

DIABETES MANAGEMENT PLAN 2024

Twice daily injections

EARLY CHILDHOOD CENTRE

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 diabetes¹.

Child's name:	Age:	Date:
---------------	------	-------

RESPONSIBLE STAFF

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

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

The Centre manager /director is responsible to ensure the appropriate documentation is completed for staff who 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 child is on two injections of insulin per day. The child may require an additional injection of insulin at lunchtime.

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: _____

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

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 a correction ratio or correction chart. Parents will explain 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 correction chart:

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

GLUCOSE LEVEL (GL) CHECKING

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

- **GL results outside of this target range are common**
- GL check should be done where the child is, whenever needed
- The child 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

Times to check GLs (tick all those that apply)

Anytime, anywhere

Before snack

When feeling unwell

Before activity

Before lunch

Anytime hypo suspected

Other routine times - please specify:

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 children 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[®]

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 CENTRE

- Staff are not expected to do more than the current routine diabetes care as per the child'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 Centre 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 child during water activities.

LOW BLOOD GLUCOSE LEVELS

(Hypoglycaemia / Hypo)

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

Mild hypoglycaemia can be treated by using supplies from the child'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 child requires more than 2 consecutive fast acting carbohydrate treatments, as per their Diabetes Action Plan, call the child'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 child is having more than 3 episodes of low BGLs at Centre in a week, make sure that the parent/carer is aware.

SEVERE HYPOGLYCAEMIA (HYPO) MANAGEMENT

Severe hypoglycaemia is not common.

Follow the child's Diabetes Action Plan for any episode of severe hypoglycaemia.

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

If the centre is located more than 30 minutes from a reliable ambulance service, then staff should discuss Glucagon injection training with the child'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 child's Diabetes Action Plan.
- If the child is experiencing frequent episodes of high BGLs at Centre, 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 child's blood ketone level if

- Child 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 child's Diabetes Action Plan.

EATING AND DRINKING

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

No Yes*

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

PHYSICAL ACTIVITY, ACTIVE OUTDOOR PLAY 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 child 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 child 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.

EXTRA SUPPLIES

Provided for diabetes care at the Centre by parent/carer for back up or in the case of a Civil Defence Emergency

Insulin and syringes / pens / pen needles

Finger prick device

Blood glucose meter

Blood glucose strips

Blood ketone strips

Sharps container

Hypo food

Activity food

Consider Batteries and / or charger for meter or glucose monitoring device

AGREEMENTS

PARENT/CARER

I have read, understood and agree with this plan.

I give consent to the Early Childhood Centre to communicate with the Diabetes Treating Team about my child's diabetes management at Centre.

First name _____ Family name _____

Signature _____ Date _____

CENTRE REPRESENTATIVE

I have read, understood and agree with this plan.

First name _____ Family name _____

Role Manager 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.*