



Book reviews

Complex Carbohydrates in Foods. Edited by M. Ashwel, Chapman & Hall, London, 1990. 164 pp. Price £45-00. ISBN 0-442-22686-1.

During the last decade or so, if you had to find one word which was used in connection with the human diet more than any other, it would be 'fibre'. The term 'fibre' actually applies to complex carbohydrates. To determine the importance and usefulness of these compounds, an independent task force was set up by the British Nutrition Foundation under the chairmanship of Professor Dame Barbara Clayton. This volume is the comprehensive result of the task force's findings.

'Complex Carbohydrates in Foods' is a thorough review of their interactions in the body, the role of 'fibre' in the diet, the complex carbohydrate requirement of different population groups for health, and to combat and prevent disease. Following on from this are conclusions on the future use and importance of these compounds in a diet.

The volume is neatly sectioned and easy to read, excellently indexed and referenced. In fact, there should be no difficulty in obtaining required information from these pages in a matter of seconds. Although this book is written from a medical viewpoint, it should prove interesting and informative to a wide range of readers. Purchase, however, should be limited to those whose field the book is specifically aimed at, i.e. the food scientist, the nutritionist and the dietician, as well as medical and scientific libraries. For many such readers, 'Complex Carbohydrates in Foods' may well be a little too medically based. A well produced and fascinating book to read.

David W. Taylor
John F. Kennedy

Wheat. Chemistry and Technology. Volumes I and II, Third Edition. Edited by Y. Pomeranz, American Association of Cereal Chemist, Inc., St. Paul, Minnesota, USA. 514 and 562 pp. Price 2-Volume set: \$162. ISBN 0-913250-61-1 and 0-913250-73-2.

The quality of wheat is a function of the composition and properties of the basic materials of wheat. But it is also a function of the technological methods by which wheat is transformed into intermediate, and ultimately

into consumer, products. In the new, revised and updated edition of 'Wheat. Chemistry and Technology', which has been organized into two books, both these aspects are included: the first book covers mainly the chemistry, whereas the second one covers mainly the technology.

The first chapter of Volume I of this monograph deals with the origin, production and utilization of wheat. Botanical, physical and chemical characteristics that determine wheat quality are described in chapter 2. After reviews of the development of the wheat grain, as well as the structure of the mature grain (chapter 3), the first book continues with chapters on the composition of the kernel, and on proteins and amino acids, carbohydrates and lipids. Wheat enzymes such as carbohydrases, proteolytic enzymes, oxidases and lipases are covered in depth in the last chapter of this volume, which also deals with the effects of the colour of the flour.

'Wheat. Chemistry and Technology', Volume II opens with a practical overview of flour milling. The testing of flour components that are recognized as contributing to quality is discussed in a general manner in chapter 2. Emphasis of the nutritional quality of wheat and wheat foods and its implications (chapter 3) leads on to the chemistry of dough in relation to its rheology, which is discussed in chapter 4. Chapter 5 is devoted to studies on composition and functionality of wheat flour components.

In view of the various procedures employed by today's baking industry and the growing spectrum of products manufactured, both the requirements for flour performance and the technological methodology are changing and becoming more diverse and complex. Chapter 6 of Volume II summarizes the current technological practices and indicates factors affecting flour performance. Soft wheat products and flat breads, including those produced in the Far and Middle East, as well as Durum wheat and pasta products are also discussed.

'Wheat. Chemistry and Technology', Third Edition provides a coherent set of reviews on the cereal chemistry and technology of wheat. It is also a guide to original literature recommended to cereal chemists and technologists.

Mercedes G. Garaita
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