

Dr. Marc Poulin



TREATMENT | CLINICAL RESEARCH

Project: Interplay between sleep, exercise and pre-diabetes in older adults at risk of Alzheimer's disease and related dementias

Thank you for your generosity. Diabetes Canada is grateful to our donors for supporting critical research that will end diabetes.

Through your support, Dr. Marc Poulin, Professor at the Cumming School of Medicine at University of Calgary and Brenda Strafford Foundation Chair in Alzheimer Research, is bringing us one step closer to reducing the risk of dementia for people at risk of diabetes.

People living with diabetes have an increased risk of dementia and Alzheimer's disease. Sleep may play an important role in the development of both diabetes and dementia, but how it does so is unclear.

Dr. Poulin and his lab will examine the relationships between sleep, diabetes, and brain health. In the first part of the project, they will study a group of 72 people with pre-diabetes or diabetes, to determine if poor sleep quality may increase their risk of developing dementia or Alzheimer's disease. In the second part of the project, the team will recruit 72 older individuals to participate in a six-month, moderate intensity aerobic exercise program meant to improve sleep quality. They will test whether positive changes in sleep positively impacts the relationship between diabetes and brain health.

This research will contribute to clinical recommendations for exercise programs in people with pre-diabetes who are at risk for dementia, to potentially prevent both diabetes and dementia.