

## Effects of administration of antimicrobials in feed on growth rate and feed efficiency of pigs in multisite production systems

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### Abstract

**Objective**—To evaluate effect of various regimens for administration of antimicrobials in feed on growth rate and feed efficiency (feed/gain) of pigs in multisite production systems.

**Design**—Controlled trial.

**Animals**—24,099 growing pigs in 3 multisite production systems.

**Procedure**—10 trials involving various regimens for administration of antimicrobials in feed were evaluated. Trial 1 compared effects of 2 antimicrobial regimens on finishing pig performance. Trials 2 through 10 compared growth rate and feed efficiency of nursery and finishing pigs given antimicrobials in feed with values for control pigs not given antimicrobials.

**Results**—In trial 1, no significant differences were observed between the 2 antimicrobial regimens. In the remaining trials, growth rate of nursery pigs fed antimicrobials was significantly improved, compared with growth rate of control pigs. However, growth rate of finishing pigs and feed efficiency of nursery and finishing pigs were not significantly improved by adding antimicrobials to the feed.

**Conclusions and Clinical Relevance**—Results suggest that use of antimicrobials in the feed to promote growth should be limited to the nursery phase in multisite pig production systems. Use of antimicrobials in the feed of finishing pigs should be limited to therapeutic applications in which a diagnosis of bacterial infection susceptible to the antimicrobial to be used has been confirmed. (*J Am Vet Med Assoc* 2002;220:1690–1695)

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