1. Record Nr. UNINA9910877113503321 Olympic textbook of science in sport / / edited by Ronald J. Maughan Titolo Chichester, UK; ; Hoboken, NJ, : Wiley-Blackwell, 2009 Pubbl/distr/stampa **ISBN** 1-282-00756-4 9786612007569 1-4443-0331-7 1-4443-0332-5 Descrizione fisica 1 online resource (437 p.) Encyclopaedia of sports medicine ; ; v. 15 Collana Altri autori (Persone) MaughanRon J. <1951-> Disciplina 613.7/11 613.711 Soggetti Human mechanics Physical fitness - Physiological aspects Sports - Physiological aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "An IOC Medical Commission publication." Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto List of Contributors; Foreword; Preface; Introduction: Sport, Science and Sports Science; Part 1Physiology and Biochemistry; Chapter 1Muscle: Producing Force and Movement; Chapter 2Physiological Demands of Sprinting and Multiple-Sprint Sports: Chapter 3Physiological Demands of Endurance Exercise; Chapter 4Physiological Adaptations to Training; Chapter 5Skeletal Muscle Metabolic Adaptations to Training; Part 2Nutrition; Chapter 6Nutrition Needs of Athletes; Chapter 7Dietary Goals and Eating Strategies; Chapter 8Hydration; Part 3Anthropometry; Chapter 9Body Composition and Sports Performance Part 4ImmunologyChapter 10Exercise Immunology; Chapter 11Exercise, Inflammation, and Metabolism; Part 5Cell Biology; Chapter 12Genetic Determinants of Physical Performance; Chapter 13Molecular Mechanisms of Adaptations to Training; Part 6Biomechanics, Engineering, and Ergonomics; Chapter 14Biomechanics of Human

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Sommario/riassunto

This new volume in the Encyclopaedia of Sports Medicine series, published under the auspices of the International Olympic Committee, delivers an up-to-date, state of the art presentation of the scientific aspects of conditioning, injury prevention, and competition. The book covers the key areas of scientific knowledge in sport and is divided into: physiology and biochemistry; nutrition; anthropometry; immunology; cell biology; biomechanics, engineering and ergonomics; psychology; pharmacology; limitations to performance; special populations; and exercise and health. Presented in