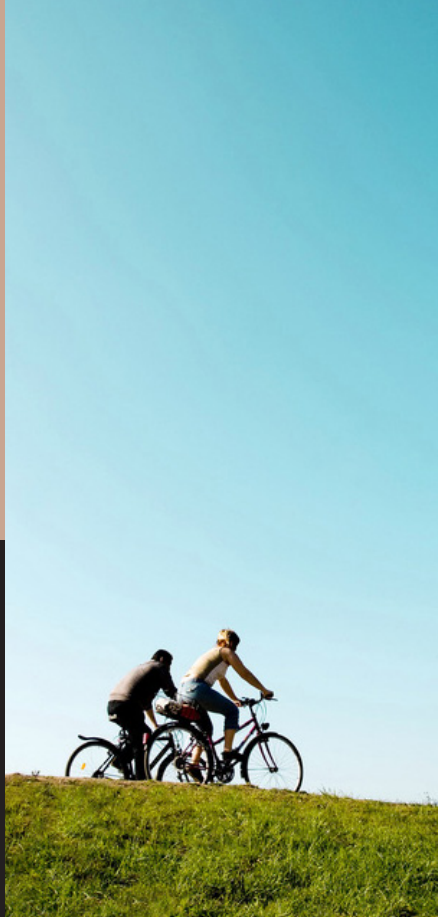


PHYSICAL ACTIVITY

To prevent and treat high blood pressure



HOW CAN PHYSICAL ACTIVITY IMPROVE MY BLOOD PRESSURE?

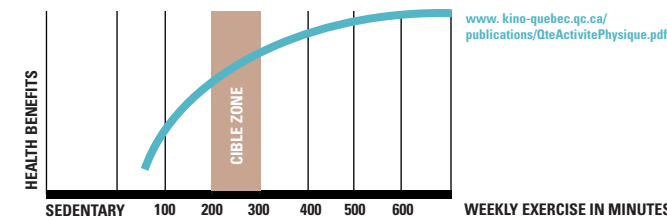
- Reduces autonomic nervous system activity
- Dilates the blood vessels
- Lowers hormones involved in high blood pressure

Regular physical exercise can prevent high blood pressure. While exercise lowers blood pressure in people with normal blood pressure, the change is even more significant in people with hypertension.

Do I have to lose weight for exercise to lower my blood pressure?

Exercise alone can lower your blood pressure but its effect is maximized when accompanied by weight loss.

RELATIONSHIP BETWEEN WEEKLY DURATION OF PARTICIPATION IN PHYSICAL ACTIVITIES AND HEALTH BENEFITS



According to this graph, **sedentary people who start to exercise** are the ones who benefit most from exercise.

What can I do to prevent hypertension and control my blood pressure?

Start by having your blood pressure checked

If your resting blood pressure is less than 160/100 mm Hg, and if you do not suffer from cardiovascular disease, diabetes, lung disease or kidney disease, **moderate-intensity aerobic exercise is safe for you.**

However, if your blood pressure is higher than 160/100 mm Hg and if you have any other diseases or symptoms, you should consult your doctor before starting any moderate to strenuous physical activity. Your health professional may recommend some additional tests, like a treadmill test, depending on your condition.

After you get the OK, the ball is in your court! It won't take long for you to feel the health benefits, both physically and mentally, once you become more active. It's up to you to take the first step!

How can I assess the intensity of my activities?

INTENSITY	EXAMPLES OF ACTIVITIES	PERCEIVED EXERTION
Mild (60% HRMax)	Walking Gardening Tai-chi, yoga Social dancing	Easy! I am breathing a bit harder but hardly sweating at all.
Moderate (70% HRMax)	Brisk walking Strength training Aquafitness Cross country skiing	A little challenging... I am breathing hard but I can still carry on a conversation. I feel hot...
Strenuous (≥80% HRMax)	Running Mountain climbing Competitive sports	It's hard! I am out of breath, I'm sweating and don't feel like talking!

