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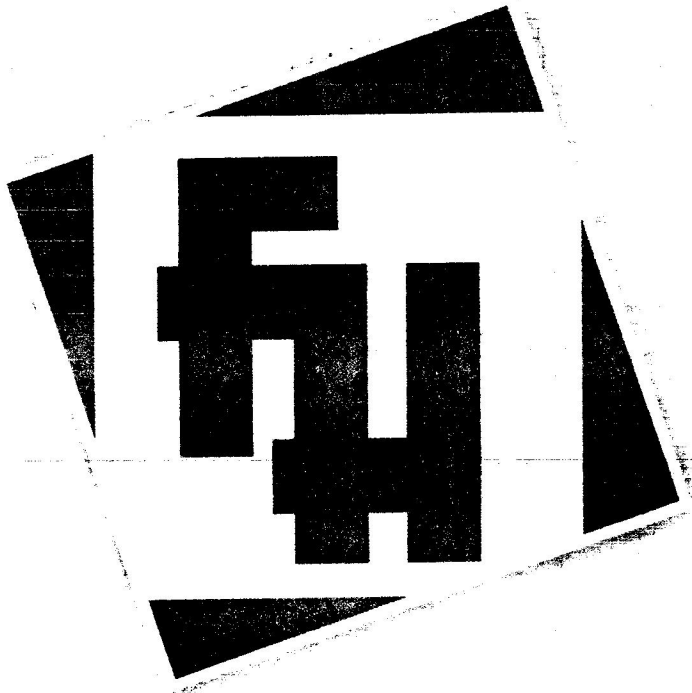
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✓ **Evaluation of chemical and microbial properties of Iranian white brined cheese using traditional kefir grain, yogurt and commercial cheese culture as a starter**

M. R. Edalatian¹, M. B. Habibi Najafi, M. Nasrollah Zadeh

¹-PhD student in Ferdowsi University of Mashhad (FUM), Iran

Corresponding Author's E-mail: Edalat3@yahoo.com

In this research, the chemical and microbiological characteristics during a 60-day ripening period of white brined cheese produced using five different starter cultures were examined. Starter cultures included traditional kefir grain as an un-defined, commercial kefir (DG 500L), commercial yogurt (Lactina), traditional yogurt and commercial cheese starter culture (FRC-65) as a control. Results of statistical analysis showed that starter culture type had a significant impact (effect) on pH, acidity, fat, protein, moisture, coli form, enterobacteria, total count, mold & yeast and lactococcus level ($p < 0.01$), and as well as on lactobacillus level ($p < 0.05$). Ripening period had significant effect on pH, acidity, fat, protein, coli form, total count, mold & yeast, and lactobacillus level ($p < 0.01$). Moisture, enterobacteria and lactococcus level in cheese were not affected by ripening period. Parameters including pH, fat and protein content showed decreasing trend during ripening except for acidity. Among chemical analyses cheese produced with traditional kefir had highest pH and cheese produced using commercial kefir showed highest acidity and moisture. Among microbial parameters cheese produced with commercial kefir starter had the lowest total microbial count and after that cheese using traditional kefir starter. Traditional kefir grain can be used as a starter culture in production of white brined cheese. Finally, the residual sugars including lactose, glucose and galactose were analyzed with the help of HPLC, cheese samples produced using kefir grain had the highest galactose at the end of ripening period after 60 days.

Keywords: White brine cheese, kefir, starter culture, chemical and microbial profiles

Functional substances & health care; Taurine and Analogues; Nutraceuticals and functional food components

R. C. Gupta

SASRD, Nagaland University, Medziphema 797106 India

Corresponding Author's E-mail: ramesh_gupta101@rediffmail.com

and food have a common origin. A food can be regarded as 'functional' if it is satisfactorily able to demonstrate its beneficial one or more target functions in the body thus improving the state of health and strengthening the well being and or participating in the prevention of risk of diseases. Such nutraceuticals in broader term must remain as component of food rather than individually as capsule forms. There is increasing evidence that sulfur amino acids (SAA) play an important metabolic and functional role in human disease prevention. It is further observed that SAA also provide elemental sulfur required for growth and development, and in the source of energy and nutrient needs of various life processes. Taurine has long been placed under such category. To add little to the known functional food until now is mother's milk of which taurine is component. It is possible and feasible to modulate the entire life activities, from vision to brain and smoking to drinking. It has anti-diabetic to anti-ageing properties via food supplemented with such agents. Taurine supplemented food and formula have provided long range of beneficial covering the entire life activities, from vision to brain and smoking to drinking. It has anti-diabetic to anti-ageing properties involved in various ways to improve the quality of life to make it more happier and healthier. Some of the taurine inhibit similarly. Hence taurine such potential require further extension and enlargement but with logistic support.