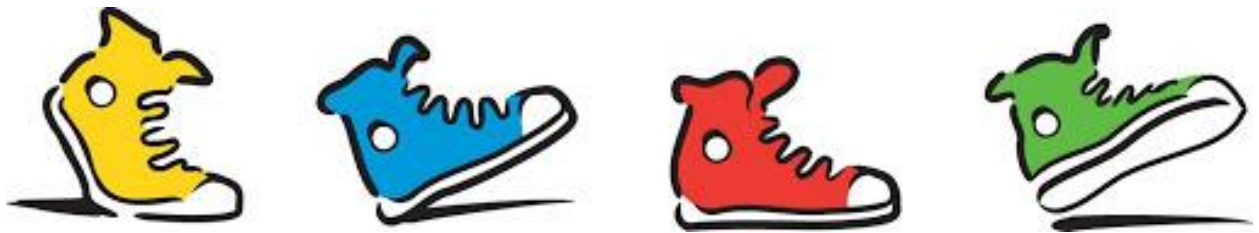


# Young Adult Transition Guide



# THE YOUNG ADULTS GUIDE TO TRANSITION

In your eighteenth year, you will be leaving our Paediatric Diabetes Clinic and will be transitioning to an Adult Diabetes Clinic for your care. This resource is to help guide you through the last two years of your Paediatric care.

There are many issues that are important to discuss before you leave the Paediatric clinic and this booklet has been developed to assist you. The responsibility of recording your own important health information helps prepare you for the independence in your diabetes management.

Over the course of the next 4-6 clinic visits, different topics from the booklet will be discussed with you. There will also be several interactive handouts for you to keep. By your final visit all of the included documents will have been reviewed and discussed. The completed booklet is for you to keep. Please feel free at any appointment to ask questions or give comments on the material reviewed.

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# Introduction



This initial section is designed to help you keep track of what you should expect at future clinic visits. It also provides a way to keep track of the skills and information that you may be talking about with the team.

## Tracking Sheet for each visit

Date							
HbA1C(.07)							
Meter							
Lab							
TSH(0.34-5.6mu/L)							
Cholesterol (3.2-4.4mmo/L)							
Eye Exam							
Other							
Albumin/Creatinine ratio (<3.0mg/mmol)							



# Young Adult's Checklist

Topics Covered	Signature of Team Member
<input type="checkbox"/> Adult Diabetes Clinic Terminology	
<input type="checkbox"/> A review of insulin actions	
<input type="checkbox"/> Relationship to HbA1C to average blood sugar	
<input type="checkbox"/> Meal planning	
<input type="checkbox"/> Use of glucagon/Baqsimi for severe hypoglycemia	
<input type="checkbox"/> Use of glucagon for illness	
<input type="checkbox"/> When you are sick	
<input type="checkbox"/> Alcohol	
<input type="checkbox"/> Smoking	
<input type="checkbox"/> Drugs	
<input type="checkbox"/> Driving	
<input type="checkbox"/> Personal Matters	
<input type="checkbox"/> Heading off to College or University	
<input type="checkbox"/> What to tell your roommate	
<input type="checkbox"/> Traveling	
<input type="checkbox"/> Employment	
<input type="checkbox"/> Financial	
<input type="checkbox"/> Complications	
<input type="checkbox"/> ADP	
<input type="checkbox"/> MTO	
<input type="checkbox"/> Other Forms	

# Adult Diabetes Clinic: Terminology

The goal of diabetes management is to achieve blood sugars that are as close to normal as possible; without causing too many low blood sugars. Now that you are older, and moving into an adult health care setting, you will be expected to achieve similar lower blood sugar readings as you did when you were younger. More aggressive and intensive treatment of your diabetes may be necessary to achieve these targets. Remember, the lower your HbA1C is over time, the less likely you are to develop complications. (pg. 25 on complications)

When you attend an adult program, you may be asked to change your insulin dose or routine. The following are some of the terms that you may hear in the adult clinic.

**Multiple daily injections (MDI)** - 4-5 insulin injections of fast acting insulin per day combined with 1-2 injections of a long acting insulin. Fast acting insulin is taken prior to each meal and insulin dose is based on the amount of carbohydrate that is to be eaten at that time. The benefit of MDI is flexibility in timing and amount of food. Properly used MDI has been proven to lower HBA1C.

**Basal and Bolus Insulin** – Basal insulin refers to your long acting insulin such as, Lantus, Levemir and Tresiba when you are on MDI. If you are on a pump, it refers to the continuous flow of background insulin. Basal insulin covers your nonfood insulin needs.

Bolus doses of insulin are given prior to the mealtime intended to cover your food needs.

