Nutrition & You provides students with a personalized approach to understanding nutrition, teaching them to become informed consumers of nutrition information. Joan Salge Blake is known for her engaging writing style, in which she addresses students directly, uses clear visuals to explain concepts, and captivates students with humor. Blake encourages students to think critically and relate the science of nutrition to their own dietary habits. The 5th Edition includes the latest scientific research and updated coverage of hot topics such as the microbiome and food waste to engage students and encourage behavior change. Mastering Nutrition features updated Practical Nutrition Tips and NutriTool Activities to help encourage better eating choices and apply nutrition concepts to improve their health, and autogradable MyDietAnalysis (MDA) Personalized Dietary Analysis activities.
Guide students through the most difficult nutrition concepts . . .

**Focus Figures** in each chapter are in-depth figures designed to teach key concepts in nutrition through bold, clear, and detailed visual presentations.

**Focus Figure Narrated Walkthroughs** provide a video tour of each full-page Focus Figure. In these Walkthroughs, author Joan Salge Blake breaks down each part of the Focus Figure and further explains them, just as she would in the classroom. These Walkthroughs are found in Mastering Nutrition.
and help them think critically about nutrition information

Are Food Labels That Distinguish between Naturally Occurring and Added Sugars Helpful to Consumers?  

The Food and Drug Administration (FDA) is implementing a revised Nutrition Facts panel on food labels that discloses the amount of added sugars per serving in foods and beverages. Currently, 13 percent of the calories in the American diet, on average, comes from added sugars. Many experts recommend consuming fewer foods with a lot of added sugars. These sugary foods displace more nutritious foods, and at the same time, often increase the overall calorie intake in the diet. However, some food industry representatives have opposed the new rules, saying the mandates are unnecessary and harmful. One company even declared that separating out added sugars on the food label would confuse consumers. Are added sugars on food labels helpful or harmful to consumers? Take a close look at the arguments for both sides and see what you think.

### Two Points of View

#### YES

- In order to pursue a healthy diet, consumers need transparent information so they can make informed choices.
- Food labels that don’t separate out added sugars from those naturally in foods give the impression that nutrient-rich foods such as orange juice, which contain naturally occurring sugars, have sugars similar to sugar-sweetened beverages. As a result, consumers may replace these healthier juices with sugary drinks that contain all of their calories from added sugars with little nutritional benefit.
- Labels with details about added sugars will increase consumer awareness about overall sugar consumption.
- Consumers often overlook the fact that canned fruit in syrup has more sugar than canned fruit in juice.
- With all the different names for sugar, it is necessary to clearly label products with added sugars.
- Added sugars can be a contributor to the obesity epidemic. Most adults in the U.S. consume more sugar than is healthy.

#### NO

- Sugar is in sugar, whether it is added or natural, and the label already lists the amount of sugar.
- Putting “added sugars” on the label will unfairly hurt sales because it sounds unnecessary and harmful. One company even declared that separating out added sugars on the food label would confuse consumers.
- Consumers have information overload. All this effort on the food label may be better spent on education on nutrition as a whole.
- Requiring companies to distinguish between sugars may drive them to disguise added sugars by adding sweetened juices, such as grape juice concentrate, to the product.
- Singling out added sugars on the food label sets a precedent for targeting future ingredients.

### What do you think?

1. Do you think that separating information about added sugars will help to solve our obesity epidemic?
2. Does reading negative nutritional information override the impulse to consume something unhealthy?

### Examining the Evidence

**Updated! Increased coverage of current topics**

Examine the Evidence stimulates thought and discussion through research findings on controversial or confusing “hot” topics and includes critical-thinking questions. This feature guides students through evaluating scientific research and encourages them to become critical media consumers of nutrition information.

**Do Sugar-Sweetened Beverages Cause Obesity?**

The evidence is overwhelming. The United States is becoming an obese nation. Recent estimates suggest that more than 80 million adult Americans and over 12.7 million American children are obese. Although there are many factors that contribute to this, some researchers note that the rise in obesity coincides with an increase in consumption of sugar-sweetened beverages, especially among children. This observation has prompted some policy makers to propose new limits on soda purchases. To reverse this obesity epidemic, should the focus be placed squarely on sugar-laden beverages as the culprit? 

