

# Nutrition Matters

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## *Diabetes...How to Reduce the Risk*

You have probably heard about diabetes. The number of people with this disease is on the rise. More than 2 million Canadians have diabetes, yet a third of these individuals are not even aware that they have the disease. Diabetes can often develop gradually with few or no symptoms for many years. Why is this a problem? Diabetes that is left untreated can lead to serious complications including heart disease, blindness, limb amputation, and kidney disease.

So what's the *good* news? There is plenty that can be done that may prevent this serious disease or reduce the risk of complications. Keep reading to find out more!

### **WHAT IS DIABETES?**

Diabetes is a condition that affects the ability of the body to use the energy we get from food. Glucose, a type of sugar, is a fuel our body uses as a source of energy. It is found in the blood after digesting carbohydrate. Insulin, a hormone produced by the pancreas, helps glucose to move into our cells so it can be used as energy. Diabetes occurs when the body does not produce enough insulin or is unable to properly use the insulin it produces.

### **WHAT ARE THE DIFFERENT TYPES OF DIABETES?**

#### **TYPE 1 DIABETES**

Type 1 diabetes occurs when a person's pancreas produces little or no insulin. This is believed to result when the body's immune system destroys the insulin-producing cells of the pancreas. Often diagnosed during childhood, 10% of people with

diabetes have type 1 diabetes. Individuals with type 1 diabetes require insulin injections. If you have been diagnosed with type 1 diabetes, there are important steps you can take that will help you stay well and avoid the complications associated with this disease. You should have a specialized health care team to assist you.

#### **GESTATIONAL DIABETES**

Gestational diabetes can occur during pregnancy and affects 2 to 4% of pregnant women. Women with gestational diabetes do not produce enough insulin or their body is unable to use it properly. Although often managed with diet and exercise, some women may need insulin treatment. Gestational diabetes disappears with the birth of the baby but both the woman and her baby are at increased risk of developing type 2 diabetes later on in life.

*There is little that can be done to prevent type 1 diabetes and gestational diabetes.*

#### **TYPE 2 DIABETES**

Type 2 diabetes occurs when the pancreas produces insulin but the body cannot use it effectively, or the amount is too small to produce enough of an effect. It usually occurs in adults over 40, but rates are increasing among younger people and even in children. Approximately 90% of people with diabetes have type 2. This type of diabetes can be managed by lifestyle changes, but often pills and/or insulin injections are needed as well.

*There is more that can be done to prevent type 2 diabetes – keep reading to find out!*

**Myth:**

**“I have been told I have borderline diabetes”**

‘Borderline diabetes’ does not exist. You either have diabetes or you don’t. It is important to talk with your doctor to get a clear understanding of your test results, so that you can follow the necessary steps that will help you to stay well. If your blood glucose (sugar) test is high, but not high enough to give you a diagnosis of diabetes, your doctor may call this “impaired glucose tolerance”. The doctor will re-check your blood glucose (sugar) from time to time. Lifestyle changes to improve physical activity and eating habits at this stage are important steps in preventing or delaying type 2 diabetes and cardiovascular disease.

**Myth:**

**“Type 2 diabetes is not serious”**

All types of diabetes are serious. Illness caused by chronic high blood glucose (sugar) is a leading cause of disability and death among Canadians. Diabetes can be controlled but a cure for diabetes has not yet been found. Proper management through lifestyle changes, pills and/or insulin, is important in delaying and even preventing the complications of this disease.

**WHAT ARE THE RISK FACTORS OR WARNING SIGNS?**

- Being 45 years of age or older
- Having a family history of diabetes - parent, brother or sister, grandparent with diabetes
- Being overweight
- Being a member of a high risk ethnic group - Aboriginal, Latin American, Asian, or African

- Giving birth to a baby that weighed over 4 kg (9 lbs) at birth, or a history of gestational diabetes
- Having impaired glucose tolerance
- Having high cholesterol
- Having high blood pressure and/or heart disease
- Being physically inactive

**WHAT CAN I DO TO PREVENT OR DELAY TYPE 2 DIABETES?**

Although several of the risk factors, such as age and family history, may not be within your control, there are several important risk factors that you *do* have control over. Scientists are doing research in the area of diabetes prevention and recent studies have shown that even small changes towards a healthier lifestyle can prevent or delay the onset of type 2 diabetes in people who are at risk for this disease.

What’s involved in achieving and maintaining a “healthy lifestyle”? Healthy eating and active living are important steps you can take to help you achieve





and maintain a healthy lifestyle.

**Make Healthy Eating a Part of Your Life Every Day...**

All foods can fit into healthy eating. It’s the overall pattern of foods eaten - not any single food, meal or even the meals eaten in one day – that determines if an eating pattern is healthy. Here are a few tips to get you started:

- ✓ Enjoy eating well – remember to take time to share your meals with family and friends. It is one of the great pleasures in life!

