

VOLUME 2

ENCYCLOPEDIA OF  
**SPORTS  
MEDICINE**

LYLE J. MICHELI, M.D., EDITOR

ENCYCLOPEDIA OF  
**SPORTS  
MEDICINE**

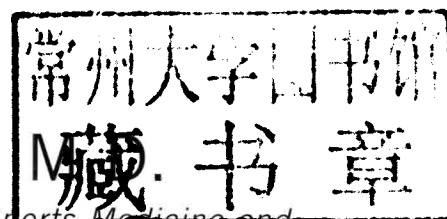
VOLUME  
**2**

EDITOR

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Los Angeles | London | New Delhi  
Singapore | Washington DC

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*For information:*



SAGE Publications, Inc.  
2455 Teller Road  
Thousand Oaks, California 91320  
E-mail: [order@sagepub.com](mailto:order@sagepub.com)

SAGE Publications Ltd.  
1 Oliver's Yard  
55 City Road  
London, EC1Y 1SP  
United Kingdom

SAGE Publications India Pvt. Ltd.  
B 1/I 1 Mohan Cooperative Industrial Area  
Mathura Road, New Delhi 110 044  
India

SAGE Publications Asia-Pacific Pte. Ltd.  
33 Pekin Street #02-01  
Far East Square  
Singapore 048763

Printed in the United States of America.

*Library of Congress Cataloging-in-Publication Data*

Encyclopedia of sports medicine / edited by Lyle J. Micheli.  
p. cm.

"A SAGE Reference Publication."

Includes bibliographical references and index.

ISBN 978-1-4129-6115-8 (cloth)

1. Sports medicine—Encyclopedias. 2. Sports injuries—Encyclopedias. I. Micheli, Lyle J., 1940–[DNLM:  
1. Sports Medicine—Encyclopedias—English. 2. Athletic Injuries—Encyclopedias—English.  
3. Sports—Encyclopedias—English. QT 13 E5298 2011]

RC1206.E53 2011

617.1'02703—dc22

2010023364

10 11 12 13 14 10 9 8 7 6 5 4 3 2 1

<i>Publisher:</i>	Rolf A. Janke
<i>Acquisitions Editor:</i>	Jim Brace-Thompson
<i>Assistant to the Publisher:</i>	Michele Thompson
<i>Developmental Editor:</i>	Sanford Robinson
<i>Reference Systems Coordinator:</i>	Laura Notton
<i>Reference Systems Manager:</i>	Leticia M. Gutierrez
<i>Production Editor:</i>	Kate Schroeder
<i>Copy Editors:</i>	QuADS Prepress (P) Ltd.
<i>Typesetter:</i>	C&M Digitals (P) Ltd.
<i>Proofreaders:</i>	Kristin Bergstad, Scott Oney, Christina West
<i>Indexer:</i>	Virgil Diodato
<i>Cover Designer:</i>	Gail Buschman

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ENCYCLOPEDIA OF  
**SPORTS**  
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Joint Injection  
Joints, Magnetic Resonance Imaging of  
Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)  
Operating Room Equipment and Environment  
Orthotics  
Pain Management in Sports Medicine  
Pharmacology and Exercise  
Physical Examination and History  
Preparticipation Cardiovascular Screening  
Presports Physical Examination  
PRICE/MICE  
Taping  
Ultrasound

## ***Musculoskeletal Examination Techniques***

Musculoskeletal Tests, Ankle  
Musculoskeletal Tests, Elbow

Musculoskeletal Tests, Foot  
 Musculoskeletal Tests, Hand and Wrist  
 Musculoskeletal Tests, Hip  
 Musculoskeletal Tests, Knee  
 Musculoskeletal Tests, Shoulder  
 Musculoskeletal Tests, Spine