### Examining the Evidence

#### Table 1: Consumption Patterns of Sugar-Sweetened Beverages

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Teaspoons*</th>
<th>Calories**</th>
<th>% of Total Calories per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>12-19</td>
<td>18.4</td>
<td>294</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>20-39</td>
<td>18.1</td>
<td>289</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>40-59</td>
<td>12.6</td>
<td>202</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>&gt; 60</td>
<td>5.9</td>
<td>94</td>
<td>4.6</td>
</tr>
<tr>
<td>Females</td>
<td>12-19</td>
<td>12.1</td>
<td>194</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>20-39</td>
<td>10.8</td>
<td>173</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>40-59</td>
<td>7.7</td>
<td>123</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>&gt; 60</td>
<td>3.8</td>
<td>60</td>
<td>4.6</td>
</tr>
</tbody>
</table>

* Teaspoons of sugar consumed per day from sugar-sweetened beverages
** Total calories consumed per day from sugar-sweetened beverages


---

A20_BLAK6229_05_SE_VWT.indd 3
12/12/18 2:22 PM
Help students make healthy eating choices . . .

MyDietAnalysis is included with Mastering Nutrition at no additional charge, and offers an up-to-date, accurate, reliable, and easy-to-use program for your students' diet analysis needs. Featured is a database of nearly 50,000 foods and multiple reports. Students can track their diet and activity intake accurately—anytime and anywhere—from any device!

**MyDietAnalysis Personalized Dietary Analysis Activities** are autogradable activities that guide students in a thorough investigation of their dietary intake and are focused on the most commonly assigned topics in diet analysis projects.
and relate nutrition to their own lives

Made Over, Made Better food comparisons at the end of Chapters 4 through 11 help students visually see how to make more nutritious decisions.

Americans, on average, are consuming only about half of the amount of fiber recommended daily. Making some easy food substitutions can quickly bump up your daily fiber intake. Here are some typical foods made over and made nutritionally better!

**If you like this...**

**Try this to boost your fiber intake!**

- **Corn flakes**
  - Serving size: 1 cup
  - Total Fiber: 1 gram
- **Whole grain**
  - Serving size: 1 cup
  - Total Fiber: 4 grams
- **Cheese crackers**
  - Serving size: 27 crackers
  - Total Fiber: 1 gram
- **Whole grain crackers**
  - Serving size: 6 crackers
  - Total Fiber: 3 grams
- **White bread**
  - Serving size: 2 slices
  - Total Fiber: 1.2 grams
- **100% Whole-wheat bread**
  - Serving size: 2 slices
  - Total Fiber: 8 grams
- **Pretzels**
  - Serving size: 10 pretzels
  - Total Fiber: 0.9 grams
- **Popcorn**
  - Serving size: 100-calorie microwave popcorn bag
  - Total Fiber: 4 grams

**UPDATED! Practical Tips Videos**

show Joan Salge Blake as she walks students through making better eating choices in familiar environments, based on a choice related to the chapter topic. Examples include a coffee shop, breakfast choices on-the-go, fitness smoothies, and much more. These dynamic videos are provided in the Instructor Resource Materials in Mastering Nutrition for easy instructor access in class, referenced in the printed text, and are also embedded within the eText.
Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience available within Mastering. It allows students to easily highlight, take notes, and review key vocabulary all in one place—even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it. Pearson eText is available within Mastering when packaged with a new book; students can also purchase Mastering with Pearson eText online. For instructors not using Mastering, Pearson eText can also be adopted on its own as the main course material.
Improve learning with Dynamic Study Modules

Dynamic Study Modules in Mastering Nutrition help students study effectively—and at their own pace—by keeping them motivated and engaged. The assignable modules rely on the latest research in cognitive science, using methods—such as adaptivity, gamification, and intermittent rewards—to stimulate learning and improve retention.

Nutrition Animation Activities explain big picture concepts that help students learn the hardest topics in nutrition. These animations include questions with wrong-answer feedback that address students’ common misconceptions and have been refreshed and made compatible for Mastering and mobile devices.
Instructor support you can rely on

*Nutrition & You* includes a full suite of instructor support materials in the Instructor Resources area in Mastering Nutrition. Resources include accessible PowerPoint lecture outlines; animations, videos, and images to show in class; a test bank; and an instructor manual with in-class discussion questions, in-class activities, and critical thinking questions.

