This volume has two dedications as the reader will notice below.

It is dedicated to the most important people in our lives. For all the lost weekends, late nights, and frustrations endured during the preparation of this book, and for the constant support and love given us, we dedicate this book to our families:

DI, JILL, AND MARLO

HANNAH, HEATHER, IAN, JEFFREY, KELLY, KELSEY, KRISTEN, AND LINDSAY

In addition:

This book is dedicated by the editors and all of the contributing authors to the memory of David O. Hough, MD, a colleague, teacher and mentor at Michigan State University for more than 18 years. Dave passed away in 1996 ending a career that was simply too short. He was a key leader in the field of Primary Care Sports Medicine from the onset of the movement. At his funeral this tribute was read:

DAVID O. HOUGH, MD
1946-1996

I lost a friend yesterday. Actually more than a friend, Dave Hough was my professional colleague, my personal confidante, my sometimes rival but really more of a “comrade in arms.” I was close enough to him to be the best man at his wedding. He was close enough to me to be the godfather of my firstborn child. We shared it all together. The ups and downs of starting, or helping to start the movement of Primary Care Sports Medicine and starting the program at Michigan State University. We shared our pride in watching our efforts and dreams come to fruition and to see the area of Primary Care Sports Medicine come into its own as a legitimate endeavor. We shared our families and more personal experiences than anyone will ever know. He was the soft side of our team, a competent physician, an outstanding lecturer, an adroit politician, a caring and loving father and a wonderful friend. He was a class act from the day that we both started at Michigan State until yesterday when he died. I’ve never worked with anybody that I complemented so well. There is no way that the success at Michigan State or that the area of Primary Care Sports Medicine could possibly have succeeded as much as it did, if it wasn’t for the efforts of this man. He was a giant in his field and somebody that I will miss very, very much. Dave, sit the rest of this game out—I’ll cover for you.

DBMc--SEPTEMBER, 1996
Contents

List of Contributors vii
ACSM Medical Education Committee xi
Preface xiii
Preface to the First Edition xv

PART 1: BASIC SCIENCE AND SPORTS MEDICINE 1

1 Primary Care Perspective 3
   Douglas B. McKeag and James L. Moeller

2 Epidemiology of Athletic Injuries 11
   Eric D. Zemper and Randall W. Dick

3 Exercise Physiology and Exercise Testing 29
   Carl Foster, Matthew J. Faber, and John P. Porcari

4 Nutrition 35
   Leslie Bonci

PART 2: PREVENTIVE SPORTS MEDICINE 53

5 Preparticipation Screening 55
   James L. Moeller and Douglas B. McKeag

6 Conditioning and Training Programs for Athletes/Nonathletes 81
   Sally E. Nogle and Jeffrey S. Monroe

7 Exercise as Medicine: The Role of Exercise in Treating Chronic Disease 107
   Eric J. Anish and Chris A. Klenck

8 Injury Prevention 133
   Michael P. Montico, Joanne Nguyen, Scott W. Eathorne, and Martha A. Steele

9 Covering Athletic Competition 143
   Thomas R. Terrell and James L. Moeller

PART 3: CLINICAL SPORTS MEDICINE 153

10 Management of On-site Emergencies 155
    Brent S.E. Rich, Benjamin B. Betteridge, and Spencer E. Richards

11 Respiratory System 165
    Jeffrey R. Kovan and James L. Moeller

12 Gastrointestinal System 173
    Scott A. Paluska

13 Cardiovascular System 185
    Vivien Lim, Aravind Rao Kokkirala, and Paul D. Thompson

14 Head Injuries 197
    Margot Putukian

15 Peripheral Neuropathy 215
    Philip D. Zanetees

16 Genitourinary System 229
    Kevin B. Gebke

17 Dermatologic Conditions in Athletes 239
    Delmas J. Bolin

18 Acute Infections 251
    Christopher A. McCreaw

19 Hematology 261
    Thomas H. Trojan and Diana L. Heiman

20 Endocrine 271
    Thomas H. Trojan

21 Environment 279
    Thomas H. Trojan

22 Challenged Athletes 293
    Katherine L. Dec

23 Common Sports-Related Injuries and Illnesses: Generic Conditions 305
    Douglas B. McKeag

24 Head and Neck 315
    Scott H. Grindel

25 The Shoulder and Upper Extremity 359
    David J. Petron and Umar Khan

26 The Elbow 387
    Roger L. McCoy, II and C. Edward Clark, III

27 Wrist, Hand, and Finger Injuries 403
    Wade A. Lillegard

28 Chest and Abdominal Wall 421
    Sami F. Rifat

29 Thoracic and Lumbar Spine 431
    Scott W. Eathorne
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Preface

The generation of the Second Edition of Primary Care Sports Medicine mercifully did not take the same amount of time as the generation of the First Edition. As editors, it was our intent to update and replicate all of the strong points of the First Edition.