## **Diet and Nutrition**

Calcium in the Athlete's Diet  
 Carbohydrates in the Athlete's Diet  
 Dietary Supplements and Vitamins  
 Fat in the Athlete's Diet  
 Nutrition and Hydration  
 Postgame Meal  
 Pregame Meal  
 Protein in the Athlete's Diet  
 Salt in the Athlete's Diet  
 Sports Drinks  
 Vegetarianism and Exercise  
 Weight Gain for Sports  
 Weight Loss for Sports

## **Doping and Performance Enhancement**

Alcohol and Exercise  
 Anabolic Steroids  
 Beta Agonists  
 Beta Blockers  
 Blood Transfusion  
 Caffeine and Exercise  
 Cannabinoids  
 Creatine  
 Diuretics  
 Doping and Performance Enhancement:  
     A New Definition  
 Doping and Performance Enhancement:  
     Historical Overview  
 Doping and Performance Enhancement:  
     Olympic Games From 2004 to 2008  
 Erythropoietin  
 Growth Hormone  
 Narcotic Analgesics  
 Peptide Hormones  
 Performance Enhancement, Doping, Therapeutic  
     Use Exemptions  
 Stimulants  
 World Anti-Doping Agency

## **Exercise Physiology, Biomechanics, and Kinesiology**

Bioenergetics of Exercise and Training  
 Biomechanics in Sports Medicine  
 Exercise Physiology  
 Kinesiology  
 Krebs Cycle and Glycolysis

## **Injuries and Disorders**

Altitude Sickness  
 Athlete's Heart Syndrome  
 Bursitis  
 Catastrophic Injuries  
 Clavicle (Collarbone) Fracture  
 Cold Injuries and Hypothermia  
 Contusions (Bruises)  
 Cramping  
 Cyst, Ganglion  
 Dehydration  
 Epicondylitis  
 Exertional Compartment Syndrome, Chronic  
 Fractures  
 Handlebar Palsy  
 Headache, Exercise-Induced  
 Hyponatremia, Exercise-Associated  
 Lightning Injuries  
 Muscle Cramps  
 Organ Injuries  
 Pectoralis Strain  
 Referred Pain  
 Rhinitis, Exercise-Induced  
 Side Stitch  
 Sports Injuries, Acute  
 Sports Injuries, Overuse  
 Strains, Muscle  
 Stress Fractures  
 Sudden Cardiac Death  
 Tendinitis, Tendinosis  
 Tendinopathy  
 Trigger Finger  
 Trunk Injuries

## **Abdomen**

Abdominal Injuries  
 Bowel Injury  
 Epstein-Barr Virus, Infectious Mononucleosis,  
     and Splenomegaly

Gastrointestinal Problems  
 Genitourinary Injuries  
 Hepatic Injury  
 Pancreatic Injury  
 Renal Injury  
 Splenic Injury

### **Ankle**

Accessory Navicular  
 Ankle, Osteochondritis Dissecans of the  
 Ankle Fracture  
 Ankle Impingement  
 Ankle Injuries  
 Ankle Instability  
 Ankle Instability, Chronic  
 Ankle Sprain  
 Apophysitis  
 Foot and Ankle Injuries, Surgery for  
 Peroneal Tendinitis  
 Peroneal Tendon Subluxation  
 Posterior Tibial Tendinitis

### **Back and Lumbar Spine**

Back Injuries, Surgery for  
 Cervical and Thoracic Fractures and Traumatic  
 Instability  
 Cervical Brachialgia  
 Intervertebral Disk Disease  
 Klippel-Feil Syndrome  
 Lower Back Contusion  
 Lower Back Injuries and Low Back Pain  
 Lower Back Muscle Strain and Ligament Sprain  
 Rhomboid Muscle Strain and Spasm  
 Slipped Disk  
 Spinal Cord Injury  
 Spondylolysis and Spondylolisthesis