**Correction dose** – Insulin given to account for blood sugar levels that are above the target range. For example:

Actual Blood sugar target range 4-8

Actual blood sugar 12mmol/L

A correction is given to bring blood sugar back down to the target range. The correction dose is individualized by your physician.

**Carbohydrate counting** – determining the amount of carbohydrate you plan to eat at each meal using food labels and nutrient tables.

**Insulin to carbohydrate ratio** – the amount of carbohydrate you eat determines how much insulin you need to cover a meal. Protein and fat that you eat are absorbed more slowly and have little effect on your blood sugar level. Your insulin to carbohydrate rates will cover your usual amounts of protein and fat, as well as your carbohydrate in that meal.

A typical ratio of 1 unit of insulin per 10g of carbohydrate, you would need 6 units of insulin for a 60g carbohydrate meal.

# What to expect from the adult diabetes team visit

There will be some changes in your care while moving from the paediatric to the adult care setting.

The following are some of the new expectations:

1. The responsibility will be shifted to you to make sure you check your blood sugars regularly. You need to take control of your care; if you have not already. You may not be reminded to do these things. In this case, it is important for you to learn how to ask questions of your provider; instead of them asking you all of the questions. For example, asking about the latest advances in diabetes management.
2. The team will most likely speak to you directly instead of your parents during your visit.
3. The focus will be on maintaining good control of your blood sugars with possibly lower target values.
4. Expectations will be to achieve an HbA1C to be less than 7%. You will be required to have your HbA1C completed at the lab every 3 months, prior to your visit.
5. Insulin regimens may be changed.
6. Your feet will be checked to make sure you do not have any early signs of complications.
7. Visit your eye doctor and dentist once a year.
8. Your family doctor will continue to be your primary care giver. They will continue to provide on-going medical support for all of your other health care.



# Management

This section identifies and provides information about important aspects of your diabetes care that you need to know as you begin to take more responsibility of your health.

## A Review of Insulin Action Profiles

PROFILE	ONSET	PEAK	DURATION
<b>Humalog/Novorapid/ Admelog/Trurapi/Apidra</b>	5-15 min	60-90 min	2-3 h
<b>Fiasp</b>	4 min	0.5-1.5 h	3-5 h
<b>REGULAR</b>	30-60 min	2-4 h	6-8 h
<b>Lantus/Levemir</b>	1 ½ h	None	18-24 h
<b>Basaglar</b>	1 ½ h	None	24 h
<b>Tresiba</b>	1 ½ h	None	42 h
<b>NPH</b>	4-6 h	8-12 h	18-24 h



# The Relationship of Hemoglobin A1C (HbA1C) to Average Blood Sugar

The HbA1C is a test that correlates with the average blood sugar over the past 3 months. Hemoglobin is the part of the red blood cell that carries oxygen from the lungs to the rest of the body. Sugar sticks to hemoglobin and stays there for the lifespan of the red blood cell—approximately 3 months. HbA1C reflects the average blood sugar level during that period. The HbA1C should be measured every 3 months.

*How does the average blood sugar measured translate to HbA1C?*

Average Blood Sugar (mmol/L)	% HbA1C
15.5-19 mmol/L	12%
14-17 mmol/L	11%
12.5-15 mmol/L	10%
11-13 mmol/L	9%
9.5-11 mmol/L	8%
8-9 mmol/L	7%
6.5 mmol/L	6%

*Canadian Diabetes Association Guidelines for Glycemic Targets for Adolescents*

Age (years)	A1C (%)	Blood sugar target
13-18	<7.0	4.0-7.0
Adult	<6.0	If safely achieved



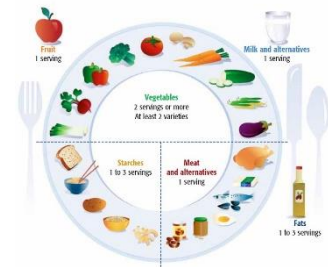
# Meal Planning

Many changes may be occurring in your life such as going away to school, moving out on your own, starting a career, and taking on full responsibility for all your diabetes management. At times, your diet and exercise routine may not be a priority; however, to perform your best, keeping your diabetes under control is essential. Management of your diabetes must include healthy eating and regular meals. This requires planning. Here are some simple suggestions for meal planning.

*Some simple suggestions for eating and exercise.*

◆ Try to choose at least 3 out of the 4 key groups at each meal

- Starch
- Fruits & Vegetables
- Milk
- Protein foods



◆ Choose protein sizes that will help you reach or maintain a healthy weight

- By now, you have likely stopped growing taller and do not need as much food as you did before.
- If you are in the habit of filling up on protein choices as “free” foods, consider the extra calories they are adding to your diet.

