Diabetes Management Plan for Boarding House – Insulin Injections

School:

click to add photo

First name: **Last name:** Date of birth: School Year:

Target range for glucose level is 4.0 - 8 mmol/L

NEVER LEAVE ALONE IF UNWELL . TREAT ON THE SPOT

Contact Details

GLUCOSE MONITORING

In addition to the daily schedule, monitoring of glucose levels and **Blood Ketone Levels** should be performed if the student is unwell.

HYPER / HIGH / UNWELL : See Page 2 **HYPO / LOW :** See Page 3

Low glucose levels to be confirmed by : Select **Type of Sensor :**

DAILY SCHEDULE // PLEASE GIVE INSULIN MINUTES BEFORE FOOD

Type of insulin dose (bolus) calculator: Select

Glucose levels will be checked routinely during the following times:

- Before breakfast, lunch, & dinner.
- Before bed.
- At midnight and 3 am (supervised by an adult).
- Any time student is showing or feeling signs of a "hypo", "hyper" or illness.

Is supervision/assistance required for Insulin injections :

Staff member/s allocated to supervise/assist:

Long acting insulin (Insulin Glargine) dose needs to be given at the same time each day.

When	Glucose Check	Insulin	Action	Responsible Person
Before Breakfast	Select	Select	Select	
Before Morning tea	Select	Select	Select	
Before Lunch	Select	Select	Select	
Before Afternoon Tea	Select	Select	Select	
Before Dinner	Select	Select	Select	
Before Supper	Select	Select	Select	
Before Bed	Select	Select	Select	
Midnight	Select	Select	Select	
3am	Select	Select	Select	

Preferred pre-bedtime and overnight glucose level range:

Perth Children's Hospital

diabetesWA by your side

LOW GLUCOSE LEVELS (Hypoglycaemia / Hypo)

Mild hypoglycaemia is common. ACTION is needed if the glucose level is less than 4.0 mmol/L.

HYPO KIT – Hypo kit should be kept with student at all times

Low glucose levels to be confirmed by : Select

LOW (HYPO) // Glucose level less than 4.0 mmol/L // **DO NOT DELAY TREATMENT.**

Symptoms: ☐ Feeling sick ☐ Pale ☐ Headache ☐ Shaky ☐ Sweaty ☐ Drowsy ☐

Student Conscious
(Able to eat hypo food)

→ **STEP 1:**
Give fast acting carbs:
_____

→ **STEP 2:** Recheck glucose level in Select If Glucose:
- Less than 4.0 repeat step 1.
- 4.0 or more, go to step 3.

→ **STEP 3**
Give sustaining carbs:
_____

Student Drowsy / Unconscious
(Unable to swallow/ choking risk).

→ FIRST AID
DRS ABCD
Stay with student.

→ **CALL AN AMBULANCE**
DIAL 000

→ ADMINISTER GLUCAGON
YES ☐ NO ☐
Dose: Select

→ CONTACT PARENT WHEN SAFE TO DO SO.
When student conscious/ alert, follow above steps.

FAST ACTING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

SUSTAINING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

- If the student requires more than 2 consecutive fast acting carbohydrate treatments, as per the instructions above, call the student's parent/carer. Continue hypo treatment if needed while awaiting further advice.
- All hypo treatment foods should be provided by the parent/carer.
- Ideally, packaging should be in serve size bags or containers and labelled as fast acting carbohydrate food and sustaining carbohydrate food.

SEVERE LOW/HYPO MANAGEMENT

Severe hypoglycaemia is not common.

Follow the instructions as above page for any episodes of severe hypoglycaemia.

DO NOT attempt to give anything by mouth to the student or rub anything onto the gums as this may lead to choking.

HIGH GLUCOSE LEVELS (Hyperglycaemia / Hyper)

ACTION is needed if the glucose level is 15mmol/L or above **BEFORE a meal / snack**

HIGH (HYPER) // Glucose level 15.0 mmol/L or above, before a meal/snack.

