

## Centro de Desarrollo de Productos Bióticos



## NANOENCAPSULATION: A NEW TREND IN FOOD ENGINEERING PROCESSING.

## **ABSTRACT**

Nanoencapsulation is defined as a technology to pack substances in miniature making use of techniques such as nanocomposite, nanoemulsification, and nanoestructuration. It provides final product functionality (including controlled release of the core) which is expected to be maintained during storage. Within the food engineering field, protection of bioactive compounds such as vitamins, antioxidants, proteins, and lipids as well as carbohydrates may be achieved using this technique for the production of functional foods with enhanced functionality and stability. In this paper, the different techniques that have been developed for the production of nanocapsules are discussed, and examples of their application are provided including regulatory aspects on products of nanotechnology. Also, it is illustrated a proposal of classification and characterization of the different structural arrangements of core—shell materials in nanoencapsulates composites found in the literature.

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Autores: María Ximena Quintanilla-Carvajal, Brenda Hildeliza Camacho-Díaz, Lesvia Sofia Meraz-Torres, José Jorge Chanona-Pérez, Liliana Alamilla-Beltrán, Antonio Jimenéz-Aparicio, Gustavo F. Gutiérrez-López.