



## SCHOOL CAMP MANAGEMENT CHECKLISTS AND PLANS FOR STUDENTS WITH DIABETES

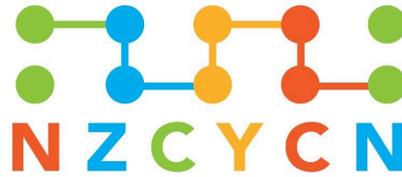
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It is important that any child with diabetes can fully participate in the school curriculum. This involves school camps and excursions, regardless of whether it is a day event or overnight. For these to be successful, preparation is paramount. The following guideline includes checklists of things that both family and whānau need to consider as well as the school. This guide also contains a Camp Management Plan that relates to a *specific* camp or excursion. A Camp Management Plan is intended to address the issues that can arise on camps, primarily around activity levels, different meal plans, and overnight management. It is anticipated that a different management plan is needed for each event. These should be used in conjunction with the student's diabetes action plan (hypo- and hyper-management) that will already be in place.

Camp staff (volunteer and/or school personnel) need to be familiar with diabetes and the needs of the student prior to the camp or excursion. This education can be carried out by parent/caregiver or health professionals. Parents need to meet with school staff several weeks prior to the event to discuss these documents and an adult must be nominated to be in charge of the safety and health needs of the student with diabetes.

Key areas for consideration and discussion between families/whānau and schools include:

- Diabetes Education
- Camp Activities – Programme
- Camp Meal Plan
- Diabetes Supplies and Additional Food Supplies
- Contact Details
- Diabetes Emergencies
- School Action Plan



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### Pre-Camp Checklist for Families

<b>Does the student know:</b>			
<b>Glucose Levels</b>			
How to check glucose levels using their meter and CGM device? E.g. using their CareSens Dual BGL meter and a Libre or Dexcom or Guardian if they are using one?	Yes	No	With Support
How to check ketone levels?	Yes	No	With Support
Do they recognise their own hypoglycaemia symptoms?	Yes	No	
How to treat/manage hypoglycaemia?	Yes	No	With Support
How to treat/manage high glucose levels?	Yes	No	With Support

<b>Insulin</b>			
How to calculate a food bolus?	Yes	No	With Support
How to calculate a correction bolus?	Yes	No	With Support
How to dial up and give insulin using pens/syringes?	Yes	No	With Support

<b>If using a glucose monitoring device does the student know:</b>			
How to respond to arrows?	Yes	No	With Support
When a finger prick is required?	Yes	No	With Support
How to insert a new sensor?	Yes	No	With Support

<b>If a pump user does the student know:</b>			
How to suspend and/or disconnect their pump?	Yes	No	With Support
How to give a food or correction bolus on their pump?	Yes	No	With Support
Use temporary basals?	Yes	No	With Support
Troubleshoot pump alarms or errors?	Yes	No	With Support
Change infusion set?	Yes	No	With Support

*If “No” or “With Support”, consider whether the student can be upskilled to be able to do these skills or how these may be managed in a camp setting.*



## **Pre-Camp Considerations for Families**

Camps require additional planning for families and whānau. This ensures that the student can enjoy a camp in a safe manner and parents, caregivers, and camp staff can be confident with the plan in place.

### **Diabetes Education**

Staff attending the camp need to have an understanding of diabetes prior to the camp. They don't need to know the same amount of information as a parent does, but the more information they have the more confident everyone will feel. Identifying some friends/classmate who also know that the student has diabetes and can seek help when needed can be helpful. An adult does need to be identified for additional supervision that is required.

### **Camp Activities – Programme**

Ask the school to obtain the camp programme. This will typically have been established well prior to the camp occurring (unless of significant weather changes). Activity levels are usually much higher than usual when at camp, and therefore adjustments to insulin doses will be required. If you have the programme, you can discuss with your diabetes team for specific recommendations.

