

# high blood pressure

#### YOU'RE IN CONTROL

Diet and lifestyle changes are powerful tools in helping lower high blood pressure. For some people, it may even bring their blood pressure back to normal or reduce the amount of medication they need.

# What is high blood pressure?

The role of our heart is to pump blood throughout our body. "Blood pressure" is the force that circulating blood creates within the walls of our blood vessels. It is similar to the pressure created by water inside a garden hose when the water is on.

High blood pressure, also known as *hypertension*, is a medical condition that exists when the force (or pressure) of the blood against the blood vessel walls is too strong.

High blood pressure is dangerous because it makes the heart work too hard. Over time, the extra force can cause arteries to become scarred and less elastic. While these changes will happen gradually with age, they occur more quickly in people with elevated blood pressure. Uncontrolled high blood pressure can lead to stroke, heart attack, congestive heart failure and kidney failure. In fact, high blood pressure is the number one risk factor for stroke and a major risk factor for heart disease.

### Know your numbers

According to Hypertension Canada, one in five Canadian adults has high blood pressure, and 20% are unaware of it because it has no symptoms. Knowing and monitoring your blood pressure, particularly if it's high, is important for staying healthy and preventing complications.



One fifth of Canadian adults have high blood pressure.

# What causes high blood pressure?

Many factors can contribute to the development of high blood

pressure. Often it isn't just one thing, but a combination. Some of the factors are out of our control.

Risk of high blood pressure increases as we get older and is most common among people over 40 years old. Smoking, genetics and certain conditions such as obesity, diabetes or kidney disease may also increase risk.

### Take control

Taking any of the steps below can help improve your blood pressure. The more you do, the healthier your blood pressure will be.

- If you smoke, get help to guit
- Reduce sodium (salt) intake
- Limit alcohol to 1-2 standard drinks a day, or less
- Be active at least 2.5 hours a week, with each exercise period lasting 10 minutes or more
- Eat a healthy diet
- Manage your weight wisely by adopting a healthy lifestyle

## DASH to healthy eating

Good news! A pattern of healthy eating, known as the DASH diet, has been shown to help effectively lower elevated blood pressure, as well as reduce the risk of developing high blood pressure.

Based on extensive research conducted by a group of renowned health institutions, DASH (Dietary Approaches to Stop Hypertension) involves no complicated instructions or special foods.<sup>1</sup>

The DASH pattern of eating is similar to the *Canada's Food Guide*, with a greater emphasis placed on vegetables, fruit and milk products.

The DASH diet study has shown that a healthy pattern of eating that includes 3 servings of milk products a day plus 8 to 10 servings of fruit and vegetables reduces blood pressure twice as much as a diet high only in vegetables and fruit.



## how does the DASH diet work?



# Key foods associated with healthy blood pressure

Studies have revealed that vegetables, fruit and milk products, especially milk and yogurt, help maintain a healthy blood pressure. These nutritious foods provide calcium, magnesium and potassium, a combination of nutrients that have long been associated with a reduced risk of high blood pressure. However, it's probably the synergy between these crucial nutrients and other, as yet unidentified, compounds in vegetables, fruit and milk products that makes these foods so effective.

Milk products also contain bioactive peptides, a special type of protein that seems to have a beneficial effect on blood pressure. They are similar to the active ingredients found in much stronger doses in blood-pressure-lowering medications.

# Are supplements as effective as food?

Individual nutrients consumed in the form of supplements may not have the same blood pressure lowering effect as foods. You need to eat the foods to get the full benefits. Why? Food has many other components beyond the nutrients mentioned previously. These provide further benefits that work in ways not yet fully understood.

The vast majority of Canadians don't eat enough servings of vegetables, fruit and milk products every day to meet the recommendations of the DASH Diet.'

# importance of a healthy lifestyle

# Healthy lifestyle and your weight

While being overweight can be a factor in higher blood pressure, managing your weight may not be as easy as you'd like to.

A balanced diet and regular exercise can help maintain healthy blood pressure. Plus, adopting these changes could help you lose weight and reduce your blood pressure even more.

### Read labels, learn lots

Nutrition Facts tables and ingredient lists provide lots of helpful information and are a great tool for anyone trying to improve the way they eat. Read them and compare what's in different foods before you buy.

For example: Check what the serving size is—you may be routinely eating more than you think. Buying foods that show higher protein and/or fibre content will help

keep you satisfied and sustain your energy levels longer. Also, use the sodium content listed on the label to compare similar foods and choose your best option.

