Diabetes in School

Interior Health

Updated July 2021
Learning Objectives

• Discuss the basics of type 1 diabetes.

• Recognize the signs and symptoms of low blood sugar (hypoglycemia) and high blood sugar (hyperglycemia) and how to respond to this.

• Know who to contact immediately in case of an emergency.

• Know where to find more information
What is Diabetes?

Diabetes is a chronic health condition in which the body cannot use the glucose (sugar) found in food.

**Type 1 (T1D):**
- The pancreas does **NOT** produce insulin.

**Type 2:**
- The pancreas does not produce **ENOUGH** insulin and/or the body RESISTS the action of insulin.
What is Insulin?

- Hormone produced in the pancreas.
- Allows our cells to use glucose (sugar).
- Without it, our body can’t create energy.
How is insulin given at school?

Student, parent or trained staff administers the insulin with an insulin pen or a syringe or an insulin pump.
Needs of Students with Diabetes

- Unrestricted access to emergency snacks and bathrooms.
- To eat on time and have adequate time to finish meals.
- Access to diabetes equipment (e.g. blood glucose meter) and be permitted to check blood sugar levels and respond to the results anywhere at anytime.
- Be able to contact their parents as needed to manage their diabetes.
Hypoglycemia: low blood glucose

SYMPTOMS

SHAKING | SWEATING | ANXIOUS | DIZZINESS | HUNGER

FAST HEARD BEAT | IMPAIRED VISION | WEAKNESS FATIGUE | HEADACHE | IRRITABLE

Credit: Google images
Emergency Treatment of Hypoglycemia

If a student has symptoms of low blood glucose, ALWAYS give a fast acting carbohydrate:

- 3-4 (15 g) glucose tablets, or
- 15 ml (1 tbsp.) sugar dissolved in ½ cup water, or
- 175 ml (3/4 c) juice or regular pop, or
- 15 ml (1 tbsp.) of honey.

DO NOT give food or drink if the student is unconscious, having a seizure or is unable to swallow. Call 911 and give glucagon if delegated.

HYPOGLYCEMIA IS LIFE THREATENING IF LEFT UNTREATED
Hyperglycemia: high blood glucose

- Very thirsty
- Needing to pass urine more often than usual
- Dry skin
- Very hungry
- Sleepy
- Blurry vision
- Infections or injuries heal more slowly than usual

Credit: Google images
Role of School Staff

- Be familiar with student's emergency plan and symptoms of low blood glucose and be able to respond appropriately.
- Allow student to eat/drink and have access to the bathroom as requested.
- Ensure student eats snacks/lunch on time.
- Inform parents of changes in student’s health or eating habits.
- Monitor student after treatment for low blood glucose.
- Give parent advance notice of changes in school routine where food and activity is involved (such as field trips, special events).
Source: Canadian Paediatric Society. Diabetes at School. Type 1 Diabetes: An Overview: www.diabetesatschool.ca/awareness/overview
Role of the Family

- Provide information to the school.
- Provide copy of the treatment plan.
- Ensure child has a Medical Alert Bracelet/Necklace.
- Provide snacks, lunch, and emergency foods.
- Provide supplies and equipment.
Role of Nursing Support Coordinator

- Provide student specific training for staff.
- Develop Individual Care Plans for younger students or those cognitively unable to manage their own diabetes needs.
- Provide support to school staff, family and student.

Role of Public Health Nurse

- General diabetes teaching – staff and student’s peers (in consultation with family).
- Train selected school staff (2-3) in glucagon administration.
- Serve as consultant throughout the school year.
Diabetes Support Plan

Diabetes Support Plan & Medical Alert Information

Instructions: This form is a communication tool for use by parents to share information with educational staff.
This form does NOT need to be completed by Diabetes Clinic staff.

Name of Student:

School:

Care Card Number:

CONTACT INFORMATION

Parent/Guardian 1: Name:

Phone Numbers:

Parent/Guardian 2: Name:

Phone Numbers:

Other/Emergency:

Able to advise on diabetes care: ☐

MEDICAL ALERT - TREATING MILD TO MODERATE LOW BLOOD GLUCOSE

NOTE: PROMPT ATTENTION CAN PREVENT SEVERE LOW BLOOD SUGAR

SYMPTOMS

☐ Shaky, sweaty
☐ Hungry
☐ Pale
☐ Dizzy
☐ Irritable
☐ Tired/sleepy
☐ Blurry vision
☐ Confused
☐ Poor coordination
☐ Difficulty speaking
☐ Headache
☐ Difficulty concentrating
☐ Other:

TREATMENT FOR STUDENTS NEEDING ASSISTANCE

(anyone can give sugar to a student):

Location of fast acting sugar: _______________________

1. If student able to swallow, give one of the following fast acting sugars:
   - 10 grams
     - _____ glucose tablets
     - 1/2 cup of juice or regular soft drink
     - 2 teaspoons of honey
     - 10 skittles
     - 10 mL (2 teaspoons) or 2 packets of table sugar dissolved in water
     - Other (ONLY if 10 grams are labelled on package):
   - OR 15 grams
     - _____ glucose tablets
     - 3/4 cup of juice or regular soft drink
     - 1 tablespoon of honey
     - 15 skittles
     - 15 mL (1 tablespoon) or 3 packets of table sugar dissolved in water
     - Other (ONLY if 15 grams are labelled on package):

2. Contact designated emergency school staff person
3. Blood glucose should be retested in 15 minutes. Retreat as above if symptoms do not improve or if blood glucose remains below 4 mmol/L
4. Do not leave student unattended until blood glucose 4 mmol/L or above
5. Give an extra snack such as cheese and crackers if next planned meal/snack is not for 45 minutes.
Resources

- B.C. Children’s Hospital: Online module for educators: [Taking Care of Diabetes at School](#)

- Canadian Paediatric Society [Type 1 diabetes in school](#) information and training modules for school staff, level 1, 2 and 3 [here](#)

- Child Health BC [https://www.childhealthbc.ca/sites/default/files/diabetes_care_in_the_school_setting_evidence-informed_key_components_care_elements_and_competencies_september_2013.pdf](#)

- Diabetes and Students in BC [https://www2.gov.bc.ca/gov/content/education-training/k-12/administration/program-management/safe-caring-and-orderly-schools/diabetes?keyword=diabetes&keyword=in&keyword=schools](#)

- Diabetes Canada [https://www.diabetes.ca/about-diabetes/kids,-teens---diabetes](#)
Any Questions?