In Response: Giufrè et al. (1) responded to our recent article about the possibility of a food reservoir, specifically in retail chicken meat, for Escherichia coli causing human extraintestinal infections (2). They are not convinced by the data of “strong support” for the hypothesis that retail chicken meat could be a reservoir for these E. coli organisms and indicate that the observed proportion of total clonal group members (8.6%) is low and heterogeneity is significant among the isolates tested.

We assembled the 844 study isolates from 3 sources (human, retail meat, and restaurant-ready-to-eat foods) in 2 provinces during a 3-year period. Given the ecologic design of the study, the fact that 72 isolates actually were related across these sources is surprising and compelling. Furthermore, we identified a retail chicken meat isolate and human urinary tract infection isolate that were indistinguishable by pulsed-field gel electrophoresis (PFGE), again a surprising result given the study design. PFGE remains the standard for E. coli genotyping because of its discriminatory power; these results were also confirmed by PFGE by using a second enzyme. This group was identified as containing E. coli O25:H4–ST131, a clonal group that appears to cause extraintestinal disease worldwide.

Our study is among the first to extensively genotype E. coli isolates from these sources. Hence, the amount of genetic diversity expected in these E. coli organisms is unclear. This diversity is the primary issue raised by Giufrè et al.: how much genetic relatedness would be expected in a comparison of E. coli isolates from these sources? Although our study was fairly modest in size and was limited by the study design, we observed evidence supporting our primary hypothesis that retail chicken meat may be a reservoir for E. coli causing extraintestinal infections in humans. More studies certainly will help resolve the debate.

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References

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etymologia

Lassa [lɑːsə] virus

This virus was named after the town of Lassa at the southern end of Lake Chad in northeastern Nigeria, where the first known patient, a nurse in a mission hospital, had lived and worked when she contracted this infection in 1969. The virus was discovered as part of a plan to identify unknown viruses from Africa by collecting serum specimens from patients with fevers of unknown origin. Lassa virus, transmitted by field rats, is endemic in West Africa, where it causes up to 300,000 infections and 5,000 deaths each year.