This book remains organized in a similar fashion to the First Edition. However, where the First Edition had two authors, the Second Edition has two editors and many authors. By necessity, a number of different writing styles are present when compared to the First Edition, as this is a compilation work. However, there is a common thread—most of the authors of this text book are graduates or faculty of the Primary Care Sports Medicine Fellowship Program at Michigan State University, University of Pittsburgh, or Indiana University.

Our goals for this book have not changed from its predecessor. We continue to hope that it will serve as a compendium of how to do things right in sports medicine. We have continued to emphasize the concepts of prevention and rehabilitation.

The book continues to take a philosophical approach to Sports Medicine and should not be thought of purely as a reference work. In order for a physician to work within his or her profession, he/she needs a philosophical approach. This remains extremely important in the area of Primary Care Sports Medicine. We feel this book emphasizes such important points.

We want to take this opportunity to thank our colleagues for all the support they have provided us through the years in the field of Sports Medicine. This is especially true for our “learners”—students, residents, and fellows—that have honored us with their interest and enthusiasm for Primary Care Sports Medicine. Finally, and perhaps most importantly, we’d like to thank the athletes who have served not only as our patients, but as our teachers.

Special acknowledgment needs to be given to many people including those mentioned in the Preface to Edition 1. Others include: Jim Moriarity, MD; Steve Simons, MD; Al Tomchaney, MD; Mark Walsh, MD; John Downs, DO; Matthew Roush, MD; Harry Galanty, MD; William “Sandy” Quillen, PT; John L. Turner, MD; Jim Herndon, MD; Donald B. Middleton, MD.

We are grateful to several people who helped make this book possible. At Lippincott Williams & Wilkins, a phenomenal job of organizational prodding and editing was done by Jenny Koleth. She definitely set a high standard and this text is a tribute to her effort. At the American College of Sports Medicine, D. Mark Robertson, Assistant Executive Vice-President, was instrumental in giving this project direction and encouragement. Finally, thanks to the ACSM Medical Education Committee Review Panel, chaired by Sandra Hoffman, MD, for providing timely overview and suggestions concerning text accuracy.

Medicine is facing enormous challenges today. Sports Medicine is not immune from these challenges. Integrated holistic care of the athlete is no longer a model, but an expectation. Exercise, the most powerful provocateur of health known to mankind has been recognized as such. The job of teaching our colleagues is not done.

It is our hope that this book provides a complete look at the field of Sports Medicine, both philosophically and contextually.

PS: The sophistication of Sports Medicine has grown since the First Edition of this book was published. The Sports Medicine Certificate of Added Qualification [CAQ] is now basically recognized as a subspecialty of the American Boards of Family Practice, Pediatrics, Internal Medicine, Emergency Medicine, and, most recently, Physical medicine and rehabilitation. The establishment of the Sports Medicine CAQ offers consumers of sports medicine care a quality assurance heretofore not seen. This book continues to use an updated and amended version of the curriculum upon which the CAQ is based.

Douglas, B. McKeag
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Preface to the First Edition

Alas, we finally come to the end of the academic road after pursuing this project for 12 years. In 1981, you could count on one hand the number of primary care sports medicine training programs in the country; and the other hand would represent the number of reasonable and useful reference texts in sports medicine. Things seemed to be a little bit simpler then, including our approach to the care of the competitive athlete. A dozen years have produced dozens of surprises and changes. This 12-year period of time has seen the proliferation of training and fellowship programs, the formalization of education in the area of primary care, and a true, measurable improvement in the quality of health care given to the recreational and competitive athlete. Primary care has taken a dominant role in this movement, a situation not ignored by the "medical establishment."

