**Tandem Diasend WORKSHEET with Basal IQ**

**Basal IQ**

Basal insulin will suspended when the predicted glucose value is less than or equal to 4.4 mmol/L within the next 30 minutes Or if the actual sensor glucose value is less than or equal to 3.9 mmol/L. These values cannot be customised or changed.

Insulin will resume when one of the following things happen: when either the CGM sensor value increases from the lowest point or if the prediction of going below 4.4 mmol/L in the future is no longer valid.

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

**SUMMARY**

**(If using Dexcom there is a tab to view glucose data type SG or BG, this won’t be highlighted if no sensor data is linked)**

**CGM/BG**

* Average Blood Glucose \_\_\_\_\_\_\_\_\_\_\_\_ (aim: less than 8mmol/L)
* Average Sensor Glucose\_\_\_\_\_\_\_\_\_\_\_\_(aim: less that 8mmol/L) – If Applicable
* % Time in Range\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (aim: >70%)
* Avg number of readings per day (if BG selected) \_\_\_\_\_ (aim: at least 8 per day)
* % Above Target (>10mmol) \_\_\_\_\_\_\_\_\_\_
* % Within Target (3.9 – 10mmol) \_\_\_\_\_\_\_\_\_
* % Below Target (<3.9mmol) \_\_\_\_\_\_\_\_\_

**Insulin (click show details)**

* Avg Total Daily Insulin (TDD) \_\_\_\_units/day
* Calculate insulin sensitivity (100 ÷ Total Daily Insulin) = \_\_\_\_\_\_\_\_\_\_
* Avg Bolus per Day \_\_\_\_\_\_\_\_\_
* Avg Daily Basal \_\_\_\_\_\_\_ units
* Avg Daily Bolus \_\_\_\_\_\_\_ % (usually 60-70%)
* Avg Cannula Fills: Every \_\_\_\_\_ days (indicates pod change, aim: every 2-3 days)
* Avg Prime: Every \_\_\_\_\_ days (indicates pod change, aim: every 2-3 days)

(Cannula and Prime should reflect same number always – no value units attached to this)

**Carb Summary**

* Avg daily carbs \_\_\_\_\_\_\_\_\_\_\_g

**Glucose Tab - LOGBOOK (look for trends):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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* |  |  |  |  |

**Glucose Tab – Day by Day**

* Review last 7 days data – highlighting any trends in BG patterns
* Correlate carb intake and bolus of insulin – identified with green triangles on charts

**CGM Tab – Day by Day (applicable if linked Dexcom)**

* Review last 7 days CGM trends
* Correlate carb intake and bolus of insulin – identified with green triangles on charts

**Insulin Tab**

**Day by Day (Control IQ system review)**

* Illustrates all events in Control IQ – Basal Variations, Low glucose suspends, Auto Corrections, Activities settings, Bolus events

**Pump Alarms/Settings**

* Looking at Pump Alarm Events – any alarms thinking mismanagement
* Max Bolus \_\_\_\_\_\_\_units (Increase if Max Bolus being reached and not all bolus being delivered – you will see this is day to day breakdown)
* Max Basal \_\_\_\_\_\_\_units/hr (Check highest basal rate and max set at 50% more)
* Active Basal Program:\_\_\_\_\_\_\_\_\_\_\_\_
* Insulin Action:\_\_\_\_\_\_\_\_\_\_\_(set at 180mins)
* **Carbohydrate Ratio (g/U)**

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

* **Insulin Sensitivity Factor**

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

* **BG target Range Settings:**

|  |  |  |
| --- | --- | --- |
| Time | Target | Threshold |
|  |  |  |
|  |  |  |
|  |  |  |

**Compilation Tab (All data in 1 page):**

* **Logbook** – illustrates all events in logbook format day by day
* **Day by Day** – Illustrates in table format BG data, CGM data, Bolus events and insulin pattern delivery. Carb intakes and bolus events

**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 Pump History – Delivery Summary - 7 day average 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 | 0.03 units per hour |
| 10-20 units per day | 0.06 units per hour |
| 20-40 units per day | 0.1 units per hour |
| More than 40 units per day | 0.2 units per hour |

**Options → My Pump → Personal Profiles → Select Profile then Edit → Timed Settings → ensure green tick selected and then confirm changes with pressing blue tick**

**RATIOS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Trend of BG 2 hrs after the meal** | **Action needed** | **Suggested ratio change** | | | |
| **High**  (More than 2 mmol/L **above** the pre-meal BG) | 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**  (More than 2 mmol/L **below** the pre-meal BG) | 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 |

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**INSULIN SENSITIVITY:**

* Check that all high readings have been corrected
* 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

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