

# Exam guidance for young people with Type 1 diabetes

## Paediatric Diabetes Department

### Overview

**Diabetes** is usually an invisible condition and the effects that blood glucose levels outside of the target range (4mmols/L - 10mmols/L) have on cognitive and physical function are often not appreciated or are underestimated.

### The effect of low blood glucose levels

**Low blood glucose levels or hypoglycaemia** (less than 4mmols/L) will affect the ability to concentrate and can cause confusion and disorientation.

Although the child or young person will usually feel better approximately 15 minutes after treating the hypoglycaemia, there is evidence that it can take 1-2 hours following normalisation of blood glucose levels **before** they are able to achieve a maximum level of performance. This is because the blood/brain barrier slows down adjustments to glucose levels in the brain.

*The negative impact on cognitive functioning following a hypoglycaemic event is also illustrated by the following studies: Morbidity of hypoglycaemia in type 1 diabetes (Frier, 2004, cited in Hanas, 2012) and Mental efficiency and hypoglycaemia (Puczynski et al, 1990, cited in Hanas, 2012).*

### The effect of high blood glucose levels

There is evidence that **high blood glucose levels** adversely affect the ability to concentrate.

High blood glucose levels are associated with poorer test results and slower performance. High blood glucose levels also increase the need to pass urine and lead to dehydration, where the young person may need more frequent toilet breaks and easy access to water.

Therefore, in order to perform to the best of their ability on the day, it is vital that the child or young person with diabetes is given the means to monitor their blood glucose levels during exams and to correct those that are too low or too high, or that are dropping or rising too quickly. **Any time taken to carry out these tasks should be added at the end of the exam (by stopping the clock as required).**

**Exams are a stressful time for young people and unfortunately, stress is a common cause for rising and/or fluctuating blood glucose levels in people with Type 1 diabetes**

At a time when it is especially important to optimise blood glucose control, it is particularly difficult to do so.

### Standard exam procedures:

- Children and young people will need to be able to monitor their blood glucose levels during exams so that they can, where possible, prevent low and high blood glucose levels and maximise their performance.

**Requirement:** Therefore, they should be able to test their blood glucose levels in the exam and/or wear a continuous glucose monitoring system. Blood glucose monitoring devices cannot be used to store non-diabetes related information nor to access the internet. **Testing levels takes seconds and should not be distracting to other candidates.**

- Children and young people will need to act when their blood glucose level is **too low** (less than 4mmols/L) or is dropping too quickly.

**Requirement:** Therefore, they will need access to sugary drinks, glucose tablets or sweets. These should be taken out of their wrappers and put in a clear plastic bag or bottle in exam circumstances.

**Requirement:** When a blood glucose level is too low (less than 4mmols/L), the clock should be stopped while the child or young person is treating and recovering from the **hypoglycaemia**. The clock should not be restarted until the child or young person's blood glucose level has risen above 5.5mmols/L.

- When the blood glucose is too high (14mmols/L or above), the child or young person will need to **administer insulin** in an attempt to bring it back down to within the target range. This will either be delivered by entering information into an insulin pump which the child or young person wears continuously, or via a subcutaneous injection.

**Requirement:** The clock should be stopped while the young person is administering the insulin and restarted when they are able to continue.

- **If a supervised break is required** for monitoring blood glucose levels, treating levels out of range, or going to the toilet, the child or young person should alert an invigilator **so that the clock can be stopped**.

**Requirement:** The clock should not be restarted until they have returned to their desk and/or the young person has recovered. **This is a common procedure for any supervised breaks.**

Some young people feel strongly that they wish to sit in the main exam hall with their peers. It is helpful, to **consider where the young person with diabetes 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 as they might feel self-conscious about carrying out diabetes tasks or be concerned that if they need to stop the clock, they will be disturbed by others leaving the exam hall before them.



## Special Consideration:

“Special consideration is a post-examination adjustment to a candidate’s mark or grade to reflect temporary illness, temporary injury or other indisposition at the time of the assessment, which has had, or is reasonably likely to have had, a material effect on a candidate’s ability to take an assessment or demonstrate his or her normal level of attainment in an assessment.” (Joint Council for Qualifications, 2014)

The Joint Council for Qualifications states that 3% of the total raw marks available in the component concerned are likely to be awarded in certain circumstances which include “flare-up of severe congenital conditions such as epilepsy, diabetes, severe asthmatic attack”. (Joint Council for Qualifications, 2014).

**Requirement:** Therefore, if the diabetes has been particularly difficult to manage during the exam and/or the child or young person has experienced a number of low and/or high blood glucose levels that have required treatment and/or significantly affected ability to concentrate, they should liaise with their school or college with regards to application for special consideration. **This is applied for after the exam concerned.**

**Downloads of blood glucose meters and continuous glucose monitoring devices can be used to support such an application.**

## Any questions?

Telephone and email support is available Monday – Friday during working hours by contacting the Diabetes Nursing Team.

The Paediatric Diabetes Nurses endeavour to reply to all calls and messages as soon as possible. However, please be aware, it is not an emergency service and responses will take place by order of medical priority.

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### References:

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### Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email [asp-tr.patient.advice@nhs.net](mailto:asp-tr.patient.advice@nhs.net). If you remain concerned, the team can also advise upon how to make a formal complaint.

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