

Special Issue

Disease-Associated Gut Microbiota Patterns, Nutritional Factors, and Host Immunity

Message from the Guest Editor

The gut microbiota play a central role in shaping host immune homeostasis and systemic inflammatory responses. Increasing evidence suggests that the distinct disease-associated patterns of gut microbiota are linked to varied human disorders, including autoimmune, inflammatory, metabolic, and neurological diseases. At the same time, dietary and nutritional factors are among the most important modulators of gut microbial composition and function. This Special Issue will explore how nutritional factors influence disease-associated gut microbiota patterns and how these interactions affect host immune responses. Particular attention will be paid to studies investigating diet-microbiota-immune interactions, the role of dietary components and microbial metabolites in immune regulation, and the impact of nutrition-driven microbiota alterations on disease pathogenesis. Topics of interest include dietary modulation of gut microbiota, microbiota-derived metabolites, gut barrier function, immune dysregulation associated with microbial alterations, and microbiota-targeted nutritional strategies such as probiotics, prebiotics, and dietary interventions.

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Message from the Editor-in-Chief

Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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