# Book Reviews

**World Oilseeds; Chemistry, Technology and Utilization.** By D. K. Salunkhe, J. K. Chavan, R. N. Adsule and S. S. Kadam. Van Nostrand Reinhold, New York, 1992. xvii + 554 pp. ISBN 0-442-00112-6. Price: £61.50.

This text provides a useful account of the composition and properties of a wide range of oil yielding crops. Sixteen chapters include details of the seed structure, chemical composition, antinutritional factors, processing and utilization of the seeds, oil and meal. Crops covered include soybean, rapeseed, sunflower, peanut, oil palm, cotton, coconut, safflower, sesame, corn, rice as well as minor oilseeds, unexploited sources of oil and non-edible oilseeds. Although the book is not as detailed about the composition and properties of the oil as other texts which deal solely with this component, the wide range of crops covered, and the information about the whole crop, is valuable. Extensive lists of references accompany each chapter, although these do not always include the most recent work. One example of the inclusion of old data is provided by a table quoting the composition of soybean oil as analysed in 1940. However, reliance on such old data is fortunately limited.

Most important crops are covered in reasonable detail, although the coverage of olives in two pages and cocoa beans in one page is not in line with the importance of these commodities.

This book will be useful as a reference book for students and teachers in agricultural chemistry, food science and technology, and related biological sciences,

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**Metal Contamination of Food. 2nd Edition.** By Conor Reilly. Elsevier Applied Science, London, 1991. xx + 284 pp, ISBN 1-85166-540-4. Price: £55.00.

This is the second edition of what proved to be a very successful publication. The rationale for the first edition was that it brought together information which could only otherwise be found from many diverse sources. This aim has been extended to the second edition, taking into account developments in methodology, legislation and not least of all our understanding of the role of trace elements in foods.

The first problem I have with this book is its title 'Metal Contamination of Food'. A more appropriate title would be 'Metals in Food', as much of the inorganic material we consume is present as natural components and nothing to do with contamination. Indeed if our food were not 'contaminated' by trace elements we would all be in a very poor state of health. Clearly for some elements the term contamination is appropriate, e.g. lead or mercury, but trace amounts of copper in milk would hardly be considered as contaminants.

The first part of the book covers general topics such as: The Metals We Consume (Chapter 1); How Metals Get Into Food (Chapter 2); Food Legislation (Chapter 3) and Metal Analysis of Food (Chapter 4). This last chapter provides an overview of methods and techniques which is extremely useful. The section could have been improved enormously by including some comparative data for the analytical techniques, e.g. a table showing performance data; sensitivity, interference effects, analysis times, costs, safety, etc. Nowhere can I find whether ICP-AES is more/less sensitive than GFAAS, or whether it is more/less prone to interference.

The second, and main, part of the book is split up into sections describing individual elements. Lead, mercury and cadmium receive the most attention as the most toxic contaminants, followed by shorter sections on all the other metals. In general there is a reasonable coverage of the elements' properties and their role and occurrence in foods. However, the sections on determination are often very short with little practical detail of the methods. The determination of iron is dismissed in eight lines. Surprisingly, radionuclides are not mentioned.

In summary, this is a useful introductory book to the occurrence of metals in foods, but it does not provide a vast amount of detail about the analytical techniques available (especially their relative merits) or indeed on specific methods for particular elements.

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