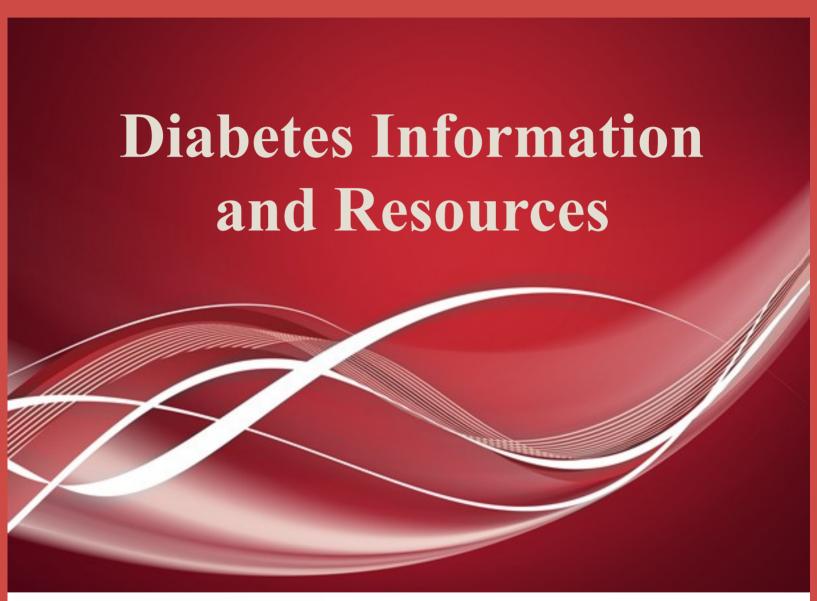
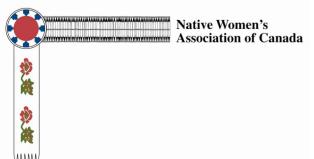
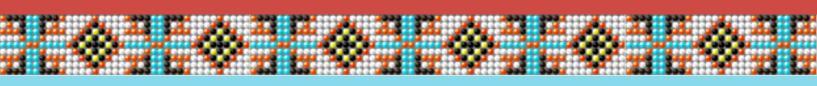
## Diabetes Self-Management Toolkit for Aboriginal Women







## Diabetes Information & Resources

This booklet contains diabetes information and resources, and has been prepared for Aboriginal women, their families and communities.





## Important:

This booklet is not meant to replace the valuable insight, care and treatment provided by your Health Care professional. Always consult your Health Care professional for medical advice and treatment options.

## Definitions:

## Types of Diabetes

## *Type 1:*

Where your body makes little or no insulin

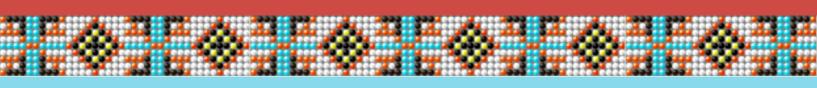
## *Type 2:*

Where your body makes insulin but cannot use it properly.

#### Gestational Diabetes:

Where the body is not able to properly use insulin during pregnancy. This type of diabetes goes away after the baby is born. Both mother and child are at increased risk of type 2 diabetes later in life.

Glucose	Pancreas	Insulin		
The body requires a certain amount of sugar (glucose) in the blood. Too much causes damage to the body proteins. Too little prevents body cells from working properly. The amount of glucose is controlled by insulin.	Insulin comes from the pancreas, a gland lying just below the stomach. Insulin goes straight through the blood stream to the tissues where it acts.	The starch in food is broken down into glucose. This glucose makes the pancreas release insulin. The insulin allows tissues to use the glucose.		



Diabetes: What Is It?

Diabetes is a lifelong condition where either your body doesn't produce enough insulin, or your body is unable to use the insulin it produces.

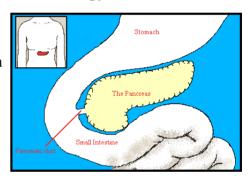


### Diabetes is a disorder that affects the way your body uses food for energy.

Diabetes is a disease in which the blood glucose levels are above normal.

The pancreas, an organ near your stomach makes a hormone called insulin that helps glucose get into the cells of our body.

