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## Carbohydrate Polymers

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## Book reviews

Benjamin Caballero, Lindsay Allen, Andrew Prentice (Eds.), Encyclopedia of Human Nutrition, 2nd Ed., Elsevier Ltd, Oxford, 2005 (clii + 2230 pp., 4 volume set, £625.00, ISBN: 0-12-150110-8)

The science of human nutrition and its application are of great importance for human health. Almost 60% of diseases that kill humans are related to diet, therefore understanding the concepts and interrelationship between nutrient needs, dietary intake and health outcomes is essential. The Encyclopedia of Human Nutrition is a four volume set which provides detailed information on many aspects of human nutrition such as functional foods, food safety, clinical nutrition, epidemiology of related disease and gastrointestinal disorders. The Encyclopedia of Human Nutrition is arranged as a series of entries in alphabetical order. Each entry consists of various articles, which are arranged in a logical sequence within the entry. These articles deal with different aspects of the topic, and contain suitable illustrations, flow charts and data tables, which support the articles.

The Encyclopedia provides in depth information on a wide variety of amino acids, carbohydrates, polysaccharides, cereals, etc. Amino acids are a series of small organic molecules from which proteins are made. Detailed information on the chemistry and classification of amino acids, their metabolism and their specific function is provided. Carbohydrates are major sources of energy in human nutrition. Carbohydrates are a group of substances with different structures and varying physical, chemical and physiological properties. The encyclopedia contains detailed information on carbohydrate chemistry and classification, regulation of metabolism, requirements and dietary importance and resistant starch and oligosaccharides. Cereal grains are dietary staples that provide a very substantial proportion of the dietary energy, protein and micronutrients for humans. The encyclopedia provides detailed information on the types of cereal and their role in diet, grain characteristics, energy macronutrient and fibre content, non-nutrients of potential benefits and potential adverse effect. Glucose and its polymers are important energy sources for living organisms and structural components of plants. Detailed information on the chemistry and dietary sources of glucose, its metabolism, maintenance of blood glucose levels, glucose tolerance, and diabetes is also provided.

The Encyclopedia is an ideal reference source for human nutrition as it provides three essential features, which are a contents list, cross references and a detailed index. These features enable the reader to access the full potential of the material contained within the encyclopedia by assisting the location of the topic of choice with ease. In conclusion, the *Encyclopedia of Human Nutrition* is an excellent reference source covering all aspects of nutrition and clinical nutrition. It is an invaluable asset for all individuals involved in food science and nutrition, including students, research scientists and academics.

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Herbert Holik (Ed.), Handbook of paper and board, Wiley-VCH, Weinheim, Germany, 2006 (xix+505, £105-00, ISBN: 3-527-30997-7)

Paper is a ubiquitous material in our life, and we hardly ever think about the technical, economic or social importance of paper. The first paper-like material was "papyrus", which was used by the ancient Egyptians, Greeks and Romans. The paper which we use nowadays, was first created in China. It was an expression of art but also a carrier of information, initially accessible only for the highest class of society. In current civilised life we