Accepted Manuscript

Effect of long-term storage on viability and acceptability of lyophilized and spray-dried synbiotic microcapsules in dry functional food formulations

Sahoo Moumita, Bhaskar Das, Uzma Hasan, R. Jayabalan

PII: S0023-6438(18)30444-4

DOI: 10.1016/j.lwt.2018.05.030

Reference: YFSTL 7140

To appear in: *LWT - Food Science and Technology*

Received Date: 3 April 2018

Revised Date: 9 May 2018

Accepted Date: 10 May 2018

Please cite this article as: Moumita, S., Das, B., Hasan, U., Jayabalan, R., Effect of long-term storage on viability and acceptability of lyophilized and spray-dried synbiotic microcapsules in dry functional food formulations, *LWT - Food Science and Technology* (2018), doi: 10.1016/j.lwt.2018.05.030.

Effect of long-term storage on viability and acceptability of lyophilized and spray-dried synbiotic microcapsules in dry functional food formulations

Sahoo Moumita[a], Bhaskar Das[a#], Uzma Hasan[a], R. Jayabalan[a*]

[a] Food Microbiology and Bioprocess Laboratory, Department of Life Science, National Institute of Technology, Rourkela, Odisha, India

[*] Corresponding author- E-mail address: jayabalanr@nitrkl.ac.in

[#] Present address: Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela, Odisha, India

'Declarations of interest: none.'

Abstract

The viability of probiotic bacteria and acceptability of dry shelf stable synbiotic foods were studied during long-term storage at room temperature. Synbiotic microcapsules were prepared using *Pleurotus florida* extract as prebiotics and *Enterococcus faecium* as probiotic, through lyophilization and spray-drying methods. These microcapsules were added to two different dry food matrices, an Indian traditional dry food powder (sattu) and a malted health drink, and were evaluated for the viability of probiotic bacteria and organoleptic properties