# Managing Insul lin

# **Getting Started**

### Introduction

Keeping Blood Glucose (BG) levels stable may require changes to insulin doses between clinic visits. This leaflet is to guide you. If you need further help advice or support from the Jenny Lind Paediatric Diabetes Team, please get in contact.

What are the blood glucose targets?

- 1. Before meals target is 4-7mmols/l.
- 2. 11/2-3 hours after meals target is 5-9 mmol/l
- 3. Overnight target is 4-7mmols/I (checked at least 3 hours after last meal/insulin).

Keep a record book (diary) or download the meter/pump using diasend®. Register at www.diasend.com/register to set up your free diasend® account. Clinic ID is 83-77913

Every week compare glucose levels to the targets set. Ask yourself is there a trend? If you see a pattern you can think about making changes.

### How to get your blood glucose in target again

- 1. Add a correction dose of rapid acting insulin (Novo Rapid , Humalog or Fiasp) if BG before a meal is above target. The bolus advisor meter or the pump can be set to calculate this. Otherwise, refer to the A4 dose planner guide for the correction dose.
- 2. Look out for a pattern of BG above target on 3-4 days before a particular meal, or overnight in a week.

# Managing Blood Glucose

### How to make changes to Insulin doses

### 1. DAY TIME

• If the pre-meal BG is consistently above the target (4-7mmol/l), change the Insulin:Carb ratio to give a higher bolus dose with the previous meal.

For example: if 1unit: 15g carbs at breakfast results in a BG above target before lunch 3-4 times in a week, change the ratio to 1:12g at breakfast.

• If regular hypos occur during the daytime the Insulin:Carb ratios will need adjustment to give less insulin before those meals.

Remember to change the setting on the bolus advisor meter or insulin pump if used.

### 2. NIGHT TIME

- If the pre-bed BG (at least 3 hours after last meal/insulin) was within target but is above 7mmol/l on waking for 3-4 days, increase the long-acting insulin.
- If hypos have occurred overnight, decrease the longacting (basal) insulin.
- If using insulin pens, adjust the dose of either Levemir / Lantus / Degludec (select insulin used).
- Increase/decrease in long acting insulin (Levemir, Lantus or Degludec) by approximately 10% of the current dose or as directed at clinic. After adjusting the long acting insulin, check BG at 2-3 am for 3 nights.
- Review overnight/pre-breakfast BG after 4 days.
- Make additional changes if BG still not in target.

### **INSULIN PUMP**

If using a pump, regularly do basal testing (carbohydrate fasting test). Basal rate settings may need to be adjusted when the data is reviewed. A guideline is available.

Please upload the pump on "Diasend" (or use the pump software) and discuss the data with a member of the Paediatric Diabetes team if you need help to make changes to the basal rates.

## **Children's Diabetes Team**

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# Managing blood glucose in children and young people with Type 1 diabetes



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