from natural sources. Some important aspects of the interaction between frying oils and natural components present in food on substances produced during frying are covered. The volume also relates the role of minor constituents and their interaction in a variety of fried food products, as these have important effects on the stability performance and nutritive value of the frying oil and the fried food.

The book has 11 chapters, each of which contain an introduction, summary, conclusion and reference section. Initial chapters cover information on fat and nutrition; oxidation products and metabolic processes; and the formation of free radicals and protection mechanisms in vitro and in vivo. Then changes of nutrients at frying temperatures and enzymatic methods for the study of thermally oxidised oils and fats are investigated. Nutrient antioxidants (tocochromanols, β-carotene, phylloquinone, ubiquinone 50), non-nutrient antioxidants and phytosterols and their stability in frying oils are examined in subsequent chapters. Finally, the use of palm oil in frying and safety and reliability during frying operations (including effects of detrimental components and fryer design features) are covered in the last two chapters.

Frying of food contains contributions from a large number of scientists, who have tried to discuss as many compounds as possible, and copious examples are given of fried foods, which are consumed throughout the globe. This clearly written volume is an essential reference book for anyone interested in the frying of food, and contains current facts as well as information on possible areas for future research.

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Food flavours biology and chemistry

The Royal Society of Chemistry, Milton Road, Cambridge; Carolyn Fisher, Thomas R. Scott; 1997, 158 pages, ISBN 0-85404-538-4 (£12.25)

Food flavours is an area that is covered widely in its relevant industry as well as been studied as part of many university courses. As a result of the area being so specialised, many of texts available are from individual people who only tend to address the areas in which they are interested in as opposed to a complete over view of the subject area. This is where this text is different. It offers contributions from a biochemist and a neuroscientist, therefore covering a much wider area of the topic.

The book is composed of five main chapters, which cover: The problems in flavour research, Flavour compounds, The chemical senses, Flavour analysis and Teaching flavour concepts. The text, in general, is incredibly user friendly and is very easy to read and comprehend for such a specialised text, and at the same time, the information obtained in the book goes into sufficient depth for most of the applications that many individuals would ever need it for. It gives a clear insight into how flavours work both from a neurological and chemical perspective and at the same time maintains an equal balance between the two areas. The information in the text may not go into as much detail as other more specialised texts available, but this is compensated by the width of the subject area that is written about.

Each chapter in the text gives detailed references at the end, which can be more useful than tediously shifting through pages of reference at the end of the book. The tables and figures shown are clearly presented and show relevance to the text although some of the chemical related figures can appear to be quite daunting upon first glance, which can only be expected with such a detailed text.

Food flavours is a highly recommended text for individuals that are already in related fields but may prove to be a little too in depth for people without a prior knowledge of the subject. It would not however, be out of place on the bookshelf of any postgraduates that were studying the field.

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