MiniMed 780G How to Survive

Carelink Username:

Carelink Password

• Important things:

- o Suspend pump when taking it off (shower & sports) & resume after.
- Always carry spare batteries, insulin, cannula, reservoirs, insulin pen and needles, blood glucose & ketone meter, hypo treatment.

Low Glucose levels:

- hypo guidance chart.
- Wait 20 minutes before retreating
- No 10g snack after treated

Glucose mmol/L		Arrow	Treatment	Choose only one		
mn	noi/L		Glucose (grams)			
4.0	- 6.0	$\uparrow \downarrow \uparrow \downarrow$				
		$\uparrow\uparrow$				
		4				
Less	than	$\uparrow \downarrow \uparrow \downarrow$				
4	4.0	$\uparrow \uparrow$				
		\downarrow				
		↑				

Hypoglycaemia management



Hyperglycaemia management



High Glucose Levels:

- Follow the <u>high guidance chart</u>
- If the glucose level stays above 14.0mmol/l for 90 minutes, even though ketones are less than 0.6 mmol/L, change the cannula, then give a correction.
- If ketones are 0.6mmol/L or above, give correction dose by insulin pen,
 change reservoir and cannula, and stop SmartGuard for 4 hours:
 - ➤ 10% of total daily dose if ketones are 0.6-1.5 mmol/L.
 - ➤ 20% of total daily dose if ketones are above 1.5 mmol/L.

Infusion Site Management:

- Take your time and follow the how to set up video.
- Mio Advanced is 0.6 ml cannula fill
- Change cannula every 2-3 days before a meal and rotate sites.
- Make sure insulin is less than 28 days out of the fridge and in date
- Remind yourself of <u>best practice</u>

CGM Management:

- Take your time and follow the how to set up video.
- If you feel different to the sensor glucose, check blood glucose.
- Calibrate if more than 20% difference between sensor and blood glucose
- Remind yourself of best practice

Infusion set change



Solutions for skin and sticking issues



Sensor change



MiniMed 780G How to Thrive

Ordering supplies:

- Order supplies upon opening the last boxes 01923 205 167 Option 1
- Support with 780G or sensors 01923 205 167 Option 2
 - If sensors do not last 7 days call produce support
 - If a cannula fails call product support for a replacment

Food and insulin:

- Bolus 15 minutes before eating.
- Three balanced meals with limited snacking, Mealtime Insulin Guide
- 5-10 minutes activity (walking, playing, dancing) after eating.
- For high fat meals (pizza, takeaway, fish and chips, etc)
 - Give 100% of the carbs eaten
 - If go and stay high, next time, dial in an extra 25% of carbs 60-90 minutes after eating. If that does not work, 50% extra the time after
 - If go hypo in the first three hours, next time only give 75% of carbs eaten, e.g. 100g x 0.75 = 75g
- o If you forget to bolus before eating:
 - Less than 30 minutes after eating, then bolus for all carbs.
 - 30-60 minutes, then bolus for half the amount of carbs.

More than 60 minutes, give a correction for the current glucose but do not enter carbs

Exercise:

- Recap on how to mange with this video.
- Start Temp Target before (90 minutes before) and for the duration of the exercise.
- Meal before exercise:
 - ➤ If eating within 2 hours of exercise, enter only 75% of the carbohydrate to be eaten
 - Carbohydrate x 0.75 = amount to enter e.g. 40g x 0.75 = 30g
- Carbs during: Glucose every 20-30 minutes following your chart (next page).
 - ➤ Do not have a large amount of carbs just before exercise as the high glucose level will make the SmartGuard deliver extra insulin.
- Request a Dietitian appointment if you exercise is hard to manage.