## Reduce your sodium intake

Reducing sodium consumption can be an important part of achieving and maintaining healthy blood pressure. Health Canada has set the upper limit of sodium intake to 2,300 mg<sup>4</sup> a day.\*

The current consumption of Canadians is about 3,400 mg<sup>5</sup>

—most of us would do better having less.

Cut a little salt from your diet every day. Note that processed food such as canned and prepared foods, including those from restaurants and fast food establishments, are the major source of sodium in the Canadian diet, not the salt we add at the table. Tips to help reduce your sodium intake:

#### At home:

- Prepare meals with fresh ingredients whenever possible
- Reduce salt in cooking by using herbs and spices instead
- For a flavour hit, squeeze fresh lemon juice on food instead of salting it
- Limit processed meats, pickled and smoked foods
- Read labels and choose lower sodium foods when available

#### In restaurants:

- Ask for your sauces and salad dressings on the side—they usually contain a lot of sodium
- Ask for lower sodium choices in restaurants



<sup>\*</sup>For people with diagnosed high blood pressure, Hypertension Canada recommends no more than 2,000 mg of sodium per day.

# eating more of the good stuff



Feel good! Committing yourself to making positive changes in your diet will have lifelong benefits to your health and well-being.

## EXPLORE THE VARIETY OF MILK PRODUCTS

To increase your consumption of milk products, eat yogurt for an afternoon snack or a cold glass of milk at night.

### Top up

See every meal as an opportunity to meet your DASH milk product guidelines. Here are some ideas:

- Increase the milk on your morning cereal to a whole serving and make sure you finish it all
- Make dips and dressings with yogurt
- Make your soups milk-based
- Choose yogurt or milk-based puddings for dessert

### Snack wise

Snacking on milk products can be an important pro-DASH eating strategy. Also milk, yogurt and cheese contain protein which makes them more satisfying than foods like chips or cookies, not to mention more nutritious.

### DASH your drinks

Rethinking what you drink opens up lots of opportunities to add more DASH to your diet.

- Make your own yogurt drink: spoon a small container of vanilla yogurt into a glass, add a cup of milk, stir it up and voilà!
- Make your morning coffee a latte or have a milky chai and make your winter drink hot chocolate made with milk.
- Blending up a smoothie with yogurt, fruit and a little milk gives you servings of both DASHrecommended food groups and lots of satisfying taste.

## GET COLOURFUL WITH VEGETABLES AND FRUIT

Start rethinking the focus of your meals. Instead of planning your plate around your choice of meat, spend equal time thinking about creating vegetable dishes you'll like.

- Enjoy more salads. Buy ready-washed greens to save on preparation. Munch on raw vegetables swiped in a yogurtbased dip.
- Layer your sandwiches with lots of dark green lettuce, onions, slices of tomatoes, and bell pepper.
- Make your own spaghetti and lasagna sauces with lots of vegetables or add them to sodium-reduced ready-to-serve versions.
- Commercial pizzas can be very high in salt. It's easy to make your own by piling sliced tomatoes, veggies and grated cheese on whole grain tortillas or English muffins, then baking them.

- Fresh, in a sauce, compote or dried, fruit is delicious and super convenient. Add berries to your cereal, snack on an apple at work. Have fresh fruit salad for dessert.
- Add lots of veggies to your soups.

### Celebrate success

Don't forget to use the tracker. You'll find it an invaluable tool. Every time you meet a goal, no matter how modest, congratulate yourself and celebrate your success. Share the news with friends and family and reward yourself. Remember that you want your love of healthy choices to last a lifetime.

With the DASH approach, healthy eating is a goal within everyone's reach.



### Sources

- Appel LJ et al. A clinical trial of the effects of dietary patterns on blood pressure. N Eng J Med 1997;336:1117-24.
- Ralston RA et al. A systematic review and meta-analysis of elevated blood pressure and consumption of dairy foods. J Hum Hypertens 2012;26:3-13.
- Garriguet D. 2004. Nutrition: Findings from the Canadian Community Health Survey — Overview of Canadians' eating habits. www.statcan.gc.ca. Accessed March 13, 2017.
- Institute of Medicine. Dietary reference intakes: the essential guide to nutrient requirements. Washington, DC: The National Academies Press. 2006.
- Health Canada, 2012, Sodium in Canada, www.hc-sc.gc.ca, Accessed March 13, 2017.

Note that the contents of this brochure and accompanying tracker are not intended to replace the advice of your physician, dietitian or other qualified health professional. Please do not make any changes to your medication, or start any new health program, without consulting them.





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