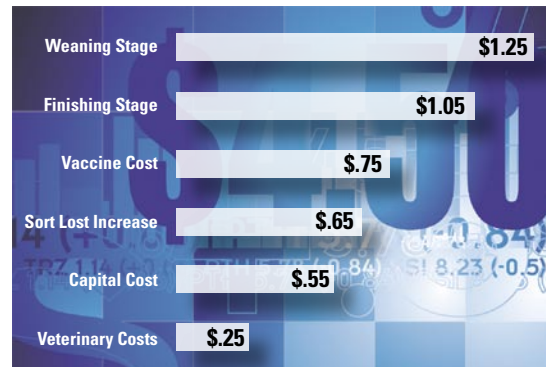


Q: What would the financial impact of such a ban be on U.S. pork producers?

A: An Iowa State University economist estimates production costs could increase up to \$4.50 per animal in the first year following a ban. A breakdown appears below:

Over 10 years, the total projected cost of such a ban would exceed \$700 million. Consumers could expect to pay about 2 percent more for pork products.⁸

Incremental Costs Per Animal



Q: What should we learn from the Danish experience?

A: Evidence shows such a ban will cause animal health and well-being problems. There is no evidence that such a ban would protect public health. The current FDA risk assessment on a drug-by-drug basis provides a scientifically sound process to protect human health and animal well-being. Other differences between the United States and Denmark could create additional problems in the United States that were not observed in Denmark. For example:

- *U.S. veterinarians, by law, don't have the prescription ability to change medication dosages in feed like the Danish veterinarians do. We would have to use more antibiotics in the feed to accomplish the same disease prevention during stress or disease outbreaks that we now can accomplish using smaller amounts.*

- *Unlike the cooperative system used in Denmark, the U.S. marketing system is competitive. Danish producers have the ability to negotiate price and make up for the increased production costs due to the decision to ban these uses. U.S. producers will not have this ability to recoup the predicted higher production costs.*

Q: What is the U.S. pork industry doing to ensure appropriate uses of antibiotics and to safeguard public health?

A: : The National Pork Board has launched a program called *Take Care – Use Antibiotics Responsibly*. It has three main goals for pork producers:



1. To educate producers about the responsible use of antibiotics.
2. To raise producers' awareness of the importance of using antibiotics responsibly and the impact of this on animal and public health.
3. To demonstrate to customers and consumers, pork producers' commitment to preserving public health, animal health and animal well-being through the responsible use of antibiotics.

This program includes principles and guidelines that producers and their veterinarians can use together to better manage the use of antibiotics and will become part of the Pork Quality Assurance Plus program in 2007. It is a proactive approach to the responsible use of antibiotics within the pork industry.

Sources

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THE DANISH EXPERIENCE:

What Happened When Denmark Banned the Subtherapeutic Use of Antibiotic Growth Promotants?



Lessons learned when Denmark removed antibiotics as growth promoters (AGPs) provide a good example of consequences from restrictions on antibiotic usage in the livestock industry.

FREQUENTLY ASKED QUESTIONS

THE DANISH EXPERIENCE: What Happened When Denmark Banned the Subtherapeutic Use of Antibiotic Growth Promotants?

Q: What is the “Danish Experience?”

A: In 1998, the Danish government instituted a voluntary ban on the use of antibiotic growth promotants (AGPs) during the finishing stage of pork production. The Danish pork industry agreed to the ban. The use of AGPs was withdrawn for all swine in 2000.

Q: Why was the ban imposed?

A: Key drivers of the ban were an increase in antibiotic imports into Denmark, the resulting political opinions and a concern from the scientific community that human health could be adversely affected by the use of antibiotics, including AGPs.¹ The ban invoked the precautionary principle for risk management that says that if any possibility exists that human health can be negatively impacted, no matter how remote, regulators should remove it by restricting food industry practices.² There was an assumption that banning AGP use would lead to a decreased amount of antibiotic use in agriculture and a decreased risk to human health from bacteria resistant to antibiotics.



Q: Did Denmark ban the use of all antibiotics in pork production?

A: No. A ban was enacted for the use of antibiotics as growth promotants for finisher pigs in 1998 and for nursery pigs in 1999. Antibiotics, including those used in feed and water for controlling and treating disease were not banned, and indeed are now being used more frequently than before the ban.

Q: What was the result of the ban at the finishing stage?

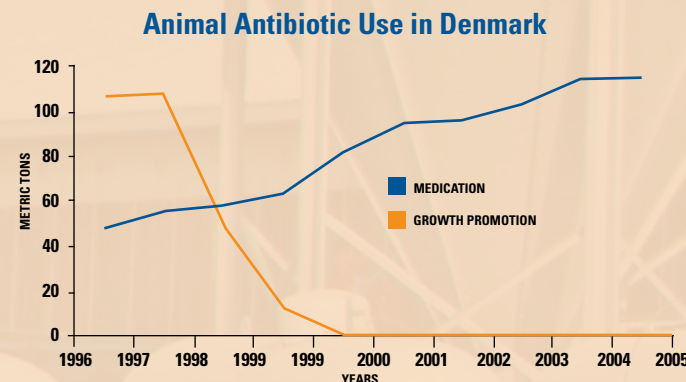
A: Initially, farmers generally reported few health problems. Some farms noticed negative impacts in average daily gain and mortality. Many farms have adjusted production practices to address these negative impacts and some farms have not been able to.

Q: Was the result of the ban at the weaning stage similar to the finishing stage?

A: No. Farmers noted an increase in piglet diarrhea, higher mortality rates, decreased weight gains, and greater weight variations.³ According to published news reports⁴ the number of pigs that died from illnesses increased by 25 percent from 1995 to 2005. These effects have still not been totally resolved.

Q: Was there a decrease in antibiotic usage?

A: Yes and no. Veterinarians resorted to significant increases in the usage of therapeutic antibiotics to combat rising health issues and declining production levels. While total antibiotic use has decreased somewhat, therapeutic usage of antibiotics has surpassed the level of AGP usage prior to the ban (See chart below).⁵



Q: How was human health affected by the ban?

A: There have been no proven human health benefits from the ban on AGPs in pork production. One potential negative consequence is that resistance to tetracyclines in *Salmonella* causing human infection has actually increased since the ban.⁶

Q: Have more restrictions on AGP usage been imposed in Denmark and elsewhere in Europe since the late 1990s?

A: In January 2006, the European Union banned all remaining antimicrobial growth promotors on a precautionary basis. While there is no direct evidence of antibiotic resistance problems in humans resulting from AGP usage in pork production, the European Union favors the Precautionary Principle and removing any theoretical risk of that occurring.⁷

Q: What is the U.S. approach to addressing risk to human health from antibiotic use in agriculture?

A: The Food and Drug Administration’s Center for Veterinary Medicine (FDA) uses a risk assessment approach to determine human health risks of antibiotic use in food animals on a case-by-case basis. FDA’s Guidance #152 uses a scientific framework to assess the human health effects of veterinary use of antibiotics. The Guidance requires antibiotic manufacturers to provide information to the FDA showing that a proposed animal drug will not harm public health.