



TEDDY Thyroid Testing



Your thyroid is a gland shaped like a butterfly. It is located in the neck and releases hormones to help run the body's metabolism. Problems develop if it produces either TOO MUCH or TOO LITTLE hormone. Too little can cause symptoms like weakness and weight gain. Too much can cause symptoms like weight loss and hyperactivity. The most common cause of thyroid problems is autoimmunity. TEDDY is interested in autoimmune disorders that may impact the development of type 1 diabetes. We have added a test to check for

thyroid autoantibodies in all TEDDY kids on blood draws at the 8 and 14 year visits. Anybody with these autoantibodies may then need to have their doctor check their thyroid hormone levels.



Meet a fellow member
of the TEDDY
Colorado Family:
Meadow 10 years

Exposures and the Risk of Celiac Disease Autoimmunity

TEDDY scientists studied what exposures during early childhood might affect the risk of celiac disease autoimmunity (CDA) after a stomach virus. Celiac disease is an autoimmune small intestine disorder caused by gluten intolerance. CDA is determined by the presence of transglutaminase autoantibodies, which can be found in blood when the body is having an autoimmune reaction to gluten. From the age of one until the age of four TEDDY kids' parents were asked questions every 3 months about the number of stomach and chest infections, as well as whether or not they were vaccinated against the rotavirus. Parents were also asked the age the child was when they were first given food containing gluten, and how long the child was breastfed. Each of these factors were found to affect the risk of developing CDA within the three months after a stomach virus. This risk went up for children who were born during the winter and who were given their first gluten foods before they were six months old. In children with a



slightly lower genetic risk, the risk of developing CDA went up if the child was breastfed for fewer than four months. However, the risk for developing CDA went down in children that were vaccinated against the rotavirus. These results suggest, but do not prove, that there may be a connection between these early life exposures and CDA. However, the results encourage more studies to identify the different exposures during early childhood that may affect the development of CDA.

Kemppainen K, et al, Clinical Gastroenterology and Hepatology, 2016

New Screening for Childhood Diabetes and Celiac in Denver!

ASK (Autoimmunity Screening for Kids) is a new research study that has started at the Barbara Davis Center. ASK is screening kids for type 1 diabetes (T1D) and celiac disease. Kids 2-17 who live in the Denver-metro area and do not have type 1 diabetes are eligible for the screening. We would like to invite all friends and family of our TEDDY kiddos to participate in the ASK study. TEDDY children are not eligible to take part in ASK because they are already getting screened through TEDDY.

The goal of ASK is to demonstrate the importance of detecting the autoimmune process of type 1 diabetes and celiac disease early on, before kids get very sick and possibly need hospitalization. ASK would like to screen up to 70,000 children over the next 3-4 years. ASK wants to learn if it is worthwhile to do routine screening for T1D and CD and whether it should become a part of standard healthcare.

TEDDY has shown that children diagnosed with T1D and/or CD through the TEDDY study have much better outcomes at diagnosis and long-term when compared to children diagnosed in the community who aren't in TEDDY. This finding has supported the justification for the ASK program to be conducted. We cannot thank our TEDDY families enough for all the different ways you continue to support our research!

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.

