**FreeStyle Libre 2 Flash Glucose Monitoring Guidance Sheet**

**About:**

Libre 2 Flash Glucose Monitor is a device that measures glucose in the interstitial fluid (a thin layer of fluid that surrounds the cells of the tissue below your skin). A sensor is placed, usually on the upper/outer aspect of the arm, and a thin, glucose detecting filament inserts through the skin.

The sensor can last 14 days and the reader device displays a current glucose level (with a trend arrow) when it is scanned over the sensor. It is also able to produce 24 hour glucose traces, so long as the sensor is scanned at least every 8 hours. The sensor is water resistant for up to 30 minutes.

Alarms can also be set up to the reader or phone app (LibreLink) – whichever is used to scan the sensor first after insertion. Please note if you scan with your phone first the reader will not work for the 14 day life of that sensor.

As the Libre 2 is measuring interstitial glucose, there is around a 2 minute delay in the interstitial glucose response compared to changes in blood glucose.

The expectation is that there will be a very limited need for finger prick blood glucose testing when using Libre 2 but it does not take it away completely. If your symptoms or expectations do not match the results you are seeing on the Libre 2 then it is recommended that you carry out a blood glucose test (finger prick test). If the result shows LO or HI then also check blood glucose. If Blood glucose shows HI, test ketones and correct appropriately.

**To Use:** Press Blue Button on reader and scan over sensor or open app, click scan sensor and scan over sensor. Sensor can be scanned through clothes.

**Recommended settings for your Libre 2 reader or Libreview App:**

**Target glucose levels 4-10 mmol/l**

**Alarm options** – should you choose to use either the high or low alarms the signal loss alarm is automatically activated.

(If setting up alarms using your LibreLink App remember to override Do Not Disturb to ensure the phone alerts you when

in silent or do not disturb mode.)

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| Alarm Type | Setting recommended | Action Recommended |
| **Low Glucose Alarm**: | 4 mmol/l – (alarm will sound if glucose falls below 4 mmol/l) | Dismiss alarm. Scan sensor. Treat hypoglycaemia, reminder to recheck can be set for 15 minutes. |
| **High Glucose Alarm:** | 14 mmol/l –(alarm will sound if glucose levels rises above 14 mmol/l) | Using insulin injections: test ketones if glucose persists above 14mmol/l after 2 hours. Correct high glucose level at next meal.  Using insulin pump: test ketones. If ketones below 1 mmol/l, deliver correction via pump, if ketones 1 mmol/l or higher treat as per flowchart in your handbook.  Reminder to recheck can be set for 1 or 2 hours. |
| **Lost Signal Alarm:** | Notification when sensor is not communicating with reader or phone | Click Yes, Scan sensor to re-establish connection |

Ensure in your setting that Sound and Vibration are set up to alert you appropriately.

**Additional Advice**

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| If glucose between 4-5 mmol/l with arrows to indicate that glucose is falling or  Consume 10-15g carbohydrate ***with no additional insulin*** to reverse falling blood glucose trend |

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| As there is around a 2 minute delay between blood glucose and a libre reading. If treating a hypo and after 10 minutes glucose is rising but not yet above 4 mmol/l. Consider rechecking in 5 minutes before retreating. |

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