

## ANIMAL SCIENCE

**Title:** Management guide for reduced usage of antibiotics in swine production – NPB #05-173

**Investigator:** Hans H Stein

**Institution:** South Dakota State University

**Date Submitted:** May 31, 2007

**Abstract:** A thorough review of the literature on management strategies for weanling pigs documented that there are a number of strategies that have been effective in reducing the negative impacts of discontinued use of antibiotic growth promoters in diets fed to weanling pigs. Producers need to reformulate diets to include barley, naked oats, or oats rather than corn, and the inclusion of soybean meal should be limited as well. Crude protein concentrations should be reduced to less than 18% and acidifiers, probiotics, zinc oxide, and copper sulfate may be used. Diets should be fed in a liquid form if possible, preferably as fermented liquid feed. If dry feed is used, diets should be pelleted. Feed intake should be restricted to 75% of ad libitum intake during the initial 2 weeks post weaning. These initiatives will all help pigs get through the weaning period without developing diseases. The profit from pig production will be maximized if pigs are weaned between 21 and 28 days of age. All-in all-out production should be practiced and pigs should always be weaned into an empty, clean, and disinfected room. If possible, this room should be at an off-site facility, possibly a wean to finish unit. Disease pressure and mortality does not necessarily have to increase if no antibiotic growth promoters are used, but profits will likely suffer because costs to prevent pigs from getting sick if no antibiotics are used, are greater than the cost of antibiotic growth promoters.

*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 This report has not been peer reviewed*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](mailto:porkboard@porkboard.org), **Web:** <http://www.porkboard.org/>