<table>
<thead>
<tr>
<th>Resources by Chapter</th>
<th>Chapter 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download instructor resources from the links below.</td>
<td></td>
</tr>
</tbody>
</table>

**PowerPoint Files**
- Chapter 7 PowerPoint Clickers
  - zip, 418 KB
- Chapter 7 Accessible PowerPoint Lecture
  - zip, 7.8 MB
- Chapter 7 PowerPoint Quiz Show
  - zip, 494 KB

**Images**
- Chapter 7 Labeled JPEG Images
  - zip, 13.9 MB

**Animations and Videos**
- Chapter 7 ABC News Videos
  - zip, 65 MB
- Chapter 7 Animations
  - zip, 46.4 MB

**Instructor Resource and Support Manual**
- Chapter 7 Instructor Resource and Support Manual (Word)
  - docx, 430 KB
- Chapter 7 Instructor Resource and Support Manual (PDF)
  - zip, 333 KB
Why I Wrote *Nutrition & You*

“You’ll probably finish this class with a whole new outlook on diet and exercise . . . and you’ll probably be a lot healthier!”

“Professor Salge Blake makes the material seem like the most interesting material in the universe.”

—Excerpts from student comments about my nutrition class at Boston University, courtesy of ratemyprofessor.com

I wrote *Nutrition & You* for you. It is all about you. For more than a decade, I have taught an Introduction to Nutrition course to a packed classroom of almost 200 students, at the unseemly hour of 8 a.m. The students keep coming year after year because I not only deliver accurate nutrition science and information in an easy-to-understand, entertaining format, but more importantly, I personalize the information for them so that they can immediately apply it to their own lifestyles.

As a college student, you are exposed to a steady stream of nutrition and health information from the media, your family and friends, and the Internet. While you may think Google has the answers to your nutrition questions, I have seen students frequently fall victim to misinformation found via a quick Web search and a few glitzy websites. So I designed *Nutrition & You* to be as user friendly as possible, packed exclusively with sound nutrition information. The text goes beyond basic nutrition science and provides realistic advice and strategies to help you easily incorporate what you learn into your busy life. The text is written to meet your nutritional concerns and answer your questions.

As you read *Nutrition & You*, I want you to feel as though you are sitting in my class being entertained and informed. For this reason, I wrote the text in a conversational tone, and we designed it to visually communicate complex nutrition science and topics in an easy-to-understand way.

The information in this textbook is arranged in a deliberate “What,” Why,” and “How” format. Each chapter will tell you:

➤ “What” the nutrition concept is;
➤ “Why” it is important and the role it plays in your body; and then, most importantly,
➤ “How” to easily adjust your lifestyle based on what you just learned.

Remember, nutrition matters to you! What you eat today and tomorrow will affect you and your body for years to come. Just as important, what you learn about nutrition today will enable you to make a positive effect on the lives of others from now on.

Joan Salge Blake
New to This Edition

Both nutrition research and personalized applications are continually expanding this dynamic science. To keep pace, we have reorganized the content, visually improved the figures and tables, and added new features to each chapter in the fifth edition of Nutrition & You. In addition, we have made these significant additions to the book and its digital accompaniments (for specific chapter-by-chapter updates, see the next section):

➤ Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience available within Mastering. It allows students to easily highlight, take notes, and review key vocabulary all in one place—even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it. Pearson eText is available within Mastering when packaged with a new book; students can also purchase Mastering with Pearson eText online.

For instructors not using Mastering, Pearson eText can also be adopted on its own as the main course material.

➤ Updated Practical Nutrition Tips videos in Mastering Nutrition feature author Joan Salge Blake offering students suggestions on ways to keep nutrition in mind in their everyday lives. Each video is accompanied by assignable questions to ensure understanding. Updated videos include Reading a Food Label, Hidden Sugar in Soda, Enhanced Waters, and more.

➤ New MyDietAnalysis Personalized Dietary Analysis activities in Mastering Nutrition guide students in a thorough investigation of their dietary intake and are focused on the most commonly assigned topics in diet analysis projects. Follow-up feedback and a reflection question help students understand how to improve their diets. Activities can also be automatically graded, saving instructors valuable time from grading their students’ lengthy diet analysis projects.

➤ New #ICYMI boxes, shorthand for “In Case You Missed It,” feature interesting facts at various points within the narrative relevant to what students just read, such as within the discussion of polysaccharides as complex carbohydrates in Chapter 4, students are provided the explanation of why unripe fruit tastes more starchy than sweet.

