

# Preface

Listeriosis, a food-borne disease caused by *Listeria monocytogenes*, is a major concern for public health authorities. In addition, addressing issues relating to *L. monocytogenes* is a major economic burden on industry. Awareness of its ubiquitous nature and understanding its physiology and survival are important aspects of its control in the food processing environment and the reduction of the public health concern. *L. monocytogenes* can survive and even grow at refrigeration temperatures and high salt concentrations, conditions normally used to control bacteria. It can also survive various other stresses encountered in food processing, for example acid stress. In addition, it can form biofilm which facilitates its survival in processing environments. Appropriate methodologies are required for its detection and isolation. Characterisation of strains by pulsed field gel electrophoresis (PFGE) and other genotypic methods can facilitate identification of putative contamination routes, while gene manipulation can lead to an understanding of its survival mechanisms. Whole genome sequencing (WGS) of outbreak strains is becoming a part of outbreak investigation. Such WGS will lead to a greater understanding of the physiology of the organism as well as contributing to understanding epidemiology and pathogenicity. However, despite the advances of WGS, the best mechanism of public health protection is prevention. Awareness of its presence and control by conventional hygiene methods or by novel biocontrol methods such as bacteriocins and bacteriophage will help prevent cross-contamination of food from the environment and therefore reduce the public health burden. *Listeria* monitoring programmes such as those in Austria and Ireland can verify the success of control strategies.

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