

Thermophilic *Campylobacter* spp. occurrence on chickens at farm, slaughter house and retail

Abstract

The aim of this study was to investigate the occurrence of campylobacters in chicken at farms (close-house system and open-house system), slaughtering (conventional slaughterhouse and processing plant) and retail (wet market and supermarket). *Campylobacter* spp. was not found in cloacal swabs in chickens aged of 4 weeks in farms with close-house system. *Campylobacter* spp. was found in cloacal swabs (95.0%) in four weeks old chicken in farms with open-house systems. End-slaughtering samples from conventional slaughterhouse and processing plant were contaminated with *Campylobacter* spp. at 84.0% and 94.0%, respectively. *Campylobacter* contamination on wet market and supermarket samples with 78.0% and 92.0%, respectively. Close-house system at farm level was able to prevent or delay *Campylobacter* spp. colonization in chickens but contamination by *Campylobacter* spp. at retail level was still high. Therefore, monitoring of *Campylobacter* spp. in chicken products at retail level is crucial to reduce risk of human ingestion of *Campylobacter* spp. through chicken products.

Keyword: *Campylobacter* spp., farm, slaughter house, retail