

## Similarities and Differences in Food Nutrient Information among the TEDDY Center Countries

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("Food Composition Database Harmonization for Between Country Comparisons of Nutrient Data in the TEDDY Study," published in *Journal of Food Composition and Analysis* in 2011)

- TEDDY is a multi-national study and the nutrient databases used to calculate data from food consumption are country-specific and need to be harmonized.
- In order to produce comparable results from the dietary assessments, the national food composition databases (FCDB) must contain mutually comparable food composition data.
- A systematic comparison (definition, unit of measurement, and method of analysis) of energy, protein, carbohydrates, cholesterol, fiber, 13 vitamins and 8 minerals was carried out among the FCDB of the four countries.
- A number of macronutrients, vitamins and minerals were found to be comparable between the FCDB in the TEDDY countries. Starch and folate are not comparable across the FCDB in TEDDY.

## TEDDY Participation Results in Less Illness at Diagnosis of Type 1 Diabetes

Helena Elding Larsson, Kendra Vehik, Ronny Bell, Dana Dabelea, Lawrence Dolan, Catharine Pihoker, Mikael Knip, Riitta Veijola, Bengt Lindblad, Ulf Samuelsson, Reinhard Holl, Michael J. Haller, on behalf of the TEDDY Study Group, SEARCH Study Group, Swediabkids Study Group, DPV Study Group, and Finnish Diabetes Registry Study Group

("Reduced Prevalence of Diabetic Ketoacidosis at Diagnosis of Type 1 Diabetes in Young Children Participating in Longitudinal Follow-up," published in *Diabetes Care* in 2011)

- The diagnosis of type 1 diabetes in children is frequently associated with diabetic ketoacidosis (DKA).
- The prevention of DKA would eliminate the serious complications caused by this condition which can include swelling of the brain.
- This study showed that TEDDY children diagnosed before the age of 5 experienced less DKA than those children in the comparative groups.
- Studies such as TEDDY that include intensive follow-up and education about diabetes risk may directly benefit young children.

## Viewing an Informational Video Improved Colorado Families' Enrollment in the TEDDY Study

Patricia Gesualdo, Lisa Ide, Marian Rewers, Judith Baxter

("Effectiveness of an Informational Video Method to Improve Enrollment and Retention of a Pediatric Cohort," published in *Contemporary Clinical Trials* in 2012)

- In 2008, an informational video was produced to describe the expectations and goals of the TEDDY Study in Colorado.
- An analysis was performed comparing a group of people who received the video and a group of people who did not receive the video to determine if enrollment and retention improved with those who received the video.
- The enrollment rate was higher in those who received the video (56.8%) compared to those who did not receive the video (49.9%).
- There were no differences in the retention between the two groups.
- The use of informational videos is an example of one method that may help to increase understanding and inform participants of what is involved in study participation.

### Differences in TEDDY Enrollment and Early Study Withdrawal among Ethnic Minority Participants in the US

Judith Baxter, Kendra Vehik, Suzanne Bennett Johnson, Barbro Lernmark, Roswith Roth, Tuula Simell for the TEDDY Study Group

("Differences in Recruitment and Early Retention Among Ethnic Minority Participants in a Large Pediatric Cohort: The TEDDY Study," published in *Contemporary Clinical Trials* in 2012)

- To achieve a representative cohort and to avoid underrepresentation of ethnic minority groups in research, it is important to include these groups in large cohort studies like TEDDY, in order to address health disparities and possible group differences regarding study enrollment and early participation in the first year of the study.
- As no ethnicity data were collected for the European centers, the analysis focuses on the US sites only.
- Exclusion rate was higher among ethnic minority groups due to difficulties in contacting them. Low educated ethnic minorities were also more likely to be excluded from the study, compared to the low educated main population.
- Early withdrawal rate was also higher among ethnic minority groups.

### Is Alternative Blood Glucose Marker Helpful in Diagnosing Type 1 Diabetes?

Kendra Vehik, David Cuthbertson, David Boulware, Craig A. Beam, Henry Rodriguez, Laurent Legault, Mila Hyttinen, Marian J. Rewers, Desmond A. Schatz, Jeffrey P. Krischer, and the TEDDY, TRIGR, Diabetes Prevention Trial–Type 1, and Type 1 Diabetes TrialNet Natural History Study Groups

("Performance of HbA1c as an Early Diagnostic Indicator of Type 1 Diabetes in Children and Youth," published in *Diabetes Care* in 2012)

- Currently type 1 diabetes diagnosis is done based on elevated blood glucose levels.
- Investigators of TEDDY, TRIGR, DPT-1 and TrialNet evaluated if elevated blood levels of an alternative blood glucose marker could be used in diagnosing childhood type 1 diabetes.

- The alternative marker was not reliable method to diagnose type 1 diabetes with its current recommended blood level limits and the investigators suggested that new limits should be set for more accurate diagnosis.

## Parents Stay in the TEDDY Study for Many Reasons and are Generally Satisfied with the Study

Barbro Lernmark, Kristian Lynch, Lori Ballard, Judy Baxter, Roswith Roth, Tuula Simell, Suzanne Johnson, and the TEDDY Study Group

(“Reasons for staying as a participant in The Environmental Determinants of Diabetes in the Young (TEDDY) longitudinal study,” published in *Journal of Clinical Trials* in 2012)

- The biggest reason for staying in TEDDY was knowing that someone was watching their child for development of diabetes.
- “Helping science” and “working with TEDDY staff” were important reasons for staying in TEDDY.
- Most parents were satisfied with TEDDY:
  - “Working with TEDDY staff” was rated highest across all the countries.
  - Transportation to and parking at the centers were rated as needing the most improvement.
- Most parents (76%) had not considered leaving TEDDY.
- “Blood draw” and “too busy” were reported as the top reasons for considering leaving TEDDY.