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Food Processing and Preservation



B. Sivasankar

Food Processing and Preservation

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FOOD PROCESSING AND PRESERVATION

by B. Sivasankar

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Food science and technology is an interdisciplinary subject involving topics from chemistry, microbiology, chemical engineering and process technology. These topics need an interactive approach in order to comprehend the complexities involved in food processing and preservation. This book provides a thorough understanding of all major aspects of food processing with an emphasis on the microorganisms associated with food, before going into the problems of large-scale production and preservation of foodstuffs.

Written in a style that is accessible to students, the text introduces the important aspects of food science, such as functional role of the nutrients, the changes that the nutrients undergo during processing and preservation, and the chemical reactions responsible for spoiling various food materials as well as maintaining the organoleptic properties of foods. The use of various chemical additives during food processing is exhaustively discussed in a separate chapter. In addition, the text presents a detailed discussion on microorganisms, which is followed by the unit operations practised in food industry for processing and preservation involving the use of high and low temperatures and radiation. Production of various types of food products including alcoholic beverages, spices and confectionery items are also discussed.

Intended as a textbook for undergraduate students of science and engineering, the study would also benefit the postgraduate students offering courses in food science as well as professionals and researchers.

B. SIVASANKAR, Ph.D., is Professor at Department of Chemistry, Anna University, Chennai. He has over 25 years of experience in teaching M.Sc. and M.Tech. students and has published several research articles in reputed scientific journals.

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