Título: Understanding And Controlling The Microstructure Of Complex Foods

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Sinopsis

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With its distinguished editor and array of international contributors, this book provides a review of current understanding of significant aspects of food structure and methods for its control. It begins with coverage of the fundamental structural elements present in foods and the forces which hold them together, discusses novel analytical techniques which can provide information on the morphology and behaviour of food materials, then examines how the principles of structural design can be employed to improve performance and functionality of foods. The book concludes with a discussion of how this knowledge can be implemented to improve properties of foods.

MICROSTRUCTURAL ELEMENTS AND THEIR INTERACTIONS
Polysaccharides: Their Role in Food Microstructure, V.J. Morris
Introduction
Food Polysaccharides
Functional Polysaccharides in Food
Microstructural Origins of Functional Properties
Polysaccharide Interactions with Other Food Components
Manipulating Polysaccharide Structure and Function in Foods
Future Trends
References and Further Information

Proteins in Food Microstructure Formation, H.H.J. de Jongh
Introduction
Proteins and Their Functional Groups
Protein Aggregation and Network Formation
Interface Stabilization by Proteins
Application of Protein Functionality
References

References

Microstructural Approaches to the Study and Improvement of Cheese and Yogurt Products, J.A. Lucey
Introduction
Casein micelles: The Building Blocs of Yogurt and Cheese
Structure Development in Cheese
Structure Development in Yogurt
Methods to Study the Microstructure of Yogurt and Cheese
Future Trends
Sources of Further Information and Advice
Acknowledgment
References

Microstructural Aspects of Protein-Based Drinks, M. Mellema and A.
Introduction
Dairy Drinks: An Introduction
Effects of Processing
Effects of Stabilising Hydrocolloids
Improving the Nutritional Quality of Dairy Drinks
References

The Microstructure of Chocolate, D. Rousseau
Introduction
The Composition of Chocolate
Fat Structure-Function Relationship
Chocolate Making Process
Fat Bloom
Methods to Study the Microstructure of Chocolate
The Microstructure of Chocolate
Effects of Processing on Microstructure
Summary and Future Trends
Sources of Further Information and Advice
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