



OUR RESEARCHERS | DR. CAROL HUANG

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

Through your support, Dr. Carol Huang, associate professor with the Departments of Endocrinology, Medical Science, Pediatrics at University of Calgary, is bringing us one step closer to preventing gestational 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 2 diabetes, they can no longer produce or use 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.

When diabetes is detected for the first time during pregnancy, it's called gestational diabetes. Gestational diabetes is a very common condition, affecting up to 20% of pregnant women. 50% of these women progress to type 2 diabetes within 10 years after their gestational diabetes diagnosis.

Dr. Carol Huang is developing a better understanding of what causes gestational diabetes, and what factors hasten progression from gestational to type 2 diabetes. Her research study's aim is to help us design strategies to delay and prevent this progression.

Prolactin receptor (PRLR) plays a vital part in beta cell production. Dr. Huang is examining:

- if a lack of PRLR can lead to diabetes both during and after pregnancy
- testing whether prebiotics can treat this
- determining whether an abnormal PRLR gene is more common in women with gestational diabetes

This research will help identify and treat women at risk of developing gestational diabetes.

Thank you for giving hope for a healthier future to pregnant women at risk of developing diabetes.