◆ Try to include high fiber foods such as whole grain breads and cereals, fresh fruits, vegetables, and legumes, and grains (pasta, rice).

◆ Make lower fat choices (e.g. use skim milk, lean meat and use smaller amounts of added fat such as butter and salad dressings).

- This can be difficult if you are often eating at restaurants or ordering takeout.
- Have lower fat snacks available like yogurt and fruit instead of chips and granola bars.

◆ Try to get some physical activity on most days of the week

- Build time in your routine to get some exercise, walk, ride a bike, go skating, or take up a new activity.

*\*For more specific dietary advice speak to a dietitian.*

*\* Adapted from Canadian Diabetes Association 2018 Clinical Practice Guidelines.*

# When you are sick

In the past, your parents have probably managed your diabetes for you while you were sick. When you are on your own, managing an illness can be quite challenging.

Here are some guidelines for you to follow.

## During an illness:

- Check your urine for ketones every 4 hours and blood sugars every 2-3 hours or even more frequently if you are vomiting.
- Most of the time, you should take your usual amount of insulin – even if you are unable to eat your usual meals. However, if you are vomiting or your blood sugar is low you may need to decrease your overall insulin by 20% of your total daily dose. If you need help to adjust the insulin dose, contact your diabetes team for advice. If you are both low and vomiting, please follow the guidelines for using low dose glucagon.
- Check blood sugar and urine ketones every 4 hours to assess the need for more insulin. If blood sugar is higher than 13mmol/L and ketones are present give 10-20% of your total daily dose as extra insulin. To do this add up the amount of all the insulin that you take in a day (fast acting and long acting) and take 10% of that as fast acting insulin right away. If the next blood sugar is not lower than 13mmol/L give 20% extra the next time your insulin is due. Add the extra insulin to your usual dose.
- Be sure to drink lots of fluids to prevent dehydration and help flush any ketones. If blood sugars are high, drink sugar free fluids and if they are low use sugar-containing fluids.

Also use The Sick Day Guidelines Pamphlet you will be provided with as an additional resource.



# Use of Glucagon for Severe Hypoglycemic Reactions

Glucagon is the hormone made by the alpha cells of the pancreas. Glucagon raises the blood sugar level by stimulating the liver to release some of its store of carbohydrate (glycogen) into the blood as sugar. Glucagon is packaged as a kit with one vial containing 1 milligram (mg) of glucagon as a dry powder, and a syringe preloaded with 1cc sterile diluent. It is to be used when there is a **severe hypoglycemic reaction** and you are unconscious, or have a seizure, or so uncooperative that juice or other concentrated sugar is not safe to be given by mouth. Glucagon should be given by someone else like a roommate.

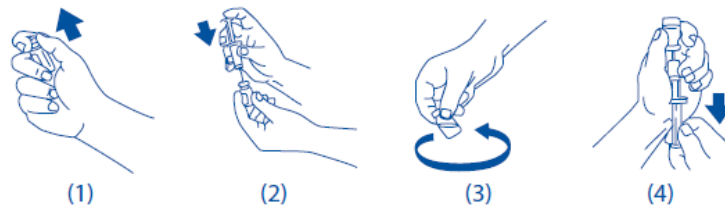
**Review these guidelines with a roommate or living companion as you will not be able to administer the Glucagon yourself.**

***Glucagon cannot be given by mouth. If someone has a seizure call 911.***

***Once unconscious you should be turned on your side.***

## To use the kit

1. Remove the cap
2. Inject the diluent directly from the loaded syringe into the dry powder vial
3. Roll gently to dissolve
4. Withdraw the fluid
5. Inject the entire syringe as you would an injection



It may take a little time to respond fully; possibly 10-20 minutes. Once alert, it is very important that you are given some juice, or fast acting sugar, followed by a long acting carbohydrate source. Nausea and vomiting are common side effects and can last up to 24 hours. Your family physician, or diabetes team, should be contacted; as you may need to adjust your insulin dose.

*\*Adapted from the BC Children's Hospital handout "Glucagon for Severe Hypoglycemic Reaction"*

# The use of Glucagon during Intercurrent Illness

## Rationale:

During a time of illness, especially with vomiting and diarrhea, your blood sugar may fall to dangerously low levels. This may require a visit to the emergency room to be put on an IV with glucose. Tiny amounts of glucagon, given like insulin, can keep the blood sugar up without causing vomiting and may be able to prevent a trip to the hospital.

