**Abstract for UF Undergraduate Research Symposium Spring 2025**

**Title:**

Ketogenic/Anti-ketogenic Potential of Food in Precision Medicine

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**Abstract (200 words):**

A century ago, use of ketogenic diet was introduced to the medical literature for the treatment of seizures. Since then, different versions used 1) grams of carbohydrate consumed per day, 2) a keto ratio of foods consumed per day (grams of dietary fat divided by the sum of grams of protein plus grams of carbohydrate), or 3) food with a low glycemic index. Medical literature supports use of the therapy for many chronic illnesses but concludes that the therapy must be defined in greater detail before the questions addressed can be answered for precision medicine.

We chose 20 recipes from a ketogenic website frequently recommended by medical providers, made a grocery list of foods listed in recipes, collected nutrient composition data for several products of each food that might be purchased by a patient, compared the nutrient content of the products for each food, and calculated several ketogenic and anti-ketogenic parameters for each recipe. We conclude that the product of the food chosen, and the parameter used for dosing are major controllable factors in the resulting therapy and should be documented. We are proposing the parameter Ketogenic/Antiketogenic Potential Percent (KAP%) as the next step in reaching a better-defined ketogenic therapy.