# **Individual Care Plan for Students with Type 1 Diabetes DAILY AND EMERGENCY PROCEDURES**

	Name:	Date of birt	h:		School	/ear: 20_	to 20	
DENTIFICATION	School: Grade: Homeroom teacher:							
	Home address:							
	Medical contact: Phone:							
	If student has another care plan, note here:					STUDENT PHOTO		
TIFIC	Designated staff to provide support with diabetes	care (minimum	2):					
DEN	1							
_	2							
	3							
	School bus #: a.m p.m		or care. I	10 🗆	Tes 🗆			
S	Name	Relationsh	nip	Pref	erred phone #	Alterr	nate phone #	
ACT	1st							
CONTACTS	2nd 3rd							
J	Siu							
<b>6</b>	<b>SCHOOL</b> must ensure a kit is accessible at all times (class, gym, field trips, lockdowns, fire drills, etc). Advise parents when running low on supplies. <b>PARENT</b> must maintain/refresh supplies.							
PPLIES	CONTENTS (check all that apply)		Wit stude		Classroom	Office	Other location(s)	
SU	Blood glucose meter, test strips, lancets							
EMERGENCY KITS / SUPP	Fast-acting sugar (juice, glucose tabs, candy) for l sugar	ow blood						
Ξ	Carbohydrate snack(s)							
≿	Glucagon (expiry date:/)							
ž	Sharps disposal container							
9	Ketone strips/meter	( · · · )						
ER	Insulin pen, pen needles, insulin (in case of pump  Extra batteries for meter	railure)						
Σ	Parents' names and contact numbers							
	Other:							
	ouici.							







Once this care plan is complete, parents should fill in the quick-reference sheet shown below, which outlines the major routine tasks to be done each day. Indicate which, if any, tasks the student needs help with. Keep a copy in each classroom and all locations (eg., gym) where the student spends part of the school day. Download the file at www.diabetesatschool.ca

TIME	Meal/snack	Blood glucose (BG) check	Insulin	Comments
		MILD HYPOGLYCI is under 4 mmol,	EMIA (Low b) /L: Treat, the	lood sugar): Check, Treat, Repeat In repeat BG check after 10-15 minutes It under 4 mmol/L It cle until the BG is 4 or more
Jsual s	ymptoms of low	blood sugar for st	tudent are:	Treat with:
	iness     Head	ache 🗆 Irrita		☐ cup juice/regular soft drink
Shak		ness 🗆 Weak		
☐ Shak	ger 🗆 Paler	ness 🗆 Weak		Other
Shak Hung Conf	ger Paler fusion Othe  YCEMIA (High blant/guardian if BG nts on a pump, g	ood sugar) is above	mmol/L, or i	f student feels unwell.
Shak Hung Conf	ger   Paler fusion   Othe  YCEMIA (High blant/guardian if BG nts on a pump, g   Call parent	ood sugar) is above ive a correction as	mmol/L, or i nd/or check k iee care plan,	f student feels unwell.







# **EMERGENCY PROCEDURE FOR LOW BLOOD SUGAR (HYPOGLYCEMIA)**

	MILD-TO-MODERATI	E LOW BLOOD S	SUGAR	SEVERE LOW BLOOD SUGAR
SYMPTOMS	When blood sugar (BG) is low, the student will be sugar (BG) is low, the student will be sugar (BG) is low, the student will be sugar (BG) is low, the student graph graph is low, the student graph	rouchy sion :/fatigue	<ul><li>□ Dizziness</li><li>□ Headache</li><li>□ Paleness</li></ul>	<ul> <li>Symptoms</li> <li>Unresponsive or unconscious</li> <li>Having a seizure</li> <li>So uncooperative that you can't give juice or sugar by mouth</li> </ul>
	Never leave a student with Treat the low blood Do not send the student with Do not send the student with the student with Do not send the student with Do not sen	<ol> <li>What to do</li> <li>Place the student in recovery position.</li> <li>Have someone call 911. Then cal parents.</li> <li>Stay with the student until</li> </ol>		
ACTION	If BG is under 4 mmol     If BG is under 5 mmol     Immediately give (See below for student      After 15 minutes, chec     If still under 4 mmol	<ul> <li>ambulance arrives. Do not give food or drink (choking hazard).</li> <li>4. If there is a signed consent and mutual agreement (see p. 8) to give glucagon, give it now.</li> <li>Yes, give glucagon</li> <li>No, do not give glucagon</li> </ul>		
	• Repeat cycle every 1 above 4 mmol/L  When BG is over 4 mmol/L:  • If meal or snack is more that • If meals or snack less than 1 Student can eat at regular to	<ol> <li>Remove shrink wrap. Open lid.         Remove the device from tube</li> <li>Hold the device between fingers and thumb</li> <li>Insert the tip gently into one of the nostrils until finger(s) touch the outside of the nose (1).</li> <li>Push the plunger all the way in.</li> </ol>		
	How much fast-ac	ting sugar to give	15 g	Dose is complete when green line is no longer showing (2).  5. Once student is alert, give juice
	Glucose tablets (4 g each)	2 tabs (8 g)	4 tabs (16 g)	or fast-acting sugar.
	Juice or regular soft drink	½ cup	¾ cup	or rust ucting sugar.
	Skittles	10 pieces	15 pieces	<b>a</b> \ <b>a</b> i \
	Rockets (roll candy)	1 roll (7 g)	2 rolls (14 g)	
	Table sugar	2 tsp / 2 pkgs	1 Tbsp / 3 pkgs	

