

Diabetes Treatment

Welcome to Science Corner- relevant and ethical science information for our supporters.

Introduction:

January is Healthy Weight Awareness Month. What does healthy weight have to do with stem cells and diseases? Well, weight can play a big role in diabetes, and for this month's Science Corner, we have dedicated our focus on diabetes.

Diabetes Facts:

Roughly 29.1 million people in the United States suffer from diabetes.

8.1 million of those people are either pre-diabetic or yet undiagnosed.

Diabetes is the 7th leading cause of death in the U.S.

The number of individuals diagnosed with diabetes is increasing at an alarming rate each year.

*The United States spends more than 245 billion dollars each year for diabetes.**

*Centers for Disease Control and Prevention

What Is Diabetes?

There are two types of Diabetes, Type 1 and Type 2. Both of them affect how the body uses glucose, also known as blood sugar. Glucose is important for the body and a source of energy. However, when you have diabetes, the body has excess glucose in the bloodstream because insulin, a hormone in charge for enabling glucose into our cells, is not functioning correctly.

For Type 1 diabetics, the immune system attacks insulin-producing cells, and therefore insulin never gets the chance to break down glucose in the cells.

For Type 2 diabetics, cells become resistant to insulin, and therefore glucose builds up in the bloodstream.

What Causes It? Is There a Cure?

Research has yet to find out what specifically causes diabetes. However, an unhealthy diet, obesity, and lack of exercise all have been shown to contribute to Type II diabetes. Currently there is no cure for diabetes, but diabetics have various medications and insulin shots to manage their blood sugar levels.

If you are suffering from Type II diabetes or are pre-diabetic, maintaining a healthy weight and eating healthy will help ease your symptoms.

What Is Diabetes Research Doing Now?

Research supports that stem cells may play an important role in finding a cure for diabetes. JP2MRI is finding ways to transform a specialized adult stem cell called IPS cells into pancreatic cells that may be able to produce and regulate insulin. The hope is that when these cells are injected, they will be able to repair the damaged organ and cure a person of their diabetes. This important research will hopefully ease the lives of all diabetics someday soon through the discovery of a permanent cure.

What Can I do To Help?

If you suffer from diabetes, you can sign up to be placed on our patient registry by clicking [here](#). If you're a physician interested in studying diabetes, you can sign up for our physician registry by clicking [here](#).

Or you can support us by making a financial gift and spread the word about our important research.

Think you may have diabetes? Check out the symptoms below and make an appointment with your doctor for evaluation.

Symptoms of Type I

- *Increased thirst*
- *Frequent urination*
- *Bedwetting in children who previously didn't wet the bed during the night*
 - *Extreme hunger*
 - *Unintended weight loss*
- *Irritability and other mood changes*
 - *Fatigue and weakness*
 - *Blurred vision*

Symptoms of Type II

- *Increased thirst*
- *Frequent urination*
- *Extreme hunger*
- *Unintended weight loss*
 - *Fatigue*
 - *Blurred vision*
- *Slow-healing sores or frequent infections*
- *Areas of darkened skin*