When you have diabetes, your body either does not make enough insulin or cannot use the insulin it makes. This causes sugar to build up in your blood



#### What happens in my body when I eat food?

Sugar is a natural substance found in many foods we eat. The sugar you eat is digested and broken down to glucose. The glucose then circulates in your blood before it enters your cells to be used as energy, insulin helps move the glucose into your cells. Your pancreas will adjust the amount of insulin it produces based on the level of glucose in your blood.

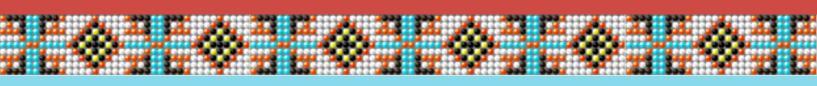
If you have diabetes, this process is interrupted, and blood sugar levels become too high.

#### Why is insulin important?

Your body needs insulin to change the sugar from food into energy. When you don't have enough insulin, the sugar stays in your blood so that your "blood sugar level" gets too high.

#### What's wrong with having a high blood sugar level?

Over long periods of time, high blood sugar levels can cause complications, such as damage to blood vessels, kidneys, and difficulties with circulation.



## Diabetes Signs & Symptoms

Knowing more about diabetes signs and symptoms will help you and your family. Keep in mind that diabetes symptoms often are different from person to person.

#### **Diabetes Signs & Symptoms:**

Diabetes can often go undiagnosed because the symptoms can seem harmless and often times, normal.

Many of the signs of Type 1 and Type 2 diabetes are similar.

In both, there is too much glucose in the blood and not enough in the cells of your body. High glucose levels in Type I are due to a lack of insulin because the insulin producing cells have been destroyed. Type 2 diabetes occurs when the body's cells become resistant to insulin that is being produced.

#### **Type 1 Symptoms Include:**

- Frequent urination
- Excessive thirst
- Extreme hunger
- Unusual weight loss
- Increased fatigue
- Irritability
- Blurry vision

## **Type 2 Symptoms Include:**

- Blurry vision
- Cuts or sores that are slow to heal
- Itchy skin, yeast infections
- Increased thirst
- Dry mouth
- Need to urinate often
- Leg pain

## **Did You Know?**

Every 8 minutes in Canada someone is diagnosed with diabetes,

5% of Canadians have diabetes, this number is expected to double by 2016

The most common form of diabetes is Type 2 Diabetes.

In the Canadian population, 90% have Type 2 diabetes, and 10% have Type 1 diabetes.

40% of Diabetics will develop long term complications

Aboriginal people are more likely to have Type 2 diabetes.

The rate of diabetes for Aboriginal people is 3 to 8% higher than the general population.

1 in 4 Aboriginal people living on reserve has Type 2 diabetes

The rate of Type 2 diabetes in Aboriginal women is almost twice that of Aboriginal men



Diabetes awareness must also include knowing about the effects that high and low blood sugar levels have on a person with diabetes.



It's just as important to recognize the effects of high and low blood sugar levels as it is to know about diabetes signs and symptoms. Often times, it is having this information that helps us seek help for ourselves or others with diabetes. Knowing when you or a friend is experiencing problems can be critical.

The chart below lists some signs and symptoms to assist in recognizing if a person has indications of high blood sugar level (called hyperglycemia) or low blood sugar level (called hypoglycemia).

## High Blood Sugar (Hyperglycemia)

This often happens when the person with diabetes:

- Has eaten too much,
- Has too little insulin in his or her body,
- Is under a lot of stress.

Also be alert for these signs:

- Frequent need to urinate
- Drowsiness
- Nausea
- Extreme thirst or hunger
- Blurred vision

The most common symptom of high blood sugar levels, is no reaction at all. This is why there are many people who remain undiagnosed.

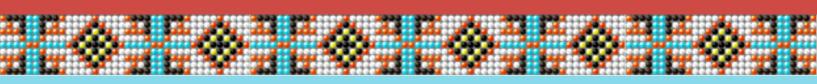
## Low Blood Sugar (Hypoglycemia)

This often happens when the person with diabetes:

- Has not eaten very much,
- Has too much insulin in his or her body,
- Has exercised beyond his or her limits.

Also be alert for these signs:

- Shaking
- Fast heartbeat
- Sweating
- Anxiety
- Dizziness
- Extreme hunger
- Weakness and tiredness
- Irritability
- Nervousness
- Confusion
- In severe cases, coma and death



## **Diabetes Complications**

Most people with diabetes can look forward to a long, healthy life if they take simple measures to avoid complications.

