TITLE: *Listeria monocytogenes* IN DAIRY PRODUCTS FROM THE REGION OF CAMPINAS-SP

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ABSTRACT: Foodborne diseases are considered a worldwide public health concern. Despite the low incidence, listeriosis is a disease of great importance due to the high lethality rate. L.isteria monocytogenes can be found in milk and milk products, because of the favorable conditions to develop in the production chain of these foods for development of microrganism. The objective of this research was to evaluate the presence and to characterize isolates of Listeria L. monocytogenes in raw and pasteurized milk, Minas frescal cheeses, environmental and equipment samples of 6 cheese manufacturing plants from the Campinas (Brazil) region. Food and Drug Administration (FDA) protocol was used to isolate L. monocytogenes., with OXFORD and Listeria according to Ottaviani and Agosti agar (ALOA) was used as selective medium. Characteristic colonies that were gram-positive rods, and catalase positive and exhibiting typical umbrella-like motility in semisolid motility medium after incubation at 25oC for 7 days were considered to be Listeria sp. 164 One-hundred sixty four samples were collected and 4.2% were positive for Listeria sp. Twenty isolates showed a characteristic profile for the genus Listeria. There were positive samples from brine, floor, drain and plastic crates in 4 of the dairy products. The L. monocytogenes species was not confirmed in this group of isolates by PCR, targeting the hly gene. The presence of Listeria spp., mainly in brine and in plastic crates is of public health concern, since these can be sources of contamination for cheeses. The isolation of Listeria from floors and drains is consistent with surveys that describes these sites such as those with the highest prevalence of L. monocytogenes and other species in the dairy industries. Listeria spp. can be an indicator for the presence of L. monocytogenes and demonstrate that the environment is suitable to the development of this microbiological hazard. These results contribute to a better understanding on contaminated areas by Listeria spp. in dairy processing cheese.

KEYWORDS: Listeria, milk, cheese, dairy industry, environment

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