



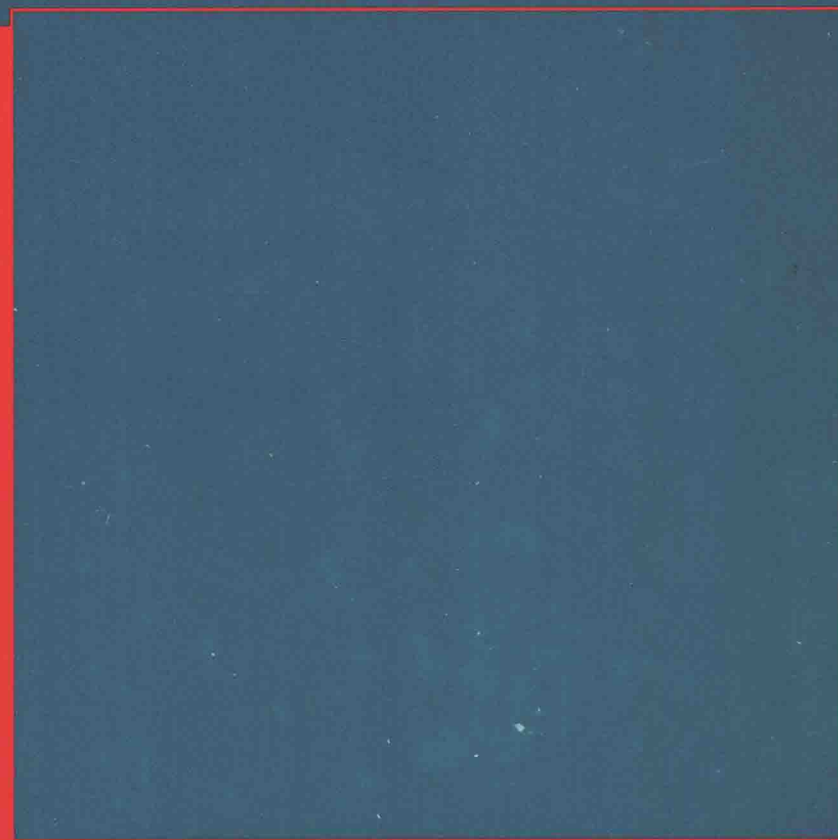
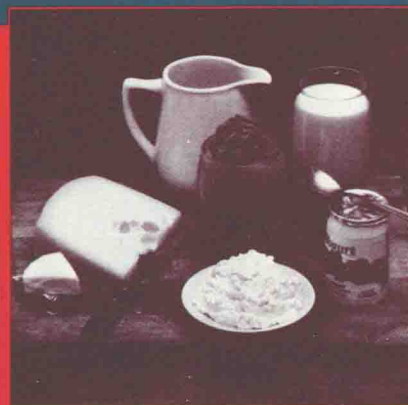
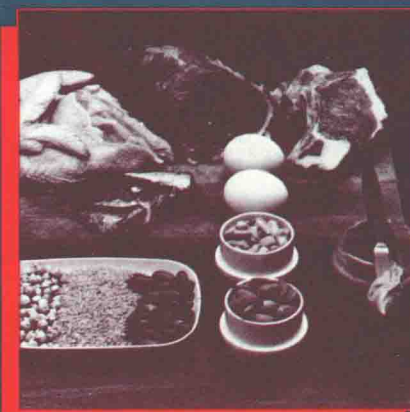
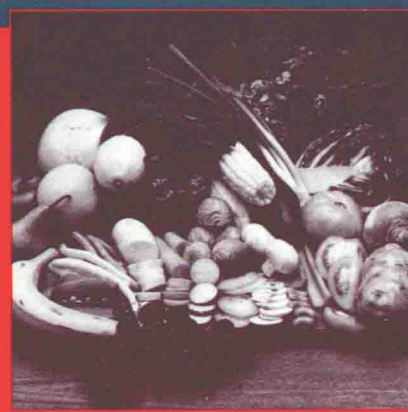
Nutrition

