Quorum-sensing inhibitors (QSI) or quorum quenching (QQ) compounds can be used as novel biopreservatives which abupt the virulence of food spoilage microbes to uphold the organoleptic, physical as well as nutritional quality of fresh, processed, packaged and Ready To Eat (RTE) dairy, meat and fish food and food by products for safer and sound consumer health (Nychas et al., 2007). Present review discussed diverse signaling molecules produced by different food spoilage and other pathogenic bacteria, molecules involved in signaling mechanism, role of signaling chemical transmitters in biofilm Food microbiologists must understand microbiology and food systems and be able to integrate them to solve problems in complex food ecosystems. This chapter addresses this in three parts by (i) examining foods as ecosystems and discussing intrinsic and extrinsic environmental factors that control bacterial growth, (ii) explaining first-order or pseudo-first-order kinetics which govern the log phase of microbial growth and many types of lethality, and (iii) focusing on physiology and metabolism of foodborne microbes. Growth of Clostridium botulinum in foods such as potatoes and sauteed onions ex... 128. Smith, J. L., P. M. Fratamico, and, J. S. Novak. 2004. Quorum sensing: a primer for food microbiologists. J. Food Prot. 67: 1053–1070. Quorum sensing: a primer for food microbiologists. J Food Protect, 67, 1053–70. 25. Sperandio, V., Torres, A. G., Jarvis, B., Nataro, J. P., & Kaper, J. B. (2003). Bacteria-host communication: The language of hormones. Quorum sensing, communication and cross-kingdom signaling in the bacterial world. Microbiology, 153, 3923–38. 30. Xavier, K. B., & Bassler, B. L. (2003). LuxS quorum sensing: more than just a numbers game.