The Role of Alternative and Innovative Food Ingredients and Products in Consumer Wellness

edited by Charis Galanakis

Humans have been adding supplements to foods for a long time. When we added quinine (first extracted from cinchona bark) to our gin and tonic, it was not for its calorific value, but rather for its antimalarial properties. Similarly, today, we aim to reduce illness and better our diet through eating bioactive compounds in the variety of ways described in this book. It is described as a reference, beneficial to food scientists, technologists, nutrition researchers and food chemistry students, but I certainly believe it accessible to all who are interested in the latest food technologies available, as well as those which might be available in the future.

The book deals largely with natural (rather than synthetic) sources of bioactive ingredients and the functional foods where they may be found. Individual chapters focus on fruit, cereal, microalgae, insect, fish-based and bacterial sources of compounds. The book also describes the methods in which nutrients are commonly extracted, where they may be medically useful, and to which foods the bioactive ingredients may be added.

Of interest are comments on how the food technology industry needs legislative support in order to successfully transform food waste into useable protein/fibre/vitamins or to define more closely exactly which foods can be branded ‘superfoods’. The success of microalgae and insect food industries also requires a societal shift for many, but in any event could play a larger role in global animal feed.

The world is becoming smaller with regard to exotic food information. Research into the omega-3 eating people of Greenland suggests that cardiovascular disease doesn’t have to be a consequence of a high-fat diet and that historical Brazilian consumers of the acai berry did so to improve digestion. This book, with chapter contributions from all corners of the globe, highlights the modern global search for better food ingredients.

James Lillington
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Modern Poisons: A Brief Introduction to Contemporary Toxicology by Alan S. Kolok

Toxicology is a field that involves the study of the adverse effects of chemicals on living organisms, understanding their effects on biological processes; it is a field that overlaps biology, chemistry, pharmacology as well as medicine, gaining interest from the general public with the rise in popularity of true crime documentaries, as well as fictional detective TV shows. The book is written in a clear and concise form; each chapter is relatively short – touching on diverse subjects such as pollution, pesticides and drug addiction. The author gives a great overview of each topic, with an extensive reference list for each chapter for the avid reader wanting to do further research.

The diversity of the quotes used at the start of each chapter illustrates the breadth of the scope of the book – from Swiss alchemist Paracelsus to modern author Jim Butcher, creator of the wizard Harry Dresden. I feel the author wanted to capture as many levels of education as possible and takes the time in the first chapters to describe and explain the terminology to allow those with a basic science education to understand. The book moves into a short section on human biology before expanding into environmental chapters such as pollution, pesticides and natural toxins and also briefly exploring the effects on reproduction. The range of the subjects, I think, will appeal to a wide audience, allowing them a brief top-dip before moving on to the next.

In summary, this book is an excellent and informative volume on toxicology, focusing on wider topics than you would find in a textbook and allowing the layman to take a step into the scientific field without being too heavy on terminology; yet informative on each topic presented in the chapters.

Becky Roberts


Principles of Tumors by Leon P. Bignold is an excellent textbook for any student or academic interested in tumours and lesions. Written in a detailed way that is easy for everyone to understand from all backgrounds and levels of expertise it leads you through in a logical structure, so you get the basic understanding which is built upon as you go through the textbook. As a master’s student studying genetics, this book has come in really useful as I was able to build my knowledge and understand further while also sparking an interest in oncology and how the oncogenes play a role in the mechanism that lead to the development of tumours. This textbook has also introduced me to the treatment methods for cancers and tumours in a high level of detail that is written in a way which is easy to understand, and the images used such as ultrasounds and X-rays from patients allow us to see this in a real-world scenario and how these images are used for the diagnosis and the types of techniques that are used for treatment. This is a book that I would highly recommend for anyone interested in oncology and the development of tumours.

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