Abstract

Customized products through gentle processing

Gentle processing intends to preserve the fresh-like properties of foods, limiting the damage on the nutritional and sensory properties, while at the same time providing the final product with a shelf life sufficient for distribution and storage. Thermal and non-thermal technologies are commercially available, or emerging, offering new possibilities for gentle processing. They are governed by different physical mechanisms and consequently their impact on microorganisms, milk colloidal structure and individual components differs significantly. Knowledge and understanding of the effects of gentle techniques on milk can be explored to customize products and ingredients with naturally enhanced functionality. In this presentation will be discussed the potential and challenges of gentle processing using traditional, novel or combination of technologies to utilize the full nutritive and sensorial potential of native milk.