Symptoms: ☐ Feeling sick ☐ Thirsty ☐ Increased urine production ☐ Headache ☐ Irritable ☐ Lethargic

Student Well Unexplained high glucose level*.	CHECK BLOOD GLUCOSE At next scheduled time.	Allow unrestricted water intake and access to toilets.	AT NEXT BLOOD GLUCOSE CHECK If glucose 15.0 mmol/L or above, CHECK KETONES.
Student Unwell Unexplained high glucose level* with cramps or vomiting.	CHECK BLOOD KETONES If less than 1.0, no diabetes action required.	If Ketones 1.0 or above, CONTACT PARENT.	If unable to contact parent, **CALL AMBULANCE 000**

* Although not ideal, glucose levels above target range are not unusual.
* Glucose levels may be above target if food has been consumed within the last two hours.
* If insulin has been given, allow two hours for glucose levels to return to target.
* Remember, if the student is frequently above 15mmol/L to contact the parent/carer.

KETONES

* Ketones occur most commonly when there is not enough insulin in the body.
* Ketones are produced when the body breaks down fat for energy.
* Ketones can be dangerous in high levels.

Check blood ketone level if:

* Student is unwell or Glucose levels remain at 15.0 mmol/L or above for two or more consecutive glucose checks.

GLUCOSE MONITORING

Glucose levels outside of the target range are common.

Glucose levels will vary day-to-day and be dependent on a number of factors such as:

* Insulin dose
* Illness/ infection
* Growth spurts
* Type/quantity of food
* Excitement / stress
* Level/duration/type of activity

FINGER PRICKS

The student should always wash and dry their hands before doing a finger prick check.

Is the student able to do their own glucose check independently? Select

If NO, the responsible staff member needs to: Observe

A finger prick is needed when:

* TAG (Trend, Arrow, Glucose) unavailable
* Symptoms don't match the sensor reading
* Sensor has fallen off

* Further action is required if glucose level is less than 4.0 mmol/L or 15.0 mmo/L or above.
* If the meter reads 'LO' this means the glucose level is too low to be measured by the meter - see page 4
* If the meter reads 'HI' this means the glucose level is too high to be measured by the meter - see page 5

SENSOR GLUCOSE CHECKING

The student is wearing a sensor : Select

* CGM and FGM consist of a small sensor that sits under the skin and measures glucose levels in the fluid surrounding the cells (interstitial fluid).
* **These devices are NOT compulsory management tools.**
* With CGM, a transmitter sends data to either a receiver, phone app or insulin pump.
* With FGM, the device will only give a glucose reading when the sensor disc is scanned by a reader or phone app
* A sensor glucose reading can differ from a finger prick blood glucose reading during times of rapidly changing glucose levels e.g. eating, after insulin administration, during exercise.
    * **Is the student able to change the Sensor ?** Select

If NO, please enable your child to learn or practice these skills.

PHYSICAL ACTIVITY

A blood glucose meter and hypo treatment should always be available.

* Physical activity may alter glucose levels.
* Physical activity should not be undertaken if glucose levels are less than 5.0 mmol/L.
* Vigorous activity should not be undertaken if the student is unwell or ketones are 1.0 mmol/L or above.
* The student may require an extra serve of carbohydrate food before every 30 minutes of planned physical activity or swimming as provided by the family.

Please check glucose levels 10 - 15 minutes prior to the activity

4.0 - 5.0 mmols/L

Once above 5 exercise can start.

5.1 - 8.0 mmols/L

Exercise can be started.

8.1 - 14.9 mmol/L

Exercise can be started.

15.0 mmols/L or above

Check Blood Ketone Levels

Ketones less than 1.0 mmol/L, exercise can start

Ketones 1.0 mmol/L or above, CONTACT PARENT & follow the plan on Page 3

If glucose levels are consistently below 3.9mmol/L or above 15.0mmol/L parents should be contacted to discuss a change to insulin doses.

