

Type 1 diabetes and The Child Diabetes Foundation

Type 1 diabetes is the most common, life-threatening, and incurable disease among children and young people in Sweden. The disease requires round-the-clock treatment, every day, for life. Anyone can develop type 1 diabetes at any time in their life, regardless of lifestyle or diet. People who suffer from type 1 diabetes need thousands of insulin injections and blood sugar controls each year, just to stay alive.

The Child Diabetes Foundation (Barndiabetesfonden) is the biggest Swedish financier of type 1 diabetes research, and we support studies that aim to prevent, cure or ease type 1 diabetes. Despite modern technology and advanced treatments, type 1 diabetes often leads to secondary diseases and a drastically shortened life. We believe that with the right conditions, we can help the researchers cure type 1 diabetes before the year 2040.

Sweden is one of the countries with the highest incidence of type 1 diabetes

Approximately 50 000 people, of which 8 000 children, live with type 1 diabetes in Sweden. Every year, more than 900 children and at least as many adults in Sweden develop the disease. No one knows why and no one is cured. During the last 30 years, the number of children who develop type 1 diabetes has doubled. Finland and Sweden have the highest incidence of type 1 diabetes in the entire world. In the category of serious, life-threatening diseases that affect children, type 1 diabetes is, by far, the most common. Three times as many children suffer from type 1 diabetes than all forms of cancer – combined.



Our research makes a difference

The Child Diabetes Foundation cooperate with some of the world's leading researchers who are working to find a cure for type 1 diabetes. Among them are the Swedish researchers Johnny Ludvigsson and Åke Lermark, two of the worlds's top ten leading researchers in type 1 diabetes. Together they have almost a century of experience in diabetes research. Below you will find information about some of the research we support in the fight against type 1-diabetes.

Johnny Ludvigsson is a senior professor of pediatrics at Linköping University and one of the world's top ten type 1 diabetes researchers. He is trying to prevent type 1 diabetes in children, which affects over 900 children in Sweden every year, with the help of probiotics.

"If 200 children were to avoid suffering from type 1 diabetes every year, it would be almost as good as being able to cure 200 children" says Johnny Ludvigsson.



Johnny Ludvigsson

One of the researchers working to cure type 1 diabetes is **Joey Lau Börjesson**, associate professor and senior lecturer at Uppsala University. With the support of The Child Diabetes Foundation, she is researching to cure type 1 diabetes with insulin-producing stem cells.

"The dream scenario is that we can transplant these stem cells to people with type 1 diabetes to create a curative treatment" says Joey Lau Börjesson.



Joey Lau Börjesson

Olle Korsgren, professor of cell transplantation at Uppsala University, is researching to try to cure type 1 diabetes with the help of a combination treatment of two drugs. The goal of the project is to cure type 1 diabetes using the antioxidant resveratrol, in combination with an anti-inflammatory drug.

"If this succeeds, people with type 1 diabetes can become healthy and live a normal life, hopefully completely without any active treatment. If we see promising results after these studies, we hope that this treatment will be available in 2030 or a few years earlier" says Olle Korsgren.



Olle Korsgren

Malin Flodström Tullberg is a professor of type 1 diabetes at Karolinska Institutet in Huddinge. She is researching to see if cold viruses can lead to type 1 diabetes. If it turns out to be true, she wants to prevent type 1 diabetes with medication that stops the virus.

"This may be what initiates the autoimmune process that eventually leads to type 1 diabetes. Therefore, we think that an antiviral treatment could work as an antiretroviral drug before you get sick. In the best case, we can prevent the onset of type 1 diabetes or at least delay the onset of the disease" says Malin Flodström Tullberg.



Malin Flodström

Per-Ola Carlsson, professor of type 1 diabetes at Uppsala University, is researching to try to cure type 1 diabetes with reprogrammed stem cells. If his research proves successful, he hopes that the treatment will be available at the start of the 2030s.

"The purpose of these cells is to be able to create a curative treatment for patients with type 1 diabetes" Per-Ola Carlsson says.



Per-Ola Carlsson





"I have watched over him, every night, for the last seven years"

At the end of August 2014, the Måndroppe family received dramatic information when their ten-month-old son Juno was diagnosed with type 1 diabetes. What began with a visit to the emergency room in Huddinge, Stockholm ended with an ambulance trip to the children's intensive care unit at Astrid Lindgren's children's hospital. For the family, these news marked the beginning of a new journey in life.

"When he was diagnosed with type 1 diabetes it felt like my tears were flowing for weeks. I was so devastated, and I did not sleep at all. The nurses checked his blood sugar every half hour for several days straight. I did not have time to close my eyes before they would do a new check. During the day you are awake and can keep track, but at night all you want to do is sleep. I am completely alone with Juno and that is why I have been watching over him every night for over seven years" says Juno's mother Emma.

Only research can cure Juno

Juno is only one of over 8 000 children in Sweden who suffer from type 1 diabetes. It is a life-threatening and incurable disease that never takes a break, which is extremely stressful for all children, adults, and relatives who are alerted around the clock to correct their blood sugar. Many parents of children with type 1 diabetes describe a constant worry and everyday life where they are forced to control their blood sugar – regardless of the time of day. If the blood sugar is too low, the child needs to be woken up in the middle of the night to ingest sugar to raise the blood sugar.

The only thing that can cure Juno and all the other children and adults with type 1 diabetes is research. By supporting The Child Diabetes Foundation, you help the researchers who are working towards a cure for type 1 diabetes.



Why should you consider donating to a Swedish organization?

- · We support some of the world's leading type 1 diabetes researchers.
- In Sweden we have a unique possibility to conduct follow-ups on patients, their treatment and the risk of secondary diseases.
- · A breakthrough in the Swedish research would be of great use for other researchers around the world. Only by working together can we cure type 1 diabetes!

Donate

Please consider giving a donation to The Child Diabetes Foundation. Press the link to give a donation now:

https://donation.barndiabetesfonden.se/1/manager/signup/donation?productId=5&locale=en

Enter Swift code/BIC: HANDSESS

or IBAN-number: SE25 6000 0000 0005 8276 4742 if you would rather donate through bank transfer.

The Child Diabetes Foundation is an accredited nonprofit agency. We can arrange a receipt for your taxes.

We would love to hear from you.

Email sandra.pihlstrom@barndiabetesfonden.se for further questions.

Kind regards,

Sandra Pihlström Head of Brand & Fundraising The Child Diabetes Foundation

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