### **Cervical and Thoracic Spine**

Cervical and Thoracic Disk Disease  
 Cervical and Thoracic Fractures and Traumatic  
 Instability  
 Cervical and Thoracic Spine Injuries  
 Cervical Brachialgia  
 Cervical Disk Degeneration  
 Cervical Facet Syndrome  
 Costosternal Syndrome (Costochondritis)  
 Intervertebral Disk Disease

Os Odontoideum  
 Scheuermann Kyphosis  
 Scoliosis

### **Chest Wall**

Bruised Ribs  
 Chest and Chest Wall Injuries  
 Rib Fracture and Contusions  
 Rib Stress Fracture  
 Rib Tip Syndrome  
 Sternal Fracture  
 Sternoclavicular (SC) Joint, Separation of

### **Elbow and Forearm**

Biceps Tendinitis  
 Biceps Tendon Rupture  
 Elbow, Osteochondritis Dissecans of the  
 Elbow and Forearm Injuries  
 Elbow and Forearm Injuries, Surgery for  
 Elbow Bursitis  
 Elbow Dislocations  
 Elbow Fractures  
 Elbow Sprain  
 Forearm Fracture  
 Little League Elbow  
 Medial Apophysitis of the Elbow  
 Medial Epicondyle Avulsion Fractures of the  
 Elbow  
 Olecranon Stress Injury  
 Panner Disease  
 Posterior Impingement Syndrome  
 Posterolateral Rotatory Instability  
 Ulnar Neuropathy

### **Foot**

Arch Pain  
 Athlete's Foot  
 Black Nail  
 Blisters  
 Bruised Foot  
 Bunions  
 Calluses  
 Corns  
 Foot and Ankle Injuries, Surgery for  
 Foot Fracture  
 Foot Injuries  
 Foot Stress Fracture

Hammertoe  
 Ingrown Toenail  
 Metatarsalgia  
 Morton Neuroma  
 Overpronating Foot  
 Oversupinating Foot  
 Plantar Fasciitis and Heel Spurs  
 Retrocalcaneal Bursitis  
 Sesamoiditis  
 Sever Disease  
 Turf Toe  
 Warts (Verrucae)

### *Hand and Finger*

Carpal Fractures  
 Finger Dislocation  
 Finger Fractures: Bennett Fracture, Boxer's Fracture  
 Finger Fractures: Overview  
 Finger Sprain  
 Hand and Finger Injuries  
 Hand and Finger Injuries, Surgery for  
 Jersey Finger  
 Mallet Finger  
 Proximal Interphalangeal Joint Dislocation  
 Thumb Sprain  
 Volkmann Contracture

### *Head and Neck*

Cervical Nerve Stretch Syndrome  
 Concussion  
 Craniofacial Injuries  
 Dental Injuries  
 Detached Retina  
 Diffuse Axonal Injury  
 Ear Infection, Outer (Otitis Externa)  
 Ear Injuries  
 Epidural Hematoma  
 Eye Injuries  
 Facial Injuries  
 Head Injuries  
 Intracerebral Hematoma  
 Intracranial Hemorrhage  
 Malignant Brain Edema Syndrome  
 Neck and Upper Back Injuries  
 Neck Spasm  
 Nose Injuries

Punch Drunk Syndrome  
 Skull Fracture  
 Subarachnoid Hemorrhage  
 Subdural Hematoma  
 Torticollis, Acute

### *Hip, Pelvis, and Groin*

Avascular Necrosis of the Femoral Head  
 Avulsion Fractures  
 Femoral Neck Stress Fracture  
 Femoroacetabular Impingement  
 Genitourinary Injuries  
 Gluteal Strain  
 Groin Pain  
 Groin Strain  
 Groin Tendinitis  
 Groin/Inguinal Hernia  
 Hip, Pelvis, and Groin Injuries  
 Hip, Pelvis, and Groin Injuries, Surgery for  
 Hip Contusion  
 Hip Dislocation  
 Hip Flexor Strain  
 Hip Flexor Tendinitis  
 Hip Fracture  
 Hip Stress Fracture  
 Osteitis Pubis  
 Pelvic Avulsion Fractures  
 Pelvic Bursitis  
 Pelvic Fracture  
 Pelvic Stress Fracture  
 Perineal Numbness and Erectile Dysfunction  
 Piriformis Syndrome  
 Sacroiliac Pain  
 Sciatica  
 Slipped Capital Femoral Epiphysis  
 Snapping Hip Syndrome  
 Tailbone (Coccyx) Injuries

