

## Special Issue

# From Population to Precision: Nutritional Approaches in Metabolic Dysfunction-Associated Steatotic Liver Disease

### Message from the Guest Editors

The liver is central to metabolic regulation, coordinating nutrient processing and energy balance to maintain whole-body homeostasis. MASLD, formerly known as NAFLD, is the most common chronic liver disease globally, largely driven by poor diet, sedentary lifestyle, obesity, and type 2 diabetes. Nutrition plays a key role in both the development and management of MASLD by influencing liver fat, insulin sensitivity, inflammation, and fibrosis. Dietary interventions that promote weight loss and improve metabolic function can slow disease progression. Personalized nutrition strategies, tailored to individual genetic and metabolic profiles, hold strong therapeutic promise. This Special Issue highlights innovative research on nutrition's role in MASLD prevention and management, from clinical trials to mechanistic studies. Topics include nutrient–gene interactions, Mendelian randomization for causal inference, and omics-driven personalized strategies. It covers both established and emerging perspectives on nutritional therapies and dietary guidelines. Population differences, genetic backgrounds, and commercial diets are also explored. You may also choose our [Joint Special Issue](#) in *Livers*.

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### Message from the Editorial Board

*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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