

## Book review

*Encyclopedia of Human Nutrition*. Edited by M. J. Sadler, J. J. Strain and B. Caballero. London: Academic Press. 1999. Three volumes, pp. 1973 and appendices. US\$ 925. ISBN 0 12 226694 3

What defines an encyclopedia? In his foreword Professor Waterlow suggests 'an exhaustive repertory of information'. In its three volumes this encyclopedia aims to cover broadly all aspects of nutrition, from the biochemical pathways of amino acid metabolism to the organization of food aid: from the physiology of digestion to the epidemiology of cancers.

As the editors say, it is not possible to cover every aspect of nutrition in minute detail, but the breadth of the coverage is impressive, bringing together virtually every topic that can be considered part of the multifaceted subject of nutrition. As well as the basic aspects of nutrient metabolism it includes physiological aspects of nutrient and energy requirements in different population groups, measurement of dietary intake and nutritional status, nutrient composition of the main food groups, associations between diet, lifestyle and disease, clinical application of nutrition, issues in food processing, food choice and eating behaviour, nutritional guidelines and public health policies, food labelling, and so on.

Where to draw the line between nutrition and all those subjects into which it merges is not an easy decision. Nor is it easy to decide how to divide up such a wealth of material. Is it best to have a relatively small number of long reviews or to subdivide the content into a large number of entries, each confined to a narrow aspect? The compromise chosen here has much to commend it. The encyclopedia consists of over 300 articles arranged in alphabetical order. Each article, typically of about six pages, describes a single topic or part of a larger topic. Each article is thus long enough to provide a coherent and comprehensive description whilst giving sufficient detail on all but specialized matters. For example, the entry 'Adipose Tissue' describes the distribution and physiological roles of adipose tissue, its structure, development and composition, as well as the deposition and mobilization of fat and the regulation of these processes. The related and larger topic of 'Fatty Acids' is broken down into six articles, one covering metabolism, the other five describing the health effects of saturated, monounsaturated, *n*-6 polyunsaturated, *n*-3 polyunsaturated and *trans*-fatty acids respectively.

The articles use diagrams, graphs and tables to convey factual information and each ends with a list of related

topics that are covered elsewhere in the encyclopedia as well as a list of further reading, some 5–20 references to journal articles, reviews or books.

Each volume includes four pages of colour plates. Few of these are essential to the text but the wide variety of images brings to life some of the themes of the articles.

Each volume ends with a series of appendices. These contain a prodigious amount of diverse reference data such as norms for energy expenditure, growth and skinfold thickness, tables of food composition and recommended dietary allowances, as well as useful tables of conversion factors.

All three volumes include the same index, which is a useful feature, allowing one to search for minor terms and to find information on topics that are discussed in more than one article.

In nutrition, as elsewhere, information derives not only from observation but also from interpretation and the presentation of any particular subject depends to some extent on the particular view of its author. With some 320 contributors the encyclopedia represents as many shades of opinion and, of course, reflects the fact that nutritional knowledge is incomplete and in some areas less complete than in others. This is natural and inevitable but does prompt the hope that the publishers have plans to revise the work periodically as the growth of knowledge dictates. This may be facilitated by the online version which is also available.

The *Encyclopedia of Human Nutrition* will undoubtedly be a very useful reference, not only for academic and practising nutritionists who will find that it brings together useful material from a wide range of sources, but also for that wider readership of those who seek concise and reliable but not overly technical presentations of particular aspects of nutrition: they will find in this one work all the information they need.

The subject of nutrition has now grown to such an extent that an encyclopedia in the sense of a work containing all that is known of nutrition would hardly be possible, even if it were desirable. Although no encyclopedia can satisfy the needs of all who use it all the time. I have no doubt that this will satisfy the needs of most of its readers most of the time, and that is as much as anyone could reasonably hope. Its one drawback is its price which puts it beyond the range of most individuals, especially students, who will therefore rely on using an institutional copy.

Malcolm Fuller