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# Prevalence of Virulence/Stress Genes in Campylobacter Jejuni from Chicken Meat Sold in Qatari Retail Outlets

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Chicken meat from the shelves of supermarkets in Qatar was tested for the presence of Camplobacter spp., and the presence of five virulence genes (htrB, cdtB, clpB, cadF and ciaB) was assessed in isolates. Forty eight percent of the chickens provided for supermarkets by Saudi (53%) and Qatari (45.9%) producers were found to be contaminated and the most important factor affecting the overall prevalence of contaminated chickens was the store from which chicken samples originated. Variation in prevalence of Camplylobacter in chicken meat from different stores was evident even when the same producer supplied the three stores in our survey. Differences in the prevalence and in the combinations of virulence genes in isolates that can and cannot grow in a classic maintenance medium (karmali) were identified, providing a starting point for linking presence/absence of particular virulence genes with actual in vivo virulence and pathogenicity. Because of the relatively low infective doses of Canpylobacter that are required to initiate infection in humans, it will be important to explore further the relationships we identified between certain Campylobacter virulence genes and their capacity for survival in poultry meat, and hence their contribution to the incidence of campylobacteriosis.

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