Book reviews

M. M. Cody and M. E. Kunkel ??. Food Safety for Professionals, 2nd ed. Chicago, IL: American Dietetic Association 2002. Price \$40.00. pp. 198. ISBN 0 88891 194 8

The title of this book aptly denotes the contents. The fivepage introduction provides a succinct précis of the chapters to come. Topics as diverse as toxic agents to consumer behaviour are covered.

The book is aimed principally at the American market, sixteen of the 110 pages of text pertaining to US laws, regulations and surveillance programmes. The remainder of the text is of broader interest and would provide a useful introduction to all health-care professionals and undergraduates with an elementary knowledge of food safety and hygiene issues.

Provision of a comprehensive glossary and extensive use of tables prevent the text becoming turgid with fact and make this an eminently readable book.

Each of the chapters provides a solid introduction to the topic; that concerning potential toxic agents is a good example. In this chapter the text is usefully used to provide an overview of this vast subject area whilst many of the hard facts, pertaining to each 'agent', are retained within the tables provided. Potential toxic agents including bacteria, viruses, protozoa, prions and food allergens are introduced concisely. More than 250 references are provided at the end of this chapter directing the reader to further texts, recent reviews, web resources and peer-reviewed articles detailing specific incidents and outbreaks.

Appendix A provides a valuable list of organisations and resources for US professionals. Similarly the self-assessment questions in Appendix B provide a useful means of assessing progress and understanding, although once again the questions are generally directed to the US audience.

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Marion Nestle. *Food Politics*. Berkeley, Los Angeles and London: University of California Press 2002. \$29.95 or £19.95. pp. 457 + 12. ISBN 0 520 22465 5

A view of science still commonly endorsed by many scientists is that it deals with incontrovertible 'facts', whose validity is unambiguously verifiable in rigorously controlled experiments. Regrettably, the argument goes, the general public, unversed in the scientific method, has a sentimental attachment to 'traditional wisdom'; and this results in an irrational rejection of new knowledge, and

impedes progress as people learn, but only slowly and grudgingly, to accept improved scientific understanding.

Conceivably, this cherished myth might not be too serious an impediment for some sciences, but unfortunately human nutrition is not one of them. Not only is it almost impossible to conduct critical studies on consenting individuals that are both reliable and socially acceptable, but also in practice uncontrollable extraneous factors often distort the conclusions that are drawn. For public perceptions of human nutrition can hardly fail to be affected by powerful political pressures, as competing interests seek to influence the ways in which people assess the value of different foods.

Marion Nestle's remarkably revealing account of the recent battles over food regulation in the United States provides ample evidence to support that claim. Presenting detailed documentation, she argues that 'the food industry uses lobbying, lawsuits, financial contributions, public relations, advertising, partnerships and alliances, philanthropy, threats, and biased information to convince Congress, federal agencies, nutrition and health professionals, and the public' to support its commercial objectives (p. 358).

The book has a very wide coverage, but one issue that deserves all nutritionists' attention is the way that commercial pressures are exerted on children to buy foods that can undermine their healthy development. The facts and figures speak for themselves. For example, in 1997 American children obtained 50% of their dietary energy from added fat and sugar, while only 1% regularly ate diets resembling the proportions in the recommended 'food pyramid' (p. 177); doubtless, a result of the \$12.7 billion spent in direct advertising of food to children that year (p. 179). In fact, in 1999, children aged 6–19 years influenced purchase decisions worth a staggering \$485 billion (p. 176).

Another critical issue discussed is the rise of functional foods, which Nestle prefers to call 'techno-foods'. As she notes, their 'philosophical rationale ... is flatly reductionist; (as) the value of a food is reduced to its single functional ingredient'. But she argues that the development of such foods has several undesirable results; such as the blurring of the distinction between food and drugs, and the resulting confusion caused in making dietary recommendations (pp. 296–297).

This is a courageous book, for even in academia free speech is at a premium. Reading the book reminded me that some years ago the publication of a paper I had submitted to an academic journal was blocked by covert (presumably, commercial) threats, to which the journal's publishers succumbed, even though the paper had already been approved by the academic referees. So, if this book merely served to alert those involved in nutrition research to the pressures that can undermine scientific integrity its publication would have been amply justified. But the

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story is so important, and the author's narrative skills so engaging, that it deserves a much wider readership.

However, for all the book's merits, the title is perhaps a little deceptive. For this is essentially a historical account of US dietary regulation over the last few decades, albeit from someone who knows the subject matter intimately. Only in the final chapter does the author reveal her true colours and provide a blueprint for effecting political change in the marketing of food.

