

of spices in blends, how to optimise the effects of spices in food (including the use of spices to reduce sugar and salt use), and the deodorizing/flavour-masking effects of spices. Chapter 4 presents the 'patterning theory' of spice use. This theory is based on the supposition that if a spice and a food ingredient tasted together are liked, the two can be successfully combined in cooking. This is the longest chapter, running to 55 pages. Chapter 5 discusses the physiological effects of spice components, chapter 6 deals with the antimicrobial and antioxidant properties of spices, and chapter 7 is concerned with the physiological effects of aroma. The book

is nicely presented and amply illustrated. Although probably of most value to product developers, chefs and flavourists, it should also be of interest to flavour chemists, food scientists in general and to those interested in herbal medicine.

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***Nutrition and Chemical Toxicity*, Costas Ioannides (Ed.).  
John Wiley and Sons Ltd, Chichester, UK, 1998, ISBN  
0-471-97453-6, £100.00**

There is an increasing awareness of the potential health benefits of many dietary components. These naturally occurring chemicals in food, primarily of plant origin, may be protective against cardiovascular disease and certain forms of cancer. Conversely, toxic substances may be generated during normal cooking of food that may be carcinogenic. This book aims to provide up-to-date information on these aspects of nutrition and toxicology.

The book consists of 14 chapters, each chapter dealing with a different subject area in some depth. The first four chapters cover various toxicants found in foods, including naturally occurring, fungal contaminants, products of the cooking process and food allergens. These chapters are clear and well written. The chapter on food allergens, an area of increasing interest, covers the potential for transgenic foods to induce allergic response.

Subsequent chapters focus on the effects of diet on metabolism, with chapters on the nutritional modulation of cytochrome P450; interactions between diet drugs and diet; glutathione, sulphur amino acids and chemical detoxication; lipotropes and chemical carcinogenesis. Chapter 8 deals with a topical research area, that of the modulation of the carcinogenic response by caloric

restriction which, although quite short in length, is clear and a worthy introduction to the area.

Further contributions discuss such diverse topics as expression of chemical toxicity in vitamin deficiency and supplementation; safety evaluation of vitamins and minerals; naturally occurring organosulphur compounds as potential anticarcinogens; cancer chemoprevention by tea polyphenols; animal diets in safety evaluation studies. Chapter 13 suggests, for relaxation, a good book and sipping hot tea but also covers the potential health benefits of green tea, the most widely consumed hot beverage in the world.

In conclusion, this is a very interesting text, covering a diverse subject range of currently important topics embracing both nutrition and toxicology. Although there seems to be a lack of coherent structure to the book, the individual chapters are clear and well written. The chapters are well referenced with up-to-date references and an international authorship. This book is suitable for a wide audience, including food scientists, toxicologists, nutritionists and biomedical research workers.

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