

Title:

The diabEAT Study: Insulin dELivery Technologies And eaTing Behaviours in People With Type 1 Diabetes

Principal investigator:

- Anne-Sophie Brazeau, DtP, PhD, McGill University, School of Human Nutrition

Co-investigators:

- Courtney South, DtP, MSc, Project lead, PhD Candidate, McGill University, School of Human Nutrition
- Sylvain Ictea, MD, PhD, Laval University
- Catherine Leroux, DtP, MSc, Research Coordinator, McGill University, School of Human Nutrition
- Nadine Taleb, MD, PhD, Université de Montreal
- Meranda Nakhla, MD, MSc, McGill University
- Jessica Kichler, CDCES, PhD, CPsych, University of Windsor
- Catherine Bégin, PhD, Laval University
- Claudia Gagnon, MD, MSc, Laval University
- Jane Yardley, PhD, Université de Montreal

Description of the Study:

Automated Insulin Delivery (AID) is rapidly replacing conventional insulin delivery, like injections or non-automated insulin pumps, since it reduces management burden and improves blood sugar levels. It is not known if AID reduces food management and disordered eating behaviours. This study aims to:

1. Investigate the relationship between AID and eating behaviours according to gender for youth, aged 12 to 17 years.
2. Determine the limit of carbohydrate counting inaccuracy to maintain stable blood sugar levels according to insulin delivery method (AID, injections, or pumps).

It is hypothesized that those who use AID will have lower disordered eating behaviours and will maintain stable blood sugar levels while allowing for higher carbohydrate counting inaccuracy.

Participants will complete a short online questionnaire and then track their food intake for four days using a mobile app. They will also share continuous glucose monitoring (CGM) data from the same period.

Funding Source: Diabetes Quebec

Project Start Date: July 29, 2024

Project End Date: The survey will stay open until sufficient responses have been collected

Inclusion Criteria/Eligibility:

- 12 years of age or older
- Living in Canada
- Living with type 1 diabetes for more than 1 year
- Using at least 2 insulin injections per day or using an insulin pump
- Using current insulin delivery system for 3 months or more

Participation Details:

Phase 1:

- Complete a 20-minute online initial survey:
 - English: <https://surveys.mcgill.ca/ls3/788411?lang=en>
 - French: <https://surveys.mcgill.ca/ls3/788411?lang=fr>

Participants who meet the inclusion criteria and are selected for the study will be contacted by email for phase 2.

Phase 2:

- Track food intake using a mobile application (Keenoa) for 4 days
- Provide continuous glucose monitoring data for a 14-day period

Participants who complete both phases of the study will receive \$60 in compensation for completion

Participant Safety and Privacy:

Participation is voluntary and confidential, and youth and parents may withdraw at any time without providing a reason.

Ethics Approval: The McGill Research Ethics Board REB File #23-07-045

Website URL: <https://clinicaltrials.gov/study/NCT07348432>

Contact Information:

Courtney South, MSc

Phone: 705-527-4843

Email: courtney.south@mail.mcgill.ca