DESCRIPTION

In recent years, the formation and impacts of biofilms on dairy manufacturing have been studied extensively, from the effects of microbial enzymes produced during transportation of raw milk to the mechanisms of biofilm formation by thermophilic spore-forming bacteria. The dairy industry now has a better understanding of biofilms and of approaches that may be adopted to reduce the impacts that biofilms have on manufacturing efficiencies and the quality of dairy products. Biofilms in the Dairy Industry provides a comprehensive overview of biofilm-related issues facing the dairy sector. The book is a cornerstone for a better understanding of the current science and of ways to reduce the occurrence of biofilms associated with dairy manufacturing. The introductory section covers the definition and basic concepts of biofilm formation and development, and provides an overview of problems caused by the occurrence of biofilms along the dairy manufacturing chain. The second section of the book focuses on specific biofilm-related issues, including the quality of raw milk influenced by biofilms, biofilm formation by thermophilic streptococci and thermophilic spore-forming bacteria in dairy manufacturing plants, the presence of pathogens in biofilms, and biofilms associated with dairy waste effluent. The final section of the book looks at the application of modelling approaches to control biofilms. Potential solutions for reducing contamination throughout the dairy manufacturing chain are also presented. Essential to professionals in the global dairy sector, Biofilms in the Dairy Industry will be of great interest to anyone in the food and beverage, academic and government sectors. This text is specifically targeted at dairy professionals who aim to improve the quality and consistency of dairy products and improve the efficiency of dairy product manufacture through optimizing the use of dairy manufacturing plant and reducing operating costs.
ABOUT THE AUTHOR

Dr Koon Hoong Teh graduated from Massey University, Palmerston North, New Zealand, majoring in food technology.

Steve Flint is Professor of Food Safety and Microbiology and director of the Food Division of the School of Food and Nutrition at Massey University, Palmerston North, New Zealand.

John Brooks is Adjunct Professor of Food Microbiology at Auckland University of Technology, Auckland, New Zealand, and microbiology consultant at microTech Services Limited, Ashhurst, New Zealand.

Geoff Knight is a food microbiologist, principal consultant for Food Process Hygiene Solutions, Melbourne, Victoria, Australia.

SERIES

Society of Dairy Technology

To purchase this product, please visit https://www.wiley.com/en-us/9781118876213