Study of some physicochemical properties, sensory evaluation and shelf life of freeze-dried yogurt made with skim milk, inulin and *Saccharomyces boulardii*

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A freeze-dried yogurt made with skim milk, inulin, vegetable oil and *Saccharomyces boulardii* was developed. To prevent fermentation of carbohydrates, probiotic yeast was encapsulated. Some physicochemical properties, sensory evaluation and viability of the encapsulated yeast were measured in the lyophilized yogurt. Yogurt had excellent rehydration properties, panelists agreed lyophilized yogurt, although a slight graininess was detected in the product. Relative to the viability of *S. boulardii*, the initial value of the colony forming units (CFU) was 6.55 log CFU/g. After 21 days of storage, the value was 4.4 log CFU/g. The initial count of lactic acid bacteria was 8.06 log CFU/g and after 21 days storage the value was 7.57 log CFU/g. The presence of *S. boulardii* was detected in colon and feces of Wistar rats previously treated with ampicillin and then fed yogurt. The conclusion is that the yogurt meets the characteristics of being a functional food.

Biography

Hector Eduardo Martinez Flores completed his PhD in the CINVESTAV-IPN Institution, Mexico. He undertook Postdoctoral studies in the Universidade Estadual of Campinas, Campinas, Sao Paulo, Brazil from 1997 to 2000. He was Visiting Professor at Washington State University from 2013 to 2014. He has published 37 papers in reputed scientific journals and has been and is serving as Reviewer of 18 JCR Journals.

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