

# Microbiome Diet Study Participant Report

Thank you for participating in the Knights Lab citizen science project: The Microbiome Diet Study. Included in this report is some high-level information about your daily dietary intake and your daily microbiome variation. This report does not provide any medical advice and is not intended to be used to diagnose disease. If you have questions about your report, or you would like access to your raw data, please contact the study coordinator Abby Cole at [cole0463@umn.edu](mailto:cole0463@umn.edu)

Here are your average daily macronutrient nutritional intakes contrasted to recommended macronutrient nutritional intake levels:

Type	Your Average	Study Average
CALORIES (kcal)	1406.09	2080.11
PROTEIN (g)	56.05	88.57
TOTAL FAT (g)	88.89	89.97
CARBS (g)	102.57	225.55
FIBER (g)	12.21	21.96

These are your average daily micronutrient nutritional intakes contrasted to recommended micronutrient nutritional intake levels:

Type	Your Average	Study Average	Recommended Daily Allowances(Male/Female)
FOLATE (ug)	308.37	437.96	400
SELENIUM (ug)	72.73	112.56	55
CALCIUM (mg)	582.23	1064.4	1000 *
POTASSIUM (mg)	2024.96	2916.33	4.7
MAGNESIUM (mg)	215.75	366.89	400 / 310 *
ZINC (mg)	6.46	12.72	11 / 8 *
VITAMIN A (ug)	979.21	952.14	900 / 700
VITAMIN B12 (ug)	4.09	4.99	2.4
VITAMIN D (ug)	2.64	5.44	15 *
VITAMIN E (mg)	8.43	10.81	15
VITAMIN K (ug)	309.1	227.23	120 / 90

The above tables show your average daily intakes of key macro and micro nutrients during the study period. For your reference also shown here are the overall average for the other participants in the study and the recommended intake levels by gender. Values marked with asterisks are indicative of recommended values that may vary for individuals over 30 may be higher or lower, visit [https://ods.od.nih.gov/Health\\_Information/Dietary\\_Reference\\_Intakes.aspx](https://ods.od.nih.gov/Health_Information/Dietary_Reference_Intakes.aspx) for a comprehensive breakdown of dietary reference intakes by age and gender.