Second Edition

Principles and Application in Health Promotion

Carol
West
Sutor

Merrily
Forbes
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Nutrition

Principles and Application in Health Promotion
Second Edition

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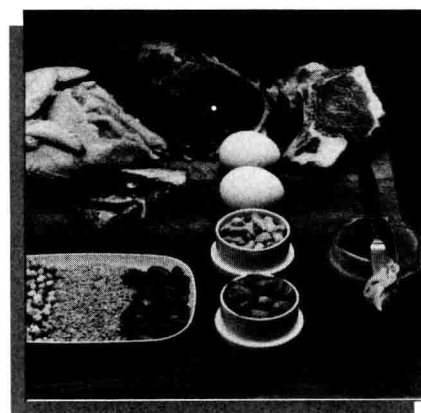
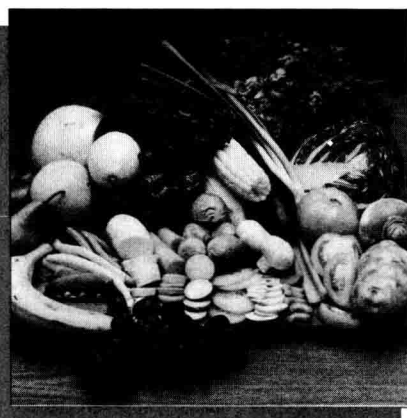
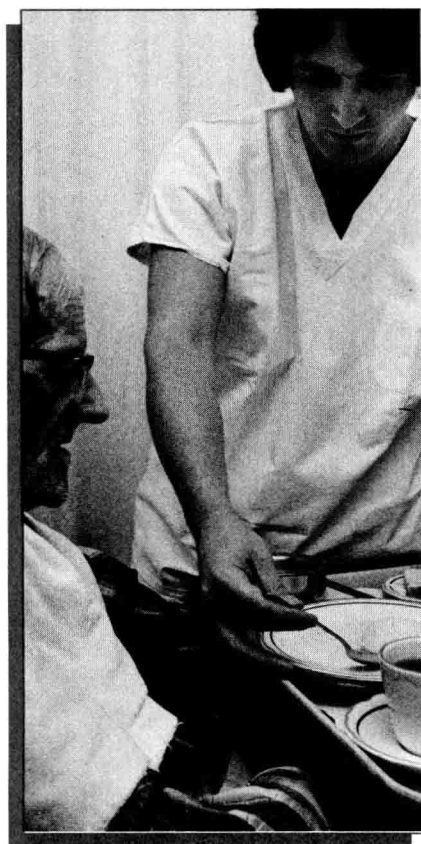
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The authors and publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new or infrequently employed drug.

Nutrition

Principles and Application in Health Promotion



To my husband, Dick, with love

Carol Jean West Suitor

To my son, Sam, who makes life a joy
and to my grandmothers,
Mary McKenzie Forbes and Mabel Elizabeth Waters,
who gave me love and inspiration

Merrily Forbes Crowley

Foreword

In the past decade, nutrition has been recognized increasingly as a science. More and more we are beginning to realize that we truly "are what we eat." A whole new world of knowledge is being unveiled, and we, as professionals involved with health maintenance and disease prevention, are constantly seeking ways to assimilate and use that knowledge.

Carol Suitor and Merrily Crowley have provided one such means in their clinically sound and very readable second edition. *Nutrition: Principles and Application in Health Promotion* has very special application to nurses and nursing students because the authors approach their subject with the same holistic viewpoint toward the client as that upon which nursing bases its practice. Understanding of human behavior as well as scientific facts and the essential interdependence of the two are emphasized throughout the text. Principles of assessment, interviewing, planning, teaching, and evaluation are consistent threads. Therefore, they provide easy transition for any professional to apply in working with clients/patients. The text not only provides the most current theory and scientific data but organizes it into an easily usable format. It expands our knowledge of nutrition and human beings and in doing so makes valuable contributions to the education of all professionals dealing with health.

Nutrition demonstrates the value of one clinical discipline sharing its knowledge and expertise with its professional peers. It has been constructed in such a manner as to complement and enhance a common framework within which patient care is delivered. As a text, it should prove an invaluable addition to nursing education curricula and the personal library of every primary nurse.

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Foreword

I am delighted to recommend *Nutrition: Principles and Application In Health Promotion* by Carol Jean West Sutor and Merrily Forbes Crowley. It is an excellent, practical guide for assuring optimal nutritional status as an essential component of health promotion.

Nutrition delivers exactly what the title promises: nutrition principles and application in health promotion. Basic nutrition principles are covered in detail in a clear, organized, and easily understood format, but the book does not stop there. It provides concrete, practical information on how to apply these principles to deliver high quality nutrition care in a variety of settings. This is not done, however, in a "cookbook" manner. Current controversies in nutrition are dealt with in such a way that the reader will be helped to evaluate these as well as future controversies.

The information in *Nutrition* meets the needs of health professionals for dealing with the daily problems and questions that arise in traditional health care settings such as hospitals and health centers. In addition, the book is a gold mine of information for professionals working in settings such as social programs, nutrition programs, and work-site health promotion projects.

Sutor and Crowley are to be commended for the dedication and expertise that went into the writing of this valuable resource for anyone committed to promoting health.

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Preface

The second edition of *Nutrition: Principles and Application in Health Promotion* has been expanded and updated with numerous recent developments occurring in the field of nutrition. The text continues to focus on ways that health professionals can help their clients achieve or maintain optimal nutritional status as a means of promoting health and coping with illness. It also continues to present a broad base of knowledge and to guide the reader in using facts and principles to provide high quality nutritional care. This is a practical text designed to help students and health professionals acquire relevant information about nutrition that they can use professionally and personally. It is our hope that readers will adopt a nonjudgmental, client-centered approach such as that taken in the text.

The content of *Nutrition: Principles and Application in Health Promotion* has been developed with flexibility in mind. The text can be used when nutrition and diet therapy are taught as separate courses, when nutrition is integrated into other courses, or when a nutrition source book is needed.

