

# Basal Rate Testing

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It is important to set the basal rates in your insulin pump to meet your insulin needs correctly. To do this it is recommended that you start with overnight basal rate testing, then proceed with daytime testing. Basal rates may need to be rechecked and fine tuned periodically, particularly for weight changes and significant changes to lifestyle or stress levels.

## General Instructions for all Basal Rate Testing

- Start with a BG level within your target range
- If your BG goes less than 4 mmol/L or greater than 14 mmol/L, stop the test and treat
- BG should not vary more than +/- 1.7 mmol/L from the start of the test
- It is best to do two sets of basal rate testing to confirm a pattern before changing your basal rates

## How to Test Basal Rates

### 1. Overnight Basal Test

Eat your suppertime meal at least 4 hours before you go to bed.

Eat a meal that is low in fat and take your regular bolus.

Do not eat again until breakfast.

Check your BG at bedtime, midsleep and upon waking

### 2. Morning Basal Test

Do not eat breakfast

Check your BG every 1-2 hours until lunchtime

### 3. Afternoon Basal Test

Eat your breakfast at least 4 hours before lunchtime and take your regular bolus.

Do not eat again until supper.

Check your BG every 1-2 hours beginning 4 hours after your breakfast bolus.

### 4. Evening Basal Test

Eat your lunch at least 4 hours before dinner and take your regular bolus.

Do not eat supper until after 8pm

Check your BG every 1-2 hours beginning 4 hours after lunch bolus

## Signs your Basal Rate needs to be Changed:

- You have low blood sugars overnight
- Your BG rises or falls when you skip a meal
- You have frequent high or low blood sugars
- You need frequent correction boluses to bring down your blood sugars

## DO NOT perform Basal Rate Testing if:

- You are stressed or ill
- You have had a low blood sugar in the past 8 hours
- You have engaged in strenuous activity in the last 24 hours

## Assessing Results

### Your basal rate is adequate if:

- Your BG does not rise or fall by > 1.7 mmol/L during the basal test

### Your basal rate is too LOW if:

- Your BG **rises** > 1.7 mmol/L during the basal test

### Your basal rate is too HIGH if:

- Your BG **falls** > 1.7 mmol/L during the basal test

*\* Speak with your educator if you are unsure of how to adjust your basal rates.*