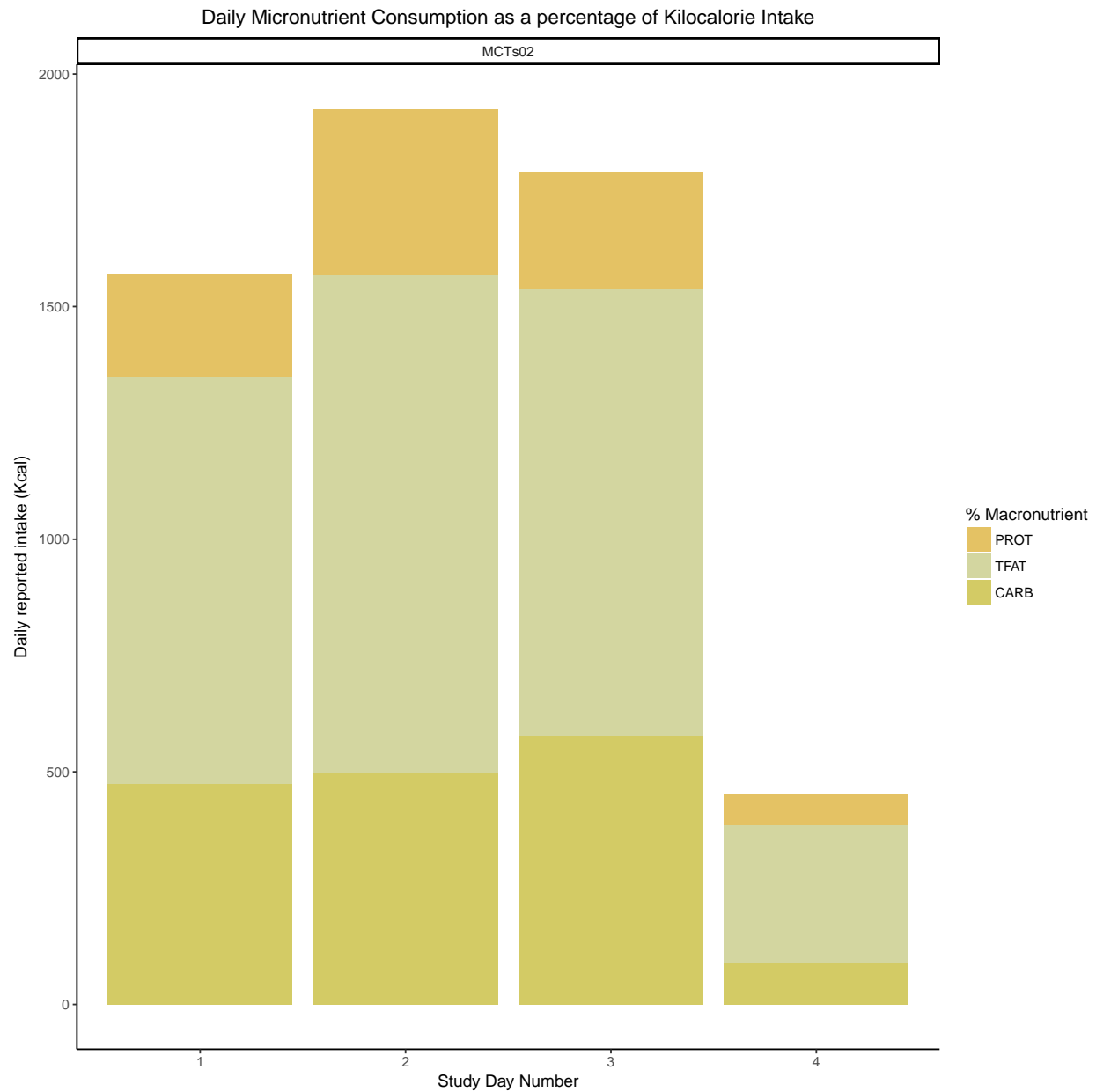


Figure 1: Figure 1 visualizes day to day variation in your consumption of micronutrients viewed as a percentage of total kilocalorie intake. Protein intakes are abbreviated as “PROT”, Carbohydrate intakes are abbreviated as “CARB”, and Total Fat intakes are abbreviated as “TFAT” in the figure legend

