Probiotic Lassi Preparation and Sensory Evaluation using *L. paracasei* Immobilized Fruit Pieces

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Objective

The objective of the study was to formulate and study sensory acceptability and probiotic cell count of fresh and stored lassi prepared using probiotic cells immobilized on two selected dry fruits.

Methodology

Free cells of the probiotic microorganism and cells immobilized in alginate beads were used for control lassi preparation. The organism used was *L. Paracasei* and the dry fruits selected for immobilization were figs and dates. Sensory evaluation (using modified Hedonic score card) of the fresh and stored products was carried out and *L. paracasei* count (on RCVBA Agar) was also enumerated.

Result and Discussion

Results indicated that for all storage days (0d, 7d, 15d and 21d) fig followed by date-lassi obtained scores higher than 8. But as the number of days of storage increased acceptability showed a decrease in dates whereas in the case of free cells and alginate beads the product showed an increase in acceptability. For microbial analysis date-lassi showed higher *L. paracasei* count (above 9 log cfu/gm) in the fresh product and during the storage period. All the stored products showed a count above 7 log cfu/gm upto 21 days of storage.

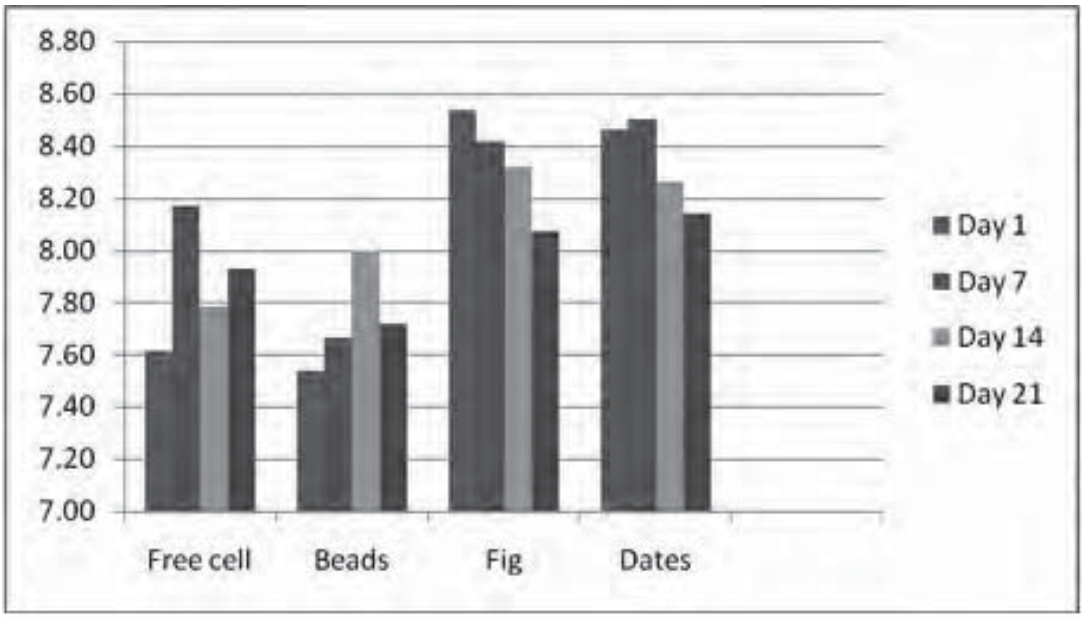

Fig :1 overall acceptability of control and experimental lassi

Conclusion

The study concludes that dry fruit – immobilized lassi is highly acceptable and may be stored upto a period of 21 days without a decrease in probiotic count. Thus dry fruits show promise as a medium for maintenance of the probiotic microorganism thus enhancing viability.

ABSTRACT