

# Download Principles And Applications Of Modified Atmosphere Packaging Of Foods

Aseptic processing is a processing technique wherein commercially thermally sterilized liquid products (typically food or pharmaceutical) are packaged into previously sterilized containers under sterile conditions to produce shelf-stable products that do not need refrigeration. Aseptic processing has almost completely replaced in-container sterilization of liquid foods, including milk, fruit ...In this article, several applications of nanomaterials in food packaging and food safety are reviewed, including: polymer/clay nanocomposites as high barrier packaging materials, silver nanoparticles as potent antimicrobial agents, and nanosensors and nanomaterial-based assays for the detection of food-relevant analytes (gasses, small organic molecules and food-borne pathogens). Scope and approach. To achieve longer shelf life, active packaging and intelligent packaging have been developed to change the conditions of the package, impart information, monitor the product supply chain, and provide anti-counterfeit functionality. Freeze drying, also known as lyophilisation or cryodesiccation, is a low temperature dehydration process which involves freezing the product, lowering pressure, then removing the ice by sublimation. This is in contrast to dehydration by most conventional methods that evaporate water using heat. Freeze drying results in a high quality product because of the low temperature used in processing.