



4th ed. 2014, XXIV, 495 p. 136 illus., 42 illus. in color.

Printed book

Softcover

59,99 € | £54.99 | \$74.99

^[1]64,19 € (D) | 65,99 € (A) | CHF

71,00

eBook

50,28 € | £43.99 | \$59.99

^[2]50,28 € (D) | 50,28 € (A) | CHF

56,50

Available from your library or

springer.com/shop

MyCopy ^[3]

Printed eBook for just

€ | \$ 24.99

springer.com/mycopy

Vickie A. Vaclavik, Elizabeth W. Christian

Essentials of Food Science

Series: Food Science Text Series

- Uses Choose My Plate, the new health guidelines from the USDA
- Major updates to chapters on food processing
- An important tool for students of nutrition and dietetics

The fourth edition of this classic text continues to use a multidisciplinary approach to expose the non-major food science student to the physical and chemical composition of foods. Additionally, food preparation and processing, food safety, food chemistry, and food technology applications are discussed in this single source of information. The book begins with an Introduction to Food Components, Quality and Water. Next, it addresses Carbohydrates in Food, Starches, Pectins and Gums. Grains: Cereals, Flour, Rice and Pasta, and Vegetables and Fruits follow. Proteins in Food, Meat, Poultry, Fish, and Dry Beans; Eggs and Egg Products, Milk and Milk Products as well as Fats and Oil Products, Food Emulsions and Foams are covered. Next, Sugar, Sweeteners, and Confections and a chapter on Baked Products Batters and Dough is presented. A new section entitled Aspects of Food Processing covers information on Food Preservation, Food Additives, and Food Packaging. Food Safety and Government Regulation of the Food Supply and Labeling are also discussed in this text. As appropriate, each chapter discusses the nutritive value and safety issues of the highlighted commodity. The USDA My Plate is utilized throughout the chapters. A Conclusion, Glossary and further References as well as Bibliography are included in each chapter. Appendices at the end of the book include a variety of current topics such as Biotechnology, Functional Foods, Nutraceuticals, Phytochemicals, Medical Foods, USDA ChooseMyPlate.gov, Food Label Health Claims, Research Chefs Association certification, Human Nutrigenomics and New Product Development.

Order online at springer.com / or for the Americas call (toll free) 1-800-SPRINGER / or email us at: customerservice@springernature.com. / For outside the Americas call +49 (0) 6221-345-4301 / or email us at: customerservice@springernature.com.

The first € price and the £ and \$ price are net prices, subject to local VAT. Prices indicated with [1] include VAT for books; the €(D) includes 7% for Germany, the €(A) includes 10% for Austria. Prices indicated with [2] include VAT for electronic products; 19% for Germany, 20% for Austria. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. [3] No discount for MyCopy.

