



An interview with  
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## BMD®: What is its future in pork production?

**Q:** BMD has been used in the US pork industry for more than 40 years. Looking forward, do you have any concerns about its age or performance?

**DN:** Not at all. In fact, BMD is still younger than a lot of other feed medications. What’s unique about BMD is that, despite extensive use, it has not been linked to cross-resistance with other antimicrobials or to an increase in transferable resistance. If usage and customer feedback are any indication, BMD is as dependable today as it was in the mid- to late ‘70s when it was introduced.

**Q:** What keeps BMD going?

**DN:** I think it’s the product’s molecular structure and mode of action. The active ingredient, bacitracin methylene disalicylate, isn’t absorbed by the intestinal tract.<sup>1</sup> It works strictly in the gut, and there’s no withdrawal period before slaughter.

**Q:** BMD is often described as a “growth-promoting antibiotic.” Isn’t the livestock industry moving away from those types of medications?

**DN:** “Growth promotion” is a common expression, but the claims on the BMD label are for “increased rate of weight gain and improved feed efficiency in growing/finishing pigs” when used at 10 to 30 grams per ton of feed. Why these performance benefits occur has been debated by scientists for years.

**Q:** But isn’t FDA doing away with performance claims for all swine antibiotics?

**DN:** That’s a misconception. Under FDA’s new veterinary feed directive (VFD) rules that took effect in January 2017, any livestock or poultry antibiotic considered “medically important” to humans — tetracyclines, penicillins and macrolides, for

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example — needed to drop their performance claims. On the other hand, BMD is not medically important to humans and was allowed to maintain its performance claims under the new rule.

**Q:** Even so, some integrated pork production companies have already told consumers they will stop using antibiotics that improve feed efficiency or average daily gain. Where does that leave BMD?

**DN:** I think it still leaves BMD with a bright future. The pork industry wants and needs tools that improve efficiency and reduce the carbon footprint. Because BMD is one of the few antibiotics remaining with FDA-approved performance claims, it’s the perfect tool for meeting these goals.

In addition, BMD has an indication for use in sows for control of clostridial enteritis caused by *Clostridium perfringens* in suckling piglets. BMD is the only medicated feed additive with this claim. When you consider that *Clostridium* is ubiquitous on swine farms,<sup>2</sup> producers need to defend their herds against it and the costly clostridial enteritis. BMD is an indispensable tool.

**Q:** By itself, BMD doesn’t require a VFD, but what if you use it in combination with other approved feed medications?

**DN:** If you’re combining BMD with Aureomycin® or another medication that requires a VFD, you’ll need a VFD from your veterinarian.

**Q:** So, in summary, when you look at BMD’s unique label claims and the fact that it doesn’t require a VFD when used alone, BMD could be used in swine feeds for many years to come.

**DN:** That’s a reasonable assumption. As long as gut health, pig care and efficient pork production remain high priorities for the pork industry, I think BMD will continue to be a valuable tool for producers.

For more information, contact Dr. Daniel Nelson at [daniel.nelson@zoetis.com](mailto:daniel.nelson@zoetis.com).

<sup>1</sup> Original New Animal Drug Application (Bacitracin methylene disalicylate – BMD®). NADA 046-592.

<sup>2</sup> Baker AA, et al. Prevalence and Diversity of Toxigenic *Clostridium perfringens* and *Clostridium difficile* among Swine Herds in the Midwest. *Appl Environ Microbiol.* 2010 May;76(9):2961-2967.

## toolbox

Toolbox is a series of interviews with veterinarians about their experiences managing antimicrobials, vaccines and other tools for swine health. It is produced by the editors of *Pig Health Today*™ on behalf of the US Pork Business of Zoetis.

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