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

	Name:	Date of birt	h:		School	year: 20_	to 20
	School: Grade: Homeroom teacher:						
	Home address:						
Z	Medical contact: Phone:						
ATIC	If student has another care plan, note here:					STUD	
DENTIFICATION	Designated staff to provide support with diabetes	care (minimum	2):			PHO	то
DEN	1						
=	2						
	3				_		
	Before-school care: No □ Yes □	Before-school care: No  Yes  After-school care: No Yes  Yes  Yes					
	School bus #: a.m p.m						
رم	Name	Relationsh	nip	Pref	erred phone #	Alterr	nate phone #
ACT.	1st						
CONTACTS	2nd						
8	3rd						
	SCHOOL must ensure a kit is accessible at all times	s (class gym fiel	d trins	lockdo	owns fire drill	s etc) Ad	lvice parents
S	<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.						
PPLIE	CONTENTS (check all that apply)		Wit stude		Classroom	Office	Other location(s)
SÜ	Blood glucose meter, test strips, lancets						
EMERGENCY KITS / SUPP	Fast-acting sugar (juice, glucose tabs, candy) for sugar	low blood					
Ξ	Carbohydrate snack(s)						
<u>&gt;</u>	Glucagon (expiry date:/)						
Ž	Sharps disposal container						
GE	Ketone strips/meter						
ER	Insulin pen, pen needles, insulin (in case of pump	tailure)					
Σ	Extra batteries for meter						
ш	Parents' names and contact numbers						
	Other:						







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

IME	Meal/snack	Blood glucose (BG) check	Insulin	Comments
				rt (if any) is needed for the various tasks:
- ASSIS	ance required;	S – Supervision ne	eaea; I – Inc	rependent
MERGE	NCY KIT LOCATIO	N(S):		
		MILD HYPOGLYC	EMIA (Low bl	lood sugar): Check, Treat, Repeat
			16	
	If DO	is under 4 mmol	/I · Treat the	a repeat RG check after 10.15 minutes
	If BG	The particular and the property of		n repeat BG check after 10-15 minutes ill under 4 mmol/L
	If BG	Tr	eat again if st	
	5555, 5965.	Treat and r	eat again if st epeat this cyc	ill under 4 mmol/L le until the BG is 4 or more
Usuals	5555, 5965.	Tr	eat again if st epeat this cyc	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:
	ymptoms of low	Treat and r	eat again if st epeat this cyc tudent are:	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets
☐ Shal	ymptoms of low	Treat and r	eat again if st epeat this cyc tudent are: bility/grouchi	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink
□ Shal	ymptoms of low kiness	Treat and r  blood sugar for st lache   Irrita	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles
☐ Shal	ymptoms of low kiness	Treat and r  Treat and r  blood sugar for st  lache   Irrita  ness   Weak	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles
☐ Shall☐ Hun☐ Con	ymptoms of low tiness	Treat and r  Treat and r  blood sugar for st  lache   Irrita  ness   Weak  r  ood sugar)	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles Other
☐ Shall☐ Hun☐ Con☐ YPERGL	ymptoms of low tiness	blood sugar for state and restauration blood sugar for state and restauration blood sugar for state and restauration blood sugar)  is above	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles Other
☐ Shai	ymptoms of low tiness	blood sugar for state and restauration blood sugar for state and restauration blood sugar for state and restauration blood sugar)  is above	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles Other
☐ Shali ☐ Hun ☐ Con ☐ YPPERGL	ymptoms of low tiness	blood sugar for state and restauration blood sugar for state and restauration blood sugar for state and restauration blood sugar)  is above	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue mmol/L, or it	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles Other  f student feels unwell.  ectones if BG is above mmol/L
☐ Shall☐ Hun☐ Con☐ IYPERGL	ymptoms of low tiness	blood sugar for state   Irrita   Inche   Irrita   Inche   Weak   Inche   Irrita   Inche   I	eat again if st epeat this cyc tudent are: bility/grouchi ness/fatigue mmol/L, or it nd/or check k	ill under 4 mmol/L cle until the BG is 4 or more  Treat with:  glucose tablets cup juice/regular soft drink Skittles Other  f student feels unwell.  ectones if BG is above mmol/L
☐ Shall☐ Hun☐ Con☐ YPERGL all pared or stude	ymptoms of low tiness	blood sugar for state   Irritations   Weak   Weak   Irritations   Weak   Irritations   Weak   Irritations   Irrita	tudent are: bility/grouchi ness/fatigue mmol/L, or it	Treat with:   glucose tablets   cup juice/regular soft drink   Skittles   Other
☐ Shall ☐ Hun ☐ Con ☐ HYPERGL Call parent For stude	ymptoms of low tiness	blood sugar for state   Irrita   Inche	tudent are: bility/grouchi ness/fatigue mmol/L, or ii nd/or check k	Treat with:   glucose tablets   cup juice/regular soft drink   Skittles   Other