### **Camp Meal Plan**

Similarly to the programme, the camp menu will likely have been established prior to the camp. If you have a menu you can make informed and educated decisions about carbohydrate amounts and portion sizes as well as whether adjustments may need to be made (e.g., know your child won't eat a meal but will require carbohydrates). If you can provide a pictorial carbohydrate counter or an "app" this can reduce the pressure for everyone.

### **Diabetes Supplies and Additional Food Supplies**

It is important that you provide all diabetes supplies (and spares) including hypo management supplies. As well as hypo management, supplies you may need to provide additional carbohydrate containing foods for activities or to maintain overnight glucose levels.

### **Contact Details**

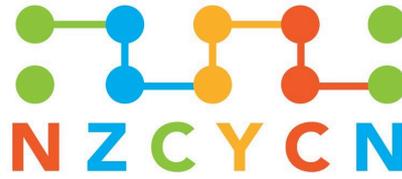
The camp staff need to know how to contact all relevant parties when at camp. This includes parents and caregivers as well as the diabetes team and after-hours support numbers if available. Does the camp have mobile reception at all times? If not, have you got a backup plan for maintaining contact?

### **Diabetes Emergencies**

There needs to be a conversation with the school about how a diabetes emergency is to be managed. Having an adult trained in glucagon administration is the preferred option. An ambulance should be called in the case of a severe hypo. Depending on the location of the camp this may take some time to arrive.

### **School Action Plan**

Ensure that the school has an up-to-date school action plan. This is a personalised flow chart for managing hypoglycaemia and hyperglycaemia and is based on the insulin delivery device that the student uses (e.g., injections or insulin pump).



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### Checklist for Schools

Diabetes management does require additional levels of management and oversight. It is important that there are identified adult/s who can provide this support for the student.

<b>Does a member of the camp staff know:</b>			
How to check glucose levels using a meter and GM device?	Yes	No	
How to check ketone levels?	Yes	No	
How to interpret glucose and ketone levels?	Yes	No	
How to treat/manage hypoglycaemia?	Yes	No	
How to treat/manage high glucose levels?	Yes	No	
How to calculate a food bolus dose?	Yes	No	
How to calculate a correction bolus dose?	Yes	No	
How to administer an insulin injection?	Yes	No	
How to supervise insulin injection?	Yes	No	

<b>If the student is a pump user. Does a staff member know:</b>			
How to suspend or disconnect a pump?	Yes	No	
How to administer a bolus on a pump?	Yes	No	
How to fill an insulin cartridge and change infusion set ?	Yes	No	
How to use an insulin pen in case of pump failure?	Yes	No	

<b>In an emergency situation, does a staff member know:</b>			
How to administer a glucagon injection?	Yes	No	

### Pre-Camp Considerations for Schools

Camps require additional planning for school personnel. This ensures that the student can enjoy a camp in a safe manner and schools as well as parents and caregivers can be confident with the plan in place.

#### Diabetes Education

Camp staff need to have an understanding of diabetes prior to the camp. They don't need to know the same amount of information as a parent does, but the more information they have the more confident everyone will feel. Identifying some friends/classmate who also know that the student has diabetes and can seek help when needed can be helpful. An adult does need to be identified for additional supervision that is required.



### **Camp Activities – Programme**

Provide the family with the camp programme. Activity levels are usually much higher than usual when at camp, and therefore adjustments to insulin doses will be required. By providing the programme to parents/caregivers they can provide specific recommendations.

### **Camp Meal Plan**

Provide the family with the camp menu and expected timing of meals. If the family have a menu they can provide clearer guidance about portion sizes as well insulin doses. Carbohydrate foods should be served at every meal and snack time. Ask the parents/caregivers if they can provide a pictorial carbohydrate counter or an “app” this can reduce the pressure for everyone.

### **Diabetes Supplies and Additional Food Supplies**

Families should provide all diabetes supplies (and spares) including hypo management supplies. As well as hypo management supplies the family should provide additional carbohydrate containing foods for activities or to maintain overnight glucose levels. Ensure that food is allowed in the sleeping rooms (this is a medical requirement).

