

The Diabetes Youth Program

All members of Guiding are encouraged to use this new and exciting resource. The Diabetes Youth Program is a partnership between Girl Guides of Canada and the Canadian Diabetes Association– Nova Scotia Region. Leaders can be flexible when using the Diabetes Youth Program by choosing and/or modifying activities to best suit their Unit's interests and abilities. The Canadian Diabetes Association has made available information/activity packages for all guiding members who participate in the program. All Guiding Units who participate in the Diabetes Youth Program activities will also receive a certificate of acknowledgement from the Canadian Diabetes Association.

Diabetes is a serious problem that costs our entire planet. Most people don't realize that it is not only the world's 4th leading cause of death; diabetes now affects more than 3 million Canadians. Our goal is to raise awareness and understanding of this serious disease. The Canadian Diabetes Association works in communities across the country to provide education and services, advocate on behalf of people with diabetes, support research and translate research into practical applications, through volunteers, healthcare professionals, researchers, partners and supporters. We hope to raise awareness and understanding of diabetes through this resource while engaging units in fun health promoting activities! We also encourage units to share the information that they learn with as many people as possible to help foster healthy communities.

To help develop peer-leadership, Guides, Pathfinders and Rangers are encouraged to share their understanding of diabetes with other members, other Units or in community settings. The Canadian Diabetes Association can also provide materials and more training to help you do this.

Leaders are asked to review the brief backgrounder on diabetes that has been included in this package. If leaders would like more training, information on diabetes or the certificates and activity packages, call 1-800-326-7712 or email nsinfo@diabetes.ca. We would be happy to assist you with any information or questions that you may have.

Activity #1

Sneaky Screen Time Challenge



Backgrounder:

Over the years, we have become increasingly inactive. We spend more time in front of “screens” (watching television, playing video games, and using the computer) and less time being physically active. In fact, national data indicates that only 10% of Canadian youth are meeting the guideline for screen time of <2 hours per day, and many get close to 6 hours per day (The Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth, 2009). Along with many other health benefits, physical activity can significantly reduce the risk of developing type 2 diabetes. In fact regular activity can reduce the risk by more than 50%!

Activity:

Let’s get moving! For one week, replace 30 minutes of screen time (time spent watching TV, and playing video and computer games) with 30 minutes of activity. Track your progress using the Screen Time Challenge form for one week and share with your Unit some of the changes that you made. Physical activity can be anything that you enjoy doing and gets you moving- walking and playing with friends, organized sports etc. Be creative and have fun! Remember, this is a lifelong challenge – keep increasing your daily physical activity and keep setting new goals! It will make you to feel healthier.

Useful Links:

Public Health Agency of Canada Website for Physical Activity Guides for all ages: <http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html> (Note- you can order copies of the Physical Activity Guide from this website or by contacting the Canadian Diabetes Association, Nova Scotia Region for smaller quantities)

Canadian Diabetes Association: www.diabetes.ca

Active Kids, Healthy Kids Canada: <http://www.activehealthykids.ca/>

Sneaky Screen Time Challenge

Name: _____



| Date | What did you do today to replace 30 minutes of screen time (i.e. video games, TV, surfing the web) with 30 minutes of physical activity? |
|--------------------|--|
| Monday _____ | |
| Tuesday _____ | |
| Wednesday _____ | |
| Thursday _____ | |
| Friday _____ | |
| Saturday _____ | |
| Sunday _____ | |



Activity #2

Getting Groovy with Canada's Food Guide

Backgrounder:

Healthy eating and physical activity help us to grow, learn, and build strong bones and muscles. It can also help us to maintain a healthy weight and prevent health conditions, such as type 2 diabetes.

Activity:

Put your creativity to the test and create your own *Eating Well with Canada's Food Guide* collage. Using newspaper/flyer clippings, pictures from magazines or your own drawings to create your Food Guide on a piece of bristol board or craft paper. Incorporate each of the 4 food groups (Vegetables and Fruit, Grain Products, Milk and Alternatives and Meat and Alternatives) into your Food Guide rainbow. Share your collage with the unit and show what you know about healthy eating. Remember, be creative and have fun!

