

**Title:**

Sex-specific and estrogen-mediated mechanisms in the development of type 2 diabetes

**Investigators:**

Jennifer Thompson PhD, Principal Investigator

Jamie Benham MD, Co-investigator

**Host Institution:**

University of Calgary

**Description of Study:**

There are well known sex differences in the risk for obesity-associated type 2 diabetes that vary across the reproductive stages. In adulthood, females are protected against the development of type 2 diabetes, but this protection is lost after menopause. Fat tissue plays an important role in preserving metabolic health and in the development of obesity-associated type 2 diabetes. This study uses animal models of obesity and menopause to determine how sex and estrogen impact the function of fat. Findings will provide important insight into why the risk for type 2 diabetes increases after menopause.

**Funding Source:** Diabetes Canada

**Project Start Date:** December 1, 2023

**Project End Date:** November 30, 2026

**Inclusion Criteria/Eligibility:**

We are looking for females (over 18 years of age) that have been diagnosed with type 2 diabetes or have a family history of type 2 diabetes. Our patient partners will serve on our advisory team and participate in quarterly meetings, which will be held in-person or remotely (days/times are flexible). Patient members will serve a critical role in devising a messaging strategy that uses accessible language to communicate results of our research findings to a broad audience and raise awareness of female-specific factors in the development of type 2 diabetes. Patient partners will be compensated for their time and parking costs.

**Ethics Approval:** AC21-0132

**Contact Information:**

**Name:** Jennifer Thompson

**Phone:** 587-438-3873

**Email Address:** [Jennifer.thompson2@ucalgary.ca](mailto:Jennifer.thompson2@ucalgary.ca)