

Diabetes and Your Heart

People with diabetes are at very high risk of heart disease and stroke, also known as cardiovascular disease (CVD) and cerebrovascular disease. In fact, up to 80% of people with diabetes will die as a result of a heart attack or stroke. In addition, people with diabetes may develop heart disease 10 to 15 years earlier than individuals without diabetes. Coronary artery disease is the most common form of heart disease in diabetes. It develops when the arteries that supply the heart with blood become narrowed or blocked by fatty deposits. This process is often called "hardening of the arteries." If the arteries that supply the brain are hardened, this may lead to a stroke.

High blood glucose(sugar) is one risk factor for heart attack or stroke, but people with diabetes often have a number of other risk factors. These include being overweight (especially if they have excess fat around the waist), inactive lifestyles, high blood pressure and high cholesterol. People who smoke or have a family history of heart disease or stroke are at even higher risk.

Reducing risk

Protect your heart with our vascular protection self-assessment tool, protect your heart...do your part! http://guidelines.diabetes.ca/CDACPG_resources/Vascular_Protection_Self_Assessment_FINAL.pdf

The good news is that people with diabetes can lower their risk of heart disease and stroke considerably by paying careful attention to all of their risk factors. Working with your healthcare team to achieve the following targets is the key to good diabetes management. Achieving and maintaining a healthy weight through regular physical activity and healthy eating are important, but most people with diabetes will also require a number of medications to reach these goals.

Ask your doctor about the **ABCDEs** to REDUCE your risk of heart attack and stroke:

- **A A1C** Glucose control target is usually 7% *or less (A1C is a blood test that is an index of your average blood glucose level over the preceding 120 days)
- **B BP** Blood pressure control (less than 130/80* mmHg)
- **C** Cholesterol LDL (bad) cholesterol target is 2.0* mmol/L or less
- **D** Drugs to protect your heart Blood pressure pills (ACE inhibitors or ARBs), cholesterol lowering pills (statins), or Aspirin or Clopidogrel
- **E** Exercise Regular physical activity which includes, healthy diet, achievement and maintenance of a healthy body weight*
- **S** Stop smoking and manage stress
- * Discuss your target values with your healthcare team

Controlling high blood glucose: Most people with type 2 diabetes will require at least 1 or 2 medications (pills and or/insulin) to meet their blood glucose targets. Diabetes is a progressive life-long disease, so increased doses and additional medications will likely be needed over time.

Controlling high blood pressure: In addition to following a healthy lifestyle, it may also help to limit intake of salt and alcohol. Many people will be prescribed medications (i.e. an ACE inhibitor or an ARB) which not only lower blood pressure, but also offer protection against heart attack and stroke. Sometimes 2 or 3 drugs are needed to lower blood pressure.

Lowering high cholesterol: Many people with diabetes will be prescribed a drug called a statin to lower LDL ("bad") cholesterol. Other drugs may sometimes also be used to increase HDL ("good") cholesterol and to lower other blood fats such as triglycerides.

Low-dose aspirin therapy may be recommended for some people with diabetes. Aspirin helps prevent blood clots from forming. Aspirin is available without a prescription, but is not safe for everyone. Talk to your doctor about whether aspirin is safe for you and the dose you should take. For people who can't take aspirin or who find it upsets their stomach, or in other specific situations, a prescription blood thinner called clopidogrel will sometimes be used.

Quit smoking. Smoking is a deadly habit. One of the best things you can do for your heart, diabetes and overall health is to quit now. Anyone who has tried to quit knows that it can be very challenging, so ask for help. You will increase your chances of success if you have support from your healthcare team and family. If at first you don't succeed, try and try again.

Keeping tabs on your health

- At every diabetes-related visit, your doctor should take your blood pressure.
- You should have your A1C measured every 3 months to monitor your blood glucose control.
- Your blood lipid (fat) levels should be measured every year and more often if you are on cholesterol lowering medications
- Ask your doctor for all of your test results and work closely with him or her to achieve your targets Don't be afraid to ask questions about your medications or your lifestyle changes.

The more you know about your disease and its treatments, the more you can participate in your own care.

Across the country, the Canadian Diabetes Association is leading the fight against diabetes by helping people with diabetes live healthy lives while we work to find a cure. Our community-based network of supporters help us provide education and services to people living with diabetes, advocate for our cause, break ground towards a cure and translate research into practical applications.



 $\hbox{* This document reflects the 2013 Canadian Diabetes } Association Clinical Practice Guidelines. @2013 Copyright$