

Isolation, Identification and Detection of *Listeria monocytogenes* Persistence in Chicken Raw Meat Products and Comminuted Ready-To-Eat Sausages in Nelna Chicken Processing and Further Processing Plant (Pvt.) Ltd. Sri Lanka

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Listeria monocytogenes, a food borne pathogenic bacterium often isolated from meat and meat products, is considered a major causative agent responsible for serious diseases in both humans and animals. This study was carried out to determine the persistence rate and occurrence of *L. monocytogenes* in poultry meat and ready to eat sausages from Nelna Farm poultry meat processing plant, Meethirigala, Sri Lanka. A total of 100 samples were (50 samples of poultry meat and 50 samples of sausages) collected and tested for *L. monocytogenes* using Fraser Broth and HiCrome Agar *Listeria* medium, examined by ISO 11290 method and confirmed by biochemical tests (catalase, beta-hemolysis, CAMP test) and the motility test in semi-solid nutrient broth. Out of 100, only 13 samples were suspected as *Listeria spp.* by the colony appearance. After the biochemical tests, those 13 samples were also confirmed as not contaminated from *L. monocytogenes*. All the fifty chicken raw meat samples and fifty comminuted sausages samples from Nelna Farm were all negative for *L. monocytogenes*. As all the results are negative, some of the paired samples were sent to the Bureau Veritas, Colombo and those results were also negative. The samples are 100% free from virulent *L. monocytogenes* and also can conclude this factory has been following good hygienic practices based on hazard analysis and critical control point programs throughout the industry.

Keywords: Biochemical test, Isolation, *Listeria monocytogenes*, Poultry meat