

Special Issue

Sex Differences in Energy Metabolism and Nutritional Requirements in Exercise and Sport

Message from the Guest Editor

Sex differences in energy metabolism and nutritional requirements are increasingly recognized as critical factors influencing not only athletic performance, but also exercise-related health outcomes across the lifespan. Biological distinctions in substrate utilization, hormonal regulation, and body composition create unique challenges and opportunities for tailoring dietary strategies to men and women engaged in either competitive sports or recreational exercise. Moreover, sex-specific considerations extend beyond macronutrient needs to encompass micronutrient adequacy and the efficacy of dietary supplements, which may impact recovery, adaptation, and long-term health differently in women and men. Despite growing interest, gaps remain regarding our understanding of how sex hormones, training status, and life stages interact with nutrition and supplementation strategies. This Special Issue seeks to advance the field by bringing together cutting-edge research on sex-specific energy metabolism, dietary requirements, supplementation practices, and their implications.

Guest Editor

Dr. Alberto Pérez-López

Departamento de Ciencias Biomédicas, Área de Educación Física y Deportiva, Facultad de Medicina y Ciencias de la Salud, Universidad de Alcalá, 28871 Madrid, Spain

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Nutrients
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nutrients@mdpi.com

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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.

Editors-in-Chief

Prof. Dr. Lluís Serra-Majem

1. Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
2. Research Institute of Biomedical and Health Sciences (IUIBS), University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
3. Preventive Medicine Service, Centro Hospitalario Universitario Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

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