

Book Reviews

M. Sandler and R. Pinder, editors. Wine: A Scientific Exploration, Taylor & Francois Group, New York, USA, 2005 (xvi + 320 pp., £48.99, ISBN 0-415-24734-9)

Wine has been part of human civilization for 6000 years, both as a mainstay of the diet and as a part of social and religious functions. It was not only the staple drink of aristocracy, but was also consumed by poor. With passage of time, its practical usefulness also became apparent. Although the beneficial effects of wine were well recognized by the ancients, but the proper scientific exploration have been carried in the past two decades. The increasing interest of the researchers in the health benefits of wine may have led to the publication of this book.

This book explores the history and appreciation of wine its early role as a medicine and modern evidence on how wine protects against disease. The preliminary chapters address the basic topics like drinking wine, history, origin of wine production and problems of *Phylloxera* in wine. The chapter fifth reviews the evidence linking the consumption of wine, and of alcohol in general, with a reduced risk of coronary heart disease (CHD). The adverse and beneficial effect of both light-moderate and heavy alcohol drinking, CHD, stroke and peripheral arterial disease are presented in separate chapter.

Atherosclerosis is the leading cause of morbidity and mortality in the Western world. Polyphenols in wine affect many factors including blood lipids, platelet aggregation and atherogenic processes. Their protective effects upon CHD may reflect antiatherosclerotic and antithrombotic actions in addition to having direct effects upon glucose metabolism. The issues of wine flavonoids and atherosclerosis, and the role of resveratrol in disease prevention and grape-derived flavonoids are discussed in individual chapters. Modern biotechnology tools like genetic engineering along with recent developments in the use of microbes or their enzymes in wine production are covered in chapter tenth. DNA profiling and its applications in grapevine is discussed in the subsequent chapter.

Wine has antimicrobial and antifungal activity and may play a role in the aetiology of migraine. Red wine may even protect against the common cold. The concluding chapters are focussed on the association of wine and migraine, role of wine in macular degeneration and antimicrobial effects of wine.

This book has nicely reviewed the various health benefits of wine. This book will not only be useful to persons involved in wine making, but also to pharmacologists,

biochemists, epidemiologists, physicians and public health officials.

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P.R. Ashurst, editor. Chemistry and Technology of Soft Drinks and Fruit Juices, 2nd ed., Blackwell Publishing Ltd, Oxford, UK, 2005, (xiv + p. 374, £119.95, ISBN 1-4051-2286-2)

Soft drinks and fruit juices are widely consumed all over the world and represent an important market with in the food industry. These are produced in almost every country and their availability is remarkable. From polar basis to the tropics and from the largest developed nations to small and less developed countries, soft drinks and fruit juices are available in almost every form. In recent years, there has been significant developments in specialized energy drinks or isotonic beverages and development of new packaging materials.

The book opens with an introductory chapter on the general concepts of the soft drinks and fruit juices. The developments in beverage industry have been discussed in the second chapter. Carbohydrate based sweeteners still represent the largest share of the global sweeteners market and currently account for 81% of sweeteners usage. The wider range of carbohydrates and intense sweeteners, which are after water, among the most important components of almost all soft drinks are discussed in the book.

Non-carbonated and carbonated products, which constitute the major part of the worldwide soft drinks industry, are described in individual chapters. It is essential for soft drinks company to assess their product on a batch to batch basis to ensure product uniformity. The chapter on analysis

of soft drinks and fruit juices deals with the analysis of different key elements of a soft drink formulation or a juice along with analytical technology and instrumentation.

The most likely cause of product deterioration for the manufacturer of soft drinks and particularly fruit juices remains that arising from microorganisms. Thus the chapter on the microbiology of soft drinks and fruit juices remains of key importance in furthering the understanding of microorganisms and their control. Functional drinks offer the consumers additional perceived benefits besides its primary function. In the concluding chapter, the book covers the latest developments in the beverage sector like functional drinks containing herbal extracts and special tonics.

This book could be excellent source of information for the persons working in food science, food technology, chemistry, food microbiology, food analysis and quality

control. This book will not only useful for the academia but also be useful for research and new product developments in beverage industry.

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