➤ Updated Health Connection: A Case Study feature box in each chapter examines the links between nutrition and disease. This new presentation is intended to:
  • Take a more case-study approach to really engage students
  • Add key concepts back into the main narrative

• Include new Health Connection Case Study questions in Mastering Nutrition, making the feature assignable

Chapter-by-Chapter Updates

Chapter 1

➤ All photos showing Nutrition Facts Panel now feature the new NFP.
➤ LO 1.1: Kilocalorie now defined earlier in the chapter.
➤ LO 1.4: Number of known phytochemicals updated to over 10,000.
➤ LO 1.5: Amount of sugar and fat consumed by Americans updated to 17 tsp and 54% of calories consumed, respectively.
➤ LO 1.5: Revised Figure 1.4, obesity map, now shows most current (2016) data.
➤ Photo caption revises population of Hispanics in the U.S. from 1 in 4 to 4 in 10.
➤ Revised “2 Points of View” feature on advertising food to children.

Chapter 2

➤ Figure 2.9, How Solid Fats and Added Sugars Fit into a Healthy Diet, has been updated with new numbers for recommended calories of added sugar and fats.
➤ Figure 2.12 walks students through the new Nutrition Facts Panel.
➤ LO 2.4 includes advice about sodium intake.
➤ LO 2.5 has extensive information about the new Nutrition Facts Panel.
➤ LO 2.6 has new information about antioxidants and functional foods.
➤ Nutrition in the Real World feature has a new portion size table.
➤ Examining the Evidence feature on the timing of meals and its effect on nutrition has been revised.
➤ New “2 Points of View” feature on supersizing versus half-portions in restaurants.

Chapter 3

➤ Figure 3.5 has been revised to show location of pyloric sphincter.
➤ LO 3.1: Chyme and bolus are now defined earlier in the chapter.
➤ LO 3.7: In Table 3.3, details about irritable bowel syndrome have been revised.
➤ Revised “2 Points of View” feature on probiotics.
Chapter 4
➤ LO 4.1 has been modestly reorganized to more effectively present the units of carbohydrates and to better distinguish between types of fiber. Fermentable fiber and viscous fiber have been added to the key terms.
➤ LO 4.6: The term prediabetes has been added to key terms and discussed in the chapter.
➤ Figure 4.8 has been revised to focus on total fiber.
➤ Figure 4.10 has new Nutrition Facts information.
➤ Figure 4.12 has been revised to compare prevalence of diabetes in the U.S. in 1994 and 2015.
➤ Throughout the chapter, figures showing the chemical structure of sucrose have been corrected, and figures showing the Nutrition Facts panel have been updated.
➤ In LO 4.7, stevia and monk fruit have been added to the discussion of sugar substitutes.

Chapter 5
➤ LO 5.4: New coverage of the FDA’s decision to ban trans fats from foods.
➤ Figure 5.2 now links types of fats with foods that contain those fats.
➤ LO 5.8: Further coverage of trans fats. Clarification added on plant stanols and sterols.
➤ New unnumbered figure on fish: Which are safest to eat?
➤ Figure 5.21 has updated content on types of fats in foods.
➤ New “2 Points of View” feature on whether coconut oil is healthy or not.

Chapter 6
➤ LO 6.3: New material on how protein contributes to satiety.
➤ LO 6.4: Quinoa has been added to the discussion of complete proteins.
➤ LO 6.6: Discussion of research showing that the type of protein consumed is more important in reducing the risk of heart disease than the quantity.
➤ Examining the Evidence feature has updated information on protein supplements and the accuracy of their labeling.
➤ Table 1 within the Examining the Evidence feature comparing energy bar content has been revised.
➤ Figure 6.11 has been updated with 2015 data.
➤ Figures 6.12 and 6.13 have been revised with the latest information.
➤ The Made Over Made Better figure replaces the bologna sandwich with a BLT.
➤ The Nutrition in the Real World feature discusses research showing that soy may prevent cancer development by reducing inflammation and inhibiting activation of proteins that promote cell growth.
➤ Revised “2 Points of View” feature on high-protein, low-carbohydrate diets.

Chapter 7
➤ New coverage of the latest research on Vitamin E and its link to cardiovascular events.
➤ The Made Over Made Better figure replaces stuffed and baked potato with iceberg lettuce and collard greens.

