

Dietary Strategies to Enhance Amino Acid Availability

Speaker: Paul Morgan, Manchester Metropolitan University Institute of Sport

Session: Plenary Symposium – Early Career Researchers

Abstract

Optimising amino acid availability is fundamental for supporting muscle protein synthesis (MPS), recovery, and adaptation to training. This talk will explore evidence-based dietary strategies designed to maximise amino acid availability in both athletic and clinical settings. Key topics will include the interpretation of the recommended dietary allowance (RDA) for protein, the influence of protein source and quality, and their implications for enhancing amino acid availability. The session will highlight the critical distinction between postprandial amino acid availability and amino acid kinetics in relation to MPS. Emerging insights into the regulation of splanchnic extraction, gut–muscle interactions, and the influence of habitual diet composition will also be explored. By integrating findings from mechanistic research and applied nutrition trials, this talk will offer practical, evidence-based recommendations to optimise amino acid availability for improved performance, recovery, and muscle health across diverse populations.