Essentials of human nutrition

4th edition

Edited by Jim Mann and A Stewart Truswell

Reviewed by Prof. Lynette Fergusson, Department of Nutrition, School of Medical Sciences, The University of Auckland

This is both a very fundamental and comprehensive textbook on human nutrition. The multi-authored text works systematically through the various classes of human nutrients, providing chapters not only on each important nutrient or group of nutrients, but also on related topics, such as energy, electrolytes and acid-base balance. There are also sections on nutrition-related disorders, foods, nutritional assessment, life stages, changing food habits and applications. The editors have worked to emphasise that nutritional science encompasses a spectrum of disciplines and involves the use of many methodologies. The text is aimed at a wide audience, including university scholars in nutrition and also those whose primary training is in other areas of health and food science. Thus, the chapters are fairly general and do not necessarily assume previous understanding of the area. The foreword comments that the editors have been somewhat interventionist in this role. This has resulted in chapters with a consistent, simple and readable style. One of their key intentions is to provide a solid basis upon which health professionals and food scientists can distinguish sound nutritional principles from the somewhat dubious claims that regularly appear in more popular media.

The generality of subject development is both a strength and a weakness of the book. One of my frustrations with several of the chapters is that they are poorly referenced, with only a small number of references, often to other books. Thus, readers are left with an impression of the importance of a subject area, but are not given the essential leads to pursue this.

It is now five years since the previous edition, which appeared in 2007. In that time, the molecular understandings of nutrition have progressed enormously, and fields such as nutritional genomics (gene–diet interactions) have come into more widespread use, with solid scientific foundations and rationale. The second chapter is now on genes, diet and nutrition risk (a new addition since the 2007 edition) and several of the individual chapter authors have commented on the implication of the rise of interest in this field in the intervening years. Some of these comments are unfortunate in their biases. Sustainability of the human diet is the other new area that has emerged since 2007. This is well covered in another new chapter. Otherwise, the chapter headings are the same as in the 2007 edition, with only the addition of four new case studies. Six of the chapters have been entirely rewritten, while others have been updated.

This remains a solid, albeit predictable, introduction to human nutrition. I anticipate that, like its predecessor, it will be widely used, especially in universities in Europe and the Southern Hemisphere.