



NUTRITION

FOR HEALTH AND HEALTH CARE

Eleanor N. Whitney Corinne B. Cataldo Linda K. DeBruyne Sharon R. Rolfes SECOND EDITION

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DEDICATION

To the memory of my parents, Edith Tyler Noss, and Henry H.B. Noss, who supported me with love, discipline, and pride.

ELLIE



To my son, Cory, a uniquely independent and determined individual, who has filled my life with precious memories, challenges, and pride. My love and best wishes go with you as you enter college and begin your life as an adult.

Mom (Corkie)



To my son, Zak, whose smiles, love, and determination fill me with happiness and wonder, and whose future looks as bright as the sun. Go for it baby.

Mom (LINDA)



To my son Lyle, whose smile makes my heart smile. The early chapters of your life have been delightful, and I look forward to seeing how your knowledge grows and your talents unfold as you enter your college years.

Mom (Sharon)



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PREFACE

Health care professionals recognize that optimal health care depends on a thorough understanding of a client's physical, emotional, intellectual, social, and spiritual needs. As the professional with a broad understanding of medical needs and the most consistent and frequent contact with clients, nurses have a unique opportunity to identify these needs. This second edition of *Nutrition for Health and Health Care* aims to provide future nurses with the basic nutrition facts, an understanding of the role of nutrition in disease prevention and treatment, and practical information for using nutrition concepts, addressing nutrition concerns, and incorporating nutrition into care plans. Although primarily written for nursing students, this book can serve as a valuable resource for students of all health-related professions, including nursing assistants, dietary technicians, health educators, health science majors, dietitians, and physicians.

Nutrition is a young and rapidly expanding science, with many questions remaining to be answered and new "facts" surfacing every day. Each chapter of this book has been substantially revised since the first edition to reflect these many changes. To help readers keep abreast of changes that will occur in the future, one of the missions of this text is to teach them how to ascertain and cautiously interpret new information.

The book begins by introducing the basics of nutrition and shows how nutrition supports health. It then describes how nutrient needs change throughout the life cycle. The second half of the book begins with a look at how nurses can use information from nursing assessments to identify and address clients' nutrient needs. The remaining chapters examine medical nutrition therapy and its role in the prevention and treatment of medical conditions.

Within each chapter, definitions and notes in the margins clarify nutrition information, remind readers of previously defined terms, and provide cross-references. "How to" skill boxes help readers work through calculations or give practical suggestions for applying nutrition advice. Case Studies in the later chapters guide readers in applying information to everyday situations. The Self Check at the end of each chapter provides questions to help review chapter information. Clinical Applications encourage readers to practice mathematical calculations, synthesize information from previous chapters, or understand the impact of nutrition care on health care professionals or their clients. Later chapters also include Nutrition Assessment Checklists, which remind readers of assessment parameters particularly relevant to specific stages of the life cycle or groups of disorders.

New to this edition are life cycle and fitness icons, learning links, web site references, nursing diagnoses, and diet-medication interaction boxes. Life cycle and fitness icons highlight age-related and fitness-related information, respectively. Learning links help readers understand the relationships between nutrition concepts by tying together information from various parts of the text. Notations of web site addresses at the end of each chapter offer readers Internet resources for finding additional information on the topic discussed in the chapter. Nursing diagnoses with nutrition implications are provided in the later chapters to help nursing students correlate nutrition care to nursing care. The diet-medication interaction boxes in the later chapters describe interactions relevant to medications described in each chapter.

At the end of each chapter, a Nutrition in Practice section explores current topics, advanced subjects, or specialty areas such as ethical issues in nutrition care. This edition includes new Nutrition in Practice sections examining supplements and ergogenic aids, food safety, fluid replacement, child-hood obesity and chronic diseases, community nutrition, nutrition and cost-conscious health care, diabetes control, free radicals and antioxidants, dialysis, and alternative therapies.

The appendixes support the book with a wealth of information on nutrient contents of foods and enteral formulas, Canadian nutrient recommendations and food choices, U.S. nutrient intake recommendations and the exchange system, supplemental information about nutrition assessments, aids of calculations, nutrition resources, and answers to Self Check questions.

We hope that as you discover the many fascinating aspects of nutrition science, you will enthusiastically apply the concepts in both your personal and professional life. For nutrition updates and other resources, we invite you to visit our Web site: http://www.wadsworth.com/nutrition.

ELLIE WHITNEY
CORINNE CATALDO
LINDA DEBRUYNE
SHARON ROLFES

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Among the most difficult words to write are those that express the depth of our gratitude to the many dedicated people whose efforts have made this book possible. A special note of thanks to Dale Hugo, R.Ph., for answering many questions about medications and how they are delivered in hospitals.

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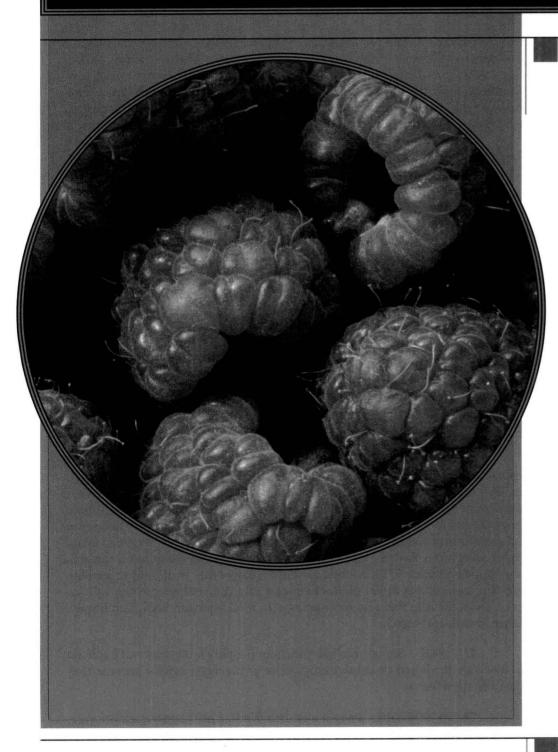
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CHAPTER 1

PERSPECTIVES ON HEALTH AND NUTRITION



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