



## Human Gut Microbiome and Diet in Health and Disease

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### Message from the Guest Editors

In the last several decades, many studies have shown that the microbial communities associated with the human host play a fundamental role in maintaining health and preventing or causing some diseases. Other works have shown that human-associated microbial communities are shaped by several factors, including age, sex, antibiotics usage, and lifestyle. Among lifestyle-related factors, diet plays a key role in shaping the microbiome of the human digestive tract, as it provides different food sources for microbes and strongly affects the host metabolism. Human diet moreover forges the cross-talk between the host and the associated microbial communities by influencing the availability and production of different host- or microbiome-produced metabolites. While disentangling the links between diet, gut microbiome, and host metabolism is a complex matter, studies shedding light on these relationships are of key importance to identify potential diet interventions that could help to prevent or treat diseases through modulation of the gut microbiome.





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## Message from the Editor-in-Chief

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