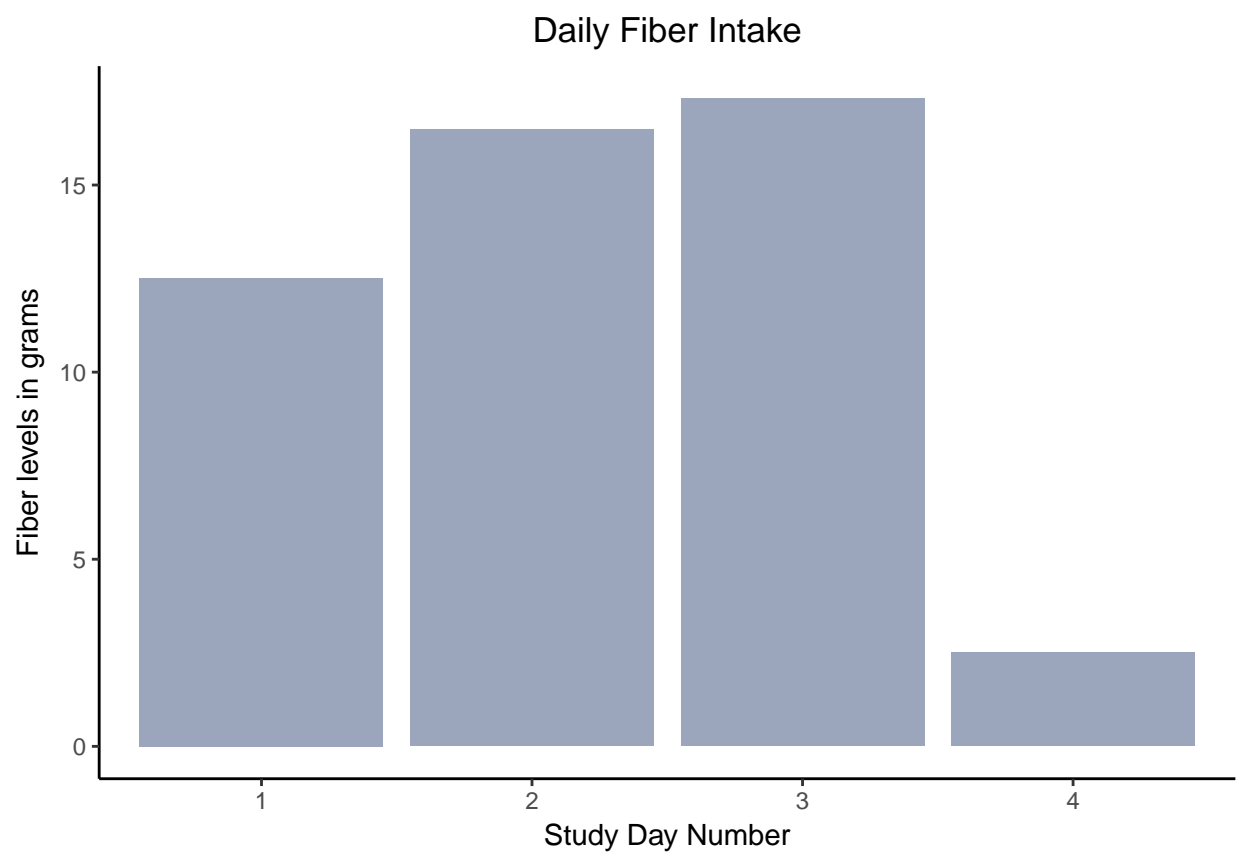


Figure 2: Figure 2 visualizes your Fiber intake on a day-to-day basis. Add blurb pertaining to microbiome importance

