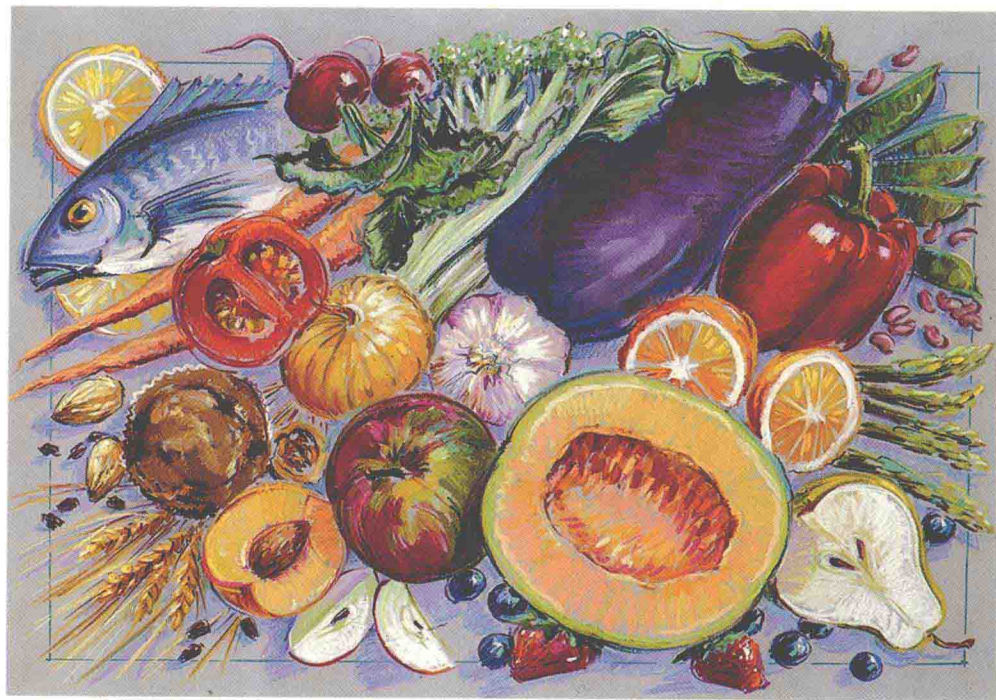


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F•O•O•D•S

TENTH EDITION



MARION BENNION

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10TH EDITION

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Preface

Change is constant in the area of food service and technology. Advances applied to food preparation and processing, along with shifting demographics and expanding knowledge of nutritional requirements, call for a text that can keep up with this fast-paced field. As with previous editions, the tenth edition of *Introductory Foods* has been written in order to provide the beginning student of foods with an introduction to the fundamental as well as some of the more innovative aspects of food science and technology.

TEXT ORGANIZATION

The first nine chapters of the book contain basic principles that the student may refer to throughout the entire course. The remaining chapters highlight specific types of foods and beverages. This edition has a chapter organization that allows you to choose the order in which you present chapters to fit the structure of your course. This is accomplished by the design and arrangement of chapters, so that each chapter functions both as an independent section and as part of a thematic unit. The chapter on beverages has been expanded to include drinks other than coffee, tea, and chocolate. It also has been placed earlier in the text so that it may be used in connection with a discussion of water and solutions.

Similarly, the chapters on sweeteners and frozen desserts which follow the beverages chapter also relate to solutions but, in addition, include crystallization and introduce carbohydrate-containing foods. These chapters are followed by starch, cereals, vegetables, fruits, and salads, which as a unit emphasize carbohydrates.

The chapter on fats and frying is placed after the carbohydrate-oriented chapters and is followed by a series of chapters that emphasize protein foods—eggs, milk, poultry, and fish. The next several chapters cover a unique group of products—batters and doughs. Finally, two chapters concerned with food preservation and packaging complete the text.

TOPICS NEW TO THIS EDITION

This edition covers new topics and innovations in food and discusses advances in biotechnology. Information concerning the 1990 nutrition labeling legislation and the food guide pyramid has been incorporated throughout the text. Food consumption data have been updated, and “light” products are addressed at several points.

The Hazard Analysis and Critical Control Point (HACCP) system is discussed in the chapter on food safety. A summary table on food infections and intoxications has been expanded to include additional organisms, and viruses are briefly discussed. Chapter 4, which is concerned with food regulations and standards, discusses food additives. Fat replacers are mentioned as food additives and are discussed further in the chapter on fats. Organic food standards also are briefly discussed.

Chapter 5, on food composition, includes information on water activity (use optional). The brief discussion of carbohydrates, fats, and proteins may be used as a review for students who have had chemistry courses or as an introduction for those who have not. A general discussion of browning reactions has been included with the section on carbohydrates.

A segment on forms for writing recipes has been added to the chapter on weights and measures. The discussion of heat conduction and radiation has been revised. Edible flowers are mentioned in the chapter on seasoning and flavoring materials. Biotechnology and vegetable production is an added topic in the chapter on vegetables. A short discussion of vegetarian diets is included along with material on plant proteins, particularly soybeans. The chapter on gelatin has been combined with the chapter on salads since gelatin is used in set salads. Safety precautions to consider in the handling of eggs and also of seafood have been expanded in these respective chapters. The discussion of food preservation by ionizing radiation has been updated. Aseptic packaging and modified atmosphere packaging of foods, including sous-vide processing, are addressed. The last chapter on food preservation by freezing and canning has been retained.

Definitions have again been placed in the margins for ready accessibility and additional definitions have been added. Cross-references have been noted at various points in the text in order to keep duplication at a minimum.

This text, as with previous editions, has been written for the beginning student of foods. A student who has not taken college chemistry should be able to read and understand the material presented. However, some background in science should be helpful in the student's attempt to grasp and apply the basic principles of food preparation.

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