GET MOVING!

Warm-up

Start with 5 to 10 minutes of mild-intensity cardiovascular exercise to warm up your joints.

AEROBIC EXERCISE (CARDIO)

Recommendations:

Frequency: 4 to 7 days a week.

Intensity: moderate. Increase your heart rate to 70% of its maximum rate as described in the chart at your left. You are slightly breathless but still able to talk.

Duration: 30 to 60 minutes a day in one session, or in ten-minute bouts.

Effect generally observed: blood pressure drops by 5 to 7 mm Hg.

This is a temporary effect and lasts up to 22 hours after exercising.

To maintain the long term benefits, you have to be active everyday, or just about!

MUSCLE CONDITIONING: A GOOD COMPLEMENT

Recommendations:

Intensity: The end of the set of repetitions should feel moderately to hard. *You shouldn't feel like you can do many more repetitions at the end.

Start with light weights and progress from there.

Number: 2 to 3 sets of 8 to 12 repetitions.

Type: Dynamic movements that engage major muscle groups.

Caution: Breathe at all times during your exercises. The tendency to hold your breath (Valsalva) while straining increases blood pressure.

Although strength training is considered effective and safe for high blood pressure, ensure medical approval if you have other conditions such as retinopathy or an aortic aneurysm.

Cool Down

Gradually reduce your exercise intensity for 5 to 10 minutes to reduce the risk of a drop in blood pressure, particularly if you are taking blood pressure medications like calcium channel blockers and beta blockers.



Get moving and start young to avoid high blood pressure!

It is estimated that one child in ten suffers from hypertension in Quebec. Hypertension is more common in boys, older children, and children who are overweight. In fact, one in three obese children has high blood pressure.

Blood pressure increases with age. Leading a more active life can help lower blood pressure in just a few weeks. **Ninety minutes of moderate to strenuous exercise daily is recommended for all Canadian children**, to help maintain normal blood pressure levels.

How to fit it all in....

- Encourage active means of transportation (walk, cycle, scooter...)
- Encourage active participation in gym class
- Promote active games at recess
- Limit screen time (less than two hours daily)
- Find physical activities that children enjoy
- Organize outdoor family activities
- Play games outside

What about competitive sports?

Before involving the child in a competitive sport, check with a health professional to make sure that his or her resting blood pressure level is normal or under control (less than 140/90 mm Hg or below than the 95th percentile for age, height and gender).



This section on pediatric hypertension was written in consultation with the CIRCUIT centre (Centre pédiatrique d'intervention en prévention et en réadaptation cardiovasculaires), Hôpital Ste-Justine

Be creative to find an active lifestyle that's right for you

Do your joints bother you? Consider **swimming** or **aquafitness**. Do you enjoy **tennis** but worry about your blood pressure? Double your fun by playing doubles!

Why not try **yoga** or **tai-chi**? These low-impact activities combine muscle strengthening and meditation — a winning combo for people with high blood pressure.

Sit less, move more! Limit prolonged sitting time and increase your daily steps count. Major health benefits are observed at 7,000 steps per day. Evaluate your weekly steps count and aim to increase from there. Improving based on your starting point leads to gains, no matter where you start.

Are you worried that your pressure will rise during weight training? Blood pressure increases when you strain and drops when you stop the exertion. This increase is acceptable as long as you breathe normally and move dynamically (limit static exertion carrying a heavy load). If your resting blood pressure is greater than 160/100 mm Hg, talk to your doctor or another health professional before getting involved in weight training.

Stay hydrated!

Some blood pressure medications, like beta-blockers and diuretics, can affect body temperature regulation, so check with your doctor or pharmacist. Try to drink every fifteen minutes if you exercise for more than 30 minutes at a time. Don't wait until you feel thirsty!

An initiative of members of the Société québécoise d'hypertension artérielle

www.hypertension.qc.ca