IMPROVEMENT OF THE FORMULATION OF A PANELA WITH LEMON DRINK

Malpica Eduardo, Sangronis Elba. Simón Bolívar University, Food Development Laboratory, 1080A Caracas, Venezuela

The panela with lemon drink presents sedimentation during storage making it unstable. The aim of this study focused on solving this problem by clarifying the drink and then using a mixture of natural clouding agents to restore the turbidity and mouth feel that characterizes the beverage; additionally, it was enriched with iron, calcium and inulin to enhance its nutritional value. A commercial panela drink was used; the experimental work was divided into three stages. In the first one, the type of diatomaceous earth to use for the clarification of the drink with minimal change in proximate composition and its content of minerals was determined. In the second stage, the preference of 120 consumers between the previously clarified drink and the commercial one was determined. The drink was enriched with iron, calcium and inulin considering the needs of the population, recommended daily intake and sensory aspects. In the third stage, the stability of the enhanced beverage at 25, 30, 35 and 42 °C for 10 weeks was determined, with weekly evaluations of flavor, soluble solids, pH, titratable acidity and visual observation of the formation of sediment. Clarification significantly affected the content of iron, aluminum, zinc, copper and manganese, and consumer preference. Enrichment with iron, calcium and inulin does not affect the taste of the drink. It was possible to increase the stability of the solids in suspension in a 509 %. The shelf-life resulted in 10 months to an average storage temperature of 8°C and it was determined by the change of taste.