### **Contact Details**

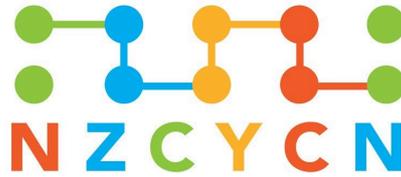
Know who camp staff can contact to discuss any diabetes concerns whilst at camp. This includes parents and caregivers as well as the diabetes team and after-hours support numbers if available.

### **Diabetes Emergencies**

There needs to be a conversation with the family/whānau about how a diabetes emergency is to be managed. Having an adult trained in glucagon administration is the preferred option. An ambulance should be called in the case of a severe hypo. Depending on the location of the camp this may take some time to arrive.

### **School Action Plan**

Ensure that the student has an up-to-date school action plan. This is a personalised flow chart for managing hypoglycaemia and hyperglycaemia and is based on the insulin delivery device that the student uses (e.g., injections or insulin pump).

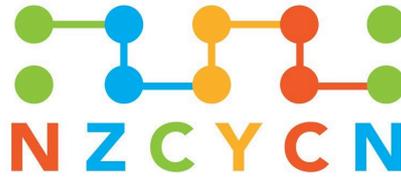


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### School Camp Management Plan for Students with Diabetes

This Camp Management Plan is to be used alongside “pre-camp checklists” and the school action plan. Parents/caregivers should meet with the school to discuss the camp or excursion well before the event. This Management Plan is completed in consultation with the family and with the diabetes clinical team if required.

<b>Student's name:</b>		<b>Age:</b>	<b>School Year:</b>		
<b>RESPONSIBLE STAFF:</b>					
<b>Staff name/s:</b>					
<b>Staff name/s:</b>					
<b>Staff name/s:</b>					
<b>Blood Glucose Checking</b>					
<b>Target ranges for blood glucose levels (BGLs): 4 – 8 mmol/L</b>					
BGL results outside of this target range are common					
BGL checks should be done where the student is, whenever needed					
<b>Always ensure the student's hands have been washed and dried before doing the BGL check</b>					
Is the student able to check glucose levels?		Yes	No	With Support	
Is the student able to identify their own hypoglycaemia symptoms?		Yes	No		
<b>Times to check BGLS</b>					
<input type="checkbox"/>	Anytime, anywhere	<input type="checkbox"/>	Before meals & snacks	<input type="checkbox"/>	When feeling unwell
<input type="checkbox"/>	Before activity	<input type="checkbox"/>	Before Bed	<input type="checkbox"/>	Overnight _____ pm
<input type="checkbox"/>	Upon waking	<input type="checkbox"/>	Overnight _____ pm	<input type="checkbox"/>	Any time hypo suspected
<input type="checkbox"/>	Other routine times				
<b>Preferred pre-bed BGL target range:</b>					
<b>Management if glucose level is below preferred target range:</b>					
<b>Glucose Level:</b>	<b>Carbohydrate food to be used:</b>		<b>Amount to be given:</b>		



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<b>Preferred overnight BGL target range:</b>		
<b>Management if glucose level is below preferred target range:</b>		
<b>Glucose Level:</b>	<b>Carbohydrate food to be used:</b>	<b>Amount to be given:</b>

### 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

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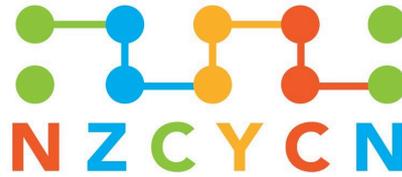
If the meter reads **LO** this means the BGL is too low to be measured by the meter

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

<b>Sensor Glucose (SG) Monitoring</b>			
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 student is wearing a glucose sensor?	Yes	No	
Type:			
<ul style="list-style-type: none"> <li>• With CGM, a transmitter sends data to either a receiver, phone app or insulin pump.</li> <li>• 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.</li> </ul>			
CGM ALARMS			
<ul style="list-style-type: none"> <li>• CGM alarms may be 'on' or 'off'.</li> <li>• If 'on' the CGM will alarm if interstitial glucose is low or high.</li> </ul>			
<b>ACTION:</b> Check finger prick blood glucose level (BGL) and if less than 4.0 mmol/L, treat as per Diabetes Action			



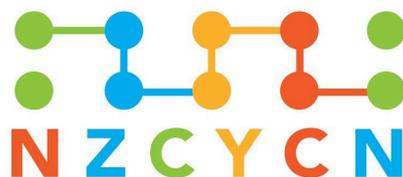
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Plan for treatment.