## How to use Glucagon

1. Dilute the glucagon in the usual fashion.\*
2. Using an **insulin syringe** draw up 15 units.
3. Inject the glucagon under the skin like insulin.
4. Check the blood sugar in 30 minutes. It should have risen.
5. You may repeat the injections every 2 hours if the blood sugar falls too low again.
6. If after 3 injections the blood sugar drops too low, go to the nearest hospital emergency room for an I.V.
7. If you are not nauseated, continue to drink small amounts of sugar containing fluids.

*\*Once prepared, glucagon may be stored in refrigerator for up to 12 hours*

## BAQSIMI

BAQSIMI is the powder form of glucagon given in the nose. Unlike injectable glucagon, BAQSIMI is ready to use and does not need to be mixed or measured. BAQSIMI does not need to be inhaled. BAQSIMI is used when you are having a low blood sugar emergency and are unable to eat or drink, requiring help from someone else to recover. It's important that people around you recognize the possible signs of low blood sugar, so they can be prepared to help. Show your family, friends, or coworkers where you keep BAQSIMI and explain how to use it. They need to know how to use BAQSIMI before you need it. Tell your doctor each time you use BAQSIMI. Your doctor may need to adjust your dose of drugs for diabetes.

Watch the video: How to use Baqsimi on their website: <https://www.baqsimi.com/how-to-use-baqsimi>

# Lifestyle

This section covers some of the challenges that you can encounter as a young adult having diabetes. Here is information and tips on how to safely enjoy your growing independence and freedom.

## Alcohol

### What is happening to my body?

When you drink alcohol it is absorbed very quickly into your body. The alcohol travels from the bloodstream to the liver. The liver's function is to remove the alcohol from your body as fast as possible. It is important to drink slowly because your liver can only remove 1 drink per hour from your body. When you drink more than this, alcohol builds up in your bloodstream, which leads to symptoms of being drunk. Also, when you have been drinking, or are intoxicated, it is easy to miss the early signs of low blood sugar because they both appear similar. It is important that at least one friend knows you have diabetes.

For those with diabetes, consuming alcohol can put them at high risk for getting a low blood sugar. Usually when someone with diabetes has a low blood sugar, the liver produces emergency sugar, but when you are drinking, the liver is too busy processing the alcohol that it is unable to make the emergency sugar. As a general rule, pure alcohol lowers your blood sugar while a mixed drink with juice, or regular pop, may raise your blood sugar. It is important to bring your glucometer with you so you can catch your "highs and lows". It is also important to carry juice, candy, or something to treat your blood sugar in case your blood sugar drops too low.

### Getting ready for a night out

- Stick to your usual meal plan. Drinking should never replace your meals
- Check your blood sugar before you go out, but don't leave your meter at home. You will need to check your sugars throughout the night.
- Make sure at least one friend knows that you have diabetes. This is so they can help you in case you have a low blood sugar reaction. Sometimes it's easy for friends to think you may be acting "different" because of the alcohol instead of low blood sugar.
- Carry a snack with you
- Carry a fast acting sugar with you. (juice, candy, glucose tablets, anything to treat your lows)

## At the party

- Always choose the sugar free option. So instead of rum and coke, choose a rum and diet coke.
- Remember to drink slowly. Your liver can only clear one drink an hour from your system. Don't let that liver of yours work overtime!
- Never drink on an empty stomach. Since you have followed your regular meal plan; you should have already had your dinner by now and if not what are you waiting for? You need to eat!
- Eat extra snacks for extra activity. If you are dancing at the party you will use extra energy, so you need to eat extra starch or fruit for each ½ hour of extra activity.
- Watch for low blood sugars. Having a low blood sugar and drunkenness can sometimes feel the same. It's important you test your blood sugar to know what is really going on.

## Time to go home

Okay it's been a fun night and now you are home...now what?

- Check your blood sugar again and have a snack. Alcohol can cause unexpected changes in blood sugar levels. Blood sugars may rise initially when drinking, and then may drop several hours later. Alcohol has delayed effects on lowering blood sugars, even up to 14 hours.

To sleep in or not to sleep in...that is the question.

- Although it may be tough, it is important to take your insulin and have breakfast at the usual time. Not following your regular routine can be very dangerous to your health. If you are still tired, you can go back to sleep for a few hours



# Smoking

*\*If this is an issue, your physician can support you with a programs to reduce or quit smoking*

For those with diabetes, smoking can be especially harmful. Smoking decreases the way blood flows through your body, therefore; increasing the chance of developing long-term complications of diabetes including heart disease and amputation.

## Here are the facts:

- When you smoke, less oxygen flows inside your body. This can cause a heart attack or a stroke.
- Smoking damages your blood vessels, which makes it harder for your body to heal. This can lead to infections in your legs and feet which can lead to amputation.
- If you smoke and you have diabetes, you are more likely to get nerve damage and kidney disease.
- Smokers are more likely to get colds and respiratory infections.
- Smoking can lead to impotence.
- Children are more likely to start smoking if their parents smoke.

