

Prediabetes

prevention

Risk factors for type 2 diabetes

- ◆ Being 40 years of age or older;
- ◆ Having a close relative (parent or sibling) who has type 2 diabetes;
- ◆ Being a member of a high-risk population, such as those of Aboriginal, Hispanic, Asian, South Asian or African descent;
- ◆ Having a history of impaired glucose tolerance or impaired fasting glucose;
- ◆ Having some evidence of the complications of diabetes, such as eye, nerve or kidney problems;
- ◆ Having heart disease;
- ◆ Having a history of gestational diabetes mellitus;
- ◆ Having high blood pressure;
- ◆ Having high cholesterol;
- ◆ Being overweight, especially around your abdomen.

Wouldn't it be nice if the human body had an "early alert system" that advised us when something was about to go wrong with our health? Prediabetes offers a warning and gives us a chance to change the future.

Prediabetes refers to blood glucose levels that are higher than normal, but not yet high enough to be diagnosed as type 2 diabetes (i.e. a fasting plasma glucose level of 7.0 mmol/L or higher). Although not everyone with prediabetes will develop type 2 diabetes, many people will.

It is important to know if you have prediabetes as research has shown some long-term complications associated with diabetes, such as heart disease and nerve damage, may begin during prediabetes.

Risk factors

Like type 2 diabetes, prediabetes can occur without you knowing it, so being aware of your risks and being tested are important. This is especially true if you have prediabetes as part of the "metabolic syndrome," meaning you also have high blood pressure, high levels of low-density lipoprotein cholesterol (the "bad" cholesterol) and triglycerides, low levels of high-density lipoprotein cholesterol (HDL-C, the "good" cholesterol), and a tendency towards abdominal obesity.

The risk for type 2 diabetes is higher as you grow older, so the Canadian Diabetes Association recommends screening by testing fasting plasma glucose for everyone once they reach age 40 and every three years after that. If you have risk factors that increase the likelihood of developing type 2 diabetes, you should be tested more frequently or start regular screening earlier.

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The good news

Research has shown that if you take steps to manage your blood glucose when you have prediabetes, you can delay or prevent type 2 diabetes from developing. You may be able to reduce blood glucose levels with simple lifestyle changes, such as increasing your physical activity and enjoying a healthy, low-fat meal plan.

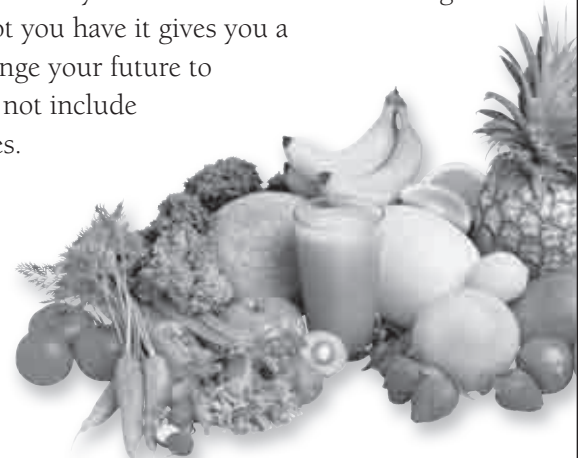
Losing even a modest amount of weight (5 to 10 per cent of total body weight) through healthy eating and regular physical activity can make a huge difference in your health and quality of life.

The effectiveness of lifestyle changes in preventing the progression to type 2 diabetes has been proven in two large studies: the Finnish Diabetes Prevention Study and the Diabetes Prevention Program. Both of these studies showed that a low-calorie meal plan with reduced fat intake and moderate-intensity physical activity of at least 150 minutes per week resulted in a 58 per cent reduction in the number of people who progressed from prediabetes to diabetes over the next four years, even though weight loss was modest.

When lifestyle changes are not enough to normalize blood glucose, at least two medications have been shown to be effective in preventing type 2 diabetes in people with impaired glucose tolerance or prediabetes: metformin, proven effective in the Diabetes Prevention Program, and acarbose, shown to be effective in another study called STOP-NIDDM (non-insulin-dependent diabetes mellitus).

If you have prediabetes, you are at increased risk for heart disease or stroke. Your doctor may also wish to treat or counsel you about cardiovascular risk factors such as tobacco use, high blood pressure and high cholesterol.

The important thing to remember about prediabetes is that it doesn't always lead to diabetes. Determining whether or not you have it gives you a chance to change your future to one that does not include type 2 diabetes.



Today, more than 9 million Canadians live with diabetes or prediabetes. 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.

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Diabetes**
Association