IMPACT OF THE ADDITION OF DIFFERENT TEA (Camellia Sinensis) EXTRACTS ON A POTENCIALY SINBIOTIC “GREEK YOGURT”

CHAVES, A. C. S. D.

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Resumo (Texto Científico) - Máximo 300 palavras | Abstract (Scientific Text) - (Maximum 300 words):
This study evaluated the impact of the addition of three types of dried extract of Camellia sinensis (black tea=BT; oolong=OT and green tea=GT) on the sensorial acceptance and in shelf life of a strained probiotic yogurt. For production, to milk was added 5% of powder milk and 9% of sugar and fermentation at 43 °C with: Streptococcus thermophilus, Lactobacillus bulgaricus, Bifidobacterium animalis and Lactobacillus acidophilus (Chr Hansen) until pH 4.6 when it was refrigerated for 12 hours. The gel was broken to allow serum separation to obtain the concentrated yogurt and to it was added 3% of inulin as a prebiotic and the dried tea extract. The GT formulation had 0.75% of green tea extract, BT had 0.75% of BT extract and in OT was added 1.0%. A high content of the phenolic compounds in the three forms of processed Camellia Sinensis were observed, ranged between 12.18 and 26.96 g EAG/100g of the sample, GT showed the highest and BT the lowest amount. The antioxidant activity ranged between 133.2 and 517.2 mmol AAE/100 g of sample (BT and GT respectively). The formulations were characterized by physic-chemical, microbiological and sensory analyses. Shelf life was determined by the counting of yeasts and molds (maximum 102 CFU/g), the GT formulation showed shelf life of 7 days, OT and BT of 14 days, but the lactic acid bacteria counts were greater than 107 CFU/g during 21 days. In the sensory acceptance, 50 untrained panelists evaluated the product using a hedonic scale of nine points. The global acceptance ranging between 76 and 78%, the GT showed the higher. The purchase intention was low (from 24 to 36%), confirming the low acceptance due to the tea flavor. The product developed is potentially prebiotic and probiotic and had a high content of phenolic compounds and antioxidant capacity.

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