No matter how long you have smoked, it is never too late to quit. Your health will start to improve right after you quit, or cut down on the amount that you smoke.

## **You benefit in important ways when you have diabetes and quit smoking.**

When you quit smoking, you have:

- Less resistance to insulin
- Less chance of eye damage
- Less chance of kidney damage and kidney failure
- Less chance of nerve damage

## **Results of your blood tests may improve when you quit smoking.**

Possible effects on your blood test results are:

- |                                     |  |
|-------------------------------------|--|
| ▪ Lower A1c levels                  | ▪ Lower glucose levels                 |
| ▪ Lower cholesterol levels          | ▪ Lower LDL (bad) cholesterol levels   |
| ▪ Lower triglycerides (fats) levels | ▪ Higher HDL (good) cholesterol levels |



# Drugs

The biggest risk of using street drugs is that it is illegal. Also, what you've been told you are getting may not really be what you get. If you want to take this risk, you may change your mind after reading the facts below.

## Marijuana

- **Will impair your judgement** so it is likely you will not make the best decisions about food, insulin, activity, sex etc. Because drugs influence the brain there is a higher chance of dosage errors, mistakes about how to respond to blood sugar results and perhaps also timing errors.
- **Causes problems with memory**, concentration, sensory and time perception, coordinated movement and problem solving, which may affect control.
- **Increases appetite** and can cause overeating, which can lead to hyperglycemia.

## Opiates/Heroin

- Can change eating habits, which can affect your blood sugar
- Alters perception which can affect the ability to manage diabetes
- Highly addictive

## Cocaine

- Can increase blood sugars and change eating habits
- Can cause high blood sugar as a result of increased liver glycogen breakdown
- Alters perception which can affect the ability to manage diabetes
- Highly addictive

*\*Reference: Campbell K. et al (2003). Effects of legal and illegal substance on diabetes control Diabetes Interview.*

# Driving

For anyone who is planning to get their driver's license, it is important to remember that driving is not a right, but a privilege. All people who intend to drive must prove that they will be responsible behind the wheel. When you have diabetes, you have to make sure that your diabetes is well managed and take certain precautions when you drive.

## Precautions while driving

Diabetes is a condition that has the potential to make driving unsafe. Hypoglycemia is your greatest risk when driving, because it can slow your response and reaction time for up to 45-60 minutes. This not only puts you in danger but it puts pedestrians, other drivers and your passengers in danger. It is recommended that you take the following precautions when driving:

- Check your blood sugar prior to driving and approximately every 4 hours thereafter if you are on a long trip.
- If your blood sugar is below 4 mmol/L treat with 15 grams of fast-acting carbohydrate (glucose tablets or regular pop) followed by a snack before driving.
- Always have a source of fast-acting glucose within easy reach while driving. As well, keep your blood glucose meter with you in the car, along with plenty of snacks in the glove compartment.
- If you feel like you are having a low blood sugar reaction while driving, **immediately** stop driving and treat with fast-acting glucose followed by a snack. Resume driving only when your blood sugars have returned to normal (above 6 mmol/L).
- Always wear your diabetes ID while driving.
- You may get a diabetes assessment form from the Ministry of Transportation. Make sure you have it completed by your team/physician by the due date to avoid suspension of your license.



# Personal Matters

Adulthood presents additional challenges that you should consider. Although decision on these matters are personal, it may have a significant impact on your diabetes. You should be aware of your options.

If you are planning to be sexually active, and do not want to get pregnant, it is important to start on a birth control method. Although there are many options; it may be a good idea to speak to your doctor about the best option for you. Importantly, the choices for birth control methods are the same for those with or without diabetes.

## Pregnancy and Diabetes

Having children is a big decision for anyone. If you are a woman who has diabetes, it is a decision that requires much more thought and careful planning. Many women who have diabetes have healthy pregnancies and healthy babies. Importantly, this isn't to say that it's an easy experience – it requires a lot of work and dedication.

## Importance of planned pregnancies

Poor **control of blood sugars** before conception and through the first eight weeks of pregnancy greatly increases the chances that your baby will develop problems. That is why it is very important to have a planned pregnancy.

You can increase your chances of delivering a healthy baby by keeping your blood sugar in good control before conception and throughout your pregnancy. The first eight weeks are particularly important for the physical development of your baby.

If you plan to get pregnant, discuss it with your diabetes team.

## Alcohol

Consuming alcohol during pregnancy not only affects your blood sugar levels and can increase your risk of hypos, it can cause significant long-term health impairments to your unborn child.

