

Handbook of Australasian Edible Oils

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Oils and Fats Specialist Group of the New Zealand Institute of Chemistry,
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NZ\$80.00.

The Handbook of Australasian Edible Oils arose from a perceived need to collect in one place much of the information provided at seminars, conferences and meetings of the Oils and Fats Group of the New Zealand Institute of Chemistry that have taken place over the past 25 years. Moreover, it was acknowledged that edible oil practices in Australasia do not necessarily match those of Europe and the USA. Thus this text brought together scientists and technologists from Australia and New Zealand who work on various aspects of edible oils in an attempt to present an Australasian viewpoint on these subjects.



The result is a well organised, up-to-the-minute and informative text that will serve for many years as a valuable reference item in libraries not only in Australia and New Zealand, but in laboratories, universities, research centres and food processing industries across the globe. Most of the contributors are New Zealanders and Australians, well-known to many food scientists and technologists in these two countries. Leading the cause is Dr Laurence Eyres, the best known 'fat chemist' in New Zealand, who shared managing responsibilities with the editor, Dr Charmian O'Connor.

The book could have had an alter-title of "*All that you ever wanted to know about Australasian oils and fats*". It contains chapters dealing individually with analytical methodologies, avocado oil, olive oil and several niche culinary oils such as hemp seed and pumpkin seed oils. The development of the New Zealand extra virgin olive oil industry is given a chapter to itself, as is the setting of quality standards for olive oils. Research and development on marine oils that has occurred over the past decade and is currently underway in Australia and New Zealand is covered and includes value-added products from these oils. Because of the perceived importance of omega-3 fatty acids in our diet, the presence of these PUFAs in New Zealand seafood is afforded a chapter on its own. This leads nicely into a section on marine oil production for nutraceutical use.

It is pleasing to see that the issue of lipids and cancer is included in this fine text. Dr Lynnette Ferguson gives a splendid objective assessment of the state of our current knowledge of the relationship. At the same time she emphasises the need to define the nature of the lipid more specifically, while separating the effects of oils and fats when consumed as part of foods from those when administered as dietary supplements.

The strong interest in the potential health benefits of plant oils is reviewed in a chapter on nutraceutical oils derived from plants. Also, as the nutrient requirements in early childhood are unique, the special area of fat in the diets of children is given individual coverage.

The addition of plant sterols and stanols to functional foods is a current hot topic and a chapter is devoted to the presentation of international evidence that supports these additions.

Processing of oils and fats in New Zealand is dealt with by Laurence Eyres and traces the changes in both processing and usage of oils and fats in our country over the years. The penultimate chapter covers the edible oil industry in Australia, a huge business worth around \$2

billion dollars annually. Finally, deep frying (one of the key food preparation processes) is given special consideration.

The Handbook of Australasian Edible Oils does not contain an index, but that is inconsequential as the comprehensive 'Table of contents' pages are so detailed that they adequately make up for this omission. There is also a most useful 'Abbreviations' page containing over 150 abbreviations used throughout the text.

With the current intensity of interest in issues surrounding edible oils and fats, it is timely that this book comes into print. Each section abounds with historical facts, compositional data and other useful information including health attributes where relevant. But what is particularly impressive are the detailed references enabling the reader to further his or her interests in specific papers and publications. The book abounds with figures and tables that are of high quality and serve as useful reference data. As if all of this were not enough, the book includes several pages of colour photographs.

This text book is probably the best value for money for a scientific publication available on the shelves today. At NZ\$80 it is a snip! It would be hard to come up with a reason why 'The Handbook of Australasian Edible Oils' should not feature on shelves of libraries of any organisation that has an interest in this branch of science. At this price it can be fitted into our own personal shopping bags.

Norman Lodge
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- Review from the October 2007 issue of *Food New Zealand*