RESEARCH ABSTRACT

PORK SAFETY

Title: Economic Impacts of Potential Restricted-Use Policies for Antimicrobial Agents Used As Growth Promotants in Swine Production – **NPB #98-237**

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ABSTRACT

Public health officials and physicians are concerned about possible development of bacterial resistance and potential effects on human health that may be related to the use of antimicrobial agents in livestock feed. This concern has raised the question of a possible ban for subtherapeutic use of these drugs as growth promotants, similar to what has already occurred in several European countries. The National Pork Producers Council funded research to determine the economic implication of potential growth promotant bans on U.S. swine production. The focus of this research was aimed at determining changes in cost of swine production and the economic effects that subtherapeutic bans of antimicrobials would have on both swine producers and consumers.

Benefits from growth promotants used in growing and finishing swine included 3.25% increased average feed efficiency in addition to improved health and reduced sort loss at marketing that was attributed to more uniform growth rates. These benefits had an estimated average net economic value of $2.88 per hog. Available data indicated that a ban on use of antimicrobials as growth promotants would likely affect 93% of projected annual production of 105 million market hogs.

A ban on growth promotants for swine would be costly, totaling $280 million annually with swine producers and consumers sharing this cost nearly equally in the short run. In the long run, consumers would bear more than 80% of this cost. If a ban affected poultry as well as pork production, these losses would expand to $673 million per year with distribution of costs between producers and consumers similar to those in the short run. The net present value of these increased costs over a 30-year period with a 4% discount rate would be $8.4 billion and $11.6 billion, respectively, for a ban that would affect pork or both pork and poultry production.