

**Assessment of Physio-Chemical and Sensory Properties of a Value Added Buttermilk Based Beverage Incorporated with Finger millet (*Eleusine coracana*)**

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Butter milk is a by-product from butter manufacturing which is a good source of protein, mineral and lactose. During the butter manufacturing process, approximately 50% of total milk used in butter manufacturing is discarded as butter milk. Thus, there is a growing interest in utilization of butter milk as an ingredient in dairy product development. Hence, present study was conducted to develop a value added fermented beverage using butter milk with incorporation of finger millet slurry. Three treatments were used with changing of finger millet slurry as 4%, 6% and 8%. Treatments without incorporation of finger millet slurry served as the control. Treatments were evaluated for pH, Titratable acidity (TA) and sensory attributes using nine point hedonic scale with 30 untrained panelists for 21 days of storage at 4 °C. Data from pH and TA were analyzed using two-way ANOVA, while sensory evaluation data were analyzed using Friedman non-parametric test in Minitab 17<sup>®</sup>. Based on sensory results, there were no significant difference ( $P>0.05$ ) among treatments in terms of all sensory attributes. However, 4% finger millet slurry incorporated fermented butter milk beverage was selected as the best treatment with respect to taste and overall acceptability which scored high estimated median values of 7.59, 7.50 respectively. TA, pH were showed significant difference ( $P<0.05$ ) amongst treatments, storage and treatment-storage interaction, while the treatments—storage interaction was non significance for pH. Moreover, at day 15, treatments showed significant difference ( $P<0.05$ ) in all attributes while amongst 4% finger millet incorporated butter milk beverage scored highest estimated median values for color, aroma and overall acceptability. Yoghurt beverage with 4% finger millet slurry can be kept for 15 days of storage period at 4 °C without deterioration of quality parameters.

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