Maximising Time in Range (4.0-10.0 mmol/L)

 10 minutes of fast walking or playing drops the glucose level by 2 mmol/L when above 10.0mmol/L between meals - watch GAME

Mealtime insulin guide



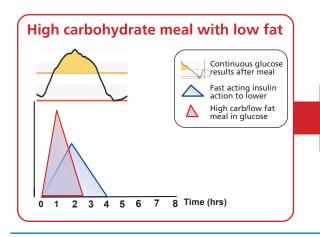
Exercise guide

Carbohydrate Guide for activity when using the MiniMed 780G

- 1. Start Temp Target before exercise (ideally 90 minutes before) and for full activity duration.
- 2. Check glucose just before and every 20-30 minutes during exercise. Give the carbohydrate required based on the value and trend arrow. Carbohydrate choice can be changed in the drop down box
- 3. If swimming take the pump off and suspend the pump, resume once the pump is back on.

Sensor glucose Levels	Rate of glocose change trend arrow & action to take	Carbohydrate grams needed for 20 minutes		
less than 4.0 mmol/l	No exercise: Treat hypoglycaemia			
4.0 - 6.4 mmol/l	$\downarrow \downarrow \downarrow$			
	$\downarrow \downarrow$			
	\downarrow			
	1			
	个个			
6.5 - 9.9 mmol/l	$\downarrow \downarrow \downarrow$			
	↓			
	↑			
10.0 - 13.9 mmol/l	Ok to exercise with any arrow			
>14.0mmol/l	Check ketones: If less than 0.6mmol/l	Ok to exercise		
	Chck ketones: If 0.6mmol/l or above	No exercise until the ketones have been corrected and are less than 0.6mmol/l		

Mealtime Insulin Guide



Meal is almost all carbohydrate

Breakfasts:

- Cereal with light milk
- Toast and jam or honey
- Fruit bread

Meals:

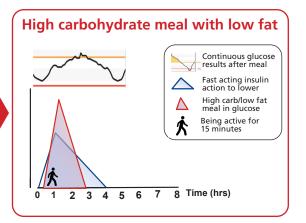
- Jacket potato & beans
- Super noodles
- Waffles & hoops

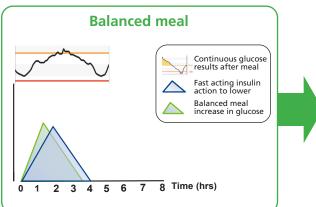
Snacks:

- Cereal bars
- Biscuits
- Rice crackers

How to keep the glucose in target?

- 1. Count carbs accurately
- 2. Choose wholefood carbohydrate
- 3. Add some vegetables
- 4. Normal bolus 20 minutes before eating
- 5. Do 15 minutes activity after eating





Meal is balanced

Breakfasts:

- Porridge with semi or full milk & nuts
- Egg or fish on toast with mushrooms
- Cheese on toast with tomatoes

Meals:

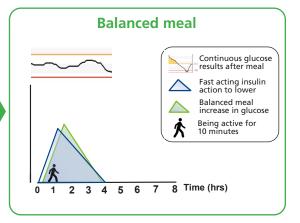
- Meat/fish/beans with potatoes & veg
- Jacket potato with cheese & salad
- Rice with curry and salad

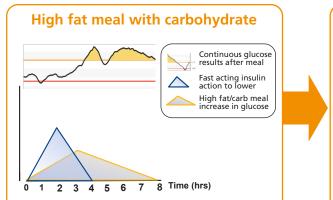
Snacks:

- Whole fruit with nuts
- Nut butter on toast
- Whole yoghurt with nuts

How to keep the glucose in target?

- 1. Count carbs accurately
- 2. Choose wholefood carbohydrate
- 3. Add more vegetables
- 4. Normal bolus 15 minutes before eating
- 5. Do 10 minutes activity after eating





Meal is very high in fat with carbs

Breakfasts:

- Full English breakfast
- Pancakes with maple syrup
- Thick slices of cheese on toast

Meals

- Takeaway fish and chips
- Heavily cheesed pizza
- Pasta with creamy sauce
- Creamy curry with rice & naan bread
- Fast food burger, fries and dessert
- Sunday roast with trimmings
- Lasagna with chips and garlic bread

How to keep the glucose in target?

