

Special Issue

Cutting-Edge Technologies to Assess Metabolism Modulated by Nutritional States and Exercise

Message from the Guest Editor

Advancements in modern technologies, techniques, and methodologies have broadened the scope for studying human metabolism in health, disease, and performance. These tools provide new opportunities to investigate extreme physiological domains, such as sports performance, diverse nutritional states, and metabolic adaptations in health and disease. This Special Issue seeks to explore the effects of various stimuli—such as brain stimulation, photobiomodulation, thermal modulation, and other interventions—on metabolism. The scope of this Issue:

- *Pathologies:*
- **Metabolic disorders:** conditions like type 2 diabetes, metabolic syndrome, and mitochondrial diseases, where dysregulated metabolism is central to pathology.
- **Obesity and sarcopenia:** these represent opposing ends of energy balance and metabolic regulation, often studied in relation to nutritional and exercise interventions.
- *Physiological Functions:*
- Exploring how varying intensities and types of physical activity can modulate metabolism at the cellular and systemic levels.

Guest Editor

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About the Journal

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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