

Book Reviews

Introduction to the Chemical Analysis of Foods. Edited by Suzanne Nielsen. Jones & Bartlett, Boston and London, 1994. ISBN 0-86720-826-0. xiv + 530 pp. £29.95.

This beautifully laid out book is designed for undergraduates though the editor hopes that it will be of use to many practitioners in the food industry. An outstanding feature of the book is undoubtedly its clarity and, also, its readability. The editor does not shrink from explaining the background to analyses and each chapter ends with study questions and practice problems, as well as a useful set of references. I was struck by its obvious value for both lecture courses and practical classes.

Like so many American books, this one is squarely set in the context of the USA analytical and regulatory system. Thus, US federal and state regulations affecting food composition are clearly delineated at the beginning and there seems to be no mention of European legislation or even the ISO. I also discovered that the Bidwell-Stirling direct distillation apparatus for moisture in foods is what we call the Dean and Starke apparatus but, under the Soxhlet fat method, there seemed to be no mention of the Simpler Bolton extractor. Yet another arguable criticism is that the sections include both wet-chemical and instrumental analysis. However, both the techniques are used alongside one another in industrial laboratories on a daily basis, so why should not a new book on food analysis include both?

How then does *Introduction to the Chemical Analysis of Foods* differ from Kirk and Sawyer's *Pearson's Composition and Analysis of Foods* (Kirk and Sawyer, 1991)? The older text is still the trusted and reliable text for the practitioner. It is also much better applied to food products themselves, as well as individual items of analytical relevance, and it is directed toward UK and European legislation. 'Introduction to the Chemical Analysis of Food' is better for set-out and synopsis of the academic background to each topic but this is at the expense of focus on food products themselves. Vitamins, for example, are all nicely grouped in one chapter (unlike Pearson's). However, there are no examples of the levels expected in particular foods.

I like *Introduction to the Chemical Analysis of Foods*. It is neatly and attractively laid out, free of errors and instructive for both students and teachers. At the price of £29.95 for a hard-back copy, it is exceptionally good value and I will definitely recommend it to my students. Indeed, at this modest price, I think it is advisable to buy this book in addition to Pearson's.

Gordon Birch

REFERENCES

Kirk, R. S. & Sawyer, R. (1991) *Person's Composition and Analysis of Foods*, 9th Edn. Longman, London.

Meat Products and Dishes. Supplement to McCance and Widdowson's *The Composition of Foods*. RSC. 1996. W. Chan, J. Brown, S. M. Church & D. H. Buss. ISBN 085404809 x ca. 150 pp. £25.95.

The aim of the supplement is to complement the previous supplement (Chan *et al.*, 1995) which listed nutrients in carcass meats, poultry, game and offal. This new supplement gives the nutrients in commercial meat products, including bacon, ham, burgers, pies, sausages, canned, chilled, frozen and long-life products and meat-based ready meals, together with values for a range of meat-based dishes eaten in and outside the home in Britain. The figures supplied are from literature values and calculations, as well as a large number of new analyses. The number of foods listed in this supplement has increased to 159 meat products and 127 meat dishes compared with 59 and 24, respectively, in the fifth edition of McCance and Widdowson. Most of the new analyses were carried out at the Laboratory of the Government Chemist, and there have been substantial changes in the composition of meat since the fifth edition. It is, therefore, both timely and important to now have this book with authoritative and reliable values.

In addition to the main tables (proximates, fibre and fats, minerals and vitamins), the book contains important appendices listing weight losses on cooking, recipes, ingredient codes, fatty acid types and vitamin D fractions, and some of these values are realistically confined to one significant figure.

I believe that this book is an essential reference text for food technologists and scientists, nutritionists, dietitians and analysts and I would strongly recommend it.

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REFERENCES

Chan, W., Brown, J., Lee, S. M. & Buss, D. H. (1995). *Meat, Poultry and Game*. 5th Supplement to 5th edn of McCance & Widdowson's *The Composition of Foods*. RSC, Cambridge, UK.