There is no reason to get scared if you have been diagnosed with diabetes

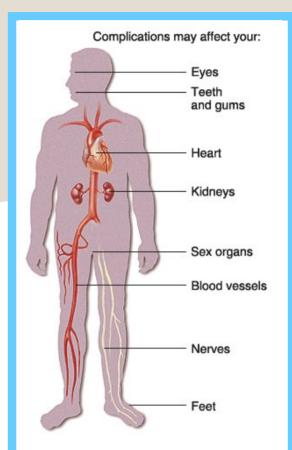
## Diabetes treatment rests on glycemic (blood glucose) control, which is achieved through diet, exercise, and medications if necessary.

Uncontrolled diabetes can lead to sever damage to blood vessels and nerves, leaving diabetics at increased risk for heart attacks, strokes, kidney failure, blindness, and gangrene of the legs and feet, leading to amputation, and the impaired functioning of many of the body's organs and systems. The image to the right points out where complications from diabetes can affect your health.

Talk to your Health Care Professional about how best to prevent complications arising from diabetes.

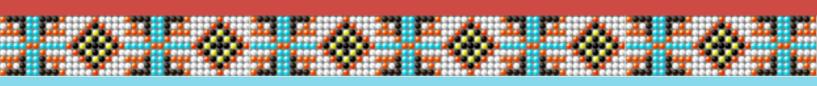
## Reducing the risk of diabetes complications can be achieved by:

- not smoking;
- being physically active:
- eating a healthy, balanced diet;
- controlling blood glucose levels;
- maintaining a healthy cholesterol level;
- controlling blood pressure;
- taking care of the feet by regularly examining toes and skin;
- regular dentist visits;
- having regular eye examinations by an eye care specialist;
   and
- having regular kidney function testing.



# A healthy lifestyle and a healthy weight can:

- Help you prevent or manage diabetes
- Improve blood glucose, blood pressure and blood lipids (fats)
- Reduce the risk of complications such as heart disease and stroke
- *Improve general well-being* and energy levels



## Diabetes: Complications

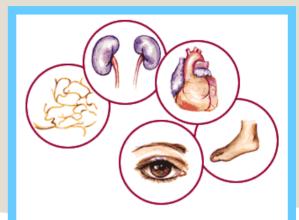
Uncontrolled diabetes can lead to severe damage to blood vessels and nerves, leaving diabetes at high risk for complications.

NERVE DAMAGE - Also known as diabetic neuropathy (peripheral neuropathy), often affects the feet and legs. Nerve damage makes it difficult for your nerves to function normally. This means that it is harder for your nerves to send messages to your brain and other body parts. Neuropathy often causes a loss of feeling in parts of your body, or a painful tingling-type feeling. This can lead to serious complications, and on the extreme end, amputation of a limb. Check your feet every day and make sure your doctor checks them annually. See your doctor immediately if you notice any swelling and redness and feel warmth in your foot.

EYE PROBLEMS - Also known as diabetic retinopathy is damage and weakening of the small blood vessels in the retina. The retina is the part of the eye that is sensitive to light and helps you see. When the blood vessels are weak they can leak fluid which causes swelling in the eye that blurs your vision. Retinopathy can cause blindness, this occurs when the retina separates away from the back of the eye. People with diabetes should have an eye exam annually.

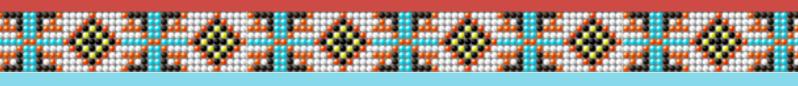
**KIDNEY DAMAGE** - Also known as nephropathy, this is damage of the blood vessels in your kidneys so that they can't filter out waste. Some people with nephropathy may require dialysis or kidney transplant. Your doctor will assess your kidneys yearly.

**HEART DISEASE & STROKE** - People with diabetes are at greater risk for heart disease and stroke, this increases for people who smoke, have high blood pressure, have a family history of heart disease or are overweight. Heart disease is easy to treat if caught early, see your doctor regularly and have him/her test you for early signs of heart disease or stroke.



