

Book reviews

Oral Health. Diet and Other Factors. Report of the British Nutrition Foundation Task Force, 1998. Ursula Arens (editor). Elsevier. \$140.00. ISBN 0-444-50025-1

This is a compilation of seventeen chapters, most of which are attributed to individual members of a British Nutrition Foundation (BNF) Task Force, although the report implies that the final version of the chapters are the collective work of all the members. The Task Force consisted of nine members and a chairman, drawn from a variety of backgrounds, mostly academic, but some Emeritus and at least one with commercial connections. So this should provide a good mixture for tackling the terms of reference, which are listed as reviewing the relationship of diet and nutrition to oral health, preparing a report on this, making recommendations and identifying areas for future research. The cost is quite high, at US \$140 for a slim volume of less than 150 pages, so it will probably be bought mainly by libraries and institutions.

The Chairman in his preface emphasizes that these 'Task Forces' operate completely independently of the BNF, but it is not made clear why oral health was singled out as an appropriate topic for this report, except for the explanation that the Council of the BNF decided that the subject was 'still of sufficient interest' for the Task Force to be convened. The time-scale of the project is not given, but it would be illuminating to learn when it was initiated.

The chapters are mostly reasonably short and succinct, in a style which should appeal to readers with limited time. I think the report will be of more value to those with a nutritional background than to those already familiar with the oral research field. The first two chapters do not deal with dietary or nutritional factors, but are concerned with the structures of the mouth and the oral microflora, classifying some of the many different types of micro-organisms that inhabit the mouth.

Then follow fifteen chapters of varying quality and usefulness on different aspects of nutrition and oral health. Some are up-to-date and should provide a valuable source of references for those interested in the field while others, it has to be said, do not cover the field completely and would benefit by updating. In reviews of this nature it is always difficult to decide whether to append the relevant references at the end of each chapter or to collect them all together at the end. In this instance they have all been put on fifteen pages near the end, which increases the length of time it takes the reader to refer to them from the individual chapters. Preceding this list of references is a feature that should be helpful to nutritionists and others not familiar with some of the terms commonly used in dentistry and dental research, in the form of a three-page glossary.

A slight inconvenience is that on page ix the titles of the chapters are given but no page numbers, and for these you have to refer back to an earlier page. The following text

gives the chapter numbers only on the first page of each chapter, and the headings at the top of the right-hand pages change within the chapters, so I found it was sometimes difficult to establish exactly which section I had opened the report at and to find the areas I was looking for.

The chapters vary in depth. Some give comprehensive and useful reviews, but others in my opinion do not deal adequately with all the issues. For example the one on tooth wear is less than three pages long, in spite of the very great interest that is currently being shown in this subject and the publication of the proceedings of at least three major conferences on it that have been held in recent years. The shortness of some of the other chapters may reflect the limited information that is available to us on the connection between nutrition and certain aspects of oral health.

The text concludes with a short chapter not included on page ix, headed 'General Conclusions and Recommendation'. This mentions the contentious classification of sugars (aetiological agents in the development of dental caries) as either extrinsic or intrinsic, summarizes some of what is known about the influence of nutrition on various oral disorders, and then gives the Task Force's recommendations to individuals, health authorities, government, industry, teachers, and healthcare and dental professionals. Some of these are very brief and surely too general to be of any real use, but on the other hand it was probably a major objective of this book to encapsulate our present knowledge in order to assist these groups, and to draw the Task Force's recommendations to their attention.

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Modern Nutrition in Health and Disease, 9th edition. M. E. Shils, J. A. Olsen, M. Shike and A. C. Ross (editors). 1999. Baltimore: Williams & Wilkins. \$105.00. ISBN 0-683-30769-X

This classic text has a pedigree that stretches back over more than half a century, and Wohl and Goodhart's first edition of a text with the current title made its debut in 1955. The ninth edition is a massive tome that contains over 2000 pages split into 115 chapters and with 200 pages of appendices and no less than 169 contributing authors. It is described on the cover as two volumes of information in one handy volume but the 'handy volume' weighs in at over 3 kg! Its sheer weight and lack of portability might restrict its usefulness, especially for students.

This is a 'must have' reference work for academic libraries. At \$105, I also consider it to be very good value for money and it is cheap enough to recommend as a valuable addition to the bookshelf of any academic or practitioner working in nutrition or any student majoring in nutrition. The text is laid out in double columns and there

is economical use of diagrams and almost no colour. This is a weighty, no nonsense academic text without the visual frills seen in many big selling American textbooks, hence presumably the good value for money. My judgement of the detailed content is obviously based upon limited sampling but I found most of the sampled sections to be substantial but reader-friendly and a good starting point for entry into the specialist literature. I am very pleased to have the review copy on my bookshelf and expect it to be well used in the coming months and years.

The book is divided up into six major sections: part I covers the specific dietary components and it starts with a chapter dealing with the definition of essentiality, what constitutes an essential nutrient and what constitutes requirement for a nutrient as opposed to desirable or pharmacological intakes. There are twenty-eight chapters dealing with individual nutrients and chapter thirty gives a useful overview of the clinical signs of nutrient deficiencies. The final chapters of this section deal with 'organic compounds with nutritional relevance' including, for example, the carotenoids, carnitine, glutamine and arginine; part II is concerned with 'nutrition in integrated biologic systems'. It starts with four 'tutorial' chapters covering aspects of physiological regulation that underpin the nutrition, i.e. nutritional regulation of gene expression, transmembrane signalling, membrane transport and the alimentary tract in nutrition. There are also background tutorials in part IV dealing with the molecular basis of neoplasia and the biology of bone. The rest of part II deals with topics like the control of food intake, nutrition and immunity, oxidative stress and antioxidants, diet and performance and five chapters dealing with the nutritional needs and priorities at various phases of the human lifecycle. There is even a chapter on nutrition in space; part III deals with dietary assessment and with the clinical, anthropometric and biochemical assessment of nutritional status; part IV has more than forty chapters dealing with the prevention and

treatment of disease. The first six chapters deal specifically with disorders of children and adolescents including childhood obesity. The rest of this section contains all of the topics that one would expect to find in a comprehensive text. The last chapter deals with legal and ethical issues relating to nutritional support and although this is obviously based around US law and practice, the general principles will be of interest and relevance to non-US readers; part V is entitled 'diet and nutrition in health of populations'. It covers topics like dietary standards, nutritional monitoring and dietary guidelines. Unlike many American texts, this one does at times try to look beyond North America and this is exemplified by comparisons of dietary standards, guidelines and food guides used in other countries; the UK's food guide plate makes an appearance on p. 1738. Given the international and comparative flavour of some of the other chapters in this section, I was a little disappointed that the chapter dealing with nutrition monitoring was solely confined to what happens in the US. This section also contains chapters dealing with vegetarianism, social and cultural factors in nutrition, alternative nutrition therapies, nutrition quackery and fraud; part VI deals with food safety and quality and covers topics like food processing, the chemical safety of foods, food additives, the assessment of risk posed by environmental chemicals in foods, functional foods and food labelling.

The large appendix is a mine of useful information. There are dietary reference values and dietary guidelines from around the world, lists of anthropometric data and anthropometric standards, food composition data, nomograms and equations and more. There is also a large section dealing with the provision of therapeutic diets including sample menu plans.

The book is rounded off by a very full index that itself occupies about seventy pages!

G. Webb