Front sheet for staff reviewing Insulin Pump Download

Patient Name;

Patient has uploaded pump: YES / NO

Recent HbA1c= …………………

Recent weight= ………………....

Age= ……………………yrs

Avg Total Daily Insulin= ………………..

(from sensor & meter overview)

Units/kg= ……………………

|  |  |
| --- | --- |
| **Expected total daily insulin dose** | **Units/kg/day** |
| Partial remission phase | <0.5 |
| Prepubertal children | 0.7-0.9 |
| Puberty  | Up to 1.3 |

**Pump download assessment completed by:**

Signed: …………………………….. Print Name: ………………………

Designation: ……………….

Date: ………………...

**Action:**

□ Phone call ⁯ Date: ………………

□ Review in clinic ⁯ Date: ………………

□ Email Date: .....................

Signed: ……………………………. Print Name: ……………………….

Designation: ………………………..

**VEO/640G CARELINK PERSONAL WORKSHEET**

Dates of Download: \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_

ADHERENCE

From the summary at the bottom of the page:

* BG readings \_\_\_\_\_\_\_\_\_\_ (aim: at least 8 per day)
* Bolus wizard events \_\_\_\_\_\_\_\_ (aim: at least 6 per day)
* Rewind: Every \_\_\_\_\_\_\_\_\_ days (this indicates set changes, aim: every 2-3 days)
* Cannula amount \_\_\_\_\_\_\_\_\_\_(Mio 6mm = 0.3 units / Mio 9mm = 0.5 units / Mio 30/Silhouette = 0.7 units / Mio Advance = 0.6 units / Sure T = 0 units)

SENSOR & METER OVERVIEW

* Average BG \_\_\_\_\_\_\_\_\_\_\_\_ (aim: less than 8mmol/L)
* Readings above target \_\_\_\_\_\_\_\_ (aim: less than 25%)
* Readings below target \_\_\_\_\_\_\_\_ (aim: less than 5% i.e. no more than 3 hypos/week)
* Avg daily carbs \_\_\_\_\_\_\_\_\_\_\_g (check if similar to average amounts below)

|  |  |  |
| --- | --- | --- |
| Age | Female (Carbs/ day) | Male (Carbs/ day) |
| 1-3 years | 115g | 125g |
| 4-6 years | 170g | 185g |
| 7-9 years | 205g | 220g |
| 10-12 years | 255g | 270g |
| 13-14 years | 285g | 315g |
| 15-16 years | 300g | 360g |
| 17-18 years | 310g | 390g |

Average amounts of carbs for age groups (i.e. 50% of average kcal requirements)

* Avg Total Daily Insulin \_\_\_\_\_\_\_\_\_\_\_ (this is the average total daily dose)

Calculate insulin sensitivity i.e. 100 ÷ Avg Total Daily Insulin

Calculated Insulin Sensitivity = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Avg Daily Basal \_\_\_\_\_\_\_ units (this is the total background insulin)
* Avg Daily Bolus \_\_\_\_\_\_\_ % (usually 60-70%)

LOGBOOK (look for a trend & tick 1 box):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Blood glucose readings | Mostly Low≤3.9 mmol/L | Mostly In Target (4-9.0 mmol/L) | Mostly High(≥ 9.1mmol/L) | Variable i.e. highs & lows/ no pattern |
| Overnight |  |  |  |  |
| Before breakfast |  |  |  |  |
| 2 hrs after b’fast |  |  |  |  |
| Before lunch |  |  |  |  |
| 2 hrs after lunch |  |  |  |  |
| Before eve meal |  |  |  |  |
| 2 hrs after eve meal/ Before supper |  |  |  |  |
| 2 hours after supper/ Before bed |  |  |  |  |

DEVICE SETTINGS SNAPSHOT

Basal: (active) will be beside basal rate currently being used

Bolus: Active insulin time (usually 3 hours)

* Max Basal \_\_\_\_\_\_\_units/hr (Check highest basal rate and max set at 50% more)
* Max Bolus \_\_\_\_\_\_\_units (Increase if Max Bolus being reached and not all bolus being delivered – you will see this is day to day breakdown)