## Try to stop smoking

Smoking while pregnant can harm your baby. The effects it has on your child can last well into childhood and can be permanent. The potential problems caused by diabetes can make smoking even more unhealthy for you.

# Heading off to College or University

Trying to find the right balance between diabetes and school life can be quite challenging. Here are some hints to help you transition from living at home to living on your own more smoothly.

## Student tips for Special Arrangements/ExAMS/Housing plans

### During the enrolment process:

- Mark the “disability” box on the application form. This notifies the school that you have a medical condition that may require special attention. This will make things easier once you start.
- Register with the accessibilities center. Diabetes is not a physical disability, however, by registering at the office, you may have special/preferred housing, parking, and meal plans.
  - You may have access to additional resources or services that can help support you,
- Try to get housing that has an open kitchen, or is near a 24-hour food source.
- A small fridge for your dorm room will become especially helpful. This can be used for storage of emergency snacks or light meals (milk, yogurt, cheese, juice) and insulin.
- Indicate on your student loans application that you have a disability. This will be helpful to ensure that you have funding to support your school and medical needs.

### **Take advantage of any resources that may come your way.**

Many schools offer people registered with diabetes a note-taker for any of your classes. The school must allow you to make up any exams that you may have missed for medical reasons. Some schools may also have the affirmative action programs for students with diabetes.

Not all schools are able to offer all of these services/benefits because of limited resources. Researching schools, not just for academia, but for accessibility programs, is important to ensure you have success. Most campuses have some form of support teams in place to help students if they need it. Some schools have financial resources available for supports and supplies.



## Exams

- Some schools allow students to write exams in a private room.
- Have extra food and drinks available when taking major exams.
- Inform your test supervisor of your diabetes, and any needs you may have.
- Remember to “graze”: strenuous brain activity may affect your blood glucose (sugar). This is similar to physical activity.
- If your blood sugar is low during a test, inform your supervisor.
- Let the supervisor know that your meter may “beep” if you need to check your blood glucose (sugar) level. Or if your pump may “click” when you need to give yourself insulin.

## Dorm Set-up:

Have your diabetes supplies easily accessible.

- Have food available for snacks and easy weekend meals.
- Have a small fridge to store your supplies
- Label your food or tell roommate(s), which foods are yours

It is important to let the people around you know that you have diabetes, what it means to have a low blood sugar, what symptoms you may have and how to treat it.

## What to tell your roommate(s)

**We suggest that you discuss the following with your roommate.**

- A simple explanation about what diabetes is and what you need to do each day (for example, blood glucose testing, insulin injections, eating meals and snacks on time).
- Explain what hypoglycemia is and list your symptoms:
  - *Confusion, Moodiness, Incoherence, Shakiness, Dizziness, Irritability*
- Tell your roommate(s), how they may help – if you are experiencing difficulties.
  - Giving you 125mL regular pop, juice, or glucose tablet.
  - If you are not feeling better after 10-15 minutes, they should insist you take more carbohydrate.
  - If your roommate(s) ever finds you unconscious or having a seizure, at any time, even after partying, or they cannot wake you up, they should call 911 immediately.
  - To use glucose if they have been shown how and are comfortable using it.
- ◆ Have a list of emergency contact numbers readily available.
- ◆ Know where the local hospital is.
- ◆ Have a supply of food somewhere specific in your room, and explain the importance of it being your “emergency food”, and that it cannot be shared.
- ◆ Provide opportunities for your roommate(s) to ask questions about your diabetes. It may be familiar to you, but not necessarily for them, and it may take time for him/her to adjust.

# Traveling

Your diabetes should not prevent you from travelling anywhere in the world. However, before you set off, you need to plan ahead carefully and consider the following information.

## Preparing for your trip:

- If you know that you will be traveling through several time zones, you will need to adjust your insulin doses. For example, flying east to Europe will shorten your day, so you may need less insulin; while flying West to Hawaii will lengthen your day so you may require more insulin. Ask your diabetes team for advice.
- You should also travel with a letter from your diabetes clinic confirming you have diabetes and you need to carry syringes, needles, insulin and testing equipment, and may be wearing an insulin pump.
- Make sure you have an ample amount of insulin and diabetes supplies just in case of loss or accidental breakage. A good guide is to double up on what you would usually require if you were not traveling.
- Air Canada recommends you inform the airline, when you are booking your ticket, that you use insulin and will be travelling with diabetes supplies. You also have to advise the ticket agent at check-in as well as security.

Most airport x-ray machines will not affect insulin pumps or blood glucose monitors.

