



Economic
Research
Service

ERS Elsewhere

MAJOR PUBLICATIONS FEATURING OUR RESEARCH

Economic Effects of a Ban Against Antimicrobial Drugs Used in U.S. Beef Production

Journal of Agricultural and Applied Economics

Volume 34, Number 3,
December 2002

Southern Agricultural
Economics Association

“The Economic Effects of an
Antimicrobial Ban in U.S. Beef
Production”

Pages 513-530

by K.H. Mathews, Jr.

For more information,
contact:
K.H. Mathews, Jr.
at kmathews@ers.usda.gov

<http://www.ers.usda.gov>

USE OF LOW-LEVEL ANTI-microbial drugs (LLADs) in live-stock feed is thought to be a factor stimulating the develop-ment of drug-resistant bacteria and other pathogens found in livestock and humans. Several countries prohibit the practice of incorporating LLADs in live-stock feed. The United States has considered partial bans as precautionary measures against the spread of resistant pathogens from animals to humans or vice versa.

This article compares changes in livestock costs of production for three scenerios: all antimicrobial drugs are banned from livestock feed, no drugs are banned, and some drugs are banned. With bans, livestock production costs rise because feed costs rise due to reduced feed efficiency, lower growth rates, and increased management and labor requirements. Regulation of LLADs in livestock production would increase costs for producers previously using drugs and reduce meat supplies in the short run. Producers not previ-ously using drugs would benefit from the shortrun price increases that would accompany reduced supplies. Under a ban, all livestock species would face similar economic effects, with some livestock sectors being affected more than others. The effects on livestock sectors also depend on consumer responses to the change in the prices of meats, although any change in meat consumption is estimated to be small.