 Carbohydrate Ratio (g/U)

|  |  |  |
| --- | --- | --- |
| Time | Ratio | Insert usual meal/ snack eaten at this time |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Insulin Sensitivity (check if similar to calculated insulin sensitivity on previous page)

|  |  |
| --- | --- |
| Time | Sensitivity |
|  |  |
|  |  |
|  |  |
|  |  |

Blood Glucose Target (usually 5-6 mmol/L)

DAILY DETAIL

Only BGs between 2-22mmol/L will be listed (arrows if BG higher/lower)

All bolus events will be listed in box (including boluses not completed)

**ACTION PLAN (Aim to make 1-3 changes):**

**Example: 1) Increase basal rate starting at 3am by 0.05**

**2) Check overnight BG’s 3 hourly to review basal rates**

**HOW TO MAKE CHANGES TO:**

**BASAL RATES:**

* From the Quick View Summary check the Total Insulin (average) = \_\_\_\_\_\_\_\_\_\_\_
* Look for trends in BG especially prior to meals & overnight
* Prior to making amendments consider doing a basal review
* To make an adjustment to the basal rate on the pump go into:

|  |  |
| --- | --- |
| **If Total Insulin is:** | **Adjust basal rate by** |
| Less than 10 units per day | 0.025 units per hour |
| 10-20 units per day | 0.05 units per hour |
| 20-40 units per day | 0.1 units per hour |
| More than 40 units per day | 0.2 units per hour |

Basal → Basal Setup →Set/ Edit Basal

**RATIOS:**

|  |  |  |
| --- | --- | --- |
| **Trend of BG 2 hrs after the meal** | **Action needed** | **Suggested ratio change** |
| **High**(More than 9mmol/L) | Decrease the number of grams of carbs that 1 unit of insulin will cover | 1:2→1:1.5 | 1:7→1:6 | 1:15→1:12 | 1:30→1:25 |
| 1:3→1:2 | 1:8→1:7 | 1:18→1:15 | 1:35→1:30 |
| 1:4→1:3 | 1:9→1:8 | 1:20→1:18 | 1:40→1:35 |
| 1:5→1:4 | 1:10→1:9 | 1:22→1:20 | 1:45→1:40 |
| 1:6→1:5 | 1:12→1:10 | 1:25→1:22 | 1:50→1:45 |
|  |  |  |  |  |  |
| **Low**(Lower than 4 mmol/L)  | Increase the number of grams of carbs that 1 unit of insulin will cover | 1:1.5→1:2 | 1:6→1:7 | 1:12→1:15 | 1:25→1:30 |
| 1:2→1:3 | 1:7→1:8 | 1:15→1:18 | 1:30→1:35 |
| 1:3→1:4 | 1:8→1:9 | 1:18→1:20 | 1:35→1:40 |
| 1:4→1:5 | 1:9→1:10 | 1:20→1:22 | 1:40→1:45 |
| 1:5→1:6 | 1:10→1:12 | 1:22→1:25 | 1:45→1:50 |

* To make an adjustment to a ratio on the pump go into:

Bolus → Bolus setup → Bolus wizard setup→ Edit settings → Carb ratios

**INSULIN SENSITIVITY:**

* Check that all high readings have been corrected (if BG was sent to pump via Bluetooth it will only remain on pump screen for 12 mins)
* Before making any changes review a few readings which have needed a correction & if the insulin sensitivity is working the BG should be back within target blood glucose levels 2 hours after bolus
* If there is a trend of the insulin sensitivity not working adjust by:

|  |  |
| --- | --- |
| **If calculated insulin sensitivity is:** | **Adjust insulin sensitivity by\*:** |
| 1.0-1.9 mmol/L/U | 0.1 |
| 2.0-2.5 mmol/L/U | 0.2 |
| 2.6-4.9 mmol/L/U | 0.5 |
| 5-9.9 mmol/L/U | 1.0 |
| 10 mmol/L/U or higher | 2.0 |

\*Do not set insulin sensitivity below calculated insulin sensitivity unless this has been discussed with your diabetes team

* To make an adjustment to the insulin sensitivity on the pump go into:

Bolus → Bolus setup → Bolus wizard setup→ Edit settings → Sensitivity