# Report any of these symptoms to your Doctor right away:

- Vision problems, such as blurry or spotted vision or flashes.
- *Unexplained, overwhelming tiredness.*
- Leg discomfort with walking.
- Numbness or tingling in your hands or feet.
- Chest pain that comes with exertion.
- Cuts or sores that stay infected or take a long time to heal.
- Constant headaches.
- Even without these symptoms, be sure to call your doctor any time you just don't feel "right."



## Diabetes & Aboriginal People

Expert opinion suggests that diabetes continues to be an ever increasing health problem with the Aboriginal population in Canada. Projections indicate the onset of a pandemic.



## Diabetes rates among Aboriginal people are three to five times higher than the general population.

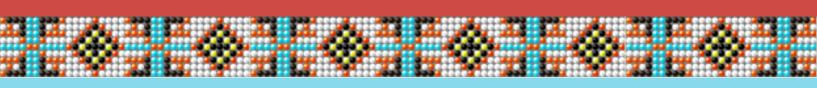
Many experts agree, diabetes is an epidemic in Aboriginal communities, where one in four people living on reserve has Type 2 diabetes compared to one in ten in the general public. According to the First Nation Regional Health Survey, 19.7% of First Nation adults living on-reserve have diabetes.

Many Aboriginal people consider diabetes an example of a "white man's illness," a new, introduced disease similar to smallpox and tuberculosis in the past. It is a disease that, seen through the eyes of many Aboriginal people is viewed as an outcome, a symptom, an effect, and a result of the loss of culture and traditional practices, access to lands and territories, holistic health perspectives and belief systems. The adoption of modern foods and the decline of hunting and fishing, combined with socio-economic factors are widely believed to be the underlying causes of the epidemic.

The long term effects of diabetes are detrimental in terms of quality of life, cost to the heath care system and negatively impact the individual, family, community and society as a whole. The health of Aboriginal people is not only sub-standard in comparison to Canadians, but is intricately related to poverty and unemployment, family violence, poor housing and living conditions, and the high cost of quality food in remote communities.

It has been suggested that poor integration of services result in Aboriginal people receiving a lower level of care in comparison to that received by the general population. Examples include the Non-Insured Health Benefits (NIHB) Plan where new diabetes medications, devices or supplies are not always made available, in addition, Métis and Non-status First Nation people do not have access to NIHB. The Health Council of Canada report "Rekindling Reform: Health Care Renewal in Canada 2003-2008" highlighted ongoing gaps in services due to the complex structure of health care funding and delivery for Aboriginal people.

Unfortunately, due to this complex structure, Aboriginal people find themselves navigating three systems of government (First Nations, Provincial, and Federal) to attain adequate health care services. This structure poses a problem for Aboriginal people and in particular Aboriginal women from equitably accessing the health care services they need.



## Diabetes & Aboriginal Women

The prevalence and severity of diabetes will hamper efforts to improve the overall health status of Aboriginal people to a level comparable to the rest of the population.

Studies have shown that Aboriginal women are not only at greater risk of developing and suffering from type 2 diabetes, but the problem of developing gestational diabetes is unique to women.

As well, now as in the past Aboriginal women are the foundation of families and communities. Aboriginal women have unique needs, and are the most vulnerable. They are heads of families, primary breadwinners and responsible for providing care for the family. This triple role results in stress. Their health is sub-standard compared to non-Aboriginal women and connected to poverty and unemployment, family violence and poor housing and living conditions, high cost of quality food in remote communities and a lack of clean water. They are also at greater risk of living in poverty.

Traditionally, it was the women who worked to ensure that the cultural teachings and unique heritage of Aboriginal people survived from one generation to the next. This fundamental role reinforces that Aboriginal women are our greatest catalyst for change within Aboriginal communities.

Statistics indicate that diabetes is taking a very heavy toll on Aboriginal women in Canada. Given this, greater emphasis on diabetes programming for Aboriginal women must be made a priority by all three systems of government. In addition, strategies aimed at addressing the diabetes epidemic among the Aboriginal population must not be tackled in isolation, and should include cross-pollination across a broad range of programming, that takes into account the social determinants of health.

