

STUDY FINDS LESS SALMONELLA, ANTIBIOTIC RESISTANCE IN ORGANIC CHICKEN

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Chicken raised organically has less salmonella, and the salmonella it does have isn't antibiotic resistant, suggests research published in the journal *Foodborne Pathogens and Disease*.

Salmonella was found in 5.6 percent of fecal samples from organic broiler farms, compared with 38.8 percent of samples from conventional broiler farms. Feed samples showed a similar pattern of positive test results: 5.0 percent from organic, and 27.5 percent from conventional production.

Researchers led by Walid Alali of the University of Georgia's Center for Food Safety collected 420 fecal samples, 140 feed samples and 140 drinking-water samples from birds at 3 and 8 weeks of age for two flock cycles. The researchers took samples from one house per farm at three organic and four conventional broiler farms operated by the same poultry company in North Carolina. (None of the water samples tested positive for salmonella.)

When it comes to antimicrobial resistance, phenotypic testing found that 36 percent of conventional and 25 percent of organic salmonella samples were resistant to streptomycin. No organic samples and 39.7 percent of conventional samples had multidrug resistance to six antimicrobial agents: ampicillin-streptomycin-amoxicillin/clavulanic acid-cephalothin-ceftiofur-cefoxitin.

"The results of our study suggest that within this poultry company, the prevalence of fecal Salmonella was lower in certified-organic birds than in conventionally raised birds, and the prevalence of antimicrobial-resistant Salmonella was also higher in conventionally raised birds than in certified-organic birds," the researchers wrote.