



# Microbiome: *What it can do*

Inside your digestive system lives a diverse community of organisms called the microbiome. Your microbiome contains bacteria and other microbes which carry out health-promoting functions. It's a unique symbiotic relationship that has a substantial impact on your well-being.

A good balance of bacteria in your digestive tract will help your body systems work optimally.



## IMMUNITY

An incredible 70% of your immune system is located in your gut. The microbiome plays a critical role in immunity and resistance to disease. When the microbiome is balanced, your immune system will be at its best. The job of beneficial intestinal bacteria is to:

- Ward off foreign invaders
- Rid the body of toxins
- Enhance immune cell production
- Prevent the growth of cancer cells
- Decrease inflammation

## DIGESTION

The microbiome helps you get the most out of the food you eat. Microorganisms in the gut are responsible for the breakdown and fermentation of some fibers. Bacteria turn these otherwise undigestable foods into usable nutrients.

In addition, the food you eat can help or harm the balance of bacteria in your intestines. A healthy diet promotes the growth of more beneficial microorganisms. Conversely, a diet high in sugar and processed foods encourages the overgrowth of harmful bacteria.

## BRAIN HEALTH

Your digestive system is connected to your brain by millions of nerves. If you've had the sensation of butterflies in your stomach or a sinking feeling in your gut, you know how complex the relationship is between your digestive system and your brain.

The microbiome of your gut influences the production of neurotransmitters such as serotonin. Bacteria of the microbiome may even affect your behavior and emotions by influencing the vagus nerve, an important brain messenger.



## AN OUT-OF-BALANCE MICROBIOME

A well-balanced microbiome can promote optimal health. However, some lifestyle habits can disrupt this diverse ecosystem. When this happens, the microbiome may become unable to carry out essential functions. Habits such as smoking, excessive drinking, eating a poor diet and being sedentary all negatively influence the microbiome. To keep the microbiome balanced, focus on these healthy habits:

- Regular exercise
- Adequate sleep
- A healthy high-fiber diet
- Stress management