- FGM device does not have alarm settings

#### **USE OF SENSOR GLUCOSE MONITORING AT CAMP**

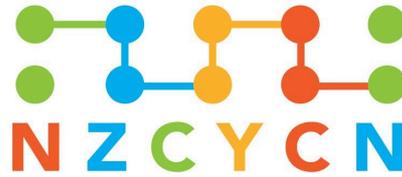
- Sensor glucose monitoring can be beneficial in a camp environment, although staff are not expected to do more than the current routine diabetes care as per the student's Diabetes Action and Management plans.
- Staff do not need to put CGM apps on their computer, smart phone or carry receivers.
- Parents/carers 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.



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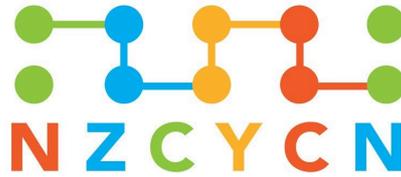
<b>Insulin Administration</b>						
<b>The student will need insulin at main meals and possibly snack times</b>						
Type of device	Syringe		Pen		Pump	
Is the student able to calculate own insulin dose?	Yes		No		With Support	
Is the student able to administer own insulin?	Yes		No		With Support	
<b>How Much Insulin to Be Administered</b>						
Basal Insulin	Type:		Time:		Units:	
Bolus Insulin	Breakfast	Morning Tea	Lunch	Afternoon Tea	Dinner	Other
Insulin: CHO Ratio (1 unit: g CHO)						
Correction Ratio (1 unit: mmol/L)						
<b>Additional Insulin Adjustments/Corrections whilst at camp (including temp basal rates)</b>						

<b>Activity</b>	
<p>Activity decreases glucose levels and activity levels at camp are usually higher than usual. Depending on the intensity of the activity, glucose levels may drop quickly or up to 24 hours later. It is important to check glucose levels during the night following daytime exercise. It is important to check BGL at least 15 minutes prior to exercise or high intensity activity and respond appropriately. Vigorous activity should <b>not</b> be commenced if BGL &gt;15mmol/L <b>and</b> blood ketones of &gt;0.6mmol/L. Vigorous activity should <b>not</b> be commenced if BGL &lt;4mmol/L.</p>	
<b>Preferred pre-activity BGL target range:</b>	
<b>Recommendations for insulin adjustments for planned activity. These should be discussed with their usual diabetes team and family, and individualised as needed:</b>	
MDI	Reduce the pre exercise <b>bolus</b> insulin dose by 30-50% (start with 30% and increase as needed) if activity is within 1 hour of insulin injection (for example meal bolus)
Pump	Reduce the basal insulin dose by up to 30-50% (start with 30% and increase as needed) from 90 minutes prior to exercise (via temp basal feature)
<b>Recommendations to prevent post-exercise hypoglycaemia:</b>	
MDI	To prevent post exercise hypo, reduce the nighttime long acting (basal) insulin dose by 20%
Pump	To prevent post exercise hypo, reduce the basal insulin dose by 30-50% until 3am (via temporary basal feature)



