

THE INVESTIGATION OF ENTEROTOXIGENIC *STAPHYLOCOCCUS AUREUS* IN RAW MILK AND MILK PRODUCTS

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This study was conducted for the purpose of identifying the enterotoxigenic *Staphylococcus aureus* in raw milk, feta (fresh) cheese, ice cream, butter milk obtained from local markets in the province of Kars. During three months periods, at 100 from each food group, a total of 400 samples collected from markets were analyzed for determining of enterotoxigenic *S.aureus* incidence. Samples were analyzed with conventional culture method. Isolates of each were randomly chosen and identified using conventional based on morphological and physiological characteristics. The ELISA test was applied to the isolates for the identification of staphylococcal enterotoxins (SET) A, B, C, D, E in bacterial cultures. From total 400 samples, 127 *S. aureus* presence have been identified (49 of raw milk samples, 36 of feta cheese samples, 27 of butter samples, 15 of ice cream samples). 265 of *S. aureus* colonies have been isolated from these samples. As a result of ELISA Test, from 265 isolates, 45 of them have been found as enterotoxigenic. It has been identified that feta cheese and butter contain enterotoxigenic *Staphylococcus aureus* in Kars of course that the public has produced traditionally from raw and fresh milk. It has been analyzed that these foods are potential source of food-borne poisoning and also dangerous for the consumers.

Keywords: *Staphylococcus aureus*, enterotoksin, ELISA, milk products

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