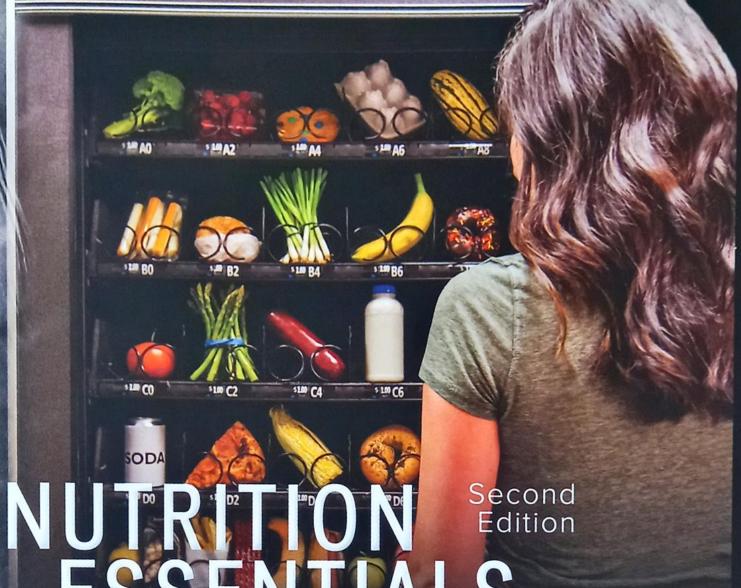
This International Student Edition is for use outside of the U.S.



A Personal Approach

Mc Graw Hill Education

WENDY J. SCHIFF



# ESSENTIALS

A Personal Approach

WENDY J. SCHIFF, MS, RD





#### NUTRITION ESSENTIALS: A PERSONAL APPROACH

Published by McGraw-Hill Education, 2 Penn Plaza, New York, NY 10121. Copyright © 2018 by McGraw-Hill Education. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of McGraw-Hill Education, including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Some ancillaries, including electronic and print components, may not be available to customers outside the United States.

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 MPM 21 20 19 18 17

ISBN 978-1-260-08378-1 MHID 1-260-08378-0

Cover Image: @McGraw-Hill Education. Mark A. Dierker, photographer



All credits appearing on page or at the end of the book are considered to be an extension of the copyright page.

The Internet addresses listed in the text were accurate at the time of publication. The inclusion of a website does not indicate an endorsement by the authors or McGraw-Hill Education, and McGraw-Hill Education does not guarantee the accuracy of the information presented at these sites.

mheducation.com/highered

# **Brief Contents**

- 1 Food Is More than Something to Eat 2
- 2 Nutrition Information: Fact or Fiction? 22
- 3 Making More Nutritious Choices 40
- 4 How Food Becomes You 70
- 5 Carbohydrates: Fuel and Fiber 100
- 6 Lipids: Focusing on Fats and Cholesterol 128
- 7 Proteins: Life's Building Blocks 160
- 8 Vitamins: Nutrients that Multitask 186
- 9 Key Minerals, Water, and the Nonnutrient Alcohol 228
- 10 Nutrition for a Healthy Weight and Fit Body 274
- 11 Nutrition for Your Life, Environment, and World 316

#### **Appendixes**

- A English-Metric Conversion and Metric-to-Household Units A-3
- B Canada's Food Guide A-4
- C Daily Values (DVs) Table A-11
- D The Basics of Energy Metabolism A-12
- E Answers to Test Yourself Questions A-14
- F References A-15
- G Dietary Reference Intake (DRI) Tables A-29
- H Stretching Your Food Dollars A-35
- Modifying Recipes for Healthy Living A-39



© Purestock/SuperStock RF

# Contents

Preface viii

## Unit 1 Food Is More than Something to Eat 2

- Module 1.1 Why Learn About Nutrition? 4
- Module 1.2 Nutrition Basics 6
- Module 1.3 Key Nutrition Concepts 13

## Unit 2 Nutrition Information: Fact or Fiction? 22

- Module 2.1 Nutrition: Science for Consumers 24
- Module 2.2 Spreading Nutrition Misinformation 30
- Module 2.3 Becoming a More Critical Consumer of Nutrition Information 32
- Module 2.4 Seeking Reliable Nutrition Information 36

## Unit 3 Making More Nutritious Choices 40

- Module 3.1 Requirements and Recommendations 42
- Module 3.2 Planning Nutritious Meals and Snacks 45
- Module 3.3 Making Sense of Food Labels 57
- Module 3.4 Should I Take Dietary Supplements? 60



