



# Diabetes in School

Healthy Schools

June 2023





# Learning Objectives

- Discuss the basics of type I diabetes (T1D).
- 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.
- Know how to support students with T1D.



# What is Diabetes?

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

## **Type 1 (T1D):**

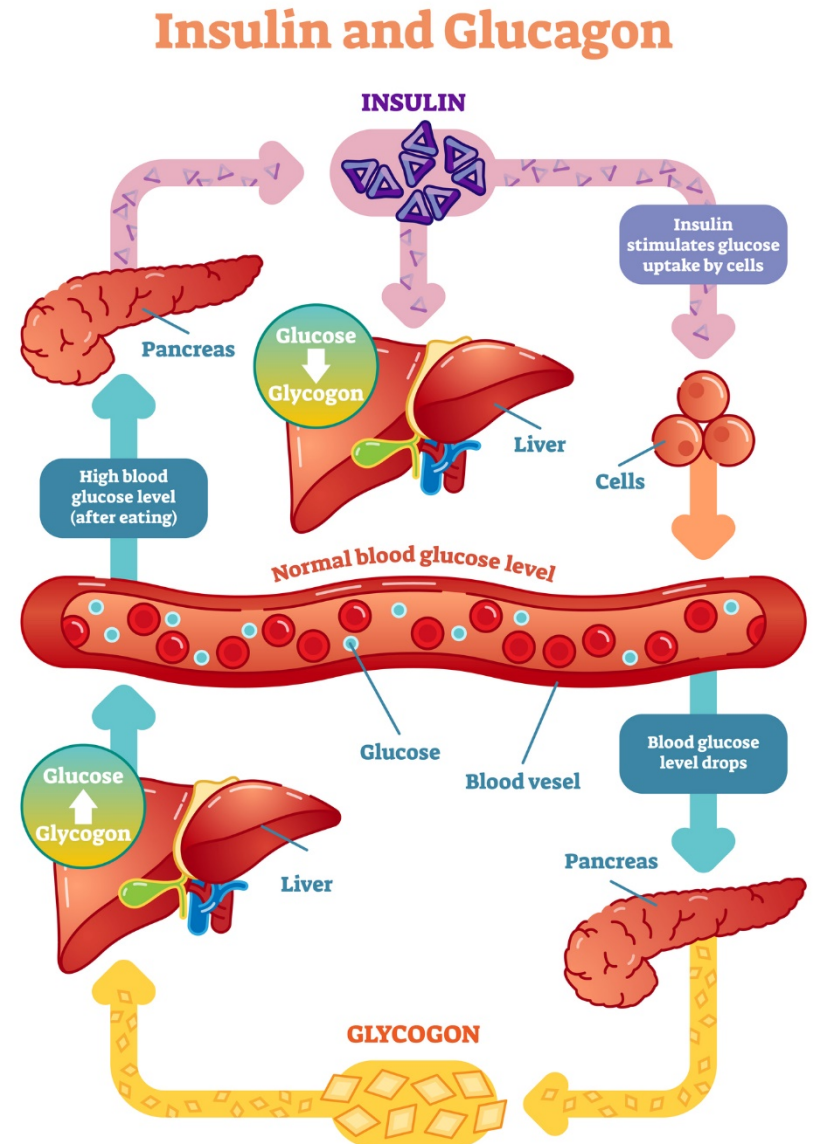
The pancreas does NOT produce insulin.

## **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, insulin pump or via a pre-filled pod system.



Pod photo credit to  
<https://www.omnipod.com/en-ca/what-is-omnipod/omnipod-dash>

# Hypoglycemia: low blood glucose

## SYMPTOMS



SHAKING



SWEATING



ANXIOUS



DIZZINESS



HUNGER



FAST HEARDBEAT



IMPAIRED VISION



WEAKNESS  
FATIGUE



HEADACHE



IRRITABLE

# Emergency Treatment of Hypoglycemia

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

- 175 ml (3/4 c) juice (juice box) or regular pop,  
or
- 15 skittles or
- 2 packages of rockets candy

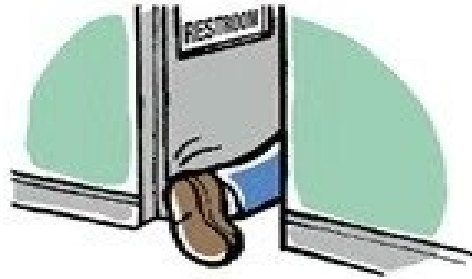
DO NOT give food or drink if the student is unconscious, having a seizure or is unable to swallow. Call 911 and give glucagon if delegated.

**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

10 things school staff should know about T1D

- Be familiar with student's emergency plan and symptoms of low blood glucose and be able to respond appropriately.
- Allow students adequate time to eat/drink and have access to the bathroom as requested.
- Inform parents of changes in student's health.
- 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).
- Ensure students have access to their diabetes equipment which may include their cell phone.