When BG is under \_\_\_\_\_ mmol/L, call parent







# PROCEDURE FOR HIGH BLOOD SUGAR (HYPERGLYCEMIA)

DEFINITION	Hyperglycemia = high blood glucose/sugar (BG). Levels may vary by individual.  High blood sugar is usually the result of extra food or inadequate insulin, but not always. BG also rises during illness or stress, and can be due to technical problems (pump failure, missed meal bolus, etc).						
SYMPTOMS	Usual symptom  Extreme the Hunger  Warm, flust		or this student are:	tion $\Box$			
ACTION	Check BG. Even students who do their own checks may need help if they are unwell.  • If student has symptoms of illness: Call parent immediately if student is unwell, has severe abdominal pain, nausea, vomiting or symptoms of severe high blood sugar. A parent should pick up the student fror school if blood sugar is high and they feel unwell, regardless of how old or independent they are.  • No symptoms of illness: If the student feels well and the BG is under, no immediate treatment in needed. Note the blood sugar reading using the typical home-school communication method. In the meantime:  • Allow free access to the washroom and encourage them to drink water/sugar-free fluids. • Allow student to eat usual meal or snack (they may chose carbohydrate-free snacks). • Allow student to resume activity as normal.  • Insulin corrections by pump: If the student is on an insulin pump, a correction may be given (see insulin section of this plan). If BG has not decreased 2 hours after the correction, call parent.						
	When BG is above mmol/L, call parent						
KETONES	□ This student does not check for ketones at school.  □ If BG is above, check ketones using urine sticks □ OR ketone blood meter □  ■ Urine stick Blood meter Action  If ketones are Negative to small Less than 0.6 Proceed as for hyperglycemia above  ■ Moderate to large At or above 0.6 May indicate pump failure or extra insulin needed. Call parents for instructions.						







	ROUTINE	MANAGEMENT					
	Student's target	Always check blood sugar when student shows symptoms of hypoglycemia.  If you are not able to check, treat as if blood sugar is low.					
	blood sugar (BG) rangetommol/L	Student's blood sugar should be checked at these times each day:					
BLOOD GLUCOSE/SUGAR (BG) MONITORING	<ul> <li>Student requires         trained staff to do a         blood sugar (BG) check         and read the meter</li> <li>Student needs         supervision to do a BG</li> </ul>	Time  Before a.m. break Before lunch Before p.m. break Before leaving school  Other times:					
	check and read the meter  Student can do a BG check and read the meter on their own	Home-school communication method:  Daily blood sugar readings should be communicated to parents via:  Agenda BG readings form Text messages Other					
	Location of glucose meter(s)  With student Homeroom class Other(s)	Call parent if blood sugar is:  Below  Above  Does student wear a continuous glucose monitor (CGM)?					
ОТВ	Allow student to check their blood sugar at any time, in any place, respecting their wish for privacy or company.	<ul> <li>No</li> <li>Yes</li> <li>Yes, sometimes.</li> <li>If yes, see Appendix B.</li> </ul>					
	□ Student needs supervision during meal/snack times to ensure all food is eaten	☐ Student can eat snack and lunch at regular school times.  If not, specify when the student should eat					
NUTRITION BREAKS	☐ Student can manage their food intake independently	Student requires a snack before:  □ End of day/getting on bus □ Physical activity (see next section, page 6).					
NUTRITIC	Allow enough time to eat meals/snacks.  Ensure student eats meals/snacks on time.	When treats or classroom food is provided:  Student/school should contact parent in advance for instructions  Student can manage independently					
	No food sharing.	Food restrictions  Celiac disease: no gluten-containing products Allergies/intolerances:					







