



COMPLICATIONS | CLINICAL RESEARCH

Project: Home-based heat therapy to improve cardiometabolic function of adults living with type 2 diabetes

Through donor support, Dr. Daniel Gagnon, Associate Professor at the School of Kinesiology and Exercise Science at the University of Montreal is testing a new lifestyle habit that may help people with diabetes better manage their blood sugar levels and prevent heart disease.

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. For people with type 2 diabetes, they can no longer produce or use enough insulin to control their blood sugars, which can lead to health complications such as nerve damage, sight loss, heart disease, kidney failure, anxiety, amputations, and even death.

People who live with type 2 diabetes are more likely to develop heart disease. Cardiovascular diseases are the number one cause of death for people living with type 2 diabetes.

Previous research has shown that heat exposure, for example at saunas or spas, reduces the risk of developing or dying from heart disease.

Dr. Gagnon is studying the beneficial effects of heat exposure for people living with type 2 diabetes. Measurements of blood vessel health and of the ability of the body to eliminate sugars and fats from the blood after a meal will be measured before, during, and after a 12-week study where people with diabetes immerse their legs in a hot water bath three to five times a week. They hope to discover that immersing the legs in hot water will improve blood vessel health and the ability of the body to eliminate sugars and fats after a meal.

This research could inform a new lifestyle habit that people living with type 2 diabetes could use to reduce their risk of developing cardiovascular diseases.