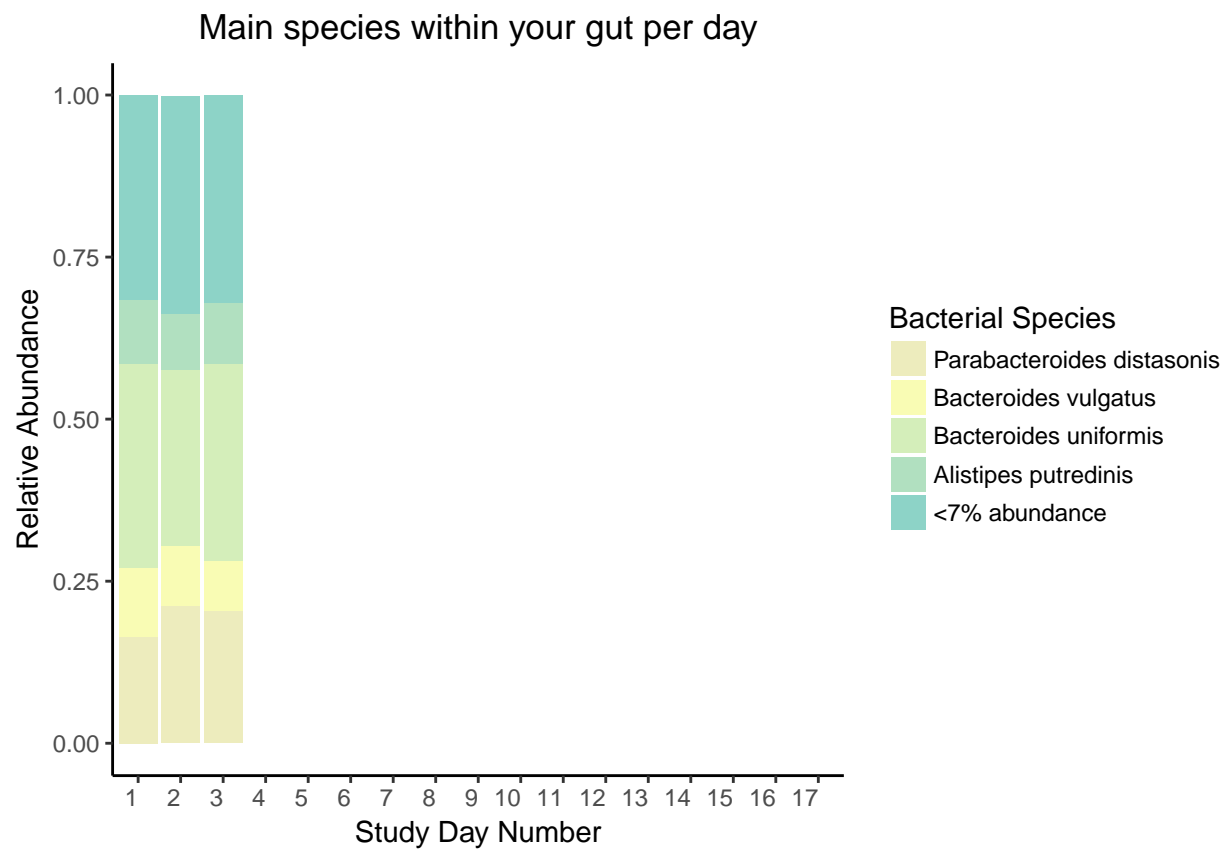


Figure 3: Figure 3 depicts the most abundant bacterial species within your gut per each day of the study. The “<7% abundance” column represents a sum of bacterial species that individually account for less than 7% of

or Vegetables;L2 Green perilla tomatoes excluding tomatoes;L4 ;L5 ;Cabbage red perilla  
 yellow vegetables;L3 Carrots;L4 ;L5 ;Carrots raw  
 yellow vegetables;L3 Carrots;L4 ;L5 ;Carrots cooked from fresh fat not added in cooking  
 green vegetables;L3 Darkgreen nonleafy vegetables;L4 ;L5 ;Broccoli raw  
 Beverages;L2 Water noncarbonated;L3 Water not bottled;L4 ;L5 ;Water tap  
 Beverages;L2 Sugars and sweets;L3 Syrups honey molasses sweet toppings;L4 ;L5 ;Honey  
 Beverages;L2 Sugars and sweets;L3 Candies;L4 ;L5 ;Milk chocolate candy plain  
 Beverages;L2 Nonalcoholic beverages;L3 Tea;L4 ;L5 ;Tea leaf decaffeinated presweetened NS as to sweetener  
 Beverages;L2 Nonalcoholic beverages;L3 Tea;L4 ;L5 ;Tea herbal  
 Beverages;L2 Nonalcoholic beverages;L3 Coffee;L4 ;L5 ;Coffee decaffeinated made from ground  
 L2 Milks and milk drinks;L3 Yogurt;L4 ;L5 ;Yogurt plain whole milk  
 L2 Creams and cream substitutes;L3 Sweet dairy cream;L4 ;L5 ;Cream heavy fluid  
 L2 Cheeses;L3 Natural cheeses;L4 ;L5 ;Cheese Cheddar  
 L2 Cheeses;L3 Cheese mixtures;L4 ;L5 ;Cheese nuggets or pieces breaded baked or fried  
 and Mixtures;L2 Poultry;L3 Chicken;L4 ;L5 ;Chicken NS as to part and cooking method skin not eaten  
 and Mixtures;L2 Pork;L3 Other pork items;L4 ;L5 ;Pork spareribs cooked lean only eaten  
 and Mixtures;L2 Organ meats sausages and lunchmeats;L3 Frankfurters sausages lunchmeats meat spreads;L4 Frank  
 and Mixtures;L2 Meatpoultry fish with nonmeat;L3 meatpoultryfish in gravy;L4 Poultry with gravy or sauce;L5 ;Chicken  
 and Mixtures;L2 Fish and shellfish;L3 Shellfish;L4 ;L5 ;Shrimp coated fried made with oil  
 and Mixtures;L2 Fish and shellfish;L3 Finfish;L4 ;L5 ;Sardines canned in oil  
 east;L3 White breads rolls;L4 ;L5 ;Croissant  
 pastas cooked cereals rice;L3 Cooked cereals rice;L4 ;L5 ;Rice white cooked fat added in cooking made with oil  
 grain mixtures frozen plate meals soups;L3 Mixtures mainly grain pasta or bread;L4 ;L5 ;Sushi with vegetables rolled in