- Always carry your diabetes supplies in your hand baggage. You are less likely to become separated from your carry-on bags and insulin that travels in the baggage hold of an airplane is subject to extremes of temperatures.
- Obtain proof of prescription for your medications and syringes. Make sure you have a prescription label on your insulin vials or cartridges.
- Look into buying travel insurance.

# Diabetes Supplies Checklist

- ☐ Diabetes ID (medic alert bracelet or necklace)
- ☐ Insulin or medications to last the whole trip
- ☐ Blood sugar meter and extra battery
- ☐ Strips for meter
- ☐ Syringes or pen needles
- ☐ Proof of prescription for supplies (box with original label)
- ☐ Alcohol wipes
- ☐ Glucose tabs or candies
- ☐ Lancets
- ☐ Nonperishable snacks
- ☐ Travel letter
- ☐ Glucagon emergency kit

## Other helpful hints

- Your hand baggage should include food supplies in case of flight delays and a supply of glucose tablets and/or whatever food or drink you usually use to treat low blood sugars.
- Double the amount of insulin, lancets, strips, syringes/pen, needles, etc. necessary for your whole trip
- Take a glucagon kit with you especially if your destination is off the beaten track. Make sure to instruct a travelling companion on when, and how, to use the glucagon injection.
- At home or abroad, it is always a good idea to wear some form of diabetes identification such as a medic alert.
- Travel insurance is available to all members of the Canadian Diabetes Association. For further information, please contact:

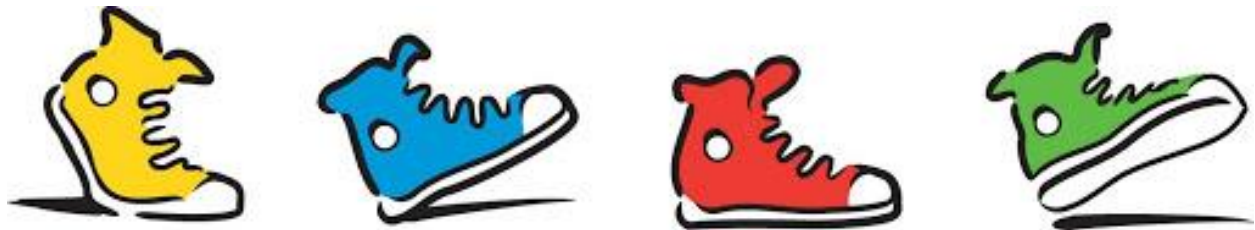
Canadian Diabetes Association  
15 Toronto St., Suite 800  
Toronto, Ontario M5C 2E3  
416-363-3373 or  
1-800-BANTING (226-8464)  
Visit [www.diabetes.ca](http://www.diabetes.ca)

# Employment

## Things to Consider:

When considering obtaining employment, people may worry about discrimination if their diabetes is revealed at the time of employment.

- A person's medical information is confidential and therefore unless health related questions are directly related to a specific job requirement, a person with diabetes is not required to report diabetes on their employment applications or in an interview. The decision is yours.
- The employer does not need to be provided medical information after employment begins unless the employee wishes to disclose it. However, you may wish to consider this for safety reasons.
- The employer needs to make provisions allowing the employee to have time or space for meals or other aspects of diabetes management.
- If any extra information is needed to address these concerns then see "The Human Rights Commission" or "A Guide to Creating an Inclusive Workplace."



# Financial

As you are aware, there are some costs associated with your diabetes care. They may include: insulin, syringes, blood glucose (sugar) monitor, blood and urine test strips and trips to hospital appointments. There are a number of programs listed that may be able to assist you. There are some Universities and Colleges that are now covering medical supplies for their students, so please inquire at your school as to whether this is an option.

Review the chart on the following page to see what financial supports might help you.



## Financial Programs

Name of Program	Coverage	Documentation Required	Contact Information
<b>Monitoring for Health</b>	Must be insulin dependent. Reimbursement of up to 65% of the cost of strips and bloodletting devices up to \$500/year	Ontario resident Health Card Monitoring for Health Claim form completed by physician.	info@diabetes.ca Contact Canadian Diabetes Association 1-800-BANTING
<b>Trillium Drug Program</b>	Assistance for medical supplies for managing your diabetes as well as drug costs for your entire family.	Application available at Pharmacy. Income tested outline in the application package.	Ministry of Health and Long Term Care 1-800-575-5386 trillium@ontariodrugbenefit.ca
<b>Income Tax</b>		You are advised to keep track of all expenses associated with your diabetes and general health.	You may be eligible for a deduction of medical expenses, as well as celiac diet.
If you are receiving assistance from <b>Ontario Works Regular Benefits</b>	Ongoing Benefits including coverage for medical supplies	Income tested Medical Letter Social Insurance Number	Ontario Works www.mcscs.gov.on.ca
<b>Assistive Devices Program (ADP)</b>	\$2400 per year for supplies paid in \$600 installments	Pump application Pump renewal form	www.ontario.ca
<b>Disability Tax Credit</b>	Every 3 months	Part A & B of Disability tax credit	www.canada.ca
<b>OHIP Plus</b>	Provides more than 4400 drug products @ no cost for anyone 24 or younger, who is not covered by a private plan.	Active Health card Eligible prescription	Service Ontario 416-314-5518
<b>Northern Travel Grant</b>	Travel related expenses for medical appointments/procedures. For residents of Northern Ontario.	Medical provider will need to sign this form at time of travel.	www.health.gov.on.ca 705-675-4010
<b>Ontario Disability Support Program (ODSP)</b>	Provides income support, employment support as well as medical benefits	Online application Meet with caseworker to discuss financial need	www.ontario.ca 705-325-7408

