 4.5 kg can result in ↓ 5.9 mmHg
Reduce salt intake Recommended daily limit is about 1 teaspoon of table salt per day	 The more salt there is in the blood, the more water, and the more work for the heart Reducing salt intake reduces the work of the heart 	↓ 5.8 mmHg	↓ 2.5 mmHg
Limit alcohol consumption Less than two units of alcohol per day Weekly maximum of 14 for men and 9 for women	 Excessive alcohol intake is an important risk factor for high BP Can cause resistance to antihypertensive therapy Risk factor for stroke 	Reducing by 2.7 drinks can result in 4.6 mmHg	Reducing by 2.7 drinks can result in 4.3 mmHg
Quit smoking	Smoking is a powerful risk factor for CVD	1—1	1_
Manage stress	Emotional stress puts stress on the body and heart	_	_

The above recommendations for healthy modifications are based on the 2005 Canadian Recommendations for the Management of Hypertension. Please note that the effects of several measures may not be additive.

Where can I get more information?

For more information on lifestyle changes that can help lower BP, consult the following websites:

- Health Canada (www.hc-sc.gc.ca)
- Heart and Stroke Foundation of Canada (www.heartandstroke.ca)



Remember: Rome wasn't built in a day!

Changing our lifestyles takes time and practice. Make changes gradually and celebrate small victories.

^{*}SBP=Systolic Blood Pressure; DBP=Diastolic Blood Pressure.

Preventing and Managing Hypertension Through Lifestyle Change

What is high blood pressure?

When blood passes through the body, it exerts force on the artery walls. This force is called "blood pressure" (BP). There are two blood pressure measurements: systolic measures are taken as the heart beats, and diastolic measures are taken as the heart relaxes between beats.

When blood pressure is high, too much force is being applied to the artery walls, and the heart is being overloaded. High blood pressure (also known as "hypertension") cannot be felt and there are usually no warning signs. Once it is diagnosed, a patient will likely have high blood pressure for life.

Why is it important to treat high blood pressure?

Having high blood pressure seriously increases the risk of cardiovascular events, (e.g., heart attack, which occurs when the blood supply to the heart is blocked, causing the heart to stop beating; and stroke, which occurs when the blood supply to the brain is blocked, resulting in permanent brain damage). Patients with hypertension have a 35% chance of developing a heart condition as a result of hardened arteries, a 49% chance of experiencing a heart attack, and a 24% chance of dying prematurely as a result of a heart condition or cardiac event. Even if blood pressure is only slightly above normal, there is still an increased risk, and the risk grows as blood pressure rises.

Keeping track of your blood pressure.

An accurate blood pressure diary can be a very valuable tool in planning a program to lower your blood pressure. Recording measurements at home and bringing these to your next appointment can help your physician understand what changes are working and which ones need to be improved.

Make sure you carefully monitor your blood pressure at home. If you have received the **Get to Goal** brochure entitled *The Home Blood Pressure Monitoring Patient Manual*, you can use the logbook found inside.

Making the commitment to a healthy lifestyle.

(circle the ones you intend to change)

Drink less alcohol

Lose weight

Quit smoking

Eat a low-fat diet

Eat less salt

Exercise often

Reduce stress

Sometimes it's easier to keep a commitment when you have a reminder. If you like, you can fill out the following agreement with your nurse or physician and put it somewhere where you'll see it every day. It certifies that you are committed to lowering your blood pressure to a healthier level.

Yes! I am committed to lowering my BP My current BP is: Date: My target BP is: SBP: DBP: I understand that I have high blood I understand that blood pressure medication can pressure - which puts me at greater risk help reduce my blood pressure. I will take my of cardiovascular disease. medication every day as prescribed. If I have trouble remembering to take my pills, or if I have I understand that certain lifestyle changes any side effects, I will discuss these with my doctor, can reduce my blood pressure. nurse or pharmacist in order to work out a system I intend to make the following changes: that will be easier for me.

Patient's signature

Congratulations!

You've just taken

the first step towards

better blood pressure

management!