

Prevalence and quantification of *Listeria monocytogenes* in chicken offal at the retail level in Malaysia.

ABSTRACT

A total of 216 chicken offal samples (chicken liver = 72; chicken heart = 72; chicken gizzard = 72) from wet markets and hypermarkets in Selangor, Malaysia, were examined for the presence and density of *Listeria monocytogenes* by using a combination of the most probable number and PCR method. The prevalence of *L. monocytogenes* in 216 chicken offal samples examined was 26.39%, and among the positive samples, the chicken gizzard showed the highest percentage at 33.33% compared with chicken liver (25.00%) and chicken heart (20.83%). The microbial load of *L. monocytogenes* in chicken offal samples ranged from <3 to 93.0 most probable number per gram. The presence of *L. monocytogenes* in chicken offal samples may indicate that chicken offal can act as a possible vehicle for the occurrence of foodborne listeriosis. Hence, there is a need to investigate the biosafety level of chicken offal in Malaysia.

Keyword: *Listeria monocytogenes*; Most probable number; PCR; Prevalence; Chicken offal