

Contents

- SECTION I STRUCTURE CONSIDERATIONS IN EQUINE SPORTS MEDICINE, 1**
- 1 An Overview of Performance and Sports Medicine, 1**
David R. Hodgson and Catherine M. McGowan
 - 2 Comparative Aspects of Exercise Physiology, 9**
David R. Hodgson and J.H. Foreman
- SECTION II PHYSIOLOGY OF EXERCISE AND PERFORMANCE, 19**
- 3 Energetic Considerations of Exercise, 19**
Mathew P. Gerard, E. De Graaf-Roelfsema, David R. Hodgson, and J.H. Van der Kolk
 - 4 Nutrition of the Performance Horse, 34**
Shannon E. Pratt-Phillips and Laurie M. Lawrence
 - 5 Hematology and Biochemistry, 56**
Catherine M. McGowan and David R. Hodgson
 - 6 Physiology of Acid-Base Balance and Fluid Shifts with Exercise, 69**
Kenneth H. McKeever and Robert A. Lehnhard
 - 7 Endocrine and Immune Responses to Exercise and Training, 88**
Kenneth H. McKeever, Shawn M. Arent, and Patrick Davitt
 - 8 Thermoregulation, 108**
David R. Hodgson
 - 9 The Respiratory System: Anatomy, Physiology, and Adaptations to Exercise and Training, 125**
Pierre Lekeux, Tatiana Art, and David R. Hodgson
 - 10 Transport of Horses, 155**
Desmond P. Leadon and David R. Hodgson
 - 11 The Cardiovascular System: Anatomy, Physiology, and Adaptations to Exercise and Training, 162**
David R. Hodgson
 - 12 Muscle: Anatomy, Physiology and Adaptations to Exercise and Training, 174**
Stephanie J. Valberg
 - 13 Tendon, Ligament, Bone and Cartilage: Anatomy, Physiology and Adaptations to Exercise and Training, 202**
Janet C. Patterson-Kane and Elwyn C. Firth
 - 14 Age and Disuse in Athletes: Effects of Detraining, Spelling, Injury, and Age, 243**
Kenneth H. McKeever and Robert A. Lehnhard
- SECTION III BIOMECHANICS/KINEMATICS AND PERFORMANCE, 253**
- 15 Conformation, 253**
Bronwyn Gregory
 - 16 The Biomechanics of Equine Locomotion, 266**
Bronwyn Gregory
 - 17 Kinematics of the Equine Back and Pelvis, 282**
Rene Van Weeren
 - 18 Functional Biomechanics: Effect of the Rider and Track, 293**
Patricia de Cocq and P. Rene Van Weeren

SECTION IV PRACTICAL EXERCISE PHYSIOLOGY, 299

- 19 Training Regimens: Physiologic Adaptations to Training, 299**
David R. Hodgson
- 20 Training the Thoroughbred Racehorse, 302**
David R. Hodgson
- 21 Training Standardbred Trotters and Pacers, 305**
Karyn Malinowski and Ryan Avenatti
- 22 Training Endurance Horses, 314**
Anne Louise Barnes
- 23 Training the Event Horse, 321**
Wendy Schaeffer
- 24 Dressage Tests, Movements, and Training: A Primer, 331**
David R. Hodgson
- 25 Training Show Jumpers, 337**
Rene Van Weeren
- 26 Training Working Horses, 347**
Brian Hampson
- 27 Training the Racing Quarterhorse, 354**
Brian D. Nielsen
- 28 Evaluation of Performance Potential, 361**
David R. Hodgson
- 29 Clinical Exercise Testing, 366**
A. Courouce-Malblanc and David R. Hodgson
- Index, 379**