- 1. Count carbs accurately
- 2. Give 100% of carbs eaten
- 3. Let Smart Guard deal with the delayed rise
- If go and stay high, next time, dial in an extra 25% of carbs 60-90 minutes after eating. If that does not work, 50% extra the time after
- If go low in the first 3 hours, next time, give 75% of carbs eaten, as normal bolus

High fat meal with carbohydrate Continuous glucose results after meal Fast acting insulin action to lower High fat/carb meal increase in glucose Being active for 15 minutes Time (hrs)



Dynamic Glucose Management

GAME-SET-MATCH

Combine glucose values and trend arrows with proactive diabetes management



Stop highs GAME



G = Glucose time in range desired

A = Alert on high set accordingly

Time in range desired? 4.0-10.0mmol/L	Set high alert mmol/L	Predicted HbA1c mmol/mol (%)	Daily energy & future health
50%	No alert	64 (8.0)	\odot
60%	14.0	58 (7.5)	<u>:</u>
70%	12.0	52 (7.0)	\odot
75%	11.0	50 (6.8)	$\odot\odot$
80%	10.0	48 (6.5)	$\odot\odot\odot$
85%	9.0	45 (6.2)	0000
90+%	8.0	42 (6.0)	$\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$

M = Mode of exercise that can be done

E = Exercise when high alert sounds

Glucose mmol/L	Trend arrow			How many
mmoi/L	Libre	Dexcom	Medtronic	minutes
	7		1	5
8.0 - 9.9	1		↑ ↑	10
			$\uparrow\uparrow\uparrow$	15
	\rightarrow			15
10.0 - 14.0	7		1	20
	1	٥	↑ ↑	25
			$\uparrow\uparrow\uparrow$	30
	\		$\downarrow\downarrow$	15
More than	7	Q	\	20
14.0	\rightarrow			25
	7		1	30
	1	٥	$\uparrow \uparrow$	40



Stay in target SET



S = Start insulin before eating

Glucose mmol/L	Trend arrow			Minutes to bolus
mmoi/L	Libre	Dexcom	Medtronic	before meal
			$\downarrow\downarrow\downarrow$	Prevent hypo
	\	0	$\downarrow\downarrow$	Prevent hypo
	R		1	Prevent hypo
4.0 - 5.9	\rightarrow			15
	7		1	20
	1	٥	↑ ↑	25
			$\uparrow \uparrow \uparrow$	30
		0	$\downarrow\downarrow\downarrow$	0
	\downarrow		$\downarrow\downarrow$	10
	R		\	15
6.0 - 9.9	\rightarrow			20
	7		1	25
	1		↑ ↑	30
			$\uparrow \uparrow \uparrow$	35
			$\downarrow\downarrow\downarrow$	15
	\downarrow	•	$\downarrow\downarrow$	20
	ĸ		\	25
10.0 - 14.0	\rightarrow			30
	7		1	35
	1	٥	↑ ↑	40
			$\uparrow \uparrow \uparrow$	45
	\downarrow	•	$\downarrow\downarrow$	25
More than	Ŋ		↓	30
14.0	\rightarrow			40
	7		1	45
	1	٥	↑ ↑	50

E = Eat three balanced meals

T = Ten minutes activity after eating



Prevent lows



M = Measure weight to calculate hypo treatment

Weight (kg)	Grams of glucose	Dextrose 3g tablets
10	3	1
20	6	2
30	9	3
40	12	4
50	15	5
60+	18	6

A = Always use glucose only, not sugar

T = Try to prevent lows

C = Change amount according to glucose value & arrow

Glucose mmol/L	Trend arrow			Percent of hypo
IIIIIOI/L	Libre	Dexcom	Medtronic	treatment
	\downarrow		$\downarrow\downarrow\downarrow$	100%
4.0 - 6.0			$\downarrow\downarrow$	75%
	Ŋ		\	50%
	\		$\downarrow\downarrow\downarrow$	125%
Less than			↓ ↓	100%
4.0	Ŗ		\	75%
	\rightarrow			50%
	7		1	25%

H = Have patience and wait 20 mins