

DEVELOPMENT AND EVALUATION OF SWEET CORN- BASED YOGHURT



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ABSTRACT

The development of sweet corn-based yoghurt presents an innovative approach to incorporating plant-based ingredients into dairy products. This study aimed to optimize the processing parameters and evaluate the quality of sweet corn-based yoghurt. Initially, the impact of blanching on sweet corn kernels was investigated, and the blanching was selected by comparing non-blanching sweet corn-based yoghurt based on sensory assessment and physicochemical characteristics. Subsequently, different sweet corn kernel-to-water ratios (2:1, 1:1, 1:2 and 1:3) were tested, and the 1:1 ratio was chosen on the basis of its physicochemical properties. After that, ratios of 1:3, 1:1, 3:1 and 4:0 were used to optimise the formulation of sweet corn milk and cow milk. Based on the assessment from sensory panels and physicochemical qualities, the 1:1 ratio was found to be the most appropriate. In order to ascertain the final yoghurt formulation's nutritional value and storage stability, its shelf life and proximate composition were evaluated. According to the research, adding sweet corn to yoghurt can improve its nutritional profile and acceptability to the palate, making it a viable alternative for consumers seeking diverse dairy-based products.

Keywords: Sweet corn-based yoghurt, blanching, physicochemical properties, sweet corn kernels-to-water ratio, sweet corn milk-to-cow milk ratio.

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