

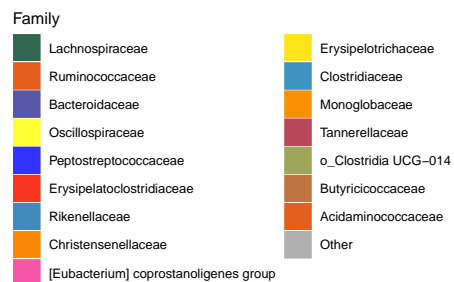
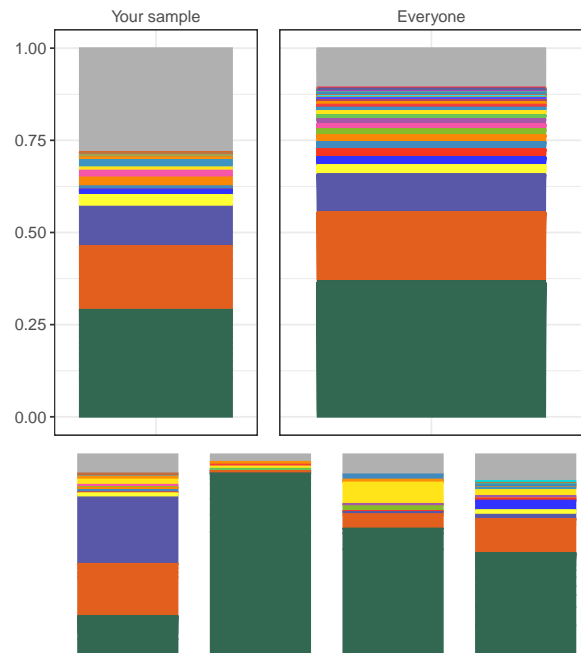
Inflammation, Microbiome & Alimentation  Gastro-Intestinal & Neuropsychiatric Effects

Introduction

INTRODUCTION TO MICROBIOME AND TO THE IMAGINE STUDY

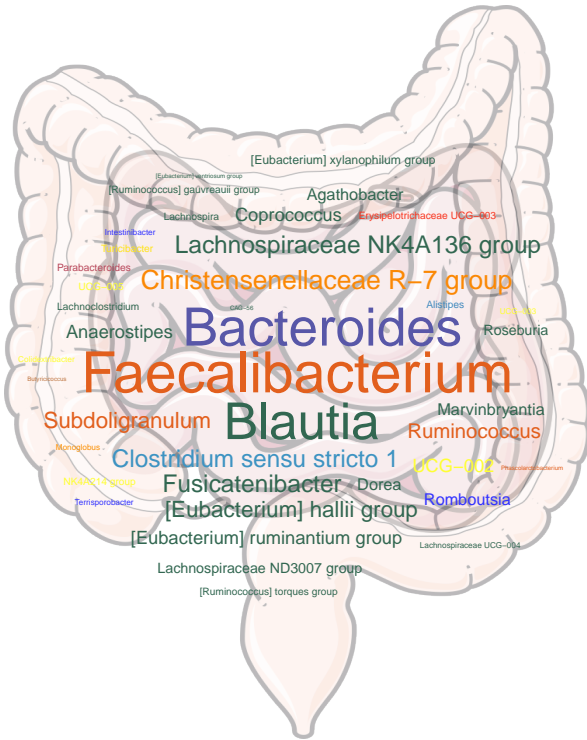
Your Sample

This bar chart shows your personal fecal bacterial community. Bacteria are grouped into ****families**** based on how closely related they are. The bar chart is stacked from most abundant bacterial family on the bottom, to least abundant on the top, with very low-abundance bacteria grouped together as "Other". Next to it is a chart showing the average community of all the people who participated in the study, and across the bottom are four anonymous individuals chosen to show the range of variation in this study. As you can see, it's quite wide!





Inflammation, Microbiome & Alimentation Gastro-Intestinal Syndrome Neurological Effects **YOU ARE HERE**

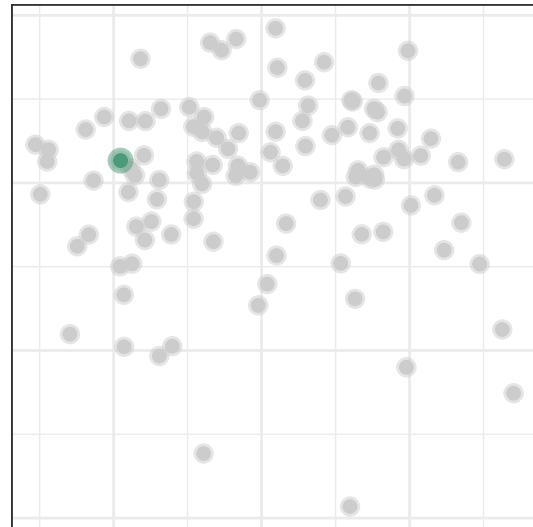


← More Detail

This word cloud shows your personal bacterial community at a finer level of detail. Within each family, bacteria can be subdivided into several ****genera**** (singular, ****genus****). The size of each word represents the relative abundance of that genus, and the colour shows which family that genus comes from.

You Are Here →

There were over 1,000 people participating in this study! We have graphed everyone together based on how similar or different their gut microbiomes were. In the next graph, points that are closer together are more similar to each other, and points that are farther apart are more different. Your sample is shown in green. Remember that your position in this graph doesn't say anything about how healthy your gut microbiome is. As we've seen above, there is a wide range of normal variation in the human gut.





Inflammation, Microbiome & Alimentation  Gastric Digestion & Neurological Effects **YOUR BACTERIAL FAMILIES**

Your Bacterial Families

Everyone's microbiome is slightly different. In your microbiome, the four most abundant bacterial families were **Lachnospiraceae**, **Ruminococcaceae**, **Bacteroidaceae**, and **Oscillospiraceae**. Here is a little bit of information about what functions these four families perform in the gut.

Lachnospiraceae

This family of bacteria is found in the gut and plays an important role in the breakdown of complex carbohydrates. Lachnospiraceae are known for their ability to ferment a variety of dietary fibers, producing short-chain fatty acids (SCFAs) such as butyrate, propionate, and acetate. These SCFAs provide an energy source for the body, improve gut health, and have anti-inflammatory properties. Research has also linked Lachnospiraceae to improved metabolic health and a reduced risk of obesity.

Ruminococcaceae

Ruminococcaceae are involved in the fermentation of dietary fiber and the production of SCFAs. These bacteria also play a role in regulating the immune system and maintaining gut health. Research has shown that reduced levels of Ruminococcaceae in the gut are associated with inflammatory bowel diseases such as Crohn's disease and ulcerative colitis.

Bacteroidaceae

Bacteroidaceae is a family of bacteria found in the gut that are involved in the breakdown of complex carbohydrates, such as dietary fibers and resistant starches. These bacteria produce enzymes that can break down plant-based foods, making the nutrients more accessible to the body. Bacteroidaceae also play a role in regulating the immune system and maintaining gut health, and their presence has been associated with a reduced risk of inflammatory bowel diseases.

Oscillospiraceae

Members of the Oscillospiraceae family of bacteria have been linked to improved glucose metabolism and may have a role in regulating blood sugar levels. These bacteria are involved in the breakdown of complex carbohydrates and the production of SCFAs such as butyrate, which have been shown to improve gut health and protect against inflammation.