The Gut Microbiome: The Basics

Animation: <https://drive.google.com/file/d/1iXx2hd65KNIq1Oj86sqJi6pZAlON9HMe/view?usp=sharing>

Graphic (attached in the email). Feel free to edit the graphics here if needed: <https://www.canva.com/design/DAF5_taxhq4/32A8OjM4sEiFxaQdwuHwNg/edit>

**What is the Gut Microbiome?**

The gut microbiome is a complex community of microbes, including bacteria, viruses, and fungi, living within our gastrointestinal tract. These tiny organisms are integral in our digestion and immune support and help to maintain a healthy gut. The specific microbial communities living within individuals can vary from person to person. Furthermore, when looking on a global scale, those living in westernized societies possess a gut microbiome that is significantly different from non-westernized nations. Therefore, as we advance in developing microbiome-based preventative and treatment strategies, it is crucial to adopt personalized approaches that are tailored to the individual’s unique microbiome composition.

**Understanding Gut Dysbiosis & Disease**

Your overall health is greatly impacted by the state of your gut microbiome. In fact, scientists have discovered that the gut microbiome plays a key role in diseases such as inflammatory bowel disease (IBD), metabolic disorders, and mental illness. When our microbiome is in balance, it maintains a symbiotic relationship with the host by aiding in digestion and immunity. However, an imbalanced microbiome, can result in more harmful bacteria overpopulating the gut and triggering chronic inflammation. This state is often referred to as “gut dysbiosis”. There are several factors that contribute to gut dysbiosis including over usage of antibiotics, unhealthy diets high in ultra-processed food, and even stress.