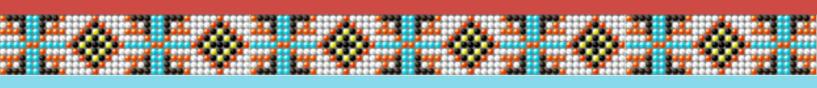


Aboriginal women experience higher rates of diabetes (13%) compared to Aboriginal men (8%).

18% of expecting Aboriginal women are diagnosed with gestational diabetes increasing the likelihood that mother and child will experience diabetes at some stage in their life.

Aboriginal children as young as five years of age are being diagnosed with type 2 diabetes.

These statistics pose grave concerns regarding the health of Aboriginal people today and in the future.



## Diabetes Resources & Information

The following pages contain a small collection of diabetes resources and Information. Remember to always consult with your Health Care Provider in the management and treatment options of diabetes.

National Aboriginal Diabetes Association (NADA) B1-90 Garry Street Winnipeg, MB R3C 4J4 www.nada.ca

Toll-free 1-877-232-NADA (6232)

Health Canada www.hc.sc.gc.ca

Canadian Diabetes Association 1400-522 University Ave Toronto, ON M5G 2R5

Reception desk: 416-363-3373

Toll free phone number: 1-800-BANTING (226-8464)

Email: info@diabetes.ca

#### Aboriginal Diabetes Initiative

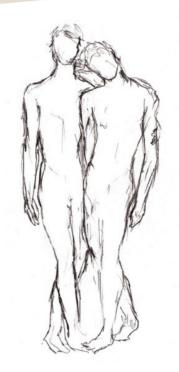
http://www.hc-sc.gc.ca/fniah-spnia/diseases-maladies/diabete/index-eng.php#a7

#### Canadian Diabetes Strategy

http://www.phac-aspc.gc.ca/cd-mc/diabetes-diabete/diabetes strategy-diabete strategie-eng.php

Health Canada—Non Insured Health Benefits for First Nation and Inuit

http://www.hc-sc.gc.ca/fniah-spnia/nihb-ssna/index-eng.php?wt=rf1

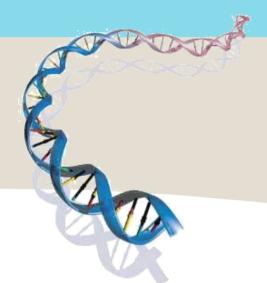


Aboriginal Portal Canada: Diabetes & Chronic Disease

http://www.aboriginalcanada.gc.ca/acp/site.nsf/eng/ao26136.html

#### **Healthy Canadians**

http://www.healthycanadians.gc.ca/index-eng.php



#### **Website Links:**

CDA: Healthy Living Series

http://www.diabetes.ca/diabetes-and-you/healthylivingseries/

**Diabetes Dictionary** 

http://www.diabetes.ca/diabetes-and-you/what/dictionary/

Canada's Food Guide

http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php

Eating Well with Canada's Food Guide: First Nations, Inuit and Métis http://www.hc-sc.gc.ca/fn-an/pubs/fnim-pnim/index-eng.php

Food Labeling

http://www.hc-sc.gc.ca/fn-an/pubs/label-etiquet/index-eng.php

Food Safety

http://www.hc-sc.gc.ca/fn-an/pubs/securit/index-eng.php

Eat Well and Be Active: Educational Toolkit—FREE www.health.gc.ca/eatwell-beactive

Healthy Living

http://www.hc-sc.gc.ca/hl-vs/index-eng.php

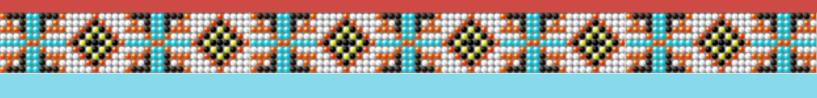
Physical Activity

http://www.hc-sc.gc.ca/hl-vs/physactiv/index-eng.php

Benefits to Physical Activity

PHAC Website: http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/index-eng.php

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## Diabetes Resources & Information



## **Diabetes Recipes—Online Website Sources:**

Canadian Diabetes Association—Recipes http://www.diabetes.ca/diabetes-and-you/nutrition/recipes/

Diabetes-Recipes.com http://www.diabetic-recipes.com/

Diabetic Gourmet Magazine http://diabeticgourmet.com/recipes/

Diabetes Recipes at allrecipes.com http://allrecipes.com//Recipes/healthy-cooking/ diabetic/Main.aspx