# KIDS SAY: Ways to Support your Student with Diabetes poster

- At the start of the year please check in with me and let me know you're here to help and ask me what support I would like
- My cell phone is a medical device so please don't take it away
- My devices often beep; this can be embarrassing for me. Please don't make it a big thing
- Sometimes I need to eat in class to treat my diabetes



# KIDS SAY...



- If my blood sugars are high I may need to use the washrooms more often
- I am more than just a blood sugar number. Sometimes it can be frustrating when people ask me ‘what’s your number’ too often.
- Please have a plan to inform a substitute teacher of my medical alert form
- When I am low I **MUST** eat fast-acting sugar. I am not making unhealthy choices, I need sugar to stay alive!

# Role of the Family

- Provide information to the school.
- Provide copy of the treatment plan.
- Ensure child has a Medical Alert identification.
- 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 staff (2-3) in Glucagon administration.
- Serve as consultant through 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 with Public Health Nurses.  
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: 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	TREATMENT FOR STUDENTS NEEDING ASSISTANCE ( <u>anyone</u> can give sugar to a student):														
<input type="checkbox"/> Shaky, sweaty <input type="checkbox"/> Hungry <input type="checkbox"/> Pale <input type="checkbox"/> Dizzy <input type="checkbox"/> Irritable <input type="checkbox"/> Tired/sleepy <input type="checkbox"/> Blurry vision <input type="checkbox"/> Confused <input type="checkbox"/> Poor coordination <input type="checkbox"/> Difficulty speaking <input type="checkbox"/> Headache <input type="checkbox"/> Difficulty concentrating	<p>Location of fast acting sugar: _____</p> <p>1. If student able to swallow, give one of the following fast acting sugars:</p> <table border="0"> <tr> <td><b>10 grams</b></td> <td><b>OR 15 grams</b></td> </tr> <tr> <td><input type="checkbox"/> ___ glucose tablets</td> <td><input type="checkbox"/> ___ glucose tablets</td> </tr> <tr> <td><input type="checkbox"/> 1/2 cup of juice or regular soft drink</td> <td><input type="checkbox"/> 3/4 cup of juice or regular soft drink</td> </tr> <tr> <td><input type="checkbox"/> 2 teaspoons of honey</td> <td><input type="checkbox"/> 1 tablespoon of honey</td> </tr> <tr> <td><input type="checkbox"/> 10 skittles</td> <td><input type="checkbox"/> 15 skittles</td> </tr> <tr> <td><input type="checkbox"/> 10 mL (2 teaspoons) or 2 packets of table sugar dissolved in water</td> <td><input type="checkbox"/> 15 mL (1 tablespoon) or 3 packets of table sugar dissolved in water</td> </tr> <tr> <td><input type="checkbox"/> Other (ONLY if 10 grams are labelled on package):</td> <td><input type="checkbox"/> Other (ONLY if 15 grams are labelled on package):</td> </tr> </table> <p>2. Contact designated emergency school staff person</p> <p>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</p> <p>4. Do not leave student unattended until blood glucose 4 mmol/L or above</p> <p>5. Give an extra snack such as cheese and crackers if next planned meal/snack is not for 45 minutes.</p>	<b>10 grams</b>	<b>OR 15 grams</b>	<input type="checkbox"/> ___ glucose tablets	<input type="checkbox"/> ___ glucose tablets	<input type="checkbox"/> 1/2 cup of juice or regular soft drink	<input type="checkbox"/> 3/4 cup of juice or regular soft drink	<input type="checkbox"/> 2 teaspoons of honey	<input type="checkbox"/> 1 tablespoon of honey	<input type="checkbox"/> 10 skittles	<input type="checkbox"/> 15 skittles	<input type="checkbox"/> 10 mL (2 teaspoons) or 2 packets of table sugar dissolved in water	<input type="checkbox"/> 15 mL (1 tablespoon) or 3 packets of table sugar dissolved in water	<input type="checkbox"/> Other (ONLY if 10 grams are labelled on package):	<input type="checkbox"/> Other (ONLY if 15 grams are labelled on package):
<b>10 grams</b>	<b>OR 15 grams</b>														
<input type="checkbox"/> ___ glucose tablets	<input type="checkbox"/> ___ glucose tablets														
<input type="checkbox"/> 1/2 cup of juice or regular soft drink	<input type="checkbox"/> 3/4 cup of juice or regular soft drink														
<input type="checkbox"/> 2 teaspoons of honey	<input type="checkbox"/> 1 tablespoon of honey														
<input type="checkbox"/> 10 skittles	<input type="checkbox"/> 15 skittles														
<input type="checkbox"/> 10 mL (2 teaspoons) or 2 packets of table sugar dissolved in water	<input type="checkbox"/> 15 mL (1 tablespoon) or 3 packets of table sugar dissolved in water														
<input type="checkbox"/> Other (ONLY if 10 grams are labelled on package):	<input type="checkbox"/> Other (ONLY if 15 grams are labelled on package):														
<p>Other: _____</p>															

# Resources

- ▶ 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>
- ▶ BCCH Endocrinology & Diabetes Unit <http://endodiab.bcchildrens.ca>
- ▶ 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](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 Canada <https://www.diabetes.ca/about-diabetes/kids,-teens---diabetes>
- ▶ Canadian Paediatric Society <https://www.diabetesatschool.ca/schools> see resources for school staff, level 1, 2 and 3 [here](#) and this [poster](#)

**Any Questions?**