

Special Issue

Physical Activity, Metabolic Health, and Nutritional Interventions

Message from the Guest Editor

Recent studies show that beyond energy balance, innovative nutritional strategies such as optimized macronutrient composition, adequate micronutrient intake, bioactive food components, and precise nutrient timing can profoundly influence inflammation, mitochondrial function, hormonal regulation, and gut–muscle–metabolism communication. When combined with structured exercise programs, these approaches enhance metabolic flexibility, improve substrate utilization, and promote adaptive responses that sustain long-term metabolic homeostasis. This Special Issue welcomes research that bridges molecular mechanisms, clinical applications, and translational perspectives to explore how nutrition and exercise jointly regulate metabolic health. Submissions incorporating multi-omics analyses, biomarkers, behavioral determinants, or digital monitoring tools are encouraged. By linking nutrition science with exercise physiology and precision health, this issue aims to advance evidence-based and personalized strategies that strengthen metabolic resilience and foster sustainable well-being.

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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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