

Possibilities of Using Chia Seeds in Fermented Beverages Made from Mare's and Cow's Milk

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Abstract : Nowadays, fermented milk containing probiotic microorganisms is fundamental to human health. The changes in the properties of fermented milk during storage influence the quality and consumer acceptability. This study aimed to evaluate the effect of 1.5 % of chia seeds on the chemical, physical and sensory properties of fermented cow's and mare's milk for two weeks at 4°C. The results showed that the pH of cow's milk drops significantly at the 2nd hour, but mare's milk drops significantly at the 6th hour. The acidity of both types of milk increased as the storage time progressed. Adding chia seeds increased firmness significantly and improved color and consistency. A decrease in brightness (L*), an increase in redness (a*), and yellowness (b*) during storage were observed. Our study showed that the chia seeds have more effect on reducing the brightness of fermented mare milk than fermented cow milk. Analysis of taste and smell parameters showed that after adding chia seeds, the scores changed and became much higher. The sour taste of fermented milk had reduced this positively affected the acceptance of the product. Chia seeds induced beneficial effects on sensory outcomes and enhanced physiochemical properties.

Keywords : mare milk, cow milk, fermented milk, kefir, koumiss

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