

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 African, Arab, Asian, Hispanic, Indigenous or South Asian descent, low socioeconomic status;
- Having a history of prediabetes (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.
- Having a history of giving birth to a baby that weighed over 4 kg (9 lb) at birth;
- Having obstructive sleep apnea;
- Having a history of using glucocorticoid medication

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 sugar 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 A1C of 6.5% or higher). Although not everyone with prediabetes will develop type 2 diabetes, many people will.

It is important to know if you have prediabetes, because research has shown that some long-term complications associated with diabetes – such as heart disease – 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 LDL cholesterol (the "bad" cholesterol) and triglycerides, low levels of HDL cholesterol (the "good" cholesterol) and excess fat around the waist.

The risk for type 2 diabetes is higher as you grow older. If you are age 40 or over, or you are an individual at high risk using a risk calculator*, Diabetes Canada recommends screening by testing fasting plasma glucose and/or A1C every three years. If you have additional risk factors that increase the likelihood of developing type 2 diabetes, you should be tested more frequently or start regular screening earlier.



* The Canadian Diabetes Risk (CANRISK) calculator (available at <http://www.healthy Canadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/diabetes-diabete/canrisk/index-eng.php>).

The good news

Research has shown that if you take steps to manage your blood sugar when you have prediabetes, you can delay or prevent type 2 diabetes from developing. You may be able to reduce blood sugar 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.

When lifestyle changes are not enough to normalize blood sugar, your health-care provider might recommend that you use oral medication.

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. If you have prediabetes, taking steps to manage your blood sugar gives you a chance to change your future to one that does not include type 2 diabetes.



Related articles: *Diabetes, Type 2 diabetes: the basics, Physical activity and diabetes, Managing weight and diabetes, and Just the basics (tips for healthy eating)*

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