DIABETES MANAGEMENT PLAN 2021
Twice daily injections

SCHOOL SETTING

Use in conjunction with Diabetes Action Plan. This plan should be reviewed every year.

Student's name:	Age:	Date:

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 is on two injections of insulin per day. The student may require an additional injection of insulin 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 given _____

HOW MUCH INSULIN TO BE ADMINISTERED

Staff responsible for administering insulin will need to be taught how to calculate the amount of insulin to be administered using carb and correction ratios.

Calculate the amount of insulin to be administered using the following ratios:

	BEFORE LUNCH
CORRECTION RATIO (1 unit: mmol/L)	

It is the responsibility of the parent / caregiver to keep the centre up to date with changes to insulin doses.

BLOOD GLUCOSE LEVEL (BGL) CHECKING

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

- BGL results outside of this target range are common
- BGL check should be done where the student is, whenever needed
- The student should always wash and dry their hands before doing the BGL check.

Blood 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 blood glucose check independently? ☐ Yes ☐ No

If NO, the responsible staff member needs to ☐ Do the check ☐ Assist ☐ Observe ☐ Remind

Times to check BGLS (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 _____

FURTHER ACTION IS REQUIRED IF

BGL is **less than 4.0 mmol/L or greater than or equal to 15.0 mmo/L.** Refer to Diabetes Acton Plan

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 Flash Glucose Monitor (FGM)

☐ Dexcom G6® ☐ Freestyle Libre

☐ Guardian™ Connect ☐ Guardian™ Sensor 3

- 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.

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

- FGM device does not have alarm settings.

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/FGM use.
- Some CGM/FGM 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.

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

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.

HIGH BLOOD GLUCOSE LEVELS

(Hyperglycaemia / Hyper)

- Although not ideal, BGLs 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

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 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 blood 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

- 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 / INCURSIONS

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.
- A separate and specific Camp Diabetes Management Plan is required.
- Parents/carers should request a Camp Diabetes Management Plan from their Diabetes Treating Team.
- The student's Diabetes Treating Team will prepare the Camp Diabetes Management Plan and require at least 4 weeks' notice to do so.
- Parents/carers will need a copy of the camp menu and activity schedule.
- At least 2 responsible staff attending the camp should have a general
- Staff need an understanding of type 1 diabetes and the support that the student requires to manage their condition for the duration of the camp.
- If the camp location is more than 30 minutes from a reliable ambulance service, Glucagon injection training will be required.
- School staff will need to discuss any training needs at least 4 weeks before the camp with the student's parents/carers or Diabetes Treating Team.

EXAMS

- BGL should be checked before an exam.
- BGL 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 Flash Glucose Monitoring (FGM) 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/

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

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 _____

DIABETES TREATING MEDICAL TEAM

First name _____ Family name _____

Signature _____ Date _____