- ✓ Balance your meals by choosing foods from each of the four food groups – *Canada’s Food Guide to Healthy Eating* can help to guide your food choices. (To obtain a copy, contact Toronto Health Connection at 416-338-7600)
- ✓ Go for variety! – choose foods from different food groups and try different foods within each group. Be adventurous and creative!
- ✓ Learn to listen to your body – eat when you are hungry, stop when you reach your “just full” feeling. If you are feeling uncomfortable, you have probably eaten too much! This may take some practice, as it’s a signal many of us have tended to ignore.
- ✓ Emphasize grains, bread, other whole grain products, vegetables and fruit.
- ✓ Choose lower fat dairy products, leaner meats and foods prepared with little or no fat.
- ✓ Limit salt, alcohol and caffeine.

- ✓ Gardening, walking, dancing or playing with the kids are all ways you can enjoy being more active. 
- ✓ It’s never too late to start being active. Start off slowly and gradually work your way up to 30 minutes of moderate to vigorous activity daily. Get that heart beating faster!
- ✓ Being active doesn’t have to mean going to the gym or taking a fitness class. There are many ways you can be more active. Try different activities and choose what’s right for you! 
- ✓ Every little bit counts - park your car and walk, and/or take the stairs more often.
- ✓ You can spread out your activity throughout the day – build in 10 minutes of activity at least three times a day.
- ✓ Get a copy of *Canada’s Physical Activity Guide to Healthy Active Living*. It’s a first step to getting started! (To obtain a copy, contact Toronto Health Connection at 416-338-7600)

**Myth:**  
**“Eating too much sugar can lead to diabetes”**



Eating too much sugar is not the *cause* of diabetes. Diabetes is a complex disease that is likely affected by a number of factors, such as genetics and lifestyle. Once a person is diagnosed with diabetes, it is important to limit sugar intake but it isn’t necessary to avoid it entirely. A dietitian can advise you on how you may include some safely.

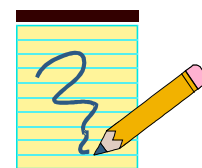
Healthy eating and active living can help you feel more energetic, feel less stressed and feel good about yourself. Together, a balance between eating well and being physically active contribute to improved health and can help to reduce the risk of diabetes and many other diseases.

Remember...taking even small steps can make a big difference. Every little bit helps! Ask yourself what steps *you* can take to get you on your way to a healthier lifestyle. (Just think about the benefits you’ll get in return!)



**Let’s Get Moving! .....**  
**Enjoy Being Active Every Day**

Do you think being physically active requires a lot of time and effort? Read on to find out how easy it is to enjoy active living!



## HOW WOULD I KNOW IF I HAVE DIABETES?

### MYTH:

#### “I feel fine so I can’t have diabetes”

It is important to note that many people with type 2 diabetes may not experience any symptoms at all, which is why many individuals may have diabetes without knowing that they do. Although you may feel fine, having high blood glucose (sugar) levels can slowly cause damage to the eyes, kidneys and blood vessels, without any symptoms at all until the damage becomes more serious. If you have risk factors for diabetes, your doctor should check your blood glucose periodically.

These are symptoms to be aware of:

- Unusual thirst
- Frequent urination
- Unexpected weight loss
- Extreme fatigue, lack of energy
- Blurred eyesight
- Frequent infections
- Numbness/tingling in hands or feet
- Slow healing of cuts or sores

If you are 45 years of age or older, you are at risk for type 2 diabetes and should be tested at least every 3 years. If you have any of the other risk factors for diabetes, you may need to be tested more often.

If you have been diagnosed with type 2 diabetes, changes towards a healthier lifestyle are important in controlling diabetes and can help prevent further complications associated with the disease.

## WHERE TO GET MORE INFORMATION:

**If you think you may be at risk or if you experience any of the symptoms of diabetes, talk to your family doctor.**

### Some other sources of information:

- Contact the Canadian Diabetes Association  
1-800-BANTING (1-800-226-8464)  
[www.diabetes.ca](http://www.diabetes.ca)
- Contact Toronto Health Connection (416-338-7600) to obtain copies of *Canada's Food Guide to Healthy Eating* and *Canada's Physical Activity Guide to Healthy Active Living*.
- Contact your local hospital to find out about programs and services available at the nearest Diabetes Education Centre.



### Useful Web sites

Health Canada – Food and Nutrition  
[http://www.hc-sc.gc.ca/english/lifestyles/food\\_nutr.html](http://www.hc-sc.gc.ca/english/lifestyles/food_nutr.html)

Health Canada – Canada's Physical Activity Guide  
<http://www.hc-sc.gc.ca/hppb/paguide>

Canadian Health Network – Healthy Eating  
[http://www.canadian-health-network.ca/1healthy\\_eating.html](http://www.canadian-health-network.ca/1healthy_eating.html)

Women's Health Matters  
<http://www.womenshealthmatters.ca>

Dietitians of Canada  
<http://www.dietitians.ca>

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