

Special Issue

Bioactive Substances in Sport and Exercise: Mechanisms, Applications, and Safety Considerations

Message from the Guest Editor

Bioactive substances are widely used in sports for their potential to enhance performance, improve recovery, and support athlete health. Although there is proof that several of these substances have ergogenic benefits, like increased attention, less inflammation, and improved endurance, the use of these substances may have negative effects. Emerging issues include the possibility of contamination or mislabeling in supplements, harmful effects associated with excessive dosages, and individual diversity in response.

Furthermore, there are frequently few long-term safety statistics available, particularly for elite or aging athlete populations. The purpose of this Special Issue is to examine the dual function of bioactive substances in sports, emphasizing both their potential hazards and their performance-enhancing benefits. We welcome contributions that discuss individual variability, safety profiles, mechanisms of action, and practical applications. The ethical use of bioactive chemicals in sports and exercise environments requires a rigorous, evidence-based approach to optimize benefits, minimize risk, and promote athlete well-being.

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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.

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