DEVELOPMENTS IN FOOD SCIENCE 19

FOOD EMULSIFIERS

Chemistry, Technology, Functional Properties and Applications

Edited by

GEORGE CHARALAMBOUS

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PREFACE

The basic aim of this book is to assemble for convenient reference state-of-the-art technical information in the field of food emulsifiers with reference to the food and beverage industries.

The need for such a work has become increasingly apparent to most food scientists and technologists, particularly those involved in the development of "convenience foods".

This book is therefore an attempt to collect, select and correlate the properties and applications of food emulsifiers in the handy format of a single up-to-date reference work for the food scientist/technologist. It comprises invited chapters contributed by an international spectrum of well-known scientists actively engaged in food emulsifier research who, having previously made notable contributions to the advancement of knowledge in their own particular field of expertise, are able to draw upon their own personal experience as well as to critically evaluate the information reported in the literature.

The chapters include critical reviews of the present state of knowledge in salient specified food and beverage emulsifier areas. The need for a multi-disciplinary approach, if outstanding problems are to be solved, is evident from the comprehensive range of topics included.

The stage is set by a brief introduction to food emulsions and emulsifiers, and the topics then treated include: milk proteins; egg yolk; food emulsifiers from the soybean; corn proteins; meat proteins; marine colloids; gum emulsifiers; phospholipids and fatty acid esters of alcohols; whipping cream emulsifiers; emulsifiers for cake systems; the development of frozen emulsions; spray dried emulsions; two distinctive accounts by separate scientists (one American, the other from Europe) of the important topic of food emulsifiers from waste products derived proteins. The treatise concludes with some considerations on the determination of emulsifiers in foods. A planned chapter on lactylates, unfortunately, did not materialize, but relevant information may be found in several other chapters of this timely work.

The Editors

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