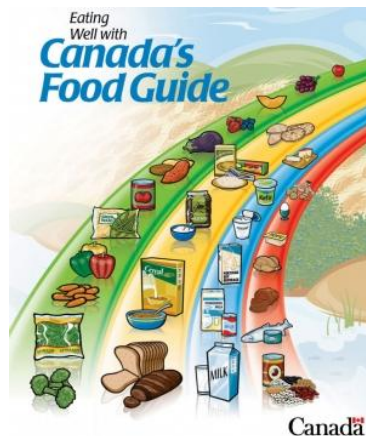
Leader Tip- Have each participant bring old magazines and grocery store flyers etc. from home to create their collages. At the beginning of the session, review *Eating Well with Canada's Food Guide*. Copies of the guide can be obtained through Health Canada or your local Canadian Diabetes Association branch office (smaller quantities only).

Useful Links:

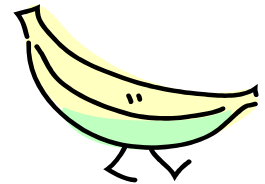
Eating Well with Canada's Food Guide: Health Canada Website <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> (Note- you can order copies of the guide from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Dietitians of Canada: www.dietitians.ca

Canadian Diabetes Association: www.diabetes.ca



Activity #3



Funky Food Group Relay

Backgrounder:

When it comes to leading a healthy lifestyle and preventing type 2 diabetes, healthy eating and physical activity go hand and hand.

Activity:

Test your knowledge of Eating Well with Canada's Food Guide while being active by participating in a food group relay!

Leader Tip:

At the beginning of the session, review *Eating Well with Canada's Food Guide*. Copies of the Guide can be obtained through Health Canada or your local Canadian Diabetes Association branch office (smaller quantities may be obtained).

Have each participant bring magazines, grocery store flyers etc. and cut out pictures from each of the 4 food groups.

Place 4 larger containers, baskets or buckets at the end of the room. Label each container as a food group from *Eating Well with Canada's Food Guide* (i.e. Vegetables and Fruits, Grain Products, Milk and Alternatives and Meat and Alternatives). The start lines will be at the other end of the room (one to the left and one to the right).

Using items such as pylons, bean bags or chairs, set up an obstacle course between the start lines and baskets by placing chairs to the left and right.

Divide the group into 2 teams and have them line up at the start lines. Give each participant a food cut out. Explain the game rules:

- Each person goes one at a time
- When the leader says go, participants run to the chair, go around it three times, run and put their food cut out in the appropriate basket, run back to the start line and tag the next person in line. This keeps going until everyone has gone 2-3 times. The team who finishes first wins!
- Rules can be tailored to suit your ideas and situation, feel free to make it your own!

Baskets, signs and food cut outs can also be borrowed from your local Canadian Diabetes Association branch.

Useful Links:

Eating Well with Canada's Food Guide: Health Canada Website <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> (Note- you can order copies of the guide from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Physical Activity Guides for Children and Youth: <http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html> (Note- you can order copies of the guides from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Dietitians of Canada: www.dietitians.ca

Canadian Diabetes Association: www.diabetes.ca

Activity #4

World Diabetes Day



Backgrounder:

November 14th has been established as World Diabetes Day. World Diabetes Day is celebrated worldwide, from Nova Scotia to Paris and far beyond! The World Diabetes Day logo is the blue circle - the global symbol for diabetes which was developed as part of the Unite for Diabetes awareness campaign. Across cultures, the circle symbolizes life and health. The color blue reflects the sky that unites all nations and is the colour of the United Nations flag. The blue circle signifies the unity of the global diabetes community in response to increasing rates of diabetes.

Activity:

Challenge your group to be creative and mark World Diabetes Day!

Example of past World Diabetes Day activities include: wearing the color blue on World Diabetes Day, getting a group of people (could also include friends and community members etc.) to wear blue and join hands to form the Diabetes Logo – the blue circle, talking to your class about diabetes- the possibilities are endless, so be creative and have fun! Remember to take pictures and send them to the Canadian Diabetes Association! Pictures can also be uploaded to the World Diabetes Day Website provided below.

Note- if November 14th does not work for your group, try celebrating World Diabetes day a few days or a week early.

Useful Links:

Canadian Diabetes Association: www.diabetes.ca

World Diabetes Day: <http://www.worlddiabetesday.org>

Activity #5

Meet the Cellbertons Family

Backgrounder:

This 7 minute animated video is based on the *Cellbertons*, a family of cells living in someone's body. As parts of the body, they share the same needs for proper nutrition and physical activity as the entire person does. Children and youth learn about diabetes through the son (Sheldon) who has learned about diabetes in school and is now sharing that knowledge with his Mom (Cheryl) and Dad (Al). This is a direct parallel to one of the objectives of the animated presentation – giving children and youth knowledge to share with their families.

