

DEVELOPMENT OF A SYNBIOTIC DAIRY BASED SMOOTHIE

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Smoothie is a fruit beverage, refreshing and creamy, which could be added of milk, yogurt or ice cream. The consumers are focused on their health and well-being which leads to the growing demand for functional foods. A dairy based smoothie have been prepared from a blend comprising of probiotic fermented milk with pasteurized guava pulp (50/50%), 8% of sucrose and potassium sorbate (0.03%). The probiotic fermented milks were prepared by inoculating yogurt starter-culture and probiotic starter (*Bifidobacterium longum*, *B.infantis*, *B. breve*) into the milk supplemented with inulin or oligofructose (3,4%).The determinations of pH, titratable acidity, protein, fat, ash, total solids matter, carbohydrates in the samples were made after one day of production. The viability of probiotics was evaluated during 30 days of refrigerated storage at 4°C. The pH of the beverages ranged from 4.39 to 4.43 and the acidity values were 0.42-0.44 g/100g of lactic acid. The protein, fat, ash, total solids matter and carbohydrates content were around 1.6%, less than 0.5%, 0.5%, 15.9% and 13.5%, respectively. Results showed that guava pulp did not influence the viability of probiotics during 30 days of the refrigerated storage (4°C) in an unfavorable pH (4.4). The viability of bifidobacteria (6.8-7.5 log CFU.mL⁻¹) is according to the limit proposed by Brazilian legislation to allegations of foods with functional properties. The fiber employed did not affect the viability of probiotics in the beverage for 30 days at 4°C. This product can be considered a synbiotic food since it combines the beneficial health-effects of probiotics and prebiotics.