Moreover, given the title, there are some surprising omissions. For example, there can be no more intense political debate than that over the marketing of genetically modified foods, which threatens to precipitate a new trade war as the United States accuses the European Union of breaking World Trade Organization rules. Yet such issues receive no mention. And while the marketing of infant foods by Nestlé (to whom, the author stresses, she is unrelated) gets the extensive treatment it surely merits, it is surprising that the epic struggle over the milk-yieldboosting hormone, bovine somatotrophin, legal in the United States since 1994 but banned in the European Union, is totally ignored. Moreover, it might be argued that the major issue in food politics on a global scale, again not really addressed, concerns the inequalities in food supply, which result in over a billion people in less economically developed countries suffering severe undernutrition, while an equivalent number in developed countries are overweight (p. 16).

But such limitations do not detract from the fact that, in its own terms, this is a splendid book. It deserves to be widely read.

B. Mepham DOI: 10.1079/BJN2002704

D. A. Bender. *Introduction to Nutrition and Metabolism*. London: Taylor and Francis 2002. £22.99. pp. 426 + index. ISBN 0-415-257-99-9.

Introduction to Nutrition and Metabolism aims to cover the scientific basis for nutritional recommendations and biochemistry necessary for an understanding of nutritional science, with undergraduate students in mind. The book comes with a CD-ROM, containing resources to accompany chapters within the book. The resources are PowerPoint presentations, self-assessment quizzes and simulations of laboratory experiments such as energy balance and enzyme assay. These will be reviewed later.

At the beginning of the book there is a list of useful Internet links, which according to the preface provides an entry to the scientific literature. These links include professional and learned organizations, research tools and information, government and international sites as well as the author's website. His biochemistry and nutrition website is autobiographical, amusing in parts particularly his descriptions of benzene rings on web page One Foot Candle, and contains some of his lecture notes and PowerPoint presentations that can be found on the CD-ROM.

The book comprises eleven chapters. These include topics on food choice, control of enzyme activity and metabolic pathways, acquisition and utilization of nutrients, energy metabolism, and the main health problems associated with malnutrition as well as nutritional recommendations on how to prevent or treat them. With regard to the organization of a chapter, each consists of an introduction, learning objectives, and then the main body. The introduction and learning objectives make the reader aware of what must be learnt and facilitate selfinstruction. Moreover, the learning outcomes for each chapter are achievable by studying the particular chapter. Another organizational feature is cross-referencing of sections within and between chapters. The benefit of cross-referencing is that it either reminds the reader of a topic covered earlier or directs the reader to a section that provides a more detailed explanation for a figure, statement or word. In general the book is laid out logically and the sections within each chapter have pertinent headings and are numbered, making it easy to find the required information.

The book, seemingly error-free, is written in an easily readable style with clear and concise explanations. In addition it is authoritative and gives the prevailing viewpoints on issues of diet and health. For an introductory book, it is comprehensive in terms of covering the essential points. From an educational standpoint, after studying the book, a reader should gain the breadth of knowledge and understanding of the principles that underpin nutritional science.

Another important feature of the book is the large number of figures and tables, which are visually appealing and complement or clarify explanations within the text. Some figures simplify complex processes, such as action of steroid hormones, an overview of metabolism in the fed state, ribosomal protein synthesis and role of ATP in muscle contraction. These figures make good revision aids because they are easy to learn and recall. One minor shortcoming, however, is that figures are not in colour; some readers might therefore find them a little dull.

At the end of Chapters 2 to 10, there are problem-based questions, which involve calculations, interpretation of experimental or actual clinical data. Some questions, in particular the clinical questions, encourage deep learning as readers unfamiliar with the topic can only answer the questions after further study or discussion with someone such as a tutor.

At the end of the book there is a useful glossary, which gives simple and easily understandable definitions of many key terms. Examples of terms are acid, isomers, reference nutrient intake and vitamins.

With regard to potential readers, the book would be an invaluable text for pre-clinical medical students and their tutors. It is also a suitable core or reference book for other undergraduates taking courses in nutrition or metabolism.

As previously mentioned, the book comes with a CD-ROM, containing three learning and teaching resources. The first resource to be reviewed is the PowerPoint presentations.

Anyone familiar with PowerPoint can easily view and

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adapt the presentations. Presentations, containing more figures than their corresponding chapters, comprise black and white photographs, coloured figures and text. The figures, which summarise the key points of topics and can easily be interpreted, make useful revision aids. The next resource is the simulations.

Generally the simulations are user-friendly with simple step-by-step instructions. Images are visually pleasing but there are no animations. The results of a simulation can be printed, except for the peptide sequences. Most of the simulations seem to be based on real results, which would make them suitable for teaching the principles of biochemical techniques such as enzyme assay, radio-immune assay and chromatography. The final resource is self-assessment quizzes.

Self-assessment quizzes test knowledge and understanding of topics covered in Chapters 2 to 11. According to the Read ME file, there are 1800 questions in the bank. Some features of the quizzes would ensure that users retest themselves. For examples, extra questions can be added, each time the program runs a new set of questions is randomly selected and a score is kept, which takes into account the number of correct answers and level of confidence selected for each of the answers.

To conclude, this book with its CD-ROM and problembased questions is more than a textbook on nutrition and metabolism; it is a complete learning and teaching resource. Costing less than £25 it is also value for money.

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