There are four major parts: Part I—Promoting Normal Nutrition, Part II—Relationships of Nutrients to Body Structure and Function, Part III—Providing Nutritional Care, and Part IV—Nutrition Interventions for Meeting Special Needs. As the names of the sections imply, each one has a special focus. Topics in Part One are oriented toward practical aspects of normal nutrition. Nutrients and a person's need for them are identified; effects of nonnutritive food components are discussed. Students are encouraged to find out how various dietary patterns can meet a person's need for nutrients and energy.

The roles that religion, culture, and behavior play in food behaviors are introduced in a manner designed to stimulate further inquiry. Part I emphasizes ways to promote sound eating habits throughout the life cycle. Material on the elderly has been expanded in consideration of the growing proportion of people in this age category. Part I also includes practical guidelines for safe food handling, conserving nutrients, and stretching the food dollar while maintaining nutrient quality of meals. At the end of Part I, facts and principles useful for evaluating nutrition information are presented in detail, preparing the health professional to deal more effectively with new fads and nutrition messages in the media.

Part II focuses on the processes of digestion, absorption, and metabolism of nutrients and on the contributions nu-

trients make to release of energy and to body structure and function. The interrelated role of nutrients in maintaining a state of dynamic equilibrium is emphasized. Several aspects of nutrition for athletes are discussed in conjunction with energy metabolism in this part of the text. Important additions include chapters focusing on malnutrition and on food-drug-nutrient interactions.

Part III guides the student in developing skills for providing quality nutritional care. The format of this section parallels the clinical care process, presenting tools for assessment, planning, and providing nutritional care. Since nutritional care often involves influencing behavior, there is strong emphasis on application of concepts from the behavioral sciences. Considerations when providing care to the elderly are highlighted. Effective means for providing nutrition education are explored. It is recognized that all health care providers are not expected to have the same proficiency in providing nutritional care. However, if health team members are to work collaboratively, it is essential that all members be familiar with all aspects of nutrition care so that they can better coordinate the client's care, obtain the assistance of the dietitian/nutritionist, and reinforce teaching as appropriate.

In Part IV, nutrition interventions, including but not limited to diet modifications, are discussed from a physiologic perspective. The focus is on interrelationships among physiologic changes, diet modifications, medications and other treatments, and the roles of health professionals in providing nutritional care. Several features are especially useful: (1) general concepts, which are applicable to a number of situations; (2) concrete examples of ways to use the clinical care process to assist clients to modify their food-related behaviors; and (3) practical suggestions to adapt diets and nutrition care plans to individual needs. Coverage of disorders of calcium and phosphorus balance; of hypertension, cancer, and other chronic conditions; and of critical care has been increased substantially.

Throughout the text the authors have referred to persons who are recipients of health care services as "clients." We have chosen this term since we feel that it suggests that the health care recipient should have the opportunity to participate in his care-related decisions and should be a responsible participant in his health care program.

To decrease confusion the pronoun "he" has been used when reference is made to the client. (Exceptions are made when the client is definitely a pregnant woman or a

mother.) When referring to a health professional of any type, the pronoun “she” has been used. The use of these pronouns is not meant to denote the person’s gender.

The authors have striven to assure the accuracy of content. We welcome comments concerning omissions, er-

rors, and/or strengths of the text. Since new developments are reported frequently, we encourage the reader to supplement the text with current reliable publications.

Carol Jean West Sutor, M.S., R.D.
Merrily Forbes Crowley, R.N., M.S.

Acknowledgments

We wish to express our sincere thanks to the many persons who provided us with support and assistance in revising this text. Special recognition goes to Joanne Malenock, R.D., PH.D., Assistant Professor of Nutrition, School of Nursing, University of Pittsburgh. She carefully reviewed the entire manuscript, shared her expertise, and provided insights based on her use of the first edition of the text with her students. We appreciate suggestions made by G. Sue Thompson, R.D., PH.D., Associate Professor of Home Economics, Sam Houston State University, who also reviewed the manuscript. We are grateful to users of the first edition who took the time to send in comments on its strengths and areas for improvement. Not forgotten are faculty and former students of St. Elizabeth's Hospital who provided the impetus for the first edition of this text. We thank Mary Kay Ebzery for her careful attention to detail in proofreading the galleys.

Additionally our gratitude goes to the authors, publishers, and others, who kindly have allowed us to reproduce materials in this text.

Bernice Heller, Editor, deserves a special word of appreciation for the encouragement, wise counsel, points to ponder, and technical assistance she provided. We feel fortunate to have such a gracious and astute editor. We are grateful for the expert work of June Eberharter, Manuscript Editor.

We hope that our families and friends know that this revision would not have been possible without their support, patience, and encouragement. They helped us in countless ways that we will long remember.

C.J.W.S. and M.F.C.

I am particularly appreciative to Johanna Dwyer, R.D., D.S.C., Director of Frances Stern Nutrition Center, New England Medical Center, for setting an example of excellence in interpreting results of nutrition research and for allowing the flexibility in scheduling that made this revision possible; to the staff of Frances Stern Nutrition Center for sharing their expertise and for being generous with encouragement; to the dietetic interns of Frances Stern Nutrition Center for their questions, insight, and support; and to the many other health professionals at New England Medical Center who have helped to expand my understanding of roles of nutrition in health care.

C.J.W.S.

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M.F.C.

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