	ROUTINE	MANAGEMENT
PHYSICAL ACTIVITY	BG meter and fast-acting sugar should ALWAYS be accessible during physical activities.	Notify parents whenever special activities are planned (for example, Terry Fox run, track and field day, field trip or other active event)  No action needed before activity Check blood sugar before regular physical activity classes
	Risk of low blood sugar increases during/after physical activity.	☐ Check blood sugar before unplanned activity  Comments:
	The student may need extra BG check(s) and/or extra food.	If blood sugar is:
	<ul> <li>Student can make decisions about physical activities independently</li> <li>Student needs supervision/guidance around physical activity</li> </ul>	<ul> <li>Under 4 mmol/L, treat for low blood sugar</li> <li>Between 4 mmol/L and, give a snack before activity</li> <li>Above, no snack is needed before activity</li> <li>For students on a pump:</li> <li>No specific pump adjustments needed</li> <li>Suspend/disconnect pump for activity. Store</li> <li>Other</li> </ul>
7	<ul> <li>□ Student does not take insulin at school.</li> <li>□ Student takes insulin at school by:         □ pen injection         □ pump         □ syringe*</li> <li>Insulin is given by:</li> <li>□ Student, independently</li> </ul>	Complete this section <b>only</b> if student takes insulin at school.  Insulin by injection/ pump is done at the following times:  Time  Before breakfast program Before morning snack Before lunch Before afternoon snack Other
INSULIN	<ul> <li>Student, with supervision</li> <li>Designated staff</li> <li>Parent</li> <li>Other</li> </ul>	If BG is above mmol/L, call parent
	Location in school where insulin will be given	For students using insulin pen/syringe:  Insulin can only be given at breakfast and/or lunchtime
	* Consider using pens at school because dosing is easier	For students using an insulin pump:  Insulin can be given anytime the student is eating  There must be 2 hours between correction doses







	ROUTINE	MANAGEMENT
INSULIN VIA PUMP	A bolus calculator (which parents will provide) must be used in school settings. The pump is always programmed at home.  Designated staff are responsible for ensuring that:  the BG reading and number of carbohydrates are entered at each meal/snack time the bolus is delivered	Training is required. The basic steps are:  1. Check BG before the student eats. The reading will:  Be sent to the pump by the meter.  Need to be manually entered into the pump.  2. Enter the total number of carbohydrates to be eaten (provided by parent or the student)  3. The pump will calculate the amount of insulin to be given. Press the appropriate button to accept and deliver the bolus.  If BG is above mmol/L:  Check ketones  Call parent Other
INSULIN VIA PENS OR SYRINGE	Always double-check the insulin dose before injecting to make sure the appropriate dose has been selected and is dialed correctly into the pen.  The student is able to select the appropriate dose. Designated staff should double-check the dose.  Insulin is given by designated staff. A second adult must check the dose. (This task requires some training, but the adult doing it does not need to be a designated staff member listed in this care plan).  Parents agree the student can give their own insulin,	Training is required. Here is how the dose is calculated:  Parents label the student's food with number of carbohydrates and provide a Bolus Calculator Sheet* that allows designated staff to select an appropriate insulin dose. This dose is based on the BG reading and the number of carbohydrates the student will eat.  OR  Same steps as above, but with the dose calculated by the student's glucose meter (only certain meters can do this).  Parents will send a set number of carbohydrates for snack/lunch each day. They will provide an appropriate tool (such as variable dose insulin scale in Appendix A) to help designated staff select appropriate dose based on the student's BG.  Parents may send a different number of carbohydrates for snack/lunch each day (clearly labeled) and will provide an appropriate tool (such as variable dose insulin scale in Appendix A) that allows designated staff to select a dose of insulin based on BG.  Parents have the right to adjust insulin dose for bolus calculator sheet or sliding scale throughout the school year as needed
	without an adult double- checking the dose.	* See <a href="www.bcchildrens.ca/health-info/coping-support/diabetes">www.bcchildrens.ca/health-info/coping-support/diabetes</a> , Click on Basal-Bolus Insulin with MDI, then Bolus Calculators for School Lunches







<b>Pre-authorizations</b>	by parants	/guardiane
Pre-authorizations	by parents	/guardians

**Consent to release information:** I authorize and provide consent to the school staff to use and/or share information in this plan for purposes related to the education, health and safety of my child. This may include:

- 1. Displaying my child's photograph on paper notices or electronic format(s) so that staff, volunteers and school visitors will be aware of my child's medical condition.
- 2. Communicating with bus operators.
- 3. Sharing information in special circumstances to protect the health and safety of the student.

