

Enumeration and identification of microflora in suusac, a Kenyan traditional fermented camel milk product

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Date: 2005

Abstract

The microflora involved in production of suusac, a Kenyan traditional fermented camel milk product, were enumerated and identified. IS samples of traditionally fermented suusac were analysed. Total viable microorganisms, lactic acid bacteria (LAB), yeasts and moulds, and coliforms were enumerated. A total of 45 LAB and 30 yeast isolates were isolated from the IS suusac samples and identified by API 50 CHL and API 20C AUX identification systems, respectively. The LAB counts were $6.8 \log_{10} \text{cfu/ml}$, while yeast and mould counts were relatively lower ($2.1 \log_{10} \text{cfu/ml}$). Low coliform numbers were encountered ($1 \log_{10} \text{cfu/ml}$). The LAB species were identified as *Lactobacillus curvatus*, *Lactobacillus plantarum*, *Lactobacillus salivarius*, *Lactococcus raffinolactis* and *Leuconostoc mesenteroides* subsp. *mesenteroides*. The isolated yeasts were identified as *Candida krusei*, *Geotrichum penicillatum* and *Rhodotorula mucilaginosa*. The most frequently isolated species was found to be *L. mesenteroides* subsp. *mesenteroides* (24% of total isolates), followed by *C. krusei* (20%) and *L. plantarum* (16%).