
Book review

Handbook of Food Analysis, Leo M.L. Nollet (Editor); 2 Volumes; Marcel Dekker Inc., NY, Basel, Hongkong, 1996; xxviii+2041 pp.; ISBN 0-8247-9684-5. US \$390.-, hardcover (sold as set only)

The book contains the following chapters:

Volume I: Sample Preparations [20 pages]; Chemometrics [31 pages]; Physical Characterization [138 pages: Determination and Ash Content of Food, Mechanical Properties, Optical Properties and Sensory Evaluation Techniques]; Nutrient Analysis [892 pages: Amino Acids, Peptides, Proteins in Food, Enzymes, Analysis of Neutral Lipids (fatty acids, triacylglycerols, unsaponifiable matter, phospholipids), Carbohydrates, Alcohols in Foods and Beverages, Determination of Fat-Soluble Vitamins in Foods by High-Performance Liquid Chromatography, Water-soluble Vitamins, Organic Acids, Organic Bases, Phenolic Compounds, Bittering Substances, Pigments, Aroma Compounds, Dietary Fiber].

Volume II: Residues [594 pages: Mycotoxins in Food (methods of analysis), Phycotoxins (paralytic shellfish poisoning and diarrhetic shellfish poisoning), Analysis of Residual Antibacterials in Food of Animal Origin, Residues of Growth Promoters in Edible Products, Analysis of Urea Pesticides in Food, Analysis of Organochlorine Pesticides in Food, Analysis of Carbamate Pesticides Residues in Foods, Residues of Organophosphates in Food, Fungicide Residues in Foods, Residue Analysis of Herbicides in Fruits and Vegetables, Food Packaging Residues, Methods for the Determination of Chlorinated Dibenzo-*p*-dioxins, Dibenzofurans and Biphenyls in Food, N-Nitroso Compounds, Polycyclic Aromatic Hydrocarbons, Metal Contamination], Mis-

cellaneous [360 pages: Nonenzymatic Browning, Colorants, Preservatives in Foods, Analysis of Synthetic Food Antioxidants, Intense Sweeteners, Determination of Cations and Anions by Capillary Electrophoresis, Methods of Irradiated Foodstuffs, Instruments and Techniques, Index].

In most cases, the sections (each ca. 45 pages long) start with an introduction of chemistry, occurrence and importance of the described compounds, followed by a list of analytical methods for their determination. The text is illustrated by numerous figures and tables. The chapters end with a list of references.

Since the book has been written by a large number of authors, it is not astonishing that the quality and quantity of information differs among the different sections.

For example, table 1 of the chapter about "Analysis of Neutral Lipids, Fatty Acids" (p. 333) establishes wrong priorities by listing also the odd numbered acids as "fatty acids", although they only occur as traces in milk fat. The special preparations of foodstuff necessary prior to extraction for the determination of total triacylglycerols should be mentioned to avoid wrong results. On the other hand, the chapter on alcohols in foods and beverages mentions also the triterpene alcohols of Illipé Butter (a cocoa butter equivalent CBE) which can be used for the evidence of adulteration of cocoa butter.

The Handbook of Food Analysis may be useful to scientists who are interested to become familiar with the analysis of special food ingredients. It is not suitable to learn food analysis because this knowledge is all ready required.

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