Occurrence of Campylobacter and Salmonella in ducks and duck eggs in Selangor, Malaysia

Abstract

The importance of Campylobacter and Salmonella as foodborne pathogens is well recognised globally. A recent work in Penang found ducks in commercial farms were infected with these organisms. The aim of the study was to detect the presence of Campylobacter and Salmonella in ducks and Salmonella in duck eggs in farms in a small part of Selangor. Cloacal swabs were obtained from 75 ducks and 30 duck eggs from three farms. The isolation and identification of Campylobacter and Salmonella were done using conventional methods. Twelve percent of Campylobacter and 16.0% of Salmonella were isolated from the ducks sampled. Salmonella was absent on and in eggs. Campylobacter isolates consisted of 22% Campylobacter jejuni and the remaining was Campylobacter coli. Three Salmonella serovars identified were Salmonella Agona, S. Braenderup and S. Corvallis. The presence of Campylobacter and Salmonella in ducks may cause contamination of the meat during processing and handling which can constitute public health hazard. Moreover, the farm workers may be exposed to the organisms through contact with the infected animals.

Keyword: Campylobacter; Salmonella; Ducks; Ducks eggs