The newly formed American Medical Society for Sports Medicine (AMSSM) joined other organizations such as American Orthopedic Society for Sports Medicine (AOSSM) and the American College of Sports Medicine (ACSM) in addressing controversial, clinical concerns and providing practicing physicians with answers to difficult, thought provoking problems. The disciplines of Family Practice, Pediatrics, Internal Medicine, Emergency Medicine, and Physical Medicine and Rehabilitation have all begun to include, as part of training in their respective discipline, experiences in sports medicine.

How does one define "Sports Medicine"? We feel that this special interest area of medicine is nothing more than "medicine in motion." The physiologic intricacies of the human body become even more complex when this body is placed in motion. Yet, we are not stagnant animals. We move, we turn, we bend, we stoop, we run, and we swim. With movement, we do what the human body was built to do. With movement, we enhance our lives. We feel good. We help our psyche, our lungs; but we also strain tendons, dislocate joints, stress hearts, and concuss brains. We have discovered that exercise is a double-edged sword.

We hope that this book will serve as a compendium of how to do things right in sports medicine. As primary care physicians, we have always felt that we brought a somewhat unique perspective to an area of medicine dominated by musculoskeletal injury. From our family practice training we have borrowed the concepts of prevention and rehabilitation and brought them to the forefront of treatment of sports-induced injury and illness. Hopefully, this book reflects that type of thinking. This book is not merely another reference text in sports medicine, but is an outline of a philosophy and a perspective. It was never meant to be a complete text, but one that would evolve constantly over time as principles of diagnosis and management change. It is our gift to those who come after us; those whose interest in sports and sports medicine can be met with a recommended, organized approach to learning the subject, something the authors and our colleagues never had.

After teaching over 500 residents and medical students the principles of sports medicine, and having the honor of training 14 incredibly competent primary care sports medicine fellows, we have begun to realize just how important this area truly is. We have always felt that you really did not have to know the difference between a basketball and a baseball; your patients surely will. More and more of our general population continue to interests in sports beyond youth in many forms of recreational activity. We must all become "team physicians" of a sort to those recreational exercisers we call our patients.

It is important to acknowledge those who have helped and stimulated us to produce this text. First and foremost, Frederick Bakker-Arkema, Ph.D., Professor of Agricultural Engineering at Michigan State University, has remained an academic role model and source of encouragement for us. He was most responsible for planting the "seed" that became this text. Acknowledgement is necessary to our colleagues with whom we shared ideas and a strong sense of teaching each other: William Anderson, Ph.D., Ronnie Barnes, AT, C., Henry Barry, M.D., John Bergfeld, M.D., Howard Brody, M.D., Vicky Curley, R.N., Brian Halpern, M.D., John Henderson, D.O., Warren Howe, M.D., Al Jacobs, D.O., Rob Johnson, M.D., Ed Kowaleski, M.D., James Kyle, M.D., John Lombardo, M.D., William Moats, M.D., Jeff Monroe, A.T., C., Sally Nogle, AT, C., James O'Brien, M.D., Randy Pearson, M.D., James Potchen, M.D., James Puffer, M.D., Lee Rice, D.O., Lon Rosen, M.D., Herb Ross, D.O., Vern Seefeldt, Ph.D., and Carol Smookler, Ph.D.

We also want to take this opportunity to thank all of the residents, medical students, private physicians, and, most importantly, former sports medicine fellows who provided the stimulus to push on with this project: Tom Morgan, M.D., Marie Schafle, M.D., Jim Swenson, M.D., Chris McGrew, M.D., Wade Lillegard, M.D., Dave Petron, M.D., Jeff Kovan, D.O., Neil Spiegel, D.O., Dave Peck, M.D., Brent Rich, M.D., Phil Zaneteas, M.D., Scott Eathorne, M.D.,
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Scott Naftulin, D.O., Margo Putukian, M.D. Some of their work is reflected in this text.

We would like to gratefully acknowledge the assistance and help of Bud Schultz, Anne Schultz, the Michigan State University Training Staff and Athletes for their assistance in the development of this book, its figures, and illustrations.

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Lastly, we want to acknowledge the effort of Susan Curtis, MA., who coordinated this project acting as typist, graphic artist, and manuscript editor for the entire text. Without question, this book is a testament to her hard work and dedication.

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