# Exam Guidance Diabetes Management in Schools, Colleges & Universities



## Tuesday 15th April 2025

#### **INTRODUCTION**

This document is intended for guidance purposes and has been written by Paediatric Diabetes Specialist Nurses from the Wessex Children's and Young People's Diabetes Network after gaining advice from the Joint Council for Qualifications. This document should be available for all education settings holding formal examinations for students with Type 1 Diabetes.

Type 1 Diabetes is a serious medical condition in which the person relies on insulin delivered by a subcutaneous insulin infusion pump or multiple daily injections in order to live.

Diabetes technologies are rapidly advancing with app based bolus advisors, Continuous Glucose Sensors and Hybrid Closed Loop (HCL) Subcutaneous Insulin Infusion pumps now becoming routine treatment of Type 1 Diabetes. These systems all rely on smart phone app technology to function. Continuous Glucose Sensor apps alert the user to any high glucose levels as well as any low or predicted low glucose levels, which must be responded to immediately at all times. The student can also gain insightful information regarding their glucose levels and patterns by assessing their trend arrows and history graph visible within the app and may be able to take action to prevent high or low glucose levels. The student needs to be able to view their continuous glucose sensor data and access their insulin pump or bolus advisor for the entirety of exam. The majority of students with Type 1 diabetes use smart phone apps to advise of their insulin dosing, with some insulin pumps also being controlled by a smart phone.

High and low blood glucose levels can significantly impact concentration, performance and cognitive ability. Stress can cause higher glucose levels which can affect concentration during the exam. Hypoglycaemia (low blood glucose) can have a significant impact on performance during the exam since the brain has less glucose to function. For all episodes of hypoglycaemia, the clock must be stopped and only restarted once the student has treated their low glucose level successfully; the student may need up to 45 minutes after the blood glucose level has returned to the normal range in order to fully recover and for their brain to be functioning adequately.

If students have access to all diabetes equipment and technology for the entirety of their exam, they are more likely to prevent high and low glucose levels before they happen.

All Education settings have a legal responsibility to make reasonable adjustments to ensure that provisions are made for pupils with Type 1 Diabetes to have immediate access to their diabetes equipment during exams, including to have access to their diabetes related smart phone apps in order to operate their insulin pump and to view their sensor data and respond to alarms and alerts. This document outlines how this can be achieved under examination conditions.

Please can all education setting staff and invigilators refer to the Digibete website examination resources and videos <a href="https://www.digibete.org/schools-teachers/key-stage-3-4/">https://www.digibete.org/schools-teachers/key-stage-3-4/</a> and the Diabetes in Schools Training Platform <a href="https://diabetesinschools.org/">https://diabetesinschools.org/</a>

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#### **EXAM CONSIDERATION & GUIDANCE**

The two main types of help which might be available for students with Type 1 diabetes are access arrangements and special considerations:

#### Access arrangements:

- Planning and managing the exam day If a young person with diabetes feels strongly that they wish to sit in the main exam hall, with their peers, it is helpful to consider where they will sit in relation to exits, as they may have to leave the exam room for supervised breaks. Other young people feel that it is important to sit the exam in a separate room. They might feel self-conscious about carrying out diabetes tasks, or concerned that, if they need to stop the clock, they will be disturbing others leaving the exam hall.
- Monitoring blood glucose levels in the exam room
- Using a mobile phone within the exam room.
- Medical prompts
  - The student may require prompts from the invigilator in response to alarms and alerts from medical devices. In some cases, it may be deemed essential that parents text students to alert them to high/low glucose levels that need attention.
- Supervised rest breaks for treating levels out of range or going to the toilet.

#### Special considerations

A pupil with diabetes might apply for special consideration when their glucose levels
negatively affected their performance immediately prior to or during the exam. Under
special considerations, the exam board might consider how much work was able to be
completed during the exam period, any relevant course work or previous exams within the
subject.

Special considerations are applied for after the exam concerned, and evidence will need to be supplied (e.g. downloads of blood glucose meters and continuous glucose monitoring devices) to support such an application.

The maximum an exam paper can be upgraded is five per cent, although the JCQ states that three per cent is more likely to be awarded for issues related to diabetes.

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## **Hybrid Closed Loop Exam Flowchart**

This flowchart is to be used in conjunction with their Individual Healthcare Plan.

Sensor and pump communicate with each other

Pump and medical device will alarm/vibrate if blood glucose (BG) outside of the range

Medical device (phone) needs to be within 6 metres of the pupil for the signal to transmit

Pump set at target range and insulin will be being delivered /suspended automatically to try and prevent BG rising or falling outside of range

If device alerts during exam young person is required to take some action

Clock must be stopped at this time as medical intervention is required

It is imperative that any intervention that needs the clock to be stopped (stop time & start time) is documented for the Exam Board consideration.

#### **Exam Guidance**

### **Diabetes Management in Schools, Colleges & Universities**

## **Higher BG reading**

### Look at BG reading

If **higher** than upper target limit.

Young person needs to make a decision based on several factors as to whether a correction of insulin is required.

If this is needed then the young person will need to access their insulin pump and instruct it to give a bolus of insulin.

The alert will still be present even after action has been taken until the BG comes back inside the target range.

## **Lower BG reading**

Alarms on the pump and sensor devices will be set within normal range at the lower end. Aim is to prevent low blood glucose if possible

### Look at BG reading

If arrow straight then young person may want to wait and see where the blood glucose is heading or eat a small low carb snack before continuing with the exam. Readings are transmitted every 5 minutes.

If arrow is diagonal down then action is required immediately.

Each pupil should have a clear bag with hypo treatment inside. They will need to administer some of this and then wait to see if it has the desired effect on the BG reading. **This can take up to 15 minutes.** 

If BG reading is still registering as a low BG then the hypo treatment will need to be administered again by the child and a further 15 minutes may be required to see the BG rise to within normal range.

Once BG reading is above 4 mmol/l then the pupil may need up to 45 minutes recovery time before recommencing the exam so that their brain can be back to its full cognitive function.