

# DIABETES MANAGEMENT PLAN 2024

## Multiple daily injections

### SCHOOL SETTING

Use in conjunction with Diabetes Action Plan. This has been developed by specialist diabetes clinicians.

*As kaitiaki (carers/guardians) of diabetes related services, it is a collective responsibility to establish an environment that facilitates a pathway for people with diabetes to navigate te ao mate huka - the world of diabetes<sup>1</sup>.*

Student's name:	Age:	Date:
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### RESPONSIBLE STAFF

School staff who have voluntarily agreed to undertake training and provide support with diabetes care to the student.

Responsible staff will need to receive training on how to check glucose levels and how to administer insulin via pen or syringe if required.

A Medication Authority Form may be required if school staff are required to administer / supervise insulin given via the pump or injection.

List below and tick those that apply.

Staff's name/s:	Glucose checking	Insulin administration

### INSULIN ADMINISTRATION

The student may need an injection of insulin at morning tea time and / or at lunchtime.

Is supervision required?      Yes      No

If yes, the responsible staff need to      Remind      Observe      Assist      Administer injection

Responsible staff will need to receive training on how to administer insulin injections.

Type of injection device (please tick)      Pen      Syringe

The location in the school where the injection is to be : \_\_\_\_\_

*Please note, injections should be administered wherever the child feels comfortable.*

### HOW MUCH INSULIN TO BE ADMINISTERED

Parents will explain carbohydrate ratios and correction doses. It is the responsibility of the parent / caregiver to keep the centre up to date with changes to insulin doses.

Calculate the amount of insulin to be administered using the following ratios or the provided sliding scale:

	MORNING TEA	LUNCH	OTHER
<b>CARB RATIO</b> (1 unit: g)			
<b>CORRECTION RATIO</b> (1 unit: mmol/L)			

# GLUCOSE LEVEL (GL) CHECKING

Target range for glucose levels (GLs): 4 – 8 mmol/L

- **GL results outside of this target range are common**
- GL check should be done where the student is, whenever needed
- The student should always wash and dry their hands when doing a BGL check via finger prick.

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

- Insulin Dose
- Excitement / stress
- Age
- Growth spurts
- Type/quantity of food
- Level of activity
- Illness / infection

Is the student able to do their own glucose check independently?	Yes	No		
If NO, the responsible staff member needs to	Do the check	Assist	Observe	Remind

### Times to check GLS (tick all those that apply)

- Anytime, anywhere
- Before snack
- Before lunch
- Before activity
- Before exams/tests
- When feeling unwell
- Anytime hypo suspected
- Beginning of afterschool care
- Other routine times - please specify:

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A finger prick (blood glucose check) is required if GL is less than 4.0 mmol/l or greater than 15.0 mmol/l. Refer to diabetes action plan.

### AND/OR

If the meter reads **LO** this means the BGL is too low to be measured by the meter  
Follow the **Hypoglycaemia** (Hypo) treatment on Diabetes Action Plan

If the meter reads **HI** this means the BGL is too high to be measured by the meter  
Follow **Hyperglycaemia** (Hyper) treatment on Diabetes Action Plan

## SENSOR GLUCOSE (SG) MONITORING

Some students will be wearing a small sensor that sits under the skin and measures glucose levels in the fluid surrounding the cells (interstitial fluid).

A sensor glucose (SG) 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. Therefore, **LOW** or **HIGH** SG readings must be confirmed by a finger prick blood glucose check. Hypo treatment is based on a blood glucose finger prick result.

The child is wearing Continuous Glucose Monitor (CGM) or Intermittently Scanned Continuous Glucose Monitor (ISCGM)

Dexcom G6®

Freestyle Libre - ISCGM

Dexcom G7®

Aidex CGM

Guardian™ Connect

Guardian™ Sensor 3

Guardian™ Sensor 4

- With CGM, a transmitter sends data to either a receiver, phone app or insulin pump.
- An ISCGM device will only give a glucose reading when the sensor disc is scanned by a reader or phone app.
- These devices are **not** compulsory management tools.

### CGM ALARMS

- CGM alarms may be 'on' or 'off'.
- If 'on' the CGM will alarm if interstitial glucose is low or high.

**ACTION:** Check finger prick blood glucose level (BGL) and if less than 4.0 mmol/L, treat as per Diabetes Action Plan for treatment.

Alerts for high glucose levels or in response to changing glucose trends are not recommended in this setting

### USE AT SCHOOL

- Staff are not expected to do more than the current routine diabetes care as per the student's Diabetes Action and Management plans.
- Staff do not need to put CGM apps on their computer, smart phone or carry receivers.
- Parents/carers are the primary contact for any questions regarding CGM/ISCGM use.
- Some CGM/ISCGM devices can be monitored remotely by family members. They should only contact the School if they foresee a prompt response is required.
- If the sensor/transmitter falls out, staff are required to keep it in a safe place to give to parents/carers.
- The sensor can remain on the student during water activities.

Student's name: \_\_\_\_\_

# LOW BLOOD GLUCOSE LEVELS

(Hypoglycaemia / Hypo)

Follow the student's Diabetes Action Plan if BGL less than 4.0 mmol/L.