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<b>Recommendations for unplanned activity:</b>	
MDI	Consume 10 – 15g long acting CHO if BGL is 4-7mmol/L and recheck in 30 minutes.
Pump	Consume 10 – 15g long acting CHO if BGL is 4-7mmol/L and recheck in 30 minutes.
<b>Additional comments for unplanned activity:</b>	
For most children, the target range for glucose levels is 3.9 – 10.0 mmol/L. Provide additional 10-15 grams carbohydrate if glucose levels are at the lower end of the target range (4.0 – 7.0 mmol/L) to avoid hypoglycaemia and recheck in 30 minutes. Food ideas include: Small muesli or fruit bar, 2 plain biscuits or crackers, UHT milk tetrapack or breakfast drink, Le Snaks, small packets of plain popcorn or trail mix.	
<b>Additional comments relating to specific exercise on camp, i.e. times of sustained or high intensity activity:</b>	
Monitor glucose levels regularly across the day and follow hypoglycaemia treatment guidelines as required. Ensure snacks are available for those who need additional carbohydrate after treating hypoglycaemia.	



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**Food and Meals at Camp**

The camp menu should have been reviewed by the parents/caregivers prior to the camp. Additional long-acting carbohydrate foods should be supplied by the family or be available if a meal/snack is delayed or activities are intense requiring additional carbohydrate.

Is the student able to count carbohydrates?	Yes	No	With Support
Does the student have coeliac disease or additional allergies?	Yes	No	

**Management of above:**

**Considerations for meal times when at camp?**

**DIABETES SUPPLIES - PLEASE ENSURE THESE ARE ALL LABELLED AND PACKED TOGETHER**

- |   |  |
|---|--|
| <input type="checkbox"/> New vials/cartridges of insulin (2 vials/cartridges of each type)                    | <input type="checkbox"/> Container for Sharps Disposal                         |
| <input type="checkbox"/> CareSens Dual Meter (& spare batteries) + Finger Pricker (& spare lancets)           | <input type="checkbox"/> Prefilled Insulin Pens and/or Syringes + Pen Needles  |
| <input type="checkbox"/> 2 Boxes of Blood Glucose Testing Strips  | <input type="checkbox"/> 2 Boxes of CareSens Ketostrips (camp supplies)        |
| <input type="checkbox"/> Glucose Monitoring Device (if using) plus charger (& spare sensor if able to change) | <input type="checkbox"/> Pump Batteries or Charger (Clearly Labelled)          |
| <input type="checkbox"/> Battery Powered USB Charger for Pump or CGM Receiver if possible                     | <input type="checkbox"/> Dressings/ Tape for Pump or Glucose Monitoring Device |
| <input type="checkbox"/> Cooler bag for insulin if out in hot weather   | <input type="checkbox"/> Baby-wipes or equivalent                              |
- Pump Supplies - sites, reservoirs, etc (if person is present who can change sites). Child and family should change the site and reservoir prior to camp, but not immediately before, e.g. please change the night before, or at least three hours before leaving for camp.

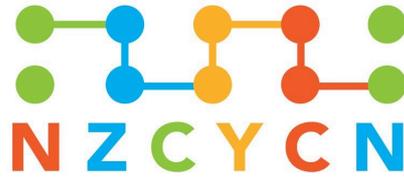
**HYPO-MANAGEMENT SUPPLIES**

- |  |   |
|--|---|
| <input type="checkbox"/> Fast-Acting Carbohydrate – (10-15g CHO) | <input type="checkbox"/> Long-Acting Carbohydrate (10-15g CHO)* |
| <input type="checkbox"/> Glucose Tablets                         | <input type="checkbox"/> Small muesli bars                      |
| <input type="checkbox"/> 125 ml Juice Boxes                      | <input type="checkbox"/> Fruit bars                             |
| <input type="checkbox"/> _____                                   | <input type="checkbox"/> _____                                  |
| <input type="checkbox"/> Hypofit Gel                             | <input type="checkbox"/> Glucagon Hypokit                       |

**ADDITIONAL FOOD SUPPLIED FOR ACTIVITY AND OVERNIGHT SUPPLEMENTS\***

- |                                |                                |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

\*Pre-packaged food is useful in a camp environment



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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 camp.

First Name	Family Name	Signature	Date

### SCHOOL REPRESENTATIVE

I have read, understood, and agree with this plan.

First Name	Family Name	Signature	Date