

Dr. Mahavir Agarwal



PREVENTION | CLINICAL RESEARCH

Project: Is abnormal insulin activity in the brain the reason behind the shared risk for depression and diabetes?

In partnership with Brain Canada

Thank you. Through donor support, and together with our funding partner, Brain Canada, Dr. Mahavir Agarwal, Staff Psychiatrist and Clinical Scientist, Centre for Addiction and Mental Health (CAMH) and Associate Professor with the Department of Psychiatry at the University of Toronto, is bringing us one step closer to better health for people experiencing depression and type 2 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, blindness, heart disease, kidney failure, depression, amputations, and even death.

People with depression are 60% more likely to develop type 2 diabetes, and people with type 2 diabetes are more likely to develop severe depression. Dr. Agarwal is exploring the relationship between type 2 diabetes and depression by studying the impact of insulin on the brain. He will study the biology behind whether disrupting insulin action in the brain can lead to depressive symptoms, helping find new treatments that can be offered at the earliest stages of diabetes. He hopes that emphasizing the mind-body connection between depression and diabetes can lead towards more holistic care and help improve the quality of life of people affected by both conditions.

Thank you for your generosity. Diabetes Canada is grateful to our donors for supporting critical research that will improve the lives of people with diabetes.