BC Diabetes Foundation

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Type 1 Diabetes at school & in the workplace

People living with Type 1 diabetes (T1D) 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 people who don't have diabetes. 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 at all times.

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 to which the CGM is connected. As such individuals living with T1D need to have their smartphone with them at all times: whether at home, at school or in the workplace. In short, the combination of a smartphone and a CGM constitutes a medical device. For a greater understanding read on.

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: thus a smartphone, 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 smartphones with audible diabetes alarms should be allowed at school & in the workplace.

Yours sincerely,

Chair, BC Diabetes Foundation