Activity:

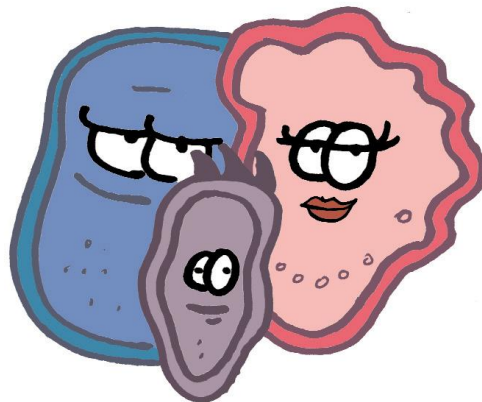
Contact your local Canadian Diabetes Association Branch to borrow the fun Learning Series Video: *The Cellbertons in What's Diabetes?* The video comes with word searches, coloring sheets and trading cards that can be used after the video and is FREE of charge.

Useful Links:

Canadian Diabetes Association: www.diabetes.ca

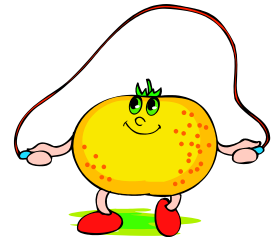
Eating Well with Canada's Food Guide: Health Canada Website <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> (Note- you can order copies of the guide from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Physical Activity Guides for Children and Youth: <http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html> (Note- you can order copies of the guides from this website or by contacting the Canadian Diabetes Association for smaller quantities)



Activity #6

Get your Game on!



Backgrounder:

Many of us, including children and youth are not active enough. Building physical activity into daily routines at a young age helps to create a pattern that may very well stay with them for the rest of their lives. Not only can physical activity help prevent type 2 diabetes, research shows that physical activity:

- Builds strong bones and strengthens muscles
- Maintains flexibility
- Achieves a healthy weight
- Promotes good posture and balance
- Improves fitness
- Strengthens the heart
- Improves physical self-esteem
- Increases relaxation
- Enhances healthy growth and development

Activity:

You don't need special equipment and facilities to be active and have fun. Try getting active and creating a game with items that you may have floating around your home already! It shows that you can be physically active even if you do not go to the gym or are not in a sporting activity. Creating the game itself is a ton of fun!

Leader Tip: To prepare for the challenge, create several buckets or bags of items that can often be found at home (i.e. balls, jump ropes, buckets, bean bags or balled up socks etc.). Alternately, leaders can have participants each participant bring something from home. Divide the classroom/participants into groups (maximum 4 groups) and provide each group with a bin of assorted supplies. Give each group 5-10 minutes to develop a new game using only the items provided. Have each group teach the class their game and briefly participate before moving onto the next group. Activity supplies can also be borrowed from your local Canadian Diabetes Association branch.

Useful links:

Physical Activity Guides for Children and Youth: <http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html> (Note- you can order copies of the guides from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Canadian Diabetes Association: www.diabetes.ca

Activity #7



Growing up Well

Backgounder:

Growing up Well from Tweens to Teens (for youth ages nine to thirteen), and Growing Up Well from Teens to Adults (for youth ages fourteen to eighteen), are two programs developed to educate youth about the seriousness of diabetes and the importance of healthy, active living. These 10-minute DVD's were made by youth for youth.

Activity:

Learn more about diabetes, how youth affected by type 1 diabetes manage the condition and how you can help prevent type 2 diabetes through healthy, active living! Call your local Canadian Diabetes Association branch and borrow a copy of the *Growing Up Well* DVD for free. The video comes with activity sheets that can be used after the video and is FREE of charge.

Useful Links:

Canadian Diabetes Association: www.diabetes.ca

Eating Well with Canada's Food Guide: Health Canada Website <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> (Note- you can order copies of the guide from this website or by contacting the Canadian Diabetes Association for smaller quantities)

Physical Activity Guides for Children and Youth: <http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html> (Note- you can order copies of the guides from this website or by contacting the Canadian Diabetes Association for smaller quantities)



Diabetes Background Information for Leaders

This section includes additional information about diabetes, including website links you may wish to check yourself or include as part of a project for the children/youth to investigate, depending on the age of the children/youth.

