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## Book Reviews

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**Antinutrients and Phytochemicals in Food**; edited by F. Shahidi. ACS Symposium Series 662. American Chemical Soc., Washington DC. 1997. 334 pp. \$109.95. ISBN 0-8412-3493-1.

This review volume is based on a symposium held in Chicago, Illinois in August, 1995. The contributors, who are from the States, Canada and Japan, write with knowledge and authority. The main problem with this offering is that it largely overlaps with other recent symposium proceedings or edited books, which cover the same ground. We have been alerted so regularly in recent years to the possible benefits or hazards of phytochemicals in our food, that there is little new in these chapters.

If, however, you are approaching this subject for the first time, you could do worse than dip into these pages. One advantage in this symposium volume, is that there are usually at least two complementary chapters on the phytochemicals reviewed here. There is first a general

chapter by the editor on the beneficial health effects and drawbacks of the secondary and other metabolites present in a range of food plants. The constituents discussed then range from glycoproteins, polyphenols, glycoalkaloids, glucosinolates, oligosaccharides and cyanogenic glycosides to tannins, saponins, lignans and phytosterols. Few chapters reach a positive or negative recommendation regarding the potential toxins present in a particular food. But this simply reflects our present limited knowledge of the detoxification efficiency and further metabolic pathway of these compounds in the human body. Even the metabolism of such well known toxins as the glycoalkaloids of the potato is still not entirely clear. More work is certainly needed in almost every case described in these pages.

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**Preparative Chromatography Techniques, Applications in Natural Product Isolation**; edited by K. Hostettmann, A. Marston and M. Hostettmann. Springer, Berlin, 1998. 2nd edn., 244 pp. price, £76. ISBN 3-540-62459-7

With the battery of chromatographic and spectral methods now available, it is relatively easy to set up a procedure for detecting a known or novel plant product in a crude extract. However, it is quite another matter to devise a system to isolate significant milligram quantities of that same substance. And yet, if it is a novel bioactive constituent, it is imperative to obtain sufficient material not only for structural elucidation but also for biological testing.

This well known textbook, written by the Hostettmanns and Andrew Marston, was first published in 1986 and was immediately accepted as an essential textbook

for the isolation of milligram to grain quantities, to be kept readily at hand in the phytochemistry laboratory. This enlarged and revised second edition is a worthy successor to that first edition. Much new information is included on technical advances of the last decade and there are many new references. A valuable feature of the first edition was the provision of numerous examples of each chromatographic procedure, as they were being described, giving amounts of phytochemicals isolated. I am pleased to say that this important feature is retained here. Overall, then, this is a second edition that will be heavily used by phytochemists and it is certainly warmly recommended.

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