Figure 4: Figure 3.5 depicts the most abundant bacterial species within your gut per each day of the study. The “<7% abundance” column represents a sum of bacterial species that individually account for less than 7% of

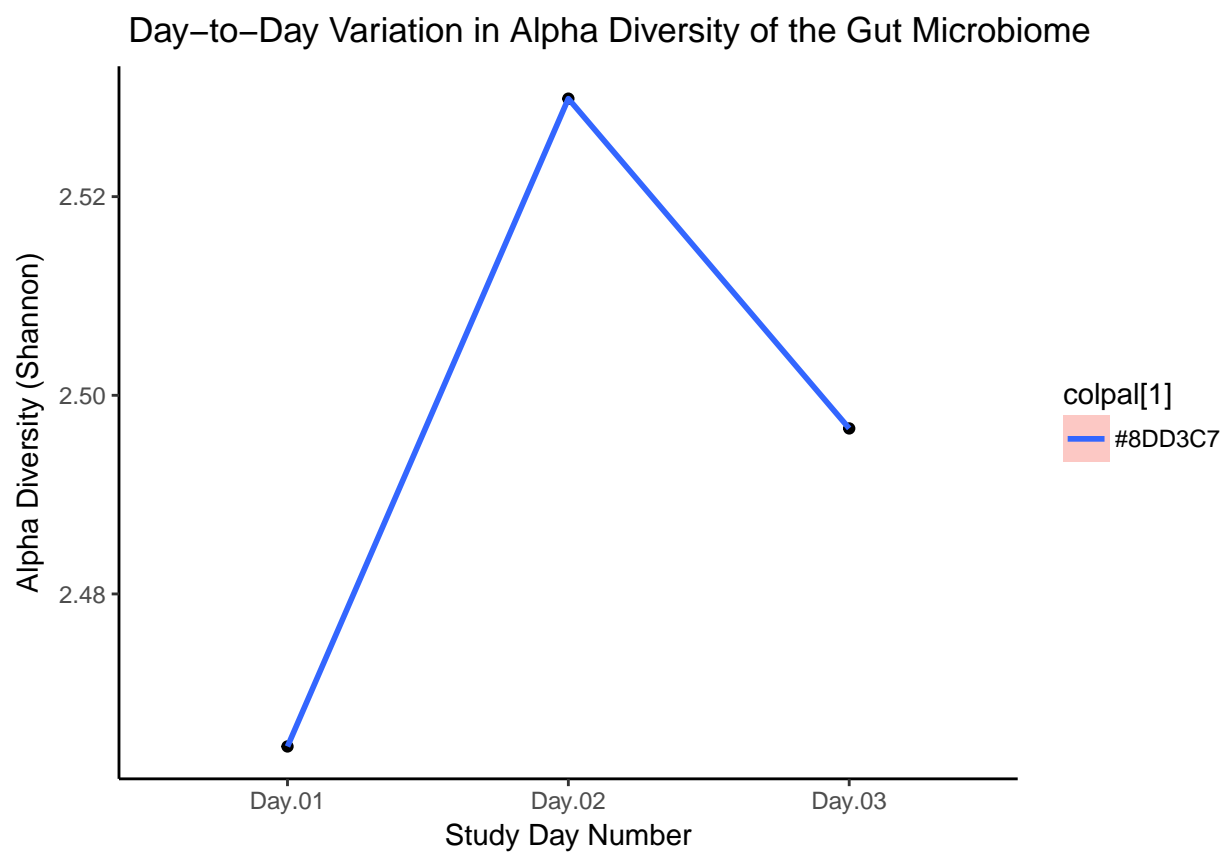


Figure 5: Figure 4 details how the bacterial diversity exhibited within your gut changes on a daily basis. This diversity catalogued within the gut microbiome is known as alpha diversity, and the metric utilized is the Shannon index of alpha diversity. The Shannon index accounts for both abundance and evenness of bacterial species present within the gut microbiome.