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

	MILD-TO-MODERA	TE LOW BLOOD	SUGAR	SEVERE LOW BLOOD SUGAR
SYMPTOMS	$\square$ Sweating $\square$ Blurred	/grouchy vision ess/fatigue	☐ Dizziness ☐ Headache ☐ Paleness	Symptoms  Unresponsive or unconscious  Having a seizure  So uncooperative that you can't give juice or sugar by mouth
ACTION	Never leave a student we Treat the low block Do not send the state of	od sugar ON THE udent somewher the students who distributed by the students who distributed by the students when the students with symptomaps of fast-and preferences and eck BG again: bol/L, treat again and 10 to 15 minutes and 1 hour away, and 1 hour away, not	o their own checks of follow these steps:  ms  acting sugar and amounts)  as above.  s until BG is  give snack now action needed.	<ul> <li>What to do</li> <li>Place the student in recovery position.</li> <li>Have someone call 911. Then call parents.</li> <li>Stay with the student until ambulance arrives. Do not give food or drink (choking hazard).</li> <li>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> <li>HOW TO USE GLUCAGON</li> <li>Students 5 years old and younger: 0.5 mg = 0.5 mL</li> <li>Students 6 years and older: 1.0 mg = 1.0 mL</li> <li>Directions</li> <li>Remove cap</li> <li>Inject liquid from syringe into dry powder bottle</li> <li>Roll bottle gently to dissolve powder</li> <li>Draw fluid dose back into the syringe</li> <li>Inject into outer mid-thigh (may go through clothing)</li> <li>Once student is alert, give juice or fast-acting sugar</li> </ul>
				·







# 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 th Hunger Warm, flus		or this student are:	tion $\Box$		
ACTION	<ul> <li>Check BG. Even students who do their own checks may need help if they are unwell.</li> <li>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 fro school if blood sugar is high and they feel unwell, regardless of how old or independent they are.</li> </ul>					
	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 blood sugar (BG) rangetommol/L	Always check blood sugar when student shows symptoms of hypoglycemia.  If you are not able to check, treat as if blood sugar is low.  Student's blood sugar should be checked at these times each day:			
BLOOD GLUCOSE/SUGAR (BG) MONITORING	□ Student requires trained staff to do a blood sugar (BG) check and read the meter □ Student needs supervision to do a BG check and read the meter □ Student can do a BG check and read the meter □ Student can do a BG check and read the meter on their own  Location of glucose meter(s) □ With student □ Homeroom class □ Other(s)	Time  Before a.m. break Before lunch Before p.m. break Before leaving school  Other times:  Home-school communication method:  Daily blood sugar readings should be communicated to parents via:  Agenda Before method sugar readings form Time At before-school program Before sport or exercise  Other times:  Call parent if blood sugar is:  Below  Above  Does student wear a continuous glucose monitor (CGM)?			
BL	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			
<b>NUTRITION BREAKS</b>	☐ 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:			







TUDENT NAME:	Date:

	ROUTINE	MANAGEMENT
	BG meter and fast-acting	Notify parents whenever special activities are planned (for example, Terry Fox run, track and field day, field trip or other active event)
	sugar should ALWAYS be accessible during physical activities.	<ul> <li>No action needed before activity</li> <li>Check blood sugar before regular physical activity classes</li> <li>Check blood sugar before unplanned activity</li> </ul>
VITY	Risk of low blood sugar increases during/after physical activity.	Comments:
PHYSICAL ACTIVITY	The student may need extra BG check(s) and/or extra food.	If blood sugar is:
PHYSIC	<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>
	<ul> <li>□ Student does not take insulin at school.</li> <li>□ Student takes insulin at school by:         <ul> <li>□ pen injection</li> <li>□ pump</li> <li>□ syringe*</li> </ul> </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
	Insulin is given by:	□ Before afternoon snack □ Other
INSULIN	<ul> <li>Student, independently</li> <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, without an adult double-checking the dose.	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  * See www.bcchildrens.ca/health-info/coping-support/diabetes, Click on Basal-Bolus Insulin with MDI, then Bolus Calculators for School Lunches







STI	UDENT NAME:	Date:
ノロリ	ODLINI INAIVIL.	Date.

	Pre-authorizations by parents/guardians							
	<ul> <li>Consent to release information: I authorize and provide consent to the school staff to information in this plan for purposes related to the education, health and safety of m</li> <li>Displaying my child's photograph on paper notices or electronic format(s) so that visitors will be aware of my child's medical condition.</li> <li>Communicating with bus operators.</li> </ul>	ny child. This ma t staff, voluntee	y incluc					
	3. Sharing information in special circumstances to protect the health and safety of		Yes □	No 🗆				
CONSENT	Consent to transfer to hospital: I consent in advance to my child's being transported based on the judgment of school staff. I also permit a staff member to accompany me Please note: the school principal or designate shall decide if an ambulance is to be careful.	y child during tra	•	-				
8		,	Yes □	No 🗆				
	Consent to treatment: I am aware that school staff are not medical professionals and plan to the best of their abilities and in good faith. I approve of the management step this care plan, including administering glucagon if indicated.	•						
		,	Yes □	No 🗆				
		<b>Agreement to provide glucagon:</b> 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 injection.						
	Yes, glucagon can be given ☐ No	, glucagon canno	ot be gi	ven 🗆				
	Parent/guardian signature: Date:							
	Parent/guardian name (print): Relationship:							
	Student signature:							
	Heath care professional (HCP) signature: Date:							
O	HCP name (print): Role:							
ZATI	Principal signature:							
ORI	Principal name:		_					
AUTHORIZAT	Designated and trained staff (minimum 2):							
4	1							
	2							
	3							
	Staff trained and designated to administer glucagon:							







UDENT 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.

reviewed by the school, the parent(s) and, when	i 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:	
Principal:	Date:	
This plan remains in effect for the 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
CGM – CONTINUOUS GLUCOSE MONITOR	Student wears a CGM:  Always Sometimes Never  The student is independent in their response to CGM results and alarms (excluding severe hypoglycemia) Student needs help to respond to the CGM results and alarms  Results are sent to: Insulin pump Remote device Parent smartphone	<ul> <li>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.</li> <li>High BG alarm is set at: mmol/L OR</li></ul>
- WBO	□ Low glucose suspend (LGS) is active on pump. □ If yes, the threshold is set at mmol/L.	<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>





