




Effect of palmitoylated alginate microencapsulation on viability of *Bifidobacterium longum* during freeze-drying

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Highlights

- Viability of encapsulated *Bifidobacterium longum* by extrusion/spray processing was investigated.
- Encapsulation yield was determined after bacteria loading in alginate microbeads.
- Beads obtained by spray were the most effective in preserving bacterial viability.
- SEM analysis allowed characterizing the structure of microbeads.
- Size and chemical composition of beads were related to probiotic viability.

Abstract

In the present research the viability of microencapsulated *Bifidobacterium longum* 15708 by extrusion and spray technique was investigated. Native (NA) and O-palmitoylated