

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE 638 060

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The food industry is in the process of revolutionary change with new processing technologies that allow foods to keep possession of superior quality without refrigeration. It is fact that not only the shelf life but also the quality of food is important to consumers led to the concept of preserving foods using preservation methods. Therefore, alternative or novel food processing technologies are being explored and implemented such as Microwave heating, High Pressure Processing (HPP), Ohmic heating, Ozone processing, Atmospheric Pressure Plasma (APP), Ultrasonic. It is important to understand that no single technology can replace the shelf-stable capabilities of either classical retorting or aseptic processing. Nowadays, many of the innovative thermal and non-thermal processing technologies can be used either additively or synergistically to build “hurdles” in working together with an objective to produce superior products with minimize heat-induced damages. The importance of novel processing techniques are to improve microbial safety and nutritional quality, to improve physicochemical properties of foods by minimizing process intensities for sensory evaluation or technological function, to reduce operating cost requirements, to reduce waste load, to increase production and process efficiency.

