

Antibiotic-Resistant Bacteria Found in Meat

Study finds alarming 20% of supermarket beef and poultry contaminated with salmonella – 84% of which was antibiotic-resistant!

Scientists are becoming increasingly alarmed about the use of antibiotics for reasons other than to treat infection or disease in animals destined for human consumption. As a result of some estimated 24.6 million pounds of antimicrobial drugs used for nontherapeutic uses in animals – such as growth promotion or improved nutritional benefits from the animal food (compared to 2 million pounds for medical treatment) – many bacterial strains have become resistant to the drugs. The fear is an increased spread of food-borne pathogens *and* antibiotic-resistance to humans, since the drugs used on animals are similar to those used by humans.

One study discovered 41 of 200 samples (20%) of supermarket ground-meat and poultry were contaminated with salmonella – and most of the strains were resistant to antibiotics fed to the animals during growth. Of the 41 cases, 84% were resistant to at least one antibiotic, and 53% were resistant to three or more antibiotics.

Salmonella is the leading cause of food-borne illness, causing 1.4 million U.S. cases each year. Most salmonella infections result from consuming contaminated poultry, beef, pork, eggs, and milk. Antibiotic treatment can be lifesaving for humans severely infected with salmonella.

Several strains of salmonella are antibiotic-resistant today due to changes that have occurred after years of regular use in animals for prevention and treatment of disease and growth promotion.

Because of these and similar findings on other food pathogens with increasing drug-resistance, scientists are urging action be taken to reduce the unnecessary use of antibiotics and other drugs in animals.

References:

White, DG, Zhao, S, Sudler, R, Ayers, S, Friedman, S, Chen, S, McDermott, PF, McDermott, S, Wagner, DD, Meng, J. (2001). The Isolation of Antibiotic-Resistant Salmonella from Retail Ground Meats. *New England Journal of Medicine*, 345(16): 1147-1154.

Gorbach, SL. (2001). Editorial: Antimicrobial Use in Animal Feed – Time to Stop. *New England Journal of Medicine*, 345(16): 1202-1203.