Diabetes is a serious, chronic disease and a leading cause of death in Canada. Over 3 million Canadians have diabetes. There is no cure for diabetes but diabetes can be managed. Diabetes develops when the body cannot properly store or use food as fuel for energy. The fuel that the body needs is a simple sugar called glucose. It is found in carbohydrate foods, like breads, pasta, potatoes, milk, fruits, and some vegetables. Glucose is the main source of energy for the body. To use glucose, the body needs insulin. Insulin is a hormone produced by the beta cells of the pancreas in response to increased levels of glucose in the blood. Insulin is essential for the body to be able to absorb enough glucose from the blood in order to supply energy. Insulin is the key that allows glucose to enter the cells and supply energy.

The pancreas is a gland found just below the stomach. It produces insulin, as well as enzymes to help in digestion, and other hormones. When the body produces enough insulin and uses it properly, the insulin allows the glucose in the blood to get into the body's cells, where it is used for energy. This process is called glucose metabolism. Diabetes exists when the pancreas cannot make enough or any insulin or the body cannot use the insulin it produces. Without enough insulin, or the ability to use it properly, the body will have too much blood glucose. Left untreated, this can lead to long-term damage to many organs in the body and to the blood vessels. Having high blood glucose levels (also called blood sugar levels) may cause tiredness, more than normal thirst, or increased need to urinate. People with high blood glucose may also experience a weight change (gain or loss), have blurry vision, or get infections. Over time, high blood glucose levels can lead to serious or life threatening complications. Diabetes is not caused by eating too much sugar. You cannot 'catch' diabetes from someone with diabetes.

There are three main types of diabetes:

1. **Type 1 diabetes** is a disease in which the body mistakenly attacks and destroys the insulin-producing cells in the pancreas, usually as a result of an autoimmune process. Approximately 10 percent of people with diabetes have type 1. It is diagnosed most often in children and young adults. People with type 1 diabetes must take multiple daily injections of insulin. Type 1 diabetes cannot be prevented or cured yet, but it can be treated and managed.

The most important thing for someone with type 1 diabetes is to learn as much as possible about how to manage blood glucose levels in order to enjoy a healthy life and prevent complications. To manage type 1 diabetes effectively, a person will also need to:

- Learn as much as possible about diabetes.
- Learn how to self-monitor blood glucose levels and interpret their results.
- Make healthy food choices every day.

- Be physically active on a regular basis.
- Visit their diabetes healthcare team regularly.
- Stay educated about diabetes.

2. **Type 2 diabetes** is the most common form of diabetes. Type 2 diabetes develops when the pancreas is no longer able to meet the demand for insulin, or the body is not properly using the insulin produced (often referred to as insulin resistance). Insulin resistance is often made worse by excess weight. Type 2 diabetes most often is diagnosed in adults. It is the most common form of diabetes: approximately 90 percent of people with diabetes have type 2. The risk for type 2 increases in people age 40 and over. In recent years, however, more and more cases of type 2 diabetes are being diagnosed in young people, especially those in high risk populations, including those of Aboriginal descent.

You can prevent or delay type 2 diabetes by living a healthy lifestyle including being physically active on a regular basis, maintaining a healthy weight, making healthy food choices, not smoking, seeing a doctor regularly, and being checked for risk factors including high blood pressure. Studies suggest that physical activity can reduce the risk of type 2 diabetes by more than 50 percent. When type 2 diabetes is diagnosed, it may be treated and managed through meal planning, increased physical activity, self-blood glucose testing, and in most cases, oral medication and / or insulin. Approximately 40 percent of people with type 2 diabetes require insulin injections.

3. **Gestational diabetes** is a temporary condition that occurs in approximately 3.5 to 3.8% pregnancies. There is an increased risk of developing diabetes for both mother and child, later in life.

Symptoms of diabetes include:

- Unusual thirst
- Frequent urination
- Weight change
- Extreme fatigue
- Blurred vision
- Nausea and vomiting / abdominal cramps
- There may be no symptoms with type 2 diabetes.

For more information about diabetes, contact the Canadian Diabetes Association toll-free at **1-800-BANTING** (1-800-226-8464) or call your local or regional office. The Association website – **www.diabetes.ca** – has a wealth of additional information.