## Day-to-Day Variation in Beta Diversity of the Gut Microbiome – PCOA – MCT

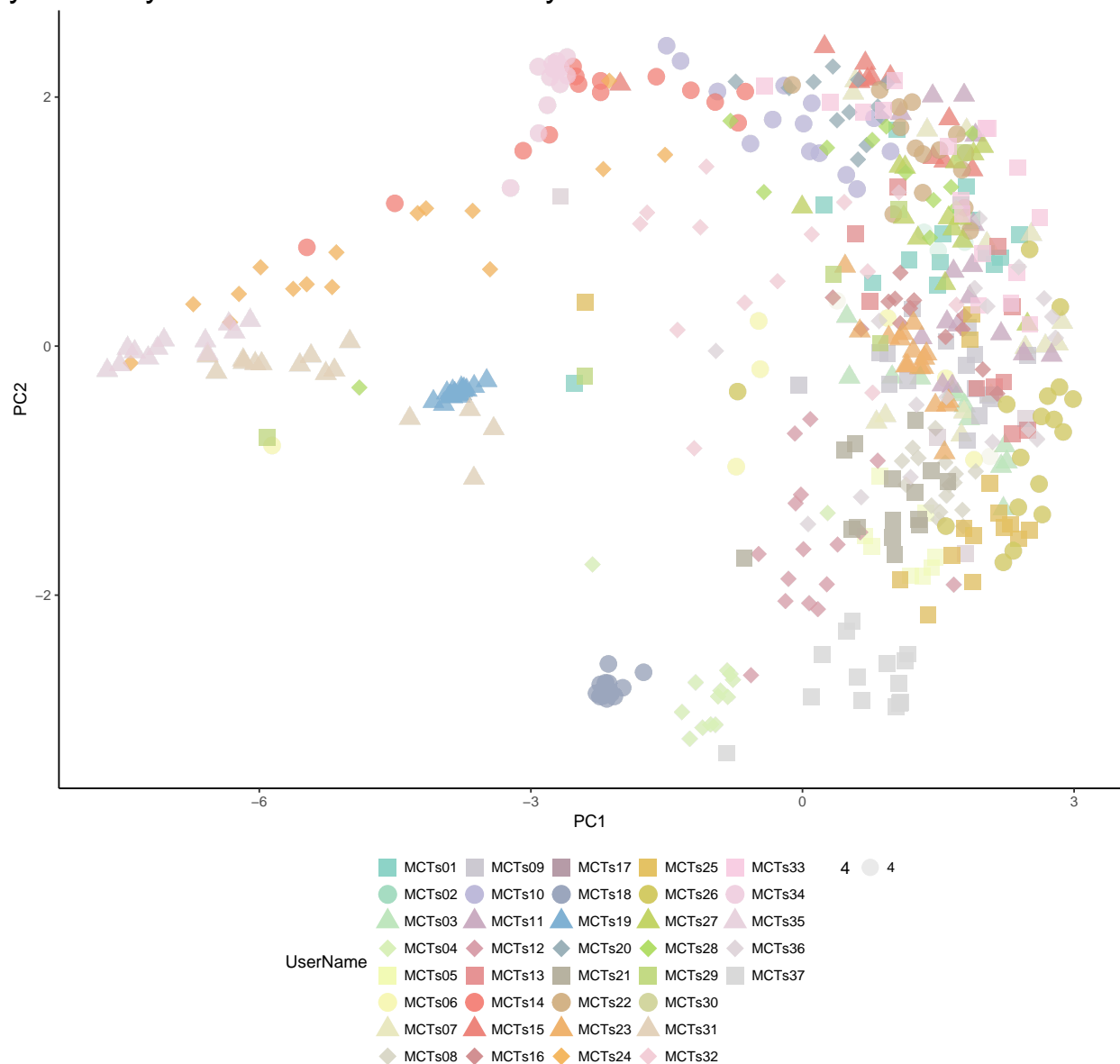


Figure 6: Figure 5 is a PCoA plot. A PCoA plot summarizes variability within a given dataset by producing a set of uncorrelated axes. Essentially, the PCoA plot can be utilized to interpret similarity of data points – data points closer to one another are more similar to one another, while points further away from each other are more dissimilar. Each data point in this plot represents a subject gut microbiome at a particular time during the multiple days of sample collection and testing. The shape corresponding to your subject ID (given above) represents data points pertaining to your gut microbiome.