



## Book Review

### **Food: The Chemistry of its Components (4th edition)**

T.P. Coultate; The Royal Society of Cambridge, 2002, xii + 432 pages, ISBN 0-85404-615-1 (£16.95)

Understanding the chemical nature of foods is an important factor in adhering to dietary standards and in turn improving health. The fourth edition of *Food The Chemistry of its Components* is an extensively updated version with many new chapters introduced. These include modified starches, oxidants, and production of glucose syrup. Several of the figures and tables have also been rewritten. The food components that are present in large amounts such as carbohydrates, fats, proteins, minerals and water are investigated. Along with those that occur in less amounts such as pigments, flavours, vitamins and preservatives.

The opening chapter of *Food The Chemistry of its Components* is an introduction entailing notes on concentration and directing the reader to further areas of reading. Chapters 2 to 5 cover extensive information on sugars, polysaccharides, lipids and proteins as the major components of foods. Each chapter is appropriately divided into further sections for example, chapter 2 (sugars) contains sections on monosaccharides, oligosaccharides, sugars as solids, sugars in solution and decomposition. Each of these

chapters contains in depth information on the chemical nature in terms of structure and composition of the food component. Chapters 6 to 9 deal with components that are found in small quantities and are colours, flavours, vitamins and preservatives. While chapter 10 discusses the undesirable effects of various foods. It includes endogenous toxins of plants and animals, mycotoxins, allergens and environmental pollutants and more. Chapter 12 focuses on bulk and trace minerals in food material. The final chapter looks at the structure and function of water, along with its interaction with food components and materials.

*Food The Chemistry of its Components* is ideal for students and teachers in food science and generally those interested in all areas of foods. The end of each chapter directs the reader to further areas of reading. The many diagrams and tables presented are clear and concise. Also given is appendices on nutritional requirements and dietary sources and general texts for further reading.

Jamie Mistry, John F. Kennedy\*

Chembiotech Laboratories,  
Institute of Research and Development,  
University of Birmingham Research Park,  
Birmingham B15 2SQ, UK

\* Corresponding author.