If you have a child in your Unit who is living with type 1 diabetes, the Canadian Diabetes Association's 'Kids with Diabetes in Your Care' brochure may be of interest. You can read this brochure online, or download a copy at

http://www.diabetes.ca/Section_About/kidswithdiabetes.asp Copies are also available at you local CDA office and included with the presentation materials.

Frequently Asked Questions

Note: these can be used as post activity questions as well.

1. Can a child with diabetes eat candy or birthday cake?

Yes, they just need to know how many carbs (carbohydrates) are in the candy or cake so they can take the right amount of insulin. The carbohydrate count of foods is always listed on food labels. People living with diabetes often have a carbohydrate counting book that provides them with carbohydrate estimates for a number of foods.

2. What is a carbohydrate?

A carbohydrate is the major source of calories in your diet. It gives you the energy you need for your day-to-day activities. You will find carbohydrates in foods like bread, pasta, rice, fruit, vegetables, yogurt, milk, as well as candy, and cake.

3. What is blood glucose?

Also called blood sugar. It is the sugar found in your blood and is the body's main source of energy.

4. What age can you develop diabetes?

People are usually diagnosed with type 1 diabetes before the age of 30, most often during childhood or their teens. Type 2 diabetes can develop at any age, but in most cases it develops in adulthood.

5. Is type 1 diabetes preventable?

NO it is not.

6. Is type 2 diabetes preventable?

Type 2 diabetes may be prevented or delayed with a healthy diet and regular physical activity, but this is not true in all cases. Some people will develop diabetes at some point in their lifetime regardless of their daily food and exercise routine.

7. What is the difference between Type 1 and Type 2 diabetes?

Type 1 diabetes

Not preventable

Body produces no insulin

Generally occurs before age 30

Happens quickly

Type 2 diabetes

Sometimes preventable

Body produces some insulin

Generally occurs in adulthood

Occurs progressively

8. What are some ways that you can incorporate healthy foods into your diet every day?

Bring healthy snacks to school, such as yogurt, fruit and vegetables. When eating out, make choices that are low in fat and include more vegetables. For example, choosing a salad instead of French fries, drinking juice instead of pop, having a piece of fruit rather than a chocolate bar for dessert. You can also cook some of your favorite foods at home, while finding ways make them healthier! Some ideas are making a pizza with extra vegetables in the toppings, making your own hamburgers with lean

meat; or even having a veggie burger instead. You could also try to eat a vegetarian meal at least once a week.

9. Is diabetes a serious illness?

Diabetes is very serious. There are more than 2 million Canadians living with diabetes. Around the world, every ten seconds 2 people get diabetes, and 1 person dies of diabetes related causes. There are very serious complications due to diabetes including heart disease, blindness, amputation and kidney disease.

10. What do people with diabetes need to do everyday?

People with type 1 diabetes use a blood glucose meter to poke their finger and check their blood glucose level. They must then take insulin by injection or with an insulin pump to regulate their blood sugar level.

People with type 2 diabetes also have to check their blood sugar level with a blood glucose monitor. They might take pills to help them regulate their blood sugar, or they might take insulin, or they might take both pills and insulin.

Exercise and proper nutrition are important for everyone and are a particularly important part of a daily routine for people living with type 1 and type 2 diabetes.

11. What does insulin do?

Insulin is a hormone produced by your pancreas to help you regulate your blood sugar level. If you have diabetes, you need help either from insulin or with pills to help keep your blood sugar levels normal.

12. Why do children with type 1 diabetes need to take insulin?

They need to take insulin because their pancreas does not make insulin for them. They have to take this insulin in order to for their body to break down glucose/carbohydrates. People with type 1 diabetes need insulin to live.

13. How can you HELP prevent type 2 diabetes?

You may be able to prevent type 2 diabetes, or at least delay it by exercising every day for at least 30 minutes, and by eating a balanced diet that combines food from all of the food groups listed in Eating Well with Canada's Food Guide.

14. What is a healthy diet?

A healthy diet is balanced and includes all of the food groups listed Eating Well with Canada's Food Guide. It also means decreasing the amount of fat you eat, making alternative choices when eating fast food, and helping in the kitchen to learn how to make healthy foods at home.

15. Where can you get information on eating healthy?

Eating Well with Canada's Food Guide.

16. List some ways to increase physical activity:

Take the stairs, get off the bus one stop early and walk, walk to school, walk to the mall, play outside with your friends, join a sports team, dance, walk the dog, ride your bike to school.