



Plant-Derived Bioactive Molecules and Their Use in Sports Practice

Guest Editors:

Dr. Guglielmo Duranti

Unit of Biochemistry and Molecular Biology, Department of Movement, Human and Health Sciences, University of Rome FORO ITALICO, Piazza Lauro de Bosis 6, 00135 Rome, Italy

Dr. Piergiorgio La Rosa

1. Division of Neuroscience, Department of Psychology, University La Sapienza, Rome, Italy
2. European Center for Brain Research, IRCCS Fondazione Santa Lucia, Rome, Italy

Deadline for manuscript submissions:

31 December 2024

Message from the Guest Editors

Dear Colleagues,

The utilization of plant-derived bioactive molecules in sports practice has gained significant attention due to their potential to optimize athletic performance, enhance recovery, and support overall well-being. This Special Issue explores the growing body of research surrounding the application of these natural compounds in sports and exercise, highlighting their benefits and mechanisms of action.

Plant-derived bioactive molecules, such as phytochemicals, polyphenols, alkaloids, and flavonoids, possess a wide array of physiological properties that can positively impact sports performance. These compounds exhibit antioxidant, anti-inflammatory, and vasodilatory effects, which may aid in reducing exercise-induced oxidative stress, inflammation, and muscle damage. Additionally, they have been found to enhance endurance, improve cardiovascular function, and enhance the body's ability to adapt to physical stressors.





Editor-in-Chief

Prof. Dr. Yehia Mechref

Department of Chemistry and
Biochemistry, Texas Tech
University, Lubbock, TX 79409,
USA

Message from the Editor-in-Chief

BioChem is an international and interdisciplinary open access journal encompassing the fields of molecular biology, cell biology, structural biology, nucleic acid biology, chemical biology, synthetic biology, disease biology, biophysics, and theoretical biochemistry. It publishes reviews, research articles, communications, and letters. Our aim is to encourage scientists to publish their experimental and theoretical research in as much detail as possible.

Author Benefits

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

Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 54 days after submission; acceptance to publication is undertaken in 16.5 days (median values for papers published in this journal in the second half of 2023).

Recognition of Reviewers: APC discount vouchers, optional signed peer review, and reviewer names published annually in the journal.

Contact Us

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

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

mdpi.com/journal/biochem
biochem@mdpi.com
[X@BioChem_MDPI](https://twitter.com/BioChem_MDPI)