CHECKLIST FOR FAMILIES

MEALS AND SNACKS

Discuss food and meal needs with schools so that they can make necessary arrangements with camp catering staff. Arrange for extra fast and slow acting carbohydrate food to be available to treat hypos and prepare for exercise. Overnight access to carbohydrate containing foods will also be necessary. For example: If access to food is limited during an extended activity the student will need to carry or have access to additional carbohydrates at all times.

SUPPLIES

Arrange for the supplies your child will need. In most cases, they will need:

- ☐ Long acting insulin pens
- ☐ Fast acting insulin pens
- ☐ Lancets / finger pricker
- ☐ A blood glucose meter
- ☐ Glucose test strips
- ☐ A blood ketone meter
- ☐ Ketone test strips
- ☐ Hypo foods and snacks
- ☐ Glucagon
- ☐ Extra batteries / charging cable
- ☐ Spare Sensors
- ☐ A water proof pouch for the smart phone, if required
- ☐ A means to keep the insulin cool in hot weather if a refrigerator is not available.

Make arrangements so your child or staff can contact you. The family will be the contact point to discuss glucose levels and insulin doses while at camp. The family can contact PCH as needed for advice.

CHECKLIST FOR SCHOOLS

SKILLS REFRESHER

Revise and refresh diabetes management skills for staff. Check that all staff responsible for the student's care at the boarding house know when to call for help, the emergency medical evacuation procedures, and are familiar with correct injection technique so they can appropriately supervise the student.

Are staff:

Familiar with blood glucose monitoring

Familiar with injection technique

Confident to treat a hypo

Familiar with blood ketone testing

Familiar with medical emergency procedures

Completed Glucagon training?

MEALS AND SNACKS

Does the student have coeliac disease?

*Seek parent/carer advice regarding appropriate food and hypo treatments.

Provide the family with a detailed meal program (including estimated timing of meals and access to food outside of these times). Carbohydrate foods should be served at every meal and snack time. For example; if meal times fluctuate each day, some additional planning may be required.

Additional carbohydrate foods are needed for exercise and must be readily available where the exercise is taking place.

HYPO KIT

A hypo kit is a pack containing fast acting and sustaining carbohydrates. Arrange for a hypo kit/s to be available at all time. In cases of severe hypo, follow the Diabetes Management Plan "Low Glucose Levels" on page 2.

The student should have a hypo kit on their person at all times.

When medical help is delayed, a trained staff member must be available to give a glucagon injection in cases of emergency. As per page 2.

NOTE

- This document is to be read in conjunction with the Type 1 Diabetes Management Plan & Checklist for Boarding House and your education sector's boarding house policy.
- It is recommended the schools arrange a meeting between relevant school staff, boarding staff and family to discuss the contents of this document well in advance of commencing boarding.
- This form is to be completed in consultation with the family. If needed, families should speak to theirs at their treating team for assistance.

AGREEMENTS

PARENT/CARER

- [ ] I have read, understood and agree with this plan.
- [ ] I give consent to the school to communicate with the Diabetes Treating Team about my child's diabetes management at camp.
- [ ] I acknowledge that school staff who administer insulin and / or glucagon do so:
  1) after receiving training from their clinical treating team.
  2) to the best of their ability.

NAME

FIRST NAME (PLEASE NOTE) FAMILY NAME (PLEASE NOTE)

SIGNATURE DATE

SCHOOL REPRESENTATIVE

- [ ] I have read, understood and agree with this plan.

NAME

FIRST NAME (PLEASE NOTE) FAMILY NAME (PLEASE NOTE)

ROLE

- [ ] Principal
- [ ] Associate principal
- [ ] Other (please specify)

SIGNATURE DATE

DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE NOTE) FAMILY NAME (PLEASE NOTE)

SIGNATURE DATE