C Lauren Burke/Getty Images RF

#### Unit 4 How Food Becomes You Module 4.1 From Cells to Systems 72 Module 4.2 Digestive System 75 Module 4.3 Common Digestive System Disorders Module 4.4 Metabolism Basics 95 Unit 5 Carbohydrates: Fuel and Fiber 100 Module 5.1 Sugars, Sweeteners, Starches, and Fiber 102 Module 5.2 What Happens to the Carbohydrates You Eat? 113 Module 5.3 Carbohydrates and Health 117 Unit 6 Lipids: Focusing on Fats and Cholesterol Module 6.1 What Are Lipids? 130 Module 6.2 What Happens to the Fat and Cholesterol You Eat? Module 6.3 Cardiovascular Disease: Major Killer of Americans Unit 7 Proteins: Life's Building Blocks 160 Module 7.1 What Are Proteins? 162 Module 7.2 What Happens to the Protein You Eat? 164 Module 7.3 Proteins in Foods 169 Module 7.4 What's Vegetarianism? 173 Module 7.5 Proteins and Health 176 Unit 8 Vitamins: Nutrients that Multitask 186

Module 8.1 Introducing Vitamins 188

Module 8.2 Fat-Soluble Vitamins 193

Module 8.3 Water-Soluble Vitamins 205

Module 8.4 Vitamins and Cancer 220

## Unit 9 Key Minerals, Water, and the Nonnutrient Alcohol 228

Module 9.1 Minerals for Life 230

Module 9.2 Key Minerals and Your Health 234

Module 9.3 Water: Liquid of Life 256

Module 9.4 Drink to Your Health? 262

# Unit 10 Nutrition for a Healthy Weight and Fit Body 274

Module 10.1 Overweight or Obese? 276

Module 10.2 Factors That Influence Your Body Weight 283

Module 10.3 Managing Your Weight Safely 289

Module 10.4 Disordered Eating and Eating Disorders 297

Module 10.5 Get Moving; Get Healthy! 300

## Unit 11 Nutrition for Your Life, Environment, and World 316

Module 11.1 Nutrition for a Lifetime 318

Module 11.2 How Safe Is My Food? 334

Module 11.3 Dietary Adequacy: A Global Concern 345

#### Appendix A-1

- A English-Metric Conversion and Metric-to-Household Units A-3
- B Canada's Food Guide A-4
- C Daily Values (DVs) Table A-11
- D The Basics of Energy Metabolism A-12
- E Answers to Test Yourself Questions A-14
- F References A-15
- G Dietary Reference Intake (DRI) Tables A-29
- H Stretching Your Food Dollars A-35
- I Modifying Recipes for Healthy Living A-39

Glossary G-1

Index I-1



The cover depicts the many baffling choices we face each day when we decide what to eat for meals and snacks. Do we choose foods simply based on convenience, taste, or cost? Or do we choose foods based on other factors, including the food's contribution to our nutritional needs and possible effects on our health and well-being?

To make healthy food choices, we need to understand basic nutrition, including features of a healthy eating pattern and how what we choose to eat can affect our health now and as we grow older. *Nutrition Essentials: A Personal Approach* provides this information in an easy-to-understand and engaging manner. There's no simple one-size-fits-all approach to good nutrition. However, the information in this textbook will help you understand how the nutrients in foods affect your body, so you'll be able to evaluate your diet and improve it, if necessary.



## **ELEARNSMART®**

### Sick of studying the wrong material?

Never quite sure where to start studying in your textbook?

Get LearnSmart®. It highlights key concepts and areas you're likely to forget. And it won't drain your wallet. Proven to help students get better grades, LearnSmart targets the material you don't know and guides you to learn, remember and master it—preparing you for exams.

#### Here's How To Get It:

- Find the 10-digit or 13-digit ISBN number of the textbook near book's barcode, and enter it in the Search bar at the top right of mheducation.com.
- If available for your textbook, find the LearnSmart subscription for your textbook under "Related Products" and select the LearnSmart subscription length that works best for you.
- 3. Add to cart and checkout.
- Launch LearnSmart through the Digital Purchases page under "My Account" or download the app from the App Store.

Global International Education Link Enterprises Co.

501-D Culmat Building, 1270-1330 E. Rodriguez Sr. Avenue Quezon City Telephone: 02-412-5009 Fax Number 02-412-5009

global international link@yahoo.com customerservice.global@yahoo.com

