

DIABETES CANADA



OUR RESEARCHERS | DR. PETER THOMPSON

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

Through your support, Dr. Peter Thompson, assistant professor at the Max Rady College of Medicine at the University of Manitoba, is bringing us one step closer to preventing type 1 diabetes.

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. Insulin is produced by cells in the pancreas called beta cells. For people with type 1 diabetes, their own immune system destroys their beta cells. They can no longer produce insulin to control their blood sugars, which can lead to health complications such as nerve damage, blindness, heart disease, kidney failure, anxiety, amputations, and even death.

We need new treatments that stop the immune attack and preserve beta cells.

Dr. Peter Thompson and his team are studying beta cells that escape the immune system attack, but become sick and then further accelerate the development of type 1 diabetes. They have discovered that in mice, removal of the sick beta cells spares the healthy beta cells and prevents type 1 diabetes. In order to move this exciting new approach towards clinical trial they will evaluate ways to target sick human beta cells. They will also establish markers to track these sick beta cells to determine who could most benefit from this therapy.

These studies will lay the groundwork for a new preventive therapy and improved screening of beta cell health in people with type 1 diabetes.

Thank you for giving hope for a healthier future to people with type 1 diabetes.