# Complications & How to Avoid Them

People with diabetes are at risk to develop problems with your eyes, kidneys, and nerves. In addition, those with diabetes, are at greater risk for early heart attacks, strokes, and poor circulation to the feet. The longer you have diabetes the greater your risk. The risk of complications can be greatly reduced by having good control of your blood sugar. The lower your HbA1C, the lower the risk.

**The following is a brief description of each of the complications.**

## Eye Disease: Retinopathy

Poor control of diabetes can lead to damage of the small blood vessels of the eyes. This is why we look in your eyes at clinic visits and why formal eye examinations are necessary every 1-2 years.

## Kidney Disease: Nephropathy

Poor control of diabetes can lead to kidney damage. This is why we check your urine for protein, the first sign that there may be a kidney problem. High blood pressure accelerates kidney problems. This is why we check your blood pressure regularly and recommend treatment if it is elevated.

## Nerve Disease: Neuropathy

This affects mainly the nerves to the legs and sometimes the arm. The usual symptom is pain. This pain can be severe. Also, there may be loss of sensation, tingling and in men impotence—the inability to maintain an erection. Again, good control of blood sugar will reduce the risk of this occurring.

## Heart Disease and Stroke

Persons with poorly controlled diabetes may have early heart attacks and strokes. Research has clearly shown that good diabetes control will reduce the risk. Also, persons with diabetes are at risk for circulation problems. It usually occurs in the feet, which could lead to amputation.

## How to prevent complications

- Control your blood sugar
- Treat high blood pressure
- Have regular eye examinations
- Take care of your feet—avoid going barefoot
- DO NOT SMOKE
- See your Diabetes Health Care Team regularly

# Resources

[www.diabetes.ca](http://www.diabetes.ca) (Canadian Diabetes Association)  
[www.diabetes.org](http://www.diabetes.org) (American Diabetes Association)  
[www.diabetes-children.ca](http://www.diabetes-children.ca) (The Diabetic Children's Foundation)  
[www.jdrf.org](http://www.jdrf.org) (Juvenile Diabetes Research Foundation International)  
[www.diabetes-exercise.org](http://www.diabetes-exercise.org) (Diabetes Exercise and Sports Association)  
[www.ezdiabetes.com](http://www.ezdiabetes.com) (Kids health: Dealing with Diabetes)  
[www.diabetes.org/diabetes-forecast.jsp](http://www.diabetes.org/diabetes-forecast.jsp) (Diabetes Forecast)  
[www.bcchildrens.ca](http://www.bcchildrens.ca) (BC Children's Hospital)  
[www.diabetescareguide.com](http://www.diabetescareguide.com) (Canadian Diabetes Care Guide)  
[www.kidswithdiabetes.org](http://www.kidswithdiabetes.org) (Kids with Diabetes)  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca) (Health Canada: Nutrient value of some common foods)  
[www.nal.usda.gov](http://www.nal.usda.gov) (USDA National nutrient database)  
[www.ndhn.com](http://www.ndhn.com) (Listing of Ontario Diabetes programs)  
[www.sickkids.ca](http://www.sickkids.ca) (click> on about kids health)  
[www.celiac.ca](http://www.celiac.ca)

For complete list of diabetes resources go to:

[www.bcchildrens.ca](http://www.bcchildrens.ca)

(Search for department of Endocrinology and diabetes; for families then look for handouts)

\*This guide has been adapted to OSMH from Markham/Stouffville Hospital.

# Important Telephone Numbers

## Your New Health Care Team

Phone Number: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Nurse: \_\_\_\_\_

Dietitian: \_\_\_\_\_

Diabetes Specialist: \_\_\_\_\_

Appointment Date: \_\_\_\_\_

## Notes



## Notes



## Notes