Company's Coming—Diabetic Recipes http://www.companyscoming.com/diabetic-recipes/

dLife—Diabetic Recipes Finder http://www.dlife.com/diabetes/diabetic-recipes/

Diabetes Daily—Diabetes Recipes http://www.diabetesdaily.com/recipes/

The Glycemic Index http://www.glycemicindex.com/

The Glycemic Load http://en.wikipedia.org/wiki/Glycemic\_load

#### General Interest—Diabetes Related Websites:

dLife: The leading online diabetes resource. dLife is the place for all aspects of your diabetes lifestyle, offering information and community support for type 1 and type 2 diabetics and caregivers. http://www.dlife.com/

Diabetic live: Diabetic live is a respected diabetes news publication that was founded in August 2006. http://www.diabeticlive.com/

Daily Diabetic: Links to latest diabetes news and articles online, blog style. http://www.daily-diabetic.com/



#### **Interesting Resources on Diabetes**

Diabetes in Aboriginal Communities

http://www.phac-aspc.gc.ca/publicat/dic-dac2/ ☑ english/49chap6-eng.php ☑

A First Nations Diabetes Report Card (AFN, 2006) http://www.nada.ca/wp-content/uploads/504.pdf

National Diabetes Surveillance System—Aboriginal 

Component 

✓

http://www.phac-aspc.gc.ca/ccdpc-cpcmc/ndss-snsd/english/aboriginal diabetes/index-eng.php

#### **Diabetes Research**

An Economic Tsunami: The Cost of Diabetes in Canada

http://www.diabetes.ca/economicreport/

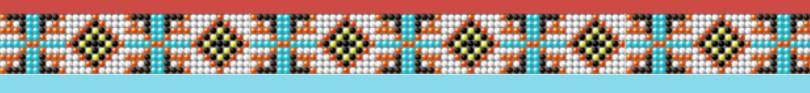
Diabetes Information Source, Canada http://www.diabetes.ca/get-involved/helping-you/advocacy/disc/

**Diabetes Books** (Available in most libraries, bookstores, or for purchase online)

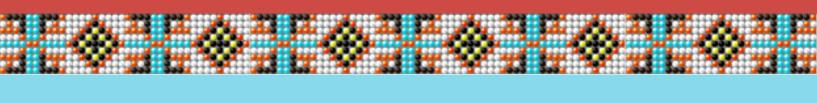
- ☑ Complete Canadian Diabetes Cookbook
- ☑ Canada's Diabetes Meals for Good Health
- ☑ The Canadian Type 2 Diabetes Sourcebook
- ☐ Canadian Diabetes Association, Living With Diabetes
- ☑ The Diabetic Gourmet Cookbook
- ✓ Canada's 150 Best Diabetes Desserts
- ☑ Diabetes for Canadians for Dummies
- ☑ Diabetes Cookbook for Canadians For Dummies
- ☐ Canada's Everyday Diabetes Choice Recipes
- ☑ The G.I Diet Diabetes Clinic
- ☑ Cooking Up Fun for Kids with Diabetes
- ☐ Diabetes Burnout: Preventing It, Surviving It, Finding Inner Peace
  - Exercise Your Way To Health Diabetes
- ☑ Textbook of Diabetes and Pregnancy
- ☑ Canadian Diabetes Slow Cooker Recipes
- ☑ Type II Diabetes & Your Health
- ✓ And many more...

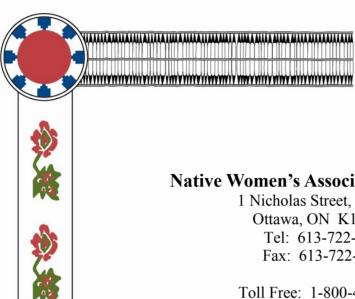
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## **NOTES:**





## **Native Women's Association of Canada**

#### Native Women's Association of Canada

1 Nicholas Street, 9th Floor Ottawa, ON K1N 7B7 Tel: 613-722-3033 Fax: 613-722-7687

Toll Free: 1-800-461-4043

www.nwac.ca

## **IMPORTANT NOTICE**

This toolkit was designed to supplement information and resources related to diabetes prevention, awareness and management. It was not designed to replace the valuable insight, care and treatment provided by your Health Care Professional.

**Always consult your Health Care Professional**