Chapter 8
➤ Table 8.2, Minerals at a Glance, has updated DRI for fluoride.
➤ Table Tips, “Shake Your Salt Habit,” has new advice on lowering your sodium intake.
➤ Figure 8.12 has updated figures on average American sodium consumption.

Chapter 9
➤ LO 9.2: Updated information on the correlation between moderate alcohol consumption and reduced risk of heart disease and Type 2 diabetes.
➤ LO 9.4: New information on congeners in fermented alcoholic beverages.
➤ LO 9.4: Updated statistics on the number of people with alcoholic hepatitis who eventually develop cirrhosis.
➤ LO 9.5: Updated data on underage drinking.
➤ LO 9.5: Revised discussion of alcohol use disorder.
➤ New “2 Points of View” feature: “Do the Health Benefits of Drinking Alcohol Outweigh the Risks?”

Chapter 10
➤ New photo feature compares two people with the same BMI, an athlete and a nonathlete.
➤ New photo shows new Barbie dolls designed to reflect various body types.
➤ New photo shows a food tracker app on a cell phone.
➤ New “2 Points of View” feature on “Intermittent Fasting.”
➤ Revised section 10.8 on disordered eating and body image now includes:
  • Latest research on genetics and anorexia and the complexity of separating environmental from genetic factors
  • Environmental factors behind eating disorders
  • Revised and more detailed Table 10.5, Diagnostic Criteria for Eating Disorders
  • New content on the role of social media in the development of eating disorders
  • Additional content on electrolyte imbalance and the impact of refeeding
  • More on orthorexia
  • Revised and expanded Table 10.6, Warning Signs for Eating Disorders
  • New discussion of research indicating that having friends or family express concern prompts people to accept treatment.
Chapter 11
- LO 11.3: New coverage, figure, and Health Connection feature on “Relative Energy Deficiency in Sports (RED-S).”
- LO 11.5: New coverage of Vitamin D’s importance in athletic performance.
- LO 11.5: New coverage of magnesium’s importance in athletic performance.
- LO 11.7: Additional coverage of safety and testing of dietary supplements.
- New key term: Relative Energy Deficiency in Sports (RED-S)
- Additional web resources
- New “2 Points of View” feature, “Vegan Diet for Elite Athletes?”

Chapter 12
- Statistics and references were updated throughout, including new data on agribusiness, crop production, and family farms.
- LO 12.2 includes new information about globesity.
- Figure 12.3 was revised to include the most up-to-date information on food imports.
- LO 12.3 includes a substantial new section on reducing food waste.
- LO 12.3: Self-assessment on sustainable eating is completely new.
- LO 12.4: Information added on the new FDA-issued guidelines for the use of antibiotics and hormones in livestock.
- LO 12.5: New material on gene editing, a new method of bioengineering used to produce GMOs. This section was revised significantly to address more current information on this issue, including the National Bioengineered Food Disclosure Law that was established in 2016, and updated public opinion surveys on GM foods.
- LO 12.7: Section on organic farming now reflects the costs and benefits of this method of farming and the fact that organic farming is not guaranteed sustainable farming.
- Check Your Understanding questions and answers have been revised and updated.
- Web resources have been updated with additional resources regarding sustainability.
- New “2 Points of View” feature, “Should GMO-free Labeling be Allowed on Foods?”
- Gene editing is now a key term.

Chapter 13
- LO 13.1: New content on the cost of food-borne illness in the U.S.
- LO 13.1 and 13.3: New material on E. coli strains, such as STEC, including outbreaks of tainted flour.
- LO 13.2: New guidelines for proper hand washing and kitchen sanitation.
- LO 13.3: Coverage of the dangers of honey for infants.
- LO 13.4: New section on Bisphenol A.
- LO 13.5: Additional coverage of methylmercury in fish.

Chapter 14
- LO 14.1 and 14.2: New coverage of whether pregnant women should take vitamin and mineral supplements, and which ones.
- LO 14.6: Latest guidelines on breast-feeding and on the process by which breast milk provides immune protections to infants.
- LO 14.10: Latest recommendations on introducing solid foods.
- LO 14.10: Latest recommendations on introducing peanuts into a child’s diet.
- Updated Nutrition in the Real World feature on breast-feeding at work.
- New “2 Points of View” feature on baby-led weaning.

