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Scientific Journals Home Page Prevalence of Listeria Species in Ice Creams Sold in The Cities of Kahramanmaraş and Adana

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Abstract: In this study, the prevalence of Listeria spp. was investigated in the ice cream samples collected from the downtown stores of Kahramanmaras (28 samples) and Adana (30 samples). A total of 58 ice cream samples were analysed by the Food and Drug Administration (FDA) two-stage enrichment techniques. Growth of Listeria spp. was determined in 14 (24.1%) of the samples collected from Kahramanmaras and 10 (17.2%) samples from Adana. The results of the biochemical tests revealed that the bacterial growth in the samples from Kahramanmaras was Listeria grayi whereas 8 (13.8%) samples of Adana were Listeria grayi, the other two samples being Listeria innocua and Listeria welshimeri. In this study, Listeria monocytogenes, a pathogenic bacteria which exists in the ice cream products manufactured using sheep and goat milk, could not be isolated. The overall incidence of Listeria species in raw milk was 41.4%. Listeria grayi was the most frequently isolated bacteria and was found in 37.9% (22/58) of the ice cream samples. In contrast, Listeria innocua and Listeria welshimeri were each determined in 1.7% (1/58) of the samples. The presence of other species of Listeria was not found in the samples under investigation. The findings of this study suggest that Listeria infections are not a potential risk in Kahramanmaraş and Adana, but it is strongly recommended that these products are monitored carefully.

Key Words: Listeria monocytogenes, Listeria spp, ice cream, food microbiology

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