



Nutritional Epidemiology, 2nd ed, edited by Walter Willett, 1998, 514 pages, hardcover, \$67.50. Oxford University Press, New York.

The field of nutritional epidemiology is constantly growing as a result of the completion of recent studies, the interaction with molecular and genetic research, and the development of food-composition databases for micronutrients and nonnutritive components in foods. *Nutritional Epidemiology* is the second edition of a book written for individuals who are actively engaged in studies of diet and disease relations and for those who seek to interpret the results of these studies. This edition integrates the results of new studies into chapters from the first edition and extends the scope of the book to include chapters on data analysis and interpretation, nutrition surveillance, and the relations between folate and neural tube defects.

The book begins with an overview of nutritional epidemiology that is followed by chapters describing food and nutrient components of diets, methods of dietary assessment, issues of reproducibility and validity of dietary tools, dietary recall methods, and use of surrogate respondents. The diet-biochemical relation is examined from the perspective of how well biochemical markers reflect dietary intake and the biochemical assessment of specific nutrients. Dietary data analysis covers measurement error; the basis for, implications of, and methods of adjustment for energy intake; and multiple approaches to dietary modeling and to data presentation. In several instances, authors of specific chapters recommend that the reader seek experts in other disciplines such as biochemistry for an understanding of the implications of methodologic issues on data interpretation. Specific topics concerning diet and disease, such as vitamin A and lung cancer and dietary fat and breast cancer, are examined extensively.

By and large, the principles of nutritional epidemiology examined in each chapter are applicable to the epidemiology of diseases across the age spectrum. The chapter on anthropometric measurements and body composition is devoted to obesity, which may differ from measurement and analytic models of maternal and child health. Developmentally recognized rates of change in linear growth, head circumference, and weight during the first years of life may not clearly overlap with the models of obesity during the adult years.

This book moves the discipline of nutritional epidemiology into several new arenas, while updating other areas. Willett is a primary contributor to many of the chapters, and experts in dietary methodology or diet and disease either coauthor or author the remaining chapters. This second edition of *Nutritional Epidemiology* makes a significant contribution to the evolution of the field and would make a worthwhile addition to one's library.

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## Book Reviews

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*Lipoprotein Protocols*, edited by Jose M Ordovas, 1998, 284 pages, hardcover, \$69.50. Humana Press, Inc, Totowa, NJ.

Since the 1950s, the importance of atherosclerotic disease to public health has led to the evolution of numerous techniques for use in the study of lipoproteins and their metabolism. In such a large field, comprehensive texts presenting lipoprotein methodology are invaluable (1–4). Molecular techniques in particular have contributed substantially to our understanding of the pathogenesis of atherosclerosis. Unfortunately, references describing those molecular techniques that are specifically applicable to lipoprotein research have been few. This latest addition to the *Methods in Molecular Biology* series begins to fill this void.

*Lipoprotein Protocols* is designed to be used in the laboratory. As with other books in the series, this is a slender volume consisting of 279 pages of text, 16 tables, and 53 figures. The chapters, written by internationally recognized lipoprotein experts, are organized into 2 major sections. The first section includes 5 chapters that describe DNA- and RNA-based methodologies. Protocols are included for the separation of small-size DNA fragments, reverse transcriptase-polymerase chain reaction techniques, and the generation of transgenic and knockout mice. Section 2 constitutes 13 chapters and is entitled "Protein-Based Methodology." This rather general section title reflects the inclusion of protocols from areas as varied as proteoglycan-lipoprotein interactions to lipoprotein oxidation and lipid-transfer activity.

The brief chapters (one is only 9 pages) contain information that is highly focused. Included are precise protocol directives, assay conditions, cautions about potential errors and previously encountered problems, as well as technical refinements that have occurred since the development and publication of the original protocols. Notes included at the end of each chapter provide valuable follow-up information. Problems with the book are few: the articles are well-referenced and nicely written with only a few typographical errors.

Ordovas has done a remarkable job of limiting the size of the book. As with previous volumes in this series, the book's simplicity may seem ingenuous in such a complex field, and yet that is its strength. Its size and organization make it an easy read and thus it accomplishes its goal: to efficiently communicate how to perform these techniques. It is this quality of the book that will add to its ability to introduce new scientists to the field. *Lipopro-*

tein Protocols will be highly valued by lipoprotein scientists and will prove to be a worthy addition to nutrition libraries.

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