

Diabetes in School

Interior Health

Updated July 2021



Learning Objectives

- Discuss the basics of type I 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):

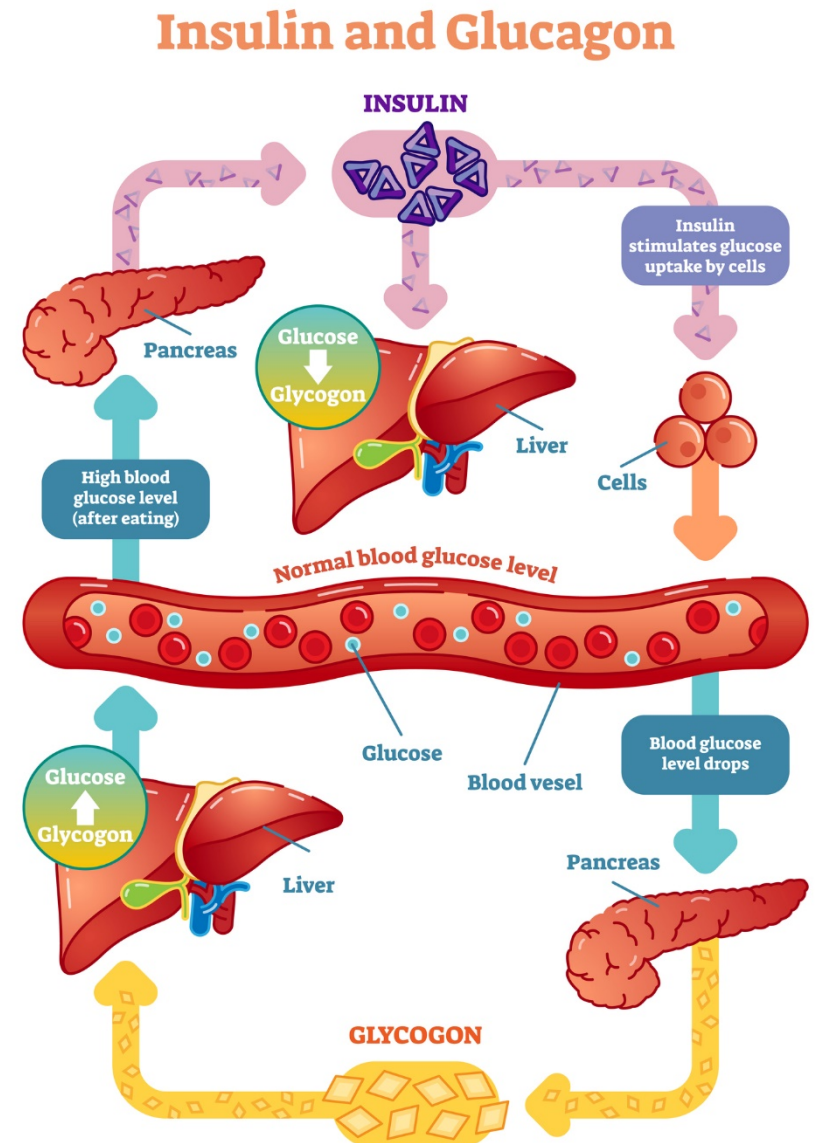
The pancreas does NOT produce insulin.

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



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 $\frac{1}{2}$ cup water, **or**
- 175 ml ($\frac{3}{4}$ c) juice or regular pop, **or**
- 15 ml (1 tbsp.) of honey.

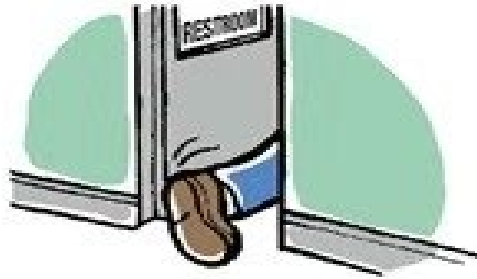
DO NOT give food or drink if the student is unconscious, having a seizure or is unable to swallow. Call 911 and give glucagon if delegated.

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

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).

Key Points for School Staff



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 Students who are receiving Nursing Support Services (NSS) Delegated Care do not need to be completed by Diabetes Clinic staff. No Public Health Nurses.

Name of Student:

School:

Care Card Number:

CONTACT INFORMATION

Parent/Guardian 1: Name:

Phone Numbers: Cell

Parent/Guardian 2: Name:

Phone Numbers: Cell:

Other/Emergency: Name:

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?