Chapter 15
- Revised Table Tips on helping children get enough iron.
- LO 15.2: Updated information on rates of childhood obesity and activity levels.
- LO 15.2: Latest data on school lunches.
- LO 15.4: Revised estimates on population demographics in 2050.
- LO 15.4: Revised coverage of zinc needs in the older adult.
- LO 15.5: New coverage of the effects of glucosamine and chondroitin on older adults.
- LO 15.5: New content on the link between the MIND diet and Alzheimer’s disease risk reduction.
- LO 15.5: New content on the link between diet and cancer.
- Revised Examining the Evidence feature on diet and developmental disabilities.
- Revised “2 Points of View” feature on 2017 changes to school meal requirements to meet the Dietary Guidelines for Americans.
- Revised Figure 15.1 reflects most recent statistics on childhood obesity.
- Revised Figure 15.4 reflects most recent statistics on sugar intake among children.
- Revised Figure 15.6 shows the new dietary guidelines for older adults.
Chapter 16

- LO 16.1 includes updated statistics on number of food insecure households in the U.S. and worldwide.
- LO 16.1 also includes coverage of food insecurity among college students.
- LO 16.2 includes updated statistics on poverty and the working poor, and a new Figure 16.3 showing trends in food insecurity over time.
- LO 16.2 also includes new coverage of food deserts and food swamps.
- LO 16.3 has more new statistics on hunger worldwide, political sanctions, corruption, and refugees.
- LO 16.3 also includes updated information about food waste worldwide.
- LO 16.5 has new data on stunting in children.
- Food deserts and food swamps are now key terms.

Other Key Features

- Visual Chapter Summaries are structured to mirror the organization of the chapter content and numbered to correspond with the chapter objectives. They contain important art and photos from the main chapter text and serve as concise study and review tools.
- The learning outcomes, chapter headings, and summary sections are linked together to provide a strong pedagogical structure that promotes comprehension and facilitates study and review.
- Examining the Evidence features look at the latest research on controversial or confusing “hot” topics in nutrition today and include critical-thinking questions. These features guide students to make better, informed choices in their personal nutrition, and become critical media consumers of nutrition information.
- MyDietAnalysis mobile website is available, so students can track their diets and activities accurately, anytime and anywhere, from their mobile devices.
- Exploring Micronutrients within Chapters 7 and 8 are self-contained sections that incorporate photos, illustrations, and text to present each vitamin and mineral. Each micronutrient is discussed using the same categories (forms, functions, daily needs, food sources, toxicity and deficiency symptoms) for a consistent and easy-to-study format. These enable students to identify at a glance the key aspects of each nutrient.
- Two Points of View at the end of each chapter contains a summary of opposing viewpoints on a timely topic. This feature will encourage students to think critically about pro and con arguments on a given issue and decide for themselves which side they agree with. Students will be applying the critical-thinking skills that they learned in the chapter as they think through each point of view presented.

- True or False? Pre-tests open each chapter with 10 true/false statements that help students realize that the things they think they know about nutrition aren’t always accurate. Answers are given at the end of the chapter, and a true/false icon emphasizes locations of answers within the chapter.
- Nutrition in the Real World features take a closer look at some of the ways nutritional information and issues affect daily life.
- Practical Nutrition videos show the dynamic and ever-interesting Joan Salge Blake walking students through making better eating choices in familiar environments, based on a choice related to the chapter topic. Examples include a pizza parlor, deli, coffee shop, breakfast choices on the go, fitness smoothies, and much more. Students can access the videos via Mastering Nutrition, or via the QR code on page xiii.
- Table Tips give practical ideas for incorporating adequate amounts of each nutrient into students’ diets using widely available foods.
- Self-Assessments throughout the book ask students to think about their own diets and behaviors and how well they are meeting their various nutrient needs.
- Made Over Made Better food comparisons at the end of Chapters 4 through 11 can help students visually see how to make more nutritious decisions.
- eLearn activities within the chapters direct students to websites to extend their knowledge on various topics, such as the American Institute for Cancer Research, Vegetarian Resource Group, Center for Science in the Public Interest, etc.

Digital Learning Products

Mastering Nutrition

www.masteringhealthandnutrition.com

Mastering Nutrition is an online homework, tutorial, and assessment product designed to improve results by helping students quickly master concepts. Students benefit from self-paced tutorials that feature immediate wrong-answer feedback and hints that emulate the office-hour experience to help keep students on track. With a wide range of interactive, engaging, and assignable activities, students are encouraged to actively learn and retain tough course concepts.

