

## **Foodomics Database and Branded Foods Database**

Precision Ketogenic Therapy (PKT) for patients with epilepsy that have not found relief through medication requires diets to be carefully monitored. Any errors in nutritional values can lead to seizures. Since companies modify their products, their nutritional amounts change. It is necessary for us to know when they change to avoid inducing seizures. Our team of researchers specifically focused on branded foods that are being used in the treatment of current patients. We did food runs by taking pictures of the nutrition facts labels of these foods and recorded their nutrition facts. The U.S. Department of Agriculture Food Data Central (FDC), collects similar information, which could eliminate the need for our food runs. We compared food run data from January 2022 to data from the Branded Foods to determine any macronutrient concentration differences between the data sets in grams per 100 grams of food. We created a spreadsheet for these Branded Foods with columns for protein, carbohydrates, and fat and indicated when there was a difference in the food run data and the Branded Foods data by marking it with a 1. Many foods were not in the Branded Food database, so we created a separate column to indicate if it was present or not. For foods that were there, there were frequent differences between the Branded Foods data and the data from our January 2022 food runs. Preliminary data suggest that the Branded Foods database cannot replace the need for frequent food runs at local markets.

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