## Summary

Food microbiology explores the fundamental factors affecting the presence, activity, and control of microorganisms in food. The subject also deals with the crucial concepts required to meet the minimum standards for food safety. The field of food microbiology has been rapidly and steadily developing in the past century. While conventional methods to detect foodborne pathogens have primarily relied on culture media the rapid methods rely on advanced molecular techniques. Recent developments have shown that they are promising tools on the horizonin the form of quantum dots, phaged-based assays, and microcantilever biosensors. Given the broad applicability and the great potential of such methods, there is still a great chance for further developments