

Third Edition

Judith E.
Brown

Nutrition

NOW





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Nutrition Now

Third Edition

Judith E. Brown
University of Minnesota

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Dedication

To instructors everywhere who love to teach nutrition,
and to students who find learning about nutrition to be both enriching and fun.

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Preface

We are pleased to present to instructors and students the third edition of *Nutrition Now*. Thoroughly updated, this text remains dedicated to complementing the instructional efforts of faculty who teach a one- to four-credit course on introductory nutrition to nonmajors. In line with the previous editions, *Nutrition Now* retains its scientific, student-focused, and practical approach to nutrition. It continues to be directed at the goals of increasing student understanding of basic nutrition concepts and developing skills for making healthful decisions about personal nutrition now and in the future. For many students, the course supported by *Nutrition Now* represents a happy balance between meeting an educational requirement and learning useful information about a subject of particular interest.

Readers of this preface will discover that the third edition covers new topics of growing importance to nutrition, and that the text's unique didactic features have been strengthened. There are now 33 “stand-alone” units in *Nutrition Now*. As before, subsets of units that match instructors' and students' interests and needs can be ordered and presented in class in any desired arrangement. Eleven of the units cover core nutrition topics, including nutrition concepts, nutrition and health relationships, the nutrients, healthy diets, and digestion. Other units address topics that touch students' lives regularly and that relate to students' professional interests. Topics covered in these 22 units include body weight, weight control, eating disorders, heart disease, cancer, herbal and other dietary supplements, sports nutrition, life cycle nutrition, food safety, and global nutrition. Exciting discoveries related to genes, genetic variation, and nutrition and health relationships receive first-time coverage in the nutrient-gene interactions unit.

In the third edition of *Nutrition Now*, you will find:

- **Expanded coverage** of herbal supplements (Unit 24), diabetes (Unit 12), genetically modified foods (Unit 21), food safety (Unit 32), Canadian dietary guides (Unit 6), the fetal origins hypothesis (Units 19 and 28), and lactose maldigestion (Units 12 and 17), as well as an expanded glossary.
- **Dietary Reference Intake values** released through 2001.
- **2000 Dietary Guidelines for Americans.**
- **New Nutrition Up Close** activities and other student activities.
- **A table of measurement equivalents.**
- **Additional Health Action features.**

Pedagogical Features

Nutrition Now continues to incorporate a number of unique approaches to student learning:

- Each unit begins with a feature called ***Nutrition Scoreboard*** that presents a set of true-false questions designed to test students' knowledge of various topics addressed in the unit. Answers to the questions appear on the following page.
- A **summary of the key concepts** covered is presented on the second page of each unit.
- **Every major point in each unit is accompanied by an illustration** that helps to drive the point home.

- **Health Action boxes** provide examples and guidelines for making healthful decisions about nutrition, food handling, and more.
- **Nutrition Up Close boxes** provide opportunities for students to apply nutrition concepts in their daily lives.
- **WWW Links** provide URLs and descriptions of high-quality nutrition resources.
- **Margin definitions** and an **end-of-text glossary** help students master the material presented.
- **Every version of the text includes a resource-rich appendix.** Materials include a table of food composition, the food exchange systems for the United States and for Canada, a table of intentional food additives, supplemental information related to the basic structure and function of cells, and a glossary.

A number of high-quality, useful aids to instruction are available to faculty adopting *Nutrition Now*:

- An **Instructor's Manual** is replete with class outlines, student activities, test questions and answers, and transparency masters of the Nutrition Scoreboard for each unit.
- A set of 80 **full-color transparencies** of key illustrations in the text.
- **CNN Videos** available to qualified adopters. These news clips are a good way to introduce nutrition topics and ignite class discussion.
- **Nutrilink CD-ROM** presentation software supplement. This software contains illustrations from this and other introductory nutrition textbooks. Instructors can download images, photographs, and animations from Nutrilink into Power Point or other electronic presentation programs.
- **Diet Analysis** software and a **Nutrition Interactive CD-ROM** are available for students to supplement their learning. These are sold individually or may be bundled with the text for a reduced price.
- **Nutrition Now on CD-ROM** provides the full text with student quizzes, animations, and video clips to enhance learning.

Acknowledgments

Nutrition Now has been and continues to be the product of a group of creative, kind, and highly skilled people. From rough drafts to published copy, the atmosphere of shared enthusiasm made my part of the effort entirely fun. For making that possible, and for his inside-out knowledge of the ingredients of high-quality textbooks, I thank Pete Marshall, Publisher, Wadsworth Publishing. Special thanks go to the rest of the editorial team for their work on all facets of production. A pat on the back goes to Becky Tollerson, Marketing Manager, for her effort in marketing this book. The creative and talented mind behind the art work in *Nutrition Now* belongs to Ann Borman. (She is the reason I traveled to a little UPS box in a dark alley late at night to drop off chunks of the manuscript.) The text has been thoughtfully reviewed for author's mistakes by Patricia Lewis. Her terrific copy-editing job is much appreciated. Once again a miracle has happened. Batches of typed pages, taped-on notes, and ideas have been converted into a text to be proud of. My thanks to you all.

Textbooks don't get to see the light of day unless instructors know they are available and have a chance to hear about them and review them. I am fortunate to have representation of *Nutrition Now* placed in the highly capable hands of Wadsworth sales representatives and managers. I hope you enjoy reading this new edition.

The Instructor's Manual for *Nutrition Now* was developed by Judy Kaufman. Thank you for expanding the usefulness of the text.

The second edition of *Nutrition Now* received a thorough going-over by faculty who teach introductory nutrition. Their comments always make me sit up and pay attention. And you will note in the third edition that I did pay attention. To the reviewers, I send my thanks for your time and helpful comments.

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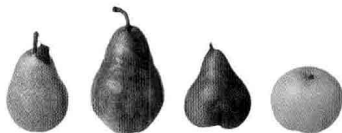
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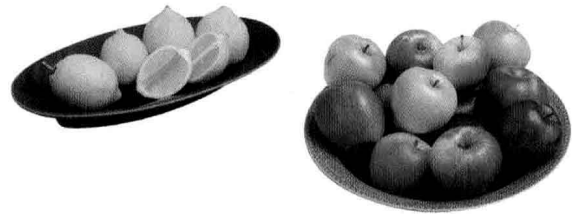
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Unit 1

Key Nutrition Concepts and Terms

Nutrition Scoreboard

- | | TRUE | FALSE |
|---|------|-------|
| 1. Calories are a component of food. | | |
| 2. Nutrients are substances in food that are used by the body for growth and health. | | |
| 3. The Dietary Reference Intakes (DRIs) specify minimal levels of nutrients people should consume in their diet each day. | | |
| 4. Both high and low intakes of nutrients threaten health. | | |
| 5. Foods can basically be divided into two groups: those that are "good" for you and those that are "bad" for you. | | |

(Answers on next page)