

## Probiotic Packaging: Turning Probiotic into Healthier Probiotic Dairy Foods through Nanencapsulation Cryoprotectents Biomaterials

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This is a principally significant moment in the development of probiotic and prebiotic research. There has been strong expansion in dairy food yield containing probiotics and/or prebiotics, and a number of them are maintained by clinical investigation showing health benefits.

It is not astonishing that a lot of human microbiome isolates, many of which are obligatively anaerobic cultivate extraordinarily weakly outside their natural habitat and can only be studied using culture independent approaches. Therefore, the large-scale cultivation and subsequent storage of probiotic bacteria in high numbers often presents a major a problem that delays a process to the realization of their commercial potential.

It is important that probiotic products meet appropriate international standards, and have properly concurrence and distinguished organisms, in their therapeutic activity throughout shelf-life -stable formulations that have been shown in well-designed clinical studies to confer defined health benefits on the consume.

This article sets the bases for the creation of innovative technological developments in the production of Probiotic within packaging in which, packing technology designed to give response to a number of issues related to the feasibility, stability and bioactivity of probiotic for the food industry. These technologies aim to integrate the probiotics within new packaging and coating material concepts including novel integration technologies, hyper microencapsulation – entrapment and enzyme encapsulation and/or immobilization, and cryoprotectants agent to improve survivability during spray drying can greatly benefit in the pharmaceutical and biomedical sectors and from the unique properties of synthetic and biomass derived bioencapsulation polymers.

### Biography:

Dr Reyed is a researcher at Scientific Research and Technology Application city. He has deep expertise in Probiotic Microbiology, water microbiology and water treatment technology application stemming from 25 years a Scientific Researcher over 10 years executive technical consultant for H<sub>2</sub>O bioprocess of corporate Safbiowater in Alexandria Egypt "Integrated Eco-solution". He has contributed to European Desalination Society, International water association & Egyptian council society and Egyptian scientific syndicate.