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Vickie A. Vaclavik • Elizabeth W. Christian

# Essentials of Food Science, 4th Edition

 Springer

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## Preface

Hello. It is with great pleasure that we introduce *Essentials of Food Science* Fourth Edition!

The student of Food Science, Nutrition, Dietetics, Hospitality, and Culinary Arts enrolled in an introductory Food Science course may each benefit from working with *Essentials of Food Science*! This new edition continues to be designed to present principles of food science at an introductory level, with the non-major in mind. Appropriate chapters each include relevant parts in Nutritive Value as well as Food Safety of the commodity being discussed.

***Bold, italicized words*** appearing in the text of each chapter are defined in a glossary at the completion of each respective chapter.

*What is new:* There are updates in each chapter—some significant. This better provides for internal consistency, clarification, and current thought in the field of food science. New to this edition of the book includes:

- Chapters covering Food Preservation, Food Additives, and Food Packaging are now part of a text part entitled Food Processing.
- The USDA Food Guide now becomes ChooseMyPlate.gov.
- After 100 years, *The American Dietetic Association* (ADA) has gotten a new name: *The Academy of Nutrition and Dietetics* (AND) (<http://www.eatright.org>).
- Also see: IFT's new campaign on food science, food facts, K-12 educational materials <http://www.worldwithoutfoodscience.org>.
- With the intent to further enrich student learning, there is, at the close of each chapter, a space to enter any additional “Notes:” as well as a “**CULINARY ALERT!**”

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## Thanks

Thank you to each textbook user for your feedback to the authors! We would like to express our appreciation for the review and input of Andres Ardisson Korat, M.S. Food Science, M.A. Gastronomy, a practicing Food Scientist for many years, currently redirecting his time in order to work on his Ph.D. in Nutrition. We are appreciative of those professionals who provided materials used throughout *Essentials of Food Science* to offer better explanations of the text material.

Thank you to the Lord for giving these authors great interest in food science and also the grace to meet each challenge in the process of writing!

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### **For More Information**

More information is available in texts relating to topics such as Food Chemistry, Food Engineering, Food Packaging, Food Preparation, Food Safety, Food Technology, Nutrition and Quantity Foods, Product Evaluation, and in references cited at the end of each chapter.

Enjoy!

Dallas, TX  
Denton, TX

Vickie A. Vaclavik  
Elizabeth W. Christian

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## About the Authors

**V. A. Vaclavik, Ph.D., R.D.**, Retired. Dr. Vaclavik has taught for over 25 years at the college level in Dallas, TX. Included among her students are *nutrition* students at the Dallas County Community College District; *food science* and *management* students at The University of Texas Southwestern Medical Center at Dallas, Nutrition Department; and *culinary* students at the International Culinary School at the Art Institute of Dallas. She is a graduate of Cornell University, human nutrition and food; Purdue University, restaurant, hotel, institution management; and Texas Woman's University, institution management and food science.

She has been the lead author with Marjorie M. Devine Ph.D., Professor Emeritus, and Marcia H. Pimentel M.S., of *Dimensions of Food* since its third edition, having been a college student worker for the original edition. Her newest culinary text is *The Art of Nutritional Cuisine*, written with Amy C. Haynes, R.D. This book, *Essentials of Food Science*, written with Elizabeth W. Christian, is now in its fourth edition with two foreign translations.

Personally, she really likes passing on what she knows and enjoys. Prior to teaching and writing, Dr. Vaclavik worked in various foodservice operations—including hotel restaurants, Meals-on-Wheels, and more. Two of her three sons are married with children of their own!

**Elizabeth Christian, Ph.D.** Elizabeth Christian has been an adjunct faculty member at Texas Woman's University in Denton for 22 years, teaching both face-to-face and online classes in the Nutrition and Food Science department. Food Science has been her passion since she was a freshman in high school. She obtained her B.S. and her Ph.D. in Food Science from the Leeds University, England. After working for 5 years as a research scientist at the Hannah Dairy Research Institute in Scotland, she married an American and moved to the United States. Elizabeth and her husband currently live in Longview, TX, with their two daughters, who are in college.

**Best wishes and God bless!**





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