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Development and Evaluation of Whey-Based Drink: An Approach to Protect Environmental Pollution

Authors : Zarmina Gillani, Mulazim Hussain Bukhari, Nuzhat Huma, Aqsa Qayyum

Abstract : Whey is a valuable by-product of dairy industry comprising of precious nutrients lactose, protein, vitamins and minerals for the human food but considered as a pollutant due to its biological activity. So, there is a need to develop nutritious whey products to overcome the problem of environmental pollution. This project was planned to develop a whey drink at different pasteurization temperatures and its quality was evaluated during storage. The result indicated that pH, acidity, total soluble solids and lactose content changed significantly ($p < 0.01$) due to lactic acid production during storage. Non-significant ($p > 0.05$) effects were detected on the protein and ash content of whey drink. Fat and viscosity changed significantly with respect to storage only. Sensory evaluation of whey drink revealed that both treatments remained acceptable while whey drink pasteurized at 75°C/30 minutes (WD2) gained more sensory score compared to whey drink pasteurized at 65°C/30minutes (WD1).

Keywords : pasteurization, sensory evaluation, storage, whey
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