Specific features include:

- Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience available within Mastering. It allows students to easily highlight, take notes, and review key vocabulary all in one place—even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they
need, when they need it. Pearson eText is available within Mastering when packaged with a new book; students can also purchase Mastering with Pearson eText online.

For instructors not using Mastering, Pearson eText can also be adopted on its own as the main course material.

➤ Single sign-on for MyDietAnalysis, a software system that allows students to complete a diet assignment. Students keep track of their food intake and exercise and enter the information to create a variety of reports (e.g., the balance between fats, carbohydrates, and proteins in their diet; how many calories they’re eating versus expending; whether they’re meeting the RDAs for vitamins and minerals, etc.). A MyDietAnalysis activity has been added within Mastering Nutrition for each text chapter that incorporates the use of MDA. A mobile version gives students 24/7 access via their smart phones to easily track food, drink, and activity on the go.

• New - MyDietAnalysis Personalized Dietary Analysis activities guide students in a thorough investigation of their dietary intake and are focused on the most commonly assigned topics in diet analysis projects. Follow-up feedback and a reflection question help students understand how to improve their diets. Activities can also be automatically graded, saving instructors valuable time from grading their students’ lengthy diet analysis projects.

➤ Focus Figure video walkthroughs feature Joan Salge Blake narrating a video walkthrough of each Focus Figure, guiding students through each section of the figure, highlighting important concepts and making connections.

➤ Visual Chapter Summary coaching activities complement each Visual Chapter Summary with hints and feedback that help students with their understanding of one or more learning outcomes and reference each learning outcome within the activity.

➤ Focus Figure coaching activities guide students through key nutrition concepts with interactive mini-lessons that provide hints and feedback.

➤ 18 NutriTools Build-A-Meal coaching activities allow students to apply nutrition concepts to improve their health through interactive mini-lessons that provide hints and feedback. The Build a Meal, Build a Pizza, Build a Salad, and Build a Sandwich tools have been carefully rethought to improve the user experience, making them easier to use. They are now HTML5 compatible. Activities, such as Carbohydrates on a Food Label and FDA Packaging Requirements, have been updated and/or created to reflect recently updated nutrition standards.

➤ Pre-lecture reading questions ensure that students come prepared for lecture by answering multiple-choice questions related to the content in the text.

➤ ABC News videos cover up-to-date hot topics that occur in the nutrition field that bring nutrition to life and spark discussion. These are accompanied by multiple-choice questions with wrong-answer feedback.

➤ 34 nutrition animation activities explain big-picture concepts that help students learn the hardest topics in nutrition. These animations include questions with wrong-answer feedback that address students’ common misconceptions and have been refreshed and made compatible for Mastering Nutrition and mobile devices.

➤ Math activities provide hands-on practice of important calculations with helpful wrong-answer feedback.

➤ Scientific reporting lab activities allow students to apply the principles of the scientific process to their own diet analysis project and determine if they are at risk for cardiovascular disease, diabetes, and more. These activities include short-answer/essay questions.

➤ Chapter Summary MP3s relate to chapter content and come with multiple-choice questions that provide wrong-answer feedback.

➤ Get Ready for Nutrition gives students extra help with math and chemistry skills.

➤ Dynamic Study Modules help students study effectively—and at their own pace. How? By keeping them motivated and engaged. The assignable modules rely on the latest research in cognitive science, using methods—such as adaptivity, gamification, and intermittent rewards—to stimulate learning and improve retention. Each module poses a series of questions about a course topic. These question sets adapt to each student’s performance and offer personalized, targeted feedback to help them master key concepts.

➤ With Learning Catalytics, you’ll hear from every student when it matters most. You pose a variety of questions that help students recall ideas, apply concepts, and develop critical-thinking skills. Your students respond using their own smart phones, tablets, or laptops. You can monitor responses with real-time analytics and find out what your students do—and don’t—understand. Then you can adjust your teaching accordingly and even facilitate peer-to-peer learning, helping students stay motivated and engaged. Updated for this edition: newly added clicker questions from the Digital Instructional Resources. All questions will be specifically tagged to Nutrition & You and non-majors nutrition.