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**Consent to transfer to hospital:** I consent in advance to my child's being transported to a hospital if required, based on the judgment of school staff. I also permit a staff member to accompany my child during transport. Please note: the school principal or designate shall decide if an ambulance is to be called.

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**Consent to treatment:** I am aware that school staff are not medical professionals and perform all aspects of the plan to the best of their abilities and in good faith. I approve of the management steps and responses outlined in this care plan, including administering glucagon if indicated.

Yes	П	No	П

**Agreement to provide glucagon:** School staff, parents and my child (if age-appropriate) agree that glucagon can be given in the event of severe hypoglycemia. Note: School personnel must sign below to indicate pre-agreement to provide this emergency medication. Information: <a href="https://www.diabetesatschool.ca/schools/glucagon">www.diabetesatschool.ca/schools/glucagon</a>

Yes, glucagon can be given  $\square$  No, glucagon cannot be given  $\square$ 

# AUTHORIZATION

CONSENT

Parent/guardian signature:	Date:	<del></del>
Parent/guardian name (print):	Relationship:	
Student signature:		
Heath care professional (HCP) signature:	Date:	
HCP name (print):	Role:	
Principal signature:		
Principal name:		
Designated and trained staff (minimum 2):		
1		
2		
3		
Staff trained and designated to administer glucagon:		







TUDENT NAME:	Date:

**ANNUAL RENEWAL** When requirements change significantly, complete a new Individual Care Plan and share with all involved. If there are no changes between school years, use this sign-off sheet to confirm the plan has been reviewed by the school, the parent(s) and, when age-appropriate, the student. This plan remains in effect for the \_\_\_\_\_ to \_\_\_\_ school year without change. Parent/guardian:\_\_\_\_\_\_ Date: \_\_\_\_\_ Principal: \_\_\_\_\_ Date: This plan remains in effect for the \_\_\_\_\_ to \_\_\_\_ school year without change. Parent/ guardian: \_\_\_\_\_ Date: \_\_\_\_\_ Principal: \_\_\_\_\_ Date: \_\_\_\_\_ This plan remains in effect for the \_\_\_\_\_ to \_\_\_\_ school year without change. Parent/ guardian: \_\_\_\_\_\_ Date: \_\_\_\_\_ Principal: \_\_\_\_\_ Date: \_\_\_\_ This plan remains in effect for the \_\_\_\_\_ to \_\_\_\_ school year without change. Parent/ guardian:\_\_\_\_\_\_ Date: \_\_\_\_\_\_ Date:

his plan remains in effect for the	to	school year withou

\_\_ to \_\_\_\_\_ school year without change.

Parent/ guardian: \_\_\_\_\_ Date: \_\_\_\_\_

Principal: \_\_\_\_\_ Date: \_\_\_\_\_







# APPENDIX A (page 1 of 2)

## How to calculate lunchtime insulin using variable dose insulin scale

For a student using insulin pens or syringes, calculate a lunchtime insulin dose in one of two ways:

- FIXED dose: A set amount of insulin to match a set number of carbohydrates for each meal.
- RATIO: 1 unit of insulin for a specific number of carbohydrate grams (Number of carbs / Ratio = dose)

Before eating, always check blood sugar. If BG is:

- Within target range: Give the usual FIXED dose or calculate using RATIO and number of carbs in the meal.
- Too low: Treat the low blood sugar. When calculating the lunchtime insulin dose, **do not** include the carbohydrates used to treat the low.
- Too high: Add extra insulin (a correction) to the dose.

#### How to calculate a correction dose

- Adjustment scale: An amount of insulin is added (or subtracted, if BG is low) from the dose, depending on the BG level.
- Correction factor (CF; Also called insulin sensitivity factor, ISF): An estimate of how much 1 unit of rapid-acting insulin will lower BG for a specific person. To calculate the amount of insulin needed to correct a high blood sugar using this method, the formula is: [BG-6] divided by CF (correction factor)

•	The student's fixed dose of insulin for lunch is units for carbohydrates
•	The student's <b>ratio</b> is 1 unit of insulin for every of carbohydrates
	The student's correction factor is

Start with the dose for lunch	units (fixed dose)					
	1 unit of insulin pergrams of carbohydrates =					
Check BG.	Below	TARGET				
What range is	4 mmol/L					
it in?		-				
Then (add to						
OR subtract						
from) dose						







