



nutrients



an Open Access Journal by MDPI

Effect of Phytochemicals on Fat Oxidation during Exercise

Guest Editor:

Dr. Juan Del Coso

Centre for Sport Studies, Rey
Juan Carlos University, 28943
Fuenlabrada, Spain

Deadline for manuscript
submissions:

closed (31 December 2020)

Message from the Guest Editor

Dear Colleagues,

Fueling to support the energy demands of contracting skeletal muscle during exercise of more than a few minutes is derived from carbohydrate and fat substrates, while the contribution of amino acids to energy expenditure is usually minimal. Previous investigations have determined that exercise intensity is the main contributor for the selection of carbohydrate or fatty acids as fuel within the muscle. While the rate of carbohydrate oxidation gradually increases with exercise intensity, the association between fat utilization and exercise intensity is explained by an inverted U-shape curve, indicating the moderate-intensity exercise routines should be the primary selection for those seeking to maximize fat oxidation during exercise (although high-intensity exercise might contribute due to its higher post-exercise fat oxidation rating). Other factors such as training status, pre-exercise feeding, the use of certain active components such as phytochemicals, ambient temperature, and even the time of the day might modify the utilization of fat during exercise.



mdpi.com/si/46056

Special Issue



nutrients



an Open Access Journal by MDPI

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

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

Journal Rank: JCR - Q1 (*Nutrition & Dietetics*) / CiteScore - Q1 (*Nutrition and Dietetics*)

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.

Contact Us

Nutrients Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nutrients
nutrients@mdpi.com
[X@Nutrients_MDPI](https://x.com/Nutrients_MDPI)