

2023-Jul-27

## **Type 1 Diabetes & exams - essential accommodations**

People living with Type 1 diabetes (PLWT1D) need insulin for life: providing they take it reliably and use a [continuous glucose meter](#) (CGM), such that they get warnings before they have a hypoglycemic reaction (a low sugar, see below), they should face no restriction in their activities other than restrictions faced by individuals who don't have T1D. T1D is a condition, not a disease - it simply has to be managed, and in 2022 the technologies are such that individuals living with T1D can aspire to any career and hold down any job for which they have the requisite talent and motivation. To be unrestricted in their activities individuals with T1D need to carry their smartphone & CGM as well as food and sugar-sweetened drinks at all times - this includes during examinations.

CGM technology provides the user with a warning before a hypoglycemic reaction occurs. This warning is in the form of an alarm (a sound or vibration) made by the smartphone/smartwatch to which the CGM is connected. As such PLWT1D need to have their smartphone/smartwatch, food/sweet drink with them at all times: whether at home, at school or in the workplace.

Specifically this client of mine requires the following accommodations:

needs to be able to carry his/her phone, or continuous blood glucose reader on his/her person at all times and needs to be able to look at the screen on the phone.

needs to have emergency supplies on his/her person at all times including candies/food/juice to treat a low blood sugar.

needs to have his/her insulin pump or insulin administration supplies on his/her person at all times and be allowed to use this equipment when necessary.

needs to be given sufficient time to treat high/low blood sugars during exams or other timed assessments. This may include the administration of insulin for elevated blood sugar, or eating candy and/or food if his/her blood sugar is below normal.

may need to attend the washroom frequently and we ask that he/she is accommodated if this is necessary.

This include accommodations listed in "Stop the Clock"

### **For why this is the case read on.**

This is so that PLWT1D may pause the exam if they are low/high to have glucose or do insulin and let their bodies recover from low/high symptoms (symptoms often include shaking, lack of focus/difficulty concentrating, sweating, blurry vision, headaches, thirst, need to urinate, and drowsiness). The Diabetes Supplies provision requires that the PLWT1D be able to access the Automated Insulin Delivery "Loop" app and have their phone within 6 feet to allow for the Looping system to work and to administer insulin bolus amounts.

In short, the combination of a smartphone/smartwatch and a CGM constitutes a medical device that needs to be kept close to the PLWT1D at all times.

There is a diabetes revolution underway, led by [continuous glucose meters](#) (CGM). CGM technology has been life-changing for all people with diabetes, particularly for people living with diabetes who need multiple shots of daily insulin or who are on insulin pumps. The combination of an insulin pump and a CGM with software that calculates the correct dose of insulin is known as [Automated Insulin Delivery](#) (the “artificial pancreas”, also known as “Looping”). Looping is now commonplace - this technology allows individuals living with Type 1 diabetes to have lives that are almost normal, freeing them from fear of diabetes complications (blindness, amputations & dialysis) as well as passing-out low sugars & the fear of passing out from a low.

Automated insulin delivery relies on a negative feedback loop - if the sugar goes low the system reduces or stops insulin. On the rare occasion (< 1 event per client per year) that the sugar is dropping dangerously low the system sets off an audible (and vibrational) alarm to warn the user that they need to consume sugary or starchy food.

These alarm systems require a smartphone/smartwatch: thus a smartphone/smartwatch, in the context of diabetes and the use of a CGM, is a medical device. To avoid discrimination against people living with diabetes who use automated insulin delivery or CGM alone, I believe that smartphone/smartwatch with audible diabetes alarms be allowed at school & in the workplace.

Please call if you have any questions +1-604-638-0431

Yours sincerely,

A handwritten signature in black ink that reads "Tom Elliott". The signature is written in a cursive, flowing style.

Tom Elliott  
Medical Director  
Short URL = <https://bit.ly/T1Dexams>