

Solid, practical advice on effective nutritional supplementation

# Amino Acids and Proteins for the Athlete

The Anabolic Edge, Second Edition

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# The physiological and pharmacological effects of protein and amino acids on athletic performance, health, disease, and longevity

Extensively updated with all chapters rewritten, two entirely new chapters, and double the information and references, Amino Acids and Proteins for the Athlete: The Anabolic Edge, Second Edition reflects the nearly exponential increase in data and knowledge regarding the requirements and functions of amino acids and their role in energy metabolism and metabolic signaling. Expanding the chapter on maximizing body composition and exercise performance to comprise Part II of the book, this second edition gives professional and recreational athletes the tools to improve performance using nutrition and nutritional supplements as alternatives to drug use.

Examining the available scientific and medical information in order to determine the physiological and pharmacological effects of protein and amino acids on lean body mass, body fat, strength, and endurance, the author provides a brief review of energy and protein metabolism before describing the positive impact of supplementation on athletic performance, health, disease, and longevity. The book outlines the protein requirements of athletes and the effects of increasing both the amount and quality of dietary protein. It reveals the actions of protein and amino acid supplements on muscle size and strength and energy metabolism and the role of specific amino acid supplements on metabolic and physiological responses to strength and endurance exercises. Specific topics include sources of dietary protein such as vegetarian diets, protein foods vs. supplements, and bioavailability, as well as the actions of amino acids on the central nervous system, the endocrine system, and as hepatoprotectants.

Clarifying previously held concepts and addressing new concepts in light of new research, this second edition brings the information on proteins and amino acids up to date, speculates on future directions, and gives solid, practical advice on effective nutritional supplementation.

# **FEATURES**

- Presents practical, applicable information on supplementation
- Reviews protein and energy metabolism during exercise
- Details the physiological and pharmacological effects of proteins and amino acids
- Examines essential, conditionally essential, and nonessential amino acids
- Describes in detail the use of diet and nutritional supplements to enhance body composition and performance

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Essential Amino Acids

Conditionally Essential Amino Acids

Nonessential or Dispensable Amino Acids

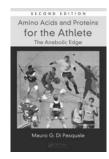
Summary and Conclusions

### NATURALLY ANABOLIC

Artificial Enhancement

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See reverse side for Other Titles of Interest and ordering information