Mild hypoglycaemia can be treated by using supplies from the student's HYPO BOX.

Hypo box location/s: \_\_\_\_\_

## HYPO BOX

### FAST ACTING CARBOHYDRATE FOOD

### AMOUNT TO BE GIVEN

FAST ACTING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

### LONG-ACTING CARBOHYDRATE FOOD

### AMOUNT TO BE GIVEN

LONG-ACTING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

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

Mild hypoglycaemia is common. However, if the student is having more than 3 episodes of low BGLs at School in a week, make sure that the parent/carer is aware.

## SEVERE HYPOGLYCAEMIA (HYPO) MANAGEMENT

**Severe hypoglycaemia is not common.**

Follow the student's Diabetes Action Plan for any episode 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.

If the school is located more than 30 minutes from a reliable ambulance service, then staff should discuss Glucagon injection training with the student's Diabetes Treating Team or with family. [A video resource is available here.](#)

# HIGH BLOOD GLUCOSE LEVELS

(Hyperglycaemia / Hyper)

- Although not ideal, GLs above target range are common.
- If BGL is 15.0 mmol/L or more, follow the student's Diabetes Action Plan.
- If the student is experiencing frequent episodes of high BGLs at school, make sure the parent/carer is aware.

## 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.
- Ketones are made more quickly when using insulin pump therapy.

You will be required to check the student's blood ketone level if:

- Student is unwell or
- BGL is above 15.0 mmol/L twice in 2 hours

If blood ketones are more than 1.0 mmol/L, follow action for positive ketones on the student's Diabetes Action Plan.

## EATING AND DRINKING

- The student should not go longer than 3 hours without eating a carbohydrate meal or snack.
- Younger students will require supervision to ensure all food is eaten.
- The student should not exchange food/meals with another student.
- Seek parent/carer advice regarding appropriate foods for parties / celebrations that are occurring at school.
- Always allow access to drinking water and toilet (high blood glucose levels can cause increased thirst and extra toilet visits).
- Does the student have coeliac disease?

No

Yes\*

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

# PHYSICAL ACTIVITY AND SWIMMING

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

- Check glucose level before physical activity.
- Physical activity may lower glucose levels.
- The student may require an extra 10g of carbohydrates before every 30 minutes of planned physical activity or swimming as provided in the Activity Food Box.

Activity Food Box location/s: \_\_\_\_\_

## ACTIVITY FOOD BOX

CARBOHYDRATE FOOD TO BE USED

AMOUNT TO BE GIVEN

CARBOHYDRATE FOOD TO BE USED	AMOUNT TO BE GIVEN

- Physical activity should not be undertaken if BGL less than 4.0 mmol/L.
- Refer to the Diabetes Action Plan for hypo treatment.
- Vigorous activity should **NOT** be undertaken if BGL is greater than or equal to 15.0 mmol/L **AND** blood ketones are greater than or equal to 1.0mmol/L **AND/OR** the student is unwell.

## EXCURSIONS / TRIPS

It is important to plan for extracurricular activities.

Consider the following:

- Ensure blood glucose meter, blood glucose strips, ketone strips, insulin, hypo and activity food are readily accessible.
- Plan for meal and snack breaks.
- Always have hypo treatment available.

## CAMPS

It is important to plan for school camps and consider the following:

- Parents/carers need to be informed of any school camps at the beginning of the year.
- Checklists for whānau and school are [available here](#).
- A separate and specific Camp Diabetes Management Plan is required.

## EXAMS

- GL should be checked before an exam.
- GL should be greater than 4.0 mmol/L before exam is started.
- Blood glucose meter, monitoring strips, hypo treatments and water should be available in the exam setting.
- Continuous Glucose Monitoring (CGM) or Intermittently Scanned Continuous Glucose Monitoring (ISCGM) devices and receivers (smart phones) should be available in the exam setting.
- Extra time will be required if a hypo occurs or for toilet privileges.

## APPLICATIONS FOR SPECIAL CONSIDERATION

Students with diabetes mellitus are eligible to apply to NZQA for "Special Assessment Conditions" (SAC) on medical grounds. Students must complete a "Student application for entitlement to special assessment conditions". This form can be downloaded from the New Zealand Qualification Authority (NZQA) website. The application should be lodged at the beginning of Year 11 and 12. For more information on the Special Assessment Conditions process please go to [www.nzqa.govt.nz/](http://www.nzqa.govt.nz/)

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## EXTRA SUPPLIES

Provided for diabetes care at the school by parent/carer

- Insulin and syringes / pens / pen needles
- Finger prick device
- Blood glucose meter
- Blood glucose strips
- Blood ketone strips
- Sharps container
- Hypo food
- Activity food
- Spare battery for blood glucose meter
- Consider charger for glucose monitoring device

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# 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 student's diabetes management at school.

First name \_\_\_\_\_ Family name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## SCHOOL REPRESENTATIVE

I have read, understood and agree with this plan.

First name \_\_\_\_\_ Family name \_\_\_\_\_

Role      Principal      Supervisor      Other (please specify) \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

*This document has been developed by Specialist Diabetes Clinicians.  
If you have concerns please contact the child's diabetes treating team.*