

Special Issue

The Roles of Diet, Gut Microbiome and Microbial Metabolome in Precision Nutrition

Message from the Guest Editors

Trillions of microbes inhabit the human gastrointestinal tract. Metagenomics studies have demonstrated that there are 3.3 million unique genes in the human gut, 150 times more genes than in the human genome. Integrative gut microbiome and metabolomics research are critical to elucidate the interplay among diet, nutrition, microbiome, microbial metabolites, and their roles in human health, particularly in the growing area of precision nutrition. The scope of this Special Issue “The Roles of Diet, Gut Microbiome and Microbial Metabolome in Precision Nutrition” is devoted to research papers and literature reviews describing the role of diet and nutrition in shaping the gut microbiome; the strategies of utilizing microbiome and metabolomics approaches in precision nutrition; the omics integration between microbiome and metabolomics data; microbiome epidemiological studies regarding the associations of diet and nutrition with the microbiome and its derived metabolites; and microbial signatures of both prebiotics and probiotics in relation to disease management, diagnosis, prevention, and dietary management.

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About the Journal

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

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