

Special Issue

Effect of Phytochemicals on Fat Oxidation during Exercise

Message from the Guest Editor

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.

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Deadline for manuscript submissions

closed (31 December 2020)



Nutrients

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 9.1
Indexed in PubMed



mdpi.com/si/46056

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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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