### *Knee*

Anterior Cruciate Ligament Tear  
 Articular and Meniscal Cartilage Regeneration and Repair  
 Chondromalacia Patella  
 Cyst, Baker  
 Discoid Meniscus  
 Extensor Mechanism Injury  
 Iliotibial Band Syndrome



Juvenile Osteochondritis Dissecans of the Knee  
 Knee, Osteochondritis Dissecans of the  
 Knee Bursitis  
 Knee Injuries  
 Knee Injuries, Surgery for  
 Knee Ligament Sprain, Medial and Lateral  
   Collateral Ligaments  
 Knee Plica  
 Kneecap, Subluxating  
 Meniscus Injuries  
 Osgood-Schlatter Disease  
 Patellar Dislocation  
 Patellar Tendinitis  
 Patellofemoral Pain Syndrome  
 Posterior Cruciate Ligament Injuries  
 Quadriceps Tendinitis  
 Tibial Tubercle Avulsion Fracture

### *Lower Leg*

Achilles Bursitis  
 Achilles Tendinitis  
 Achilles Tendon Rupture  
 Acromioclavicular (AC) Joint, Separation of  
 Calf Strain  
 Compartment Syndrome, Anterior  
 Lower Leg Injuries  
 Lower Leg Injuries, Surgery for  
 Medial Tibial Stress Syndrome  
 Peroneal Strain  
 Tibia and Fibula Fractures  
 Tibia and Fibula Stress Fractures

### *Shoulder*

Frozen Shoulder  
 Glenoid Labrum Tear  
 Little League Shoulder  
 Rotator Cuff Tears, Partial  
 Rotator Cuff Tendinopathy  
 Shoulder Arthritis  
 Shoulder Bursitis  
 Shoulder Dislocation  
 Shoulder Impingement Syndrome  
 Shoulder Injuries  
 Shoulder Injuries, Surgery for  
 Shoulder Instability  
 Shoulder Subluxation  
 Superior Labrum From Anterior to Posterior  
   (SLAP) Lesions

### *Skin*

Abrasions and Lacerations  
 Allergic Contact Dermatitis  
 Angioedema and Anaphylaxis  
 Athlete's Nodules  
 Dermatology in Sports  
 Friction Injuries to the Skin  
 Frostbite and Frost Nip  
 Fungal Skin Infections and  
   Parasitic Infestations  
 Insect Bites and Stings  
 Irritant Contact Dermatitis  
 Jock Itch  
 Jogger's Nipples  
 Pressure Injuries to the Skin  
 Prickly Heat  
 Puncture Wounds  
 Skin Conditions in Wrestlers  
 Skin Disorders, Metabolic  
 Skin Infections, Bacterial  
 Skin Infections, Viral  
 Skin Infestations, Parasitic  
 Sunburn  
 Sunburn and Skin Cancers  
 Toenail Fungus  
 Urticaria and Pruritus  
 Warts (Verrucae)

### *Thigh*

Hamstring Strain  
 Legg-Calvé-Perthes Disease  
 Proximal Hamstring Syndrome  
 Quadriceps Strain  
 Thigh Contusion  
 Thigh Injuries  
 Thighbone Fracture  
 Trochanteric Bursitis

### *Thorax*

Cardiac Injuries (Commotio Cordis,  
   Myocardial Contusion)  
 Lung Injuries

### *Wrist*

Carpal Tunnel Syndrome  
 Colles Fracture  
 Kienböck Disease