

PORK SAFETY

Title: Economic Impact of a Ban on the Use of Over the Counter Antibiotics in U.S. Swine Rations – **NPB #98-235**

Investigator: Dermot J. Hayes

Investigator: Iowa State University

Co-Investigators: Helen H. Jensen, Lennart Backstrom (University of Wisconsin) and Jay Fabiosa

Date Received: 11/5/1999

Abstract

Antibiotic drugs are currently used in 90 percent of starter feed, 75 percent of grower feeds, more than 50 percent of finishing feeds and at least 20 percent of sow feeds (USDA/APHIS). A ban on the use of feed grade antibiotics would lead to changes in production processes and practices in production of pork, and hence would have an economic impact on the U.S. pork industry and pork market. This study considers the economic effects of a ban in pork production, with no change of regulation on other meats. The analysis uses a set of technical assumptions that are based in large part on a historical analysis of how the Swedish ban influenced the Swedish pork industry to anticipate the potential economic effects. A range of cases is examined. The cases use evidence from the experience in Sweden to describe what is most likely, given this evidence and (other) various expert opinions, to occur if the ban were to be implemented in the United States.

The estimated effects of a ban on the use of over the counter antibiotics would increase production costs per head by \$6.05 initially, and by \$5.24 at the end of the 10 year period considered for the most likely case, with reservations for all uncertainties about assumptions made. However, with higher prices due to reduced supply, net profit would decline only by \$0.79 per head. The net present value of forgone profit to the industry over 10 years is \$1.039 billion. These results include the costs of adding troughs and space to allow restricted feeding. On the consumer side, the effects of a ban would raise the retail price of pork by 5 cents per pound, and increase costs of pork to a family of four by \$11 per year, or, increase costs for all consumers by \$748 million per year. The estimated impact of a ban on an "average" or "representative" farm presented here masks very wide differences across farms. The greatest impact may be on densely populated farms in areas with large numbers of hog farms who have older buildings and who do not follow sound management practices. While certain general patterns stand out, technical evidence from the Swedish experience must be regarded very cautiously as an exact indicator of what might happen in the United States.

These research results were submitted in fulfillment of checkoff funded research projects. This report is published directly as submitted by the project's principal investigator. This report has not been peer reviewed

For more information contact:

National Pork Board, P.O. Box 9114, Des Moines, Iowa USA

800-456-7675, Fax: 515-223-2646, E-Mail: porkboard@porkboard.org, Web: <http://www.porkboard.org/>