Limits of Human Endurance

Editors: Luc J. C. van Loon and Romain Meeusen.


Subjects: Nutrition, Exercise Performance.

Description: Limits of Human Endurance contains the proceedings of the 76th Nestlé Nutrition Institute Workshop held in London and Oxford, UK, in August 2012. This publication includes all the presented scientific papers covering ergogenic properties of various nutritional interventions and presents research to show that dietary strategies can be applied to extend the limits of human endurance.

Purpose: The aim of the workshop and so the book is to provide the reader with many novel insights into the complex interaction between nutrition and exercise, allowing them to define more effective dietary strategies to improve health and performance.

Audience: Every medical student, athlete and clinician in the fields of sports medicine, sports nutrition, exercise physiology and sports science will benefit from the current information provided by this book.

Features: This book includes 10 clearly written and well documented scientific papers and includes 17 figures and 9 tables. The following topics from the proceedings of the workshop are addressed in the papers: “Caffeine, exercise and the brain”, “Carnitine and fat oxidation”, “Hydration during intense exercise training”, “Intense exercise training and immune function”, “Physiological and performance adaptations to high-intensity interval training”, “Effect of β-alanine supplementation on high-intensity exercise performance”, “Dietary protein for muscle hypertrophy”, “The role of amino acids in skeletal muscle adaptation to exercise”, “National nutritional programs for the 2012 London Olympic Games: a systematic approach by three different countries”, and “Concluding remarks: nutritional strategies to increase performance capacity”.

Assessment: The authors of each paper are expert scientists and all are specialists in different areas of sports nutrition. The scientific papers discuss recent findings on topics such as caffeine and its effect on the brain, carnitine and fat oxidation, ergogenic properties of β-alanine on exercise performance, dietary protein and muscle reconditioning, nutrition and immune status, and the importance of proper hydration during exercise training.

Reviewed by: Ufuk Sekir, MD, Prof., Department of Sports Medicine, Medical School of Uludag University, Bursa, Turkey