

Avoiding Antibiotic Resistance: Denmark's Ban on Growth Promoting Antibiotics in Food Animals

Antibiotics are the crown jewels of medicine. These life-saving drugs are vital to human health—treating everything from strep throat to skin infections to bacterial pneumonia. Yet up to 70 percent of antibiotics in the United States go to food animals on industrial farms not to treat sick animals but to promote growth and prevent diseases in often unsanitary, overcrowded conditions.

Bacteria exposed to antibiotics at low doses for prolonged periods can develop antibiotic resistance — a dangerous trait enabling bacteria to survive and grow instead of being inhibited or destroyed by therapeutic doses of a drug. Since many classes of antibiotics used in food animals also are important in human medicine, resistance that begins on the farm can lead to a serious public health problem.

Recognizing the potential for a health crisis, Denmark began restricting the administration of antibiotics used for growth promotion (i.e., non-medical uses) in cattle, broiler chickens and swine in 1998. All uses of antibiotics in food animals must be accompanied by a prescription in a valid veterinarian-client-patient relationship, and veterinarians cannot profit from the sale of antibiotics. In addition, farmers, veterinarians and pharmacies must report the use and sale of antibiotics, and farm inspections are conducted regularly.

Although the U.S. food animal production and animal drug industries often have claimed that the Danish ban was costly and ineffective, the World Health Organization found that the ban reduced human health risk without significantly harming animal health or farmers' incomes. In fact, Danish government and industry data show that livestock and poultry production has increased since the ban, while antibiotic resistance has declined on farms and in meat.



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