

Practical Applications in

SPORTS FIFTH EDITION **NUTRITION**

**Heather Hedrick Fink
Alan E. Mikesky**



Practical Applications in

SPORTS NUTRITION

FIFTH EDITION

Heather Hedrick Fink, MS, RD, CSSD

Owner

Nutrition and Wellness Solutions, LLC

Indianapolis, Indiana

Alan E. Mikesky, PhD, FACSM

Professor Emeritus

School of Physical Education and Tourism Management

Indiana University-Purdue University Indianapolis

Indianapolis, Indiana



JONES & BARTLETT
LEARNING



World Headquarters
Jones & Bartlett Learning
5 Wall Street
Burlington, MA 01803
978-443-5000
info@jblearning.com
www.jblearning.com

Jones & Bartlett Learning books and products are available through most bookstores and online booksellers. To contact Jones & Bartlett Learning directly, call 800-832-0034, fax 978-443-8000, or visit our website, www.jblearning.com.

Substantial discounts on bulk quantities of Jones & Bartlett Learning publications are available to corporations, professional associations, and other qualified organizations. For details and specific discount information, contact the special sales department at Jones & Bartlett Learning via the above contact information or send an email to specialsales@jblearning.com.

Copyright © 2018 by Jones & Bartlett Learning, LLC, an Ascend Learning Company

All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner.

The content, statements, views, and opinions herein are the sole expression of the respective authors and not that of Jones & Bartlett Learning, LLC. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not constitute or imply its endorsement or recommendation by Jones & Bartlett Learning, LLC and such reference shall not be used for advertising or product endorsement purposes. All trademarks displayed are the trademarks of the parties noted herein. *Practical Applications in Sports Nutrition, Fifth Edition* is an independent publication and has not been authorized, sponsored, or otherwise approved by the owners of the trademarks or service marks referenced in this product.

There may be images in this book that feature models; these models do not necessarily endorse, represent, or participate in the activities represented in the images. Any screenshots in this product are for educational and instructive purposes only. Any individuals and scenarios featured in the case studies throughout this product may be real or fictitious, but are used for instructional purposes only.

The authors, editor, and publisher have made every effort to provide accurate information. However, they are not responsible for errors, omissions, or for any outcomes related to the use of the contents of this book and take no responsibility for the use of the products and procedures described. Treatments and side effects described in this book may not be applicable to all people; likewise, some people may require a dose or experience a side effect that is not described herein. Drugs and medical devices are discussed that may have limited availability controlled by the Food and Drug Administration (FDA) for use only in a research study or clinical trial. Research, clinical practice, and government regulations often change the accepted standard in this field. When consideration is being given to use of any drug in the clinical setting, the health care provider or reader is responsible for determining FDA status of the drug, reading the package insert, and reviewing prescribing information for the most up-to-date recommendations on dose, precautions, and contraindications, and determining the appropriate usage for the product. This is especially important in the case of drugs that are new or seldom used.

10346-5

Production Credits

VP, Executive Publisher: David D. Cella
Publisher: Cathy L. Esperti
Acquisitions Editor: Sean Fabery
Associate Editor: Taylor Maurice
Reprints and Special Projects Manager: Tina Chen
Production Assistant: Molly Hogue
Production Assistant: Brooke Haley
Director of Marketing: Andrea DeFronzo

VP, Manufacturing and Inventory Control: Therese Connell
Composition: Cenveo Publisher Services
Cover Design: Kristin E. Parker
Rights & Media Specialist: Merideth Tumas
Media Development Editor: Shannon Sheehan
Cover Image: © Chris Ryan/Getty Images
Printing and Binding: LSC Communications
Cover Printing: LSC Communications

Library of Congress Cataloging-in-Publication Data

Names: Fink, Heather Hedrick, author. | Mikesky, Alan E., author.
Title: Practical applications in sports nutrition / Heather Hedrick Fink, Alan E. Mikesky.
Description: Fifth edition. | Burlington, Massachusetts : Jones & Bartlett Learning, [2018] | Includes bibliographical references and index.
Identifiers: LCCN 2016048145 | ISBN 9781284101393 (pbk.)
Subjects: | MESH: Sports Nutritional Physiological Phenomena | Sports-physiology | Exercise-physiology | Sports Nutritional Sciences
Classification: LCC TX361.A8 | NLM QT 263 | DDC 613.2024796-dc23
LC record available at <https://lccn.loc.gov/2016048145>

6048

Printed in the United States of America
21 20 19 18 17 10 9 8 7 6 5 4 3 2 1