➤ The Study Area is broken down into learning areas and includes videos, animations, MP3s, and much more for student self-study.
MyDietAnalysis was developed by the nutrition database experts at ESHA Research, Inc., and is tailored for use in college nutrition courses. This software system allows students to complete a diet assignment by keeping a diary of food intake and exercise and then creating a variety of reports (for example, the balance between fats, carbohydrates, and proteins in the diet; how many calories eaten versus expended; whether the student is meeting the RDAs for vitamins and minerals, and so on). It has been updated to include a mobile version so students can access it from their smart phones to easily track food, drink, and activity on the go, 24/7.

Instructional Resources for Nutrition & You (Download Only)

The digital Instructional Resources provide everything an instructor needs to prep for the course, and deliver a dynamic lecture, in one convenient place. All resources are downloadable from Mastering Nutrition and include:

- ABC News Lecture Launcher videos covering the most up-to-date nutrition topics
- Updated 34 Nutrition Animations
- Practical Nutrition Tips videos
- Clicker questions
- Quiz Show questions
- PowerPoint® Lecture Outlines (including Media-only PowerPoints)
- PowerPoint step-edit Image Presentations
- Files for all illustrations and tables and selected photos from the text
- Microsoft® Word and PDF files for the Instructor Resource and Support Manual
- Microsoft® Word, RTF, and PDF files for the Test Bank
- Computerized Test Bank, which includes all the questions from the test bank in a format that allows instructors to easily and intuitively build exams and quizzes
- Printed User’s Quick Guide with easy instructions for both experienced and new faculty members to get started with the rich toolkit content

Additional digital instructor and student resources include PDFs of:

- Step-by-step Mastering Nutrition tutorials
- Great Ideas in Teaching Nutrition
- Eat Right! Healthy Eating in College and Beyond
- Food Composition Table

Acknowledgments

It takes a village, and then some, when it comes to writing a dynamic textbook. Nutrition & You is no exception. I personally want to thank all of those who passionately shared their expertise and support to make Nutrition & You better than I could have envisioned.

Beginning with the dynamic staff at Pearson, I would like to thank Michelle Yglesias, who helped make my vision for this textbook a reality. Revising a text of this nature takes a lot of coordination, and Content Producer Lizette Faraij managed to keep us on track while still applying her eagle eye to every aspect of the revision and worked diligently to create the best supplements for Nutrition & You. Developmental Editor Cathy Murphy expertly brought careful attention to each chapter. Crackerjack Rich Media Content Producer Mia Sullivan expertly produced the new Practical Nutrition Tips Videos and spearheaded the NutriTools updates. Rich Media Content Producer Lucinda Bingham managed the content of our rich Mastering Nutrition course.

A very special thanks to Mary Tindle, Production Project Manager, for all of her hard work shepherding this book through production. My humble appreciation also goes to Eric Schrader and Grace Subito for obtaining the most vivid and unique photos available, as well as to Designers Wanda Espana and Jerilyn Bockorick and Design Manager Maria Guglielmo-Walsh, whose design made the text, art, and photos all come alive and whom I must thank for the book’s gorgeous cover.

Marketing takes energy, and that’s exactly what Director of Product Marketing Allison Rona, Executive Field Marketing Manager Mary Salzman, and their teams seem to generate nonstop. The many instructors who reviewed this book and supporting media, and who provided good insights and suggestions, are listed on the following pages; I am grateful to all of them for helping to inform the development of the fifth edition of Nutrition & You.

The village also included loyal contributors who lent their expertise to specific chapters. Mary Ellen Kelly revised the nutrition and fitness chapter, Paula Quatromoni and Meg Salvia revised the disordered eating section of the weight-management chapter, E. Whitney Evans at Brown University revised the two “life cycle” chapters, Heidi Wengreen at Utah State University revised the food consumerism and sustainability chapter, Kellene A. Isom at Brigham and Women’s Hospital revised the food safety and technology chapter, Kathleen Deegan updated the hunger chapter, and Claire Alexander revised the Two Points of View features. Many thanks also to my accuracy reviewer, Stanley Wilfong of Baylor University. Special thank you to my nutrition students, Katharine Terry, Elayna DeBenedetto, and Jamie Burgess, for their help with updating several chapters.

Lastly, an endless thanks to my family, Adam, Brendan, and Craig, for their love and support when I was working more than I should have been.

Juan Edgell Blake