

TREATMENT | BIOMEDICAL RESEARCH

Project: Cold-induced thermogenesis in diabetes

Through donor support, Dr. Denis Blondin, Associate Professor in the Faculty of Medicine and Health Sciences at the University of Sherbrooke, is learning of a potential new way to control blood sugars in people with diabetes.

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.

Researchers have recently discovered brown fat, a tissue in people that helps to use excess energy in our body to generate heat when exposed to cold temperatures. Brown fat may help with controlling blood sugar levels in people with diabetes, by using up excess sugars and fats in the blood.

Dr. Blondin and his team aim to identify the importance of brown fat in using energy reserves. They will then determine the role of brown fat in type 2 diabetes. This research may help identify an innovative new treatment for controlling blood sugars in people with diabetes.