## **Book Reviews**

## Oxidative Stress, Lipoproteins and Cardiovascular Dysfunction

Edited by C. Rice-Evans and K.R. Bruckdorfer Portland Press Research Monograph VII, Portland Press London UK

This attractive-looking small book aims to update the reader about the current status of oxidants, anti-oxidants and lipoproteins in relation to disorders of the cardiovascular system. After a clear and comprehensive introduction to oxidants in Chapter One, the book proceeds to review lipoprotein metabolism (Mackness and Durrington), including reverse cholesterol transport. After this scene setting, Esterbauer thoroughly and clearly discusses the chemistry of lipoprotein oxidation and the role of aldehyde end-products of peroxide decomposition. The irrepressible Darley-Usmar et al then review the role of nitric oxide and peroxynitrite in lipoprotein oxidation. Jessup and Leake present the confused topic of cell-mediated LDL oxidation with admirable clarity. Mitchinson et al review the role of macrophages in LDL oxidation. Jacobs and Bruckdorfer discuss the changes in vascular behaviour, especially in relation to NO, that occur during atherosclerosis and the effects of oxidised LDL. Chapter eight is entitled 'Free Radicals and the Inflammatory Response' concentrates largely on myocardial ischaemia/ reperfusion injury.

All the chapters are well-written by experts in the field, although Chapter eight does not quite seem to 'hang together' with the others. The book is a valuable addition to the field and I am pleased to have it on my bookshelf. The editors are to be congratulated on putting together such a useful and compact volume.

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## Free Radicals and Oxidative Stress: Environment, Drugs and Food Additives

C. Rice-Evans, B. Halliwell, G.C. Hunt (Eds) Portland Press: London. 1995 pp. 276 ISBN 1855780690

Reflecting the growing interest in reactive oxygen species and reactive nitrogen species as oxidants polluting the environment and foodstuffs, this book covers an important Biochemical Society Symposium dedicated to these topics held in 1994 at the University of Sussex. As with most Biochemical Society symposia the majority of invited speakers were of high international standing in their respective fields. Nineteen presentations are published as volume 61 of the symposium series. The contributions are structured under topic headings in the Preface, but not in the contents, and cover the chemistry of oxygen, nitrogen, sulphur, lipid and UV-light derived free radicals, antioxidants, air-borne pollutants, drug-derived radicals and, finally, aspects of food preservation. The quality and rapidity of publication are



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commendable for a symposium proceedings, giving a uniform, clear and pleasing format for the reader. Extensive reference lists at the end of each chapter, a subject index and list of abbreviations (eg COSY ELF SOD LOPS COPS), further add to the value of this volume as a research monograph.

The editors and publishers are to be congratulated for producing an excellent, original and timely contribution to the scientific literature on free radicals and oxidative stress.

John M.C. Gutteridge

