



# Institute for Agriculture and Trade Policy

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The Institute for Agriculture and Trade Policy promotes resilient family farms, rural communities and ecosystems around the world through research and education, science and technology, and advocacy.

COMMENTARY February 12, 2007

## Subtracting an additive

By Rebecca Goldburg and David Wallinga\*

Recently, scientists from the United States, Canada, and northern Europe warned about the impact of livestock operations on human health. One key finding, among six reports published by the National Institutes of Health in the journal Environmental Health Perspectives, was that the routine use of antibiotics in livestock production contributes to the rise of antibiotic-resistant germs in human medicine.

By one credible estimate, 70 percent of all the antibiotics used in the United States are used as feed additives for chicken, hogs, and beef cattle. Antibiotic feed additives are used without a prescription to help animals grow slightly faster -- and to compensate for crowded, often unsanitary conditions on industrial-scale farms. The scientists' recommendations included a ban on using antibiotic feed additives to promote the growth of livestock and a new requirement that the drugs be available to farmers only by prescription.

Following these recommendations will protect human health. According to the US Institute of Medicine , reducing the use of antibiotics and related drugs only in humans will have little effect on the crisis of antibiotic resistance -- unless "substantial efforts" are made to reduce the over use of antibiotics in farm animals.

Spurred by concerns about antibiotics resistance, Europe already has banned the use of antibiotics to promote livestock growth. In Denmark, where the effects of the ban have been rigorously studied, there have been no significant adverse effects on farmers, animals or consumers. Four large US poultry producers -- Perdue , Tyson , Gold Kist , and Foster Farms -- that in 2005 accounted for more than 38 percent of US broiler chickens say they no longer use antibiotics to promote growth. (Of course, since the government does not collect data on antibiotic use in agriculture, there is no way to verify these statements .)

Some agricultural and pharmaceutical interests defend the antibiotic feed additives, saying they are needed for efficient farm production. Yet a recent Johns Hopkins University study found that farmers using growth-promoting antibiotics in chicken feed experience a net financial loss. Using data from Perdue, researchers found that the cost of antibiotics more than offset the benefit of minimally faster growth in chickens, raising total costs by about a penny per chicken.

Using growth-promoting antibiotics in feed for hogs may be overrated. A 2002 study at Kansas State University showed that these antibiotics provided no economic benefits during the “finishing” stage of hog production, when weaned pigs are grown to market weight.

Under current law, the Food and Drug Administration theoretically has the power to withdraw agricultural animal drugs from the market. But past proceedings to do so have taken up to 20 years because the FDA’s procedures are so cumbersome.

Senate Health Committee chairman Edward M. Kennedy, Democrat of Massachusetts, and Senator Olympia J. Snowe, Republican of Maine, are expected to introduce legislation tomorrow that could address this problem. “The Preservation of Antibiotics for Medical Treatment Act” was also introduced in the House Thursday by Rules Committee chairwoman Louise Slaughter, a New York Democrat who is the only microbiologist in Congress. The American Medical Association, the Infectious Diseases Society of America, and the American Academy of Pediatrics are among the more than 350 health, agriculture, and other groups nationwide that have endorsed this legislation.

Within two years, the bill would phase out the use of penicillin and other antibiotics important to humans as additives in animal feed. The bill also requires the companies making agricultural antibiotics to submit data on the quantity of drugs they sell, along with information on the dosage form of those drugs. This information will help public health officials track the implementation of the phase-out.

The bill leaves farmers with many options, including antibiotics not used in human medicine, along with improved animal husbandry practices that are used in Europe and on some US farms. The Senate bill also authorizes funds to farmers to help defray the costs of phasing out use of medically important antibiotics, and provides for research and projects to help farmers in the transition.

Only a handful of new classes of antibiotics have been developed during the past 25 years. Congress should enact Kennedy’s legislation into law, before it’s too late to preserve our dwindling supply of life-saving antibiotics. □

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\*This commentary was published in the *Boston Globe* on February 11, 2007.