# APPENDIX A (page 2 of 2)

# How to calculate lunchtime insulin using variable dose insulin scale

## **Examples**

1. Susan has a ratio. This is her adjustment scale:

Lunch dose	1 unit per 10 grams of carbohydrates					
Lunchtime BG	Below 4 mmol/L	TARGET 4-7 mmol/L	7 – 10 mmol/L	10.1 – 14 mmol/L	14.1 – 17 mmol/L	Above 17
Adjustment ( – or +)	– 1 unit		+1 units	+2 units	+3 units	+4 units

On Monday, her BG is 11.5 mmol/L. She plans to eat 50 grams of carbs for lunch.

Insulin for food = 50/10 = 5 units Correction for BG + 2 units

Total insulin 7 units

On Tuesday, her BG is in her target range at 6.4 mmol/L. She plans to eat 45 grams of carbs for lunch.

Insulin for food = 45/10 = 4.5 units <u>Correction for BG + 0 units</u>

Total insulin 4.5 units

- 2. Max uses a correction factor rather than a scale:
  - His ratio is 9.
  - Correction factor is 2

The formula is [BG-6] / CF. Max's BG is 13.2 mmol/L and he plans to eat 50 grams of carbs for lunch.

Correction = 13.2 - 6 = 7.2/2 = 3.7

Round to the nearest ½ unit = 3.5 units

Insulin for food = 50/9 = 5.5 units <u>Correction for BG</u> + 3.5 units

Total insulin 9 units







# **APPENDIX B**

## **Using Continuous Glucose Monitors in School**

- A Continuous Glucose Monitor (CGM) is a monitoring device that is inserted every 6 to 7 days and automatically provides readings every 5 minutes, day and night. A sensor, inserted underneath the skin, it measures "interstitial glucose", or the glucose found in the fluid between cells. The sensor sends this information wirelessly to a monitor.
- A CGM provides a constant picture—a pattern as opposed to a "moment-in-time" snapshot that comes from intermittent fingerprick readings.
- A CGM does not replace traditional BG testing. Fingerpricks are still needed at least twice a day to
  calibrate the CGM, and are recommended before meals to guide insulin dosing, and to confirm any
  alerts that require treatment.
- If the CGM and meter results differ, the meter BG is considered the most reliable. Parents may choose to use the CGM reading before snacks and activity. That is an individual decision and depends on how accurate they consider the CGM to be. See the table below for guidance.
- BG readings are sent to an insulin pump or to a remote device where they can be tracked. Some families are able to access their child's CGM readings remotely on their smart phone. The results are available in real time and can also be uploaded and reviewed by parents at the end of the day.
- Some pumps have a feature called "Low Glucose Suspend" (LGS), where the pump will automatically stop delivering insulin for 2 hours if the BG is low and the user hasn't responded.
- While most students with a CGM will also be using an insulin pump, a CGM can also be used by those taking insulin by injection.

	ROUTINE	MANAGEMENT
MONITOR	Student wears a CGM:  Always Sometimes Never	Low BG alarm is set at: mmol/L     Low BG alarm should be confirmed with a BG check. Respond as per hypoglycemia section of this plan.
GLUCOSE MO	☐ The student is independent in their response to CGM results and alarms (excluding	<ul> <li>High BG alarm is set at: mmol/L OR □ No alarm set for highs</li> <li>High BG alarm should be confirmed with a BG check. Respond as per hyperglycemia section of this plan.</li> </ul>
nons ern	severe hypoglycemia)  Student needs help to respond to the CGM results and alarms	<ul> <li>Also, BG checks are to be routinely done at the following times (check all that apply).</li> <li>Before lunch</li> <li>Before all snacks</li> </ul>
CGM – CONTINUOUS	<ul> <li>□ Results are sent to:</li> <li>□ Insulin pump</li> <li>□ Remote device</li> <li>□ Parent smartphone</li> </ul>	<ul> <li>Before gym/activity</li> <li>Other</li> <li>If Low Glucose Suspend comes on, check BG by meter and follow care plan for action:</li> </ul>
CGM	<ul> <li>□ Low glucose suspend         (LGS) is active on pump.</li> <li>□ If yes, the threshold is set         at mmol/L.</li> </ul>	<ul> <li>If BG is below mmol/L, treat and re-check in 15 minutes.</li> <li>If BG is above mmol/L, cancel LGS. No treatment required.</li> </ul>





