



Video: What Is Type 1 Diabetes?

Go GREEN with TEDDY!



If your TEDDY child is 10 or older you may have seen our book *Will and Emma Meet the TEDDY Scientists*. As a follow-up we are creating three short videos to complement the book. Check out our first video “What is Type 1 Diabetes” that includes short interviews with a boy and a girl who have T1D. <https://youtu.be/-z8OHyWNOAo>

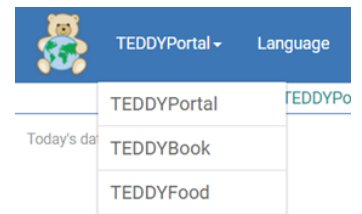
The next two videos will explain what it means to be at risk for developing T1D and the role the immune system and autoantibodies play in developing diabetes.

We can't thank you enough for all your valuable contribution to the study of type 1 diabetes!

TEDDY wants to be more mindful of the environment. One way to do this is to reduce the amount of paper we are using. A lot of families are using the TEDDY Portal to complete the questionnaires and food record online. This has helped us save paper. We think we can do more. You will notice the visit packets have less paper. Eventually, we would like to only mail visit packets for the annual visit. If less paper is also your preference, we will email you the visit reminder, parking code and your TEDDY portal link and IDs.

We understand this will not be everyone's choice; that is okay! Your clinician will be talking with you about this at your next visit so be sure to let them know. The questionnaires and food record are important in TEDDY and we appreciate you completing them.

www.teddystudy.org/portal



Meet a fellow member of the TEDDY Colorado Family:
Gavin, 12 years

Acetaminophen and ibuprofen use among young children in the TEDDY



Scientists at TEDDY wanted to know if the use of fever reducing drugs, like acetaminophen and ibuprofen, were associated with islet autoimmunity. They also wanted to know whether the use of those drugs was different between the US and European TEDDY centers, or if the drugs were given more often to first born children. At each visit, TEDDY asks about the use of medications. We asked parents to tell us which, if any, fever reducing drugs were given to their child and whether the medicine was given because of a fever or not. After looking at the data, TEDDY scientists found that the use of fever reducing drugs was not associated with islet autoimmunity. They also found that the use of fever reducing drugs was significantly higher in the US compared to Europe. The use of acetaminophen was higher in first born children but the use of NSAID drugs such as ibuprofen was lower in first born children.

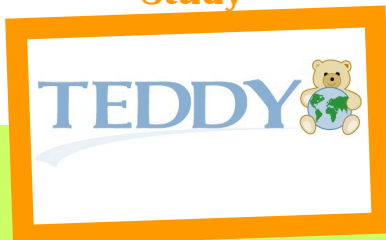
Lundrgren M, et al, *BMC Pediatrics*. 2017

Co-occurrence of type 1 diabetes and celiac disease autoimmunity

TEDDY scientists recently looked at autoantibody data for type 1 diabetes and celiac disease within the TEDDY Study. Past studies show that children with type 1 diabetes are at a greater risk for developing celiac disease. Scientists wanted to see if the early signs of these diseases behaved in the same way. They thought that having autoantibodies for one disease might impact the chance of getting autoantibodies to the other. They studied autoantibody results on more than 5000 TEDDY participants from 10 months to 9 years old! From that data, they found that children with autoimmunity for both diseases usually developed autoantibodies for type 1 diabetes before those for celiac disease. This means that there may be shared factors that influence both diseases. Scientists hope to find ways to target both diseases by studying these shared factors in the future.

Hagopian W, et al, *Pediatrics*. 2017

Study



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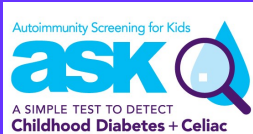
Blog: teddystudymom.blogspot.com

COLORADO TEDDY NEWSLETTER

The Environmental Determinants of Diabetes in the Young

www.teddystudy.org
www.teddycolorado.org

Remember siblings of your TEDDY child can be screened through ASK for autoantibodies for type 1 diabetes and celiac disease. Please let your TEDDY staff know if you are interested in having someone screened for ASK or you may contact an ASK staff member at 303-724-1275 or ask.program@ucdenver.edu.



Summer Coupon Codes!

Get ready for summer by bookmarking these links if you plan to make a trip to Water World or Elitch Gardens!

Elitch Gardens www.tinyurl.com/BDCatEG

Water World
www.thecalypsoclub.com

Store name: DAISY

TEDDY mom blog

We have a blog written by a TEDDY mom who is also a staff member at one of our centers. There you can read blogs about difficult blood draws, poop samples, interviews with adults who have celiac disease or diabetes, parents of children with celiac disease and many more. If you'd like to write a guest post, please email teddy.study@ucdenver.edu

<http://teddystudymom.blogspot.com>

Guest Post — A TEDDY Staff member at the Seattle TEDDY Center

I fell into diabetes research completely by accident. But I ended up loving my job and my co-workers, and it was a great place to be while I navigated the steps of young adulthood — getting married, buying a house, and starting a family. My daughter was born in 2008, and my son in 2012. My daughter was screened for TEDDY, but didn't have the high risk markers so she was not eligible to participate in the follow-up part of the TEDDY Study.

A big part of my job as a TEDDY Study Clinical Coordinator is educating families about the signs and symptoms of type 1 diabetes. So when my almost-5 year old daughter was suddenly peeing like crazy, drinking like crazy, and super cranky, I thought I was imagining things (like the way they say med students end up thinking they have each condition as they learn about it). But over the course of a weekend, I couldn't stop thinking about it, so on Monday, I brought a glucometer home from work. When I checked her blood sugar that night, she was 400. Diabetes.

We hopped in the car, and went down to Seattle Children's Hospital. We caught it very early, and she was relatively healthy at diagnosis. We completed our diabetes education over the next few days. Having the background of working at the TEDDY Study for 8 years was such a blessing. To understand the auto-immune processes at play, and to know that environmental triggers are yet to be found removed much of the shock and guilt that seems to sometimes accompany a type 1 diabetes diagnosis. We hit the ground running.



Today, Greta is a healthy, happy 9 1/2 year old. She manages her diabetes with a pump and continuous glucose monitor. Diabetes is exhausting. The constancy of needing to manage it, day in and day out, is draining. But I have faith that technologies will get better and better, making management easier and easier. In the mean time, we live by one of our favorite expressions from Type 1 Diabetes Camp: "Type 1 may be along for the ride, but it DOESN'T get to drive!"

Follow-up Q&A coming in the next issue. Do you have a question you'd like to ask this mom? Please email rachel.karban@ucdenver.edu



New at TEDDY!



TEDDY toenails are going to be collected at EVERY ANNUAL visit instead of once every other year. TEDDY found out that we can test toenails for a hormone called cortisol in addition to testing for certain vitamins and minerals. The cortisol in the toenails allows TEDDY to

determine if a stress response has happened, as cortisol is released during stress.

TEDDY has added a body composition machine that will allow us to collect more data about our TEDDY kids as they grow.

TEDDY is now collecting your kid's baby teeth! Why, teeth? TEDDY would like to look at teeth because we can gain more information about metal exposure by looking at the bone constituents found in teeth. We will take one or as many as you would like to give. All we need to know is month and year the tooth fell out. Please do not treat or clean the teeth in any way. We have cute tooth shaped boxes, and a letter for the Tooth Fairy (if she still visits) available at your next visit!

We can collect old baby teeth only if the month and year of the loss of that particular tooth is known.

