

# Nourishing Your Microbiome Through Diet

A microbe, an organism too minuscule for unaided vision, encompasses various life forms such as bacteria, fungi, yeast, and viruses. The term "microbiome" denotes the assembly of these microbes within a specific community, such as the intestinal environment in the human body. This community is also interchangeably referred to as "flora" or "microbiota." The formation of our microbiome initiates from birth, influenced significantly by the circumstances and method of our delivery. Microbial acquisition begins during a vaginal birth, followed by ongoing exposure to microbes from various sources encountered throughout life. The microbiome is not static; it evolves over time and adapts to changes in its surroundings.

## Functions of the Microbiome:

The entirety of the body, including the brain, is impacted by gut bacteria. Beneficial bacteria within the gut serve multifaceted roles, such as synthesizing certain vitamins, aiding digestion, maintaining mood equilibrium, alleviating anxiety, and providing defense against infections and specific cancer types. Strains of beneficial gut bacteria are correlated with reduced rates of obesity, diabetes, and various digestive tract ailments. Imbalances in the microbiome, characterized by an excess of harmful bacteria or insufficient beneficial bacteria, can lead to severe health issues. Stress, surgery, illness, trauma, or unhealthy dietary habits can hinder or eradicate the population of beneficial bacteria. While antibiotics eliminate disease-causing bacteria, they also compromise beneficial microbes. Sustaining a healthy microbiome involves consuming foods that nourish beneficial bacteria and abstaining from those that promote the proliferation of harmful bacteria.

## Feeding the Microbiome

The impact of our diet on the microbiome is substantial. Numerous microbes in the gut aid in extracting nutrients from otherwise indigestible food. Different microbes thrive on specific types of food, and promoting the growth of beneficial bacteria, also known as probiotics, can be achieved

by consuming foods conducive to their proliferation—referred to as prebiotics. These prebiotic foods encompass a variety of fiber-rich food options.

## Tips for Maintaining a Healthy Microbiome

- ➔ Eat a wide variety of fiber-rich plant foods, including legumes, nuts, seeds, herbs, whole grains, fruits, and especially vegetables.
- ➔ Limit or avoid red meat, processed foods, and foods high in added sugar and artificial sweeteners.
- ➔ Stay hydrated. Drink plenty of plain water and other non-caffeinated, unsweetened beverages.
- ➔ Limit or avoid any foods to which you are sensitive, intolerant, or allergic. Some common examples are corn, dairy, eggs, fish and shellfish, peanuts, soy, tree nuts, and wheat (gluten).
- ➔ Include both prebiotic and probiotic foods in your diet. For more information, ask your functional medicine practitioner for IFM's Probiotic and Prebiotic Foods document.
- ➔ Take antibiotics only when medically necessary. During and after completing a course of antibiotics, eat probiotic foods and take a probiotic supplement. This can help rebuild the population of healthy bacteria in your gut.

## References

1. Valdes AM, Walter J, Segal E, Spector TD. Role of the gut microbiota in nutrition and health. *BMJ*. 2018;361:k2179. Published 2018 Jun 13. doi:10.1136/bmj.k2179.
2. Deehan EC, Duar RM, Armet AM, Perez-Muñoz ME, Jin M, Walter J. Modulation of the gastrointestinal microbiome with nondigestible fermentable carbohydrates to improve human health. *Microbiol Spectr*. 2017;5(5):10.1128/microbiolspec.BAD-0019-2017. doi:10.1128/microbiolspec.BAD-0019-2017.
3. Heiman ML, Greenway FL. A healthy gastrointestinal microbiome is dependent on dietary diversity. *Mol Metab*. 2016;5(5):317-320. Published 2016 Mar 5. doi:10.1016/j.molmet.2016.02.005.
4. Wang Z, Bergeron N, Levison BS, et al. Impact of chronic dietary red meat, white meat, or non-meat protein on trimethylamine N-oxide metabolism and renal excretion in healthy men and women. *Eur Heart J*. 2019;40(7):583-594. doi:10.1093/eurheartj/ehy799.