

EFFECT OF FERMENTATION BY SELECTED LACTIC ACID BACTERIA ON THE CHEMICAL COMPOSITION AND FATTY ACIDS OF CAMEL MILK

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ABSTRACT

Fresh pasteurised whole camel milk was inoculated with 5% of *Streptococcus thermophilus* 37, *Lactobacillus delbrueckii* spp. *bulgaricus* CH2 and *Lactococcus lactis* and incubated at 43°C in a circulating water bath for 6 hours. The results showed that fermentation of the camel did not affect in moisture, protein and total solids contents significantly. Fermentation process significantly increased fat and ash content, while lactose content significantly decreased. Fatty acids analysis revealed that fermentation significantly increased the content of palmitic, oleic, myristic, capric, caprylic, lauric and linolenic, while palmitoleic acid and arachidic acid were significantly decreased. The stearic and linoleic acids content were not affected by fermentation process.

Keywords: Camel milk, chemical composition, fatty acids, fermentation, Lactic acid bacteria