Summary:

Consumers demand food products without preservatives having fresh quality even after storage. Food borne diseases are among the most serious public health concerns world wide. In spite of modern technologies, good manufacturing practices, quality control and hygiene and safety concepts such as risk assessment still food-borne illnesses increased over the past decade.

In recent years, there has been a growing interest in the use of natural antimicrobials, especially nisin. Generally they are active against food spoilage and food borne pathogenic microorganisms including *Bacillus cereus, Clostridium perfringens,Staphylococcus aureus*, and *Listeria monocytogenes*. Nisin is a ribosomally synthesized peptide that has broad-spectrum of antibacterial activity including many food-spoilage pathogens. Nisin works by attaching to the plasma membrane of target cells and create pores in the cytoplasmic membrane leading to cell lysis.