

# BEEF SOLUTIONS

## SMART PRODUCERS, SMART SOLUTIONS



E-Newsletter

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### Medicated minerals in the age of the VFD

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The initiation of the Veterinary Feed Directive (VFD) in January changed the way we acquire feed-grade antibiotics. For beef producers, veterinary oversight has added another step to the process as well as increased the level of responsibility for keeping records and understanding legal claims and applications. It may seem the VFD has only added inconvenience and paperwork to our already complicated lives. However, limiting the ease and frequency of antibiotic use will achieve the VFD's objective; to promote the judicious use of medically important antimicrobial drugs in food-producing animals.

#### The ABCs of medicated feeds

Medicated feeds are categorized as Type A, B or C<sup>1</sup>. Type A medicated articles are products of standardized potency, intended for use in the manufacture of other medicated articles or medicated feeds. Aureomycin<sup>®</sup> 90 (Zoetis) and Tylan<sup>®</sup> 100 (Elanco) are examples of this classification. They are what we commonly refer to as a "raw drug," purchased from the pharmaceutical company for use in feed mills. The second category is Type B medicated feed, which is produced using a Type A medication and is intended solely for further blending before being fed. The most common Type B feeds are medicated supplements such as loose meals, pellets and crumbles that are used as ration ingredients and are not fed free-choice. Lastly, there are the Type C feeds. These include complete feeds and minerals or grain mixes fed as a top dress or offered free-choice to supplement the daily ration. Veterinary Feed Directives are written for Type C feeds, with the medication specified as grams per ton in a 90 percent dry matter ration. Consider the steps from Type A to C as a simple matter of diluting the concentration to a level suitable for consumption: raw drug to supplement to complete ration. They are all viewed as medicated feeds by the U.S. Food and Drug Administration (FDA), with only Type C being legally approved for free-choice feeding.

#### CTC and free-choice minerals

Minerals medicated with antibiotics may fall under the classification of either Type B or C. The status of a given mineral is important to know in order for veterinarians to write a valid VFD and for producers to feed the mineral properly. Most minerals containing the antibiotic chlortetracycline (CTC) are Type B medicated feeds and are tagged to be fed as part of a total mixed ration (TMR), with directions to feed daily. These supplements are meant to be included in a TMR after obtaining a VFD but are not offered free-choice; to do so would be an off-label use and would be in violation of the legal feeding application.

There are only a select few minerals with CTC classified as Type C and approved by the FDA for free-choice feeding.

**STOCKMASTER<sup>®</sup> Aureo<sup>®</sup> FC C6000** is the Hubbard Feeds proprietary, free-choice mineral formula. This mineral is designed to be continuously fed for the control of active infections of anaplasmosis in summer-grazing cows. Veterinarians must write the VFD using this claim, rather than a claim for the prevention of respiratory disease, and must specify Aureomycin<sup>®</sup> brand CTC with no substitutions.

Are your cows at risk for anaplasmosis, and should you include this free-choice mineral in your herd health program? Understanding the basics of this disease can provide some insight<sup>2</sup>. Anaplasmosis is primarily found in warm climates but has been diagnosed in many U.S. states. It is caused by a parasite that affects the red blood cells, causing the animal to become anemic. Older cows are most susceptible to die from oxygen deprivation, whereas younger cows and calves may not show signs of the disease and can become carriers.

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Wood ticks serve as the primary carriers that spread the disease. While anaplasmosis is not directly contagious, it can be spread within a herd by biting insects and contaminated needles, or be brought into your herd by purchased cows. When using **STOCKMASTER® Aureo® FC C6000** to control anaplasmosis, it is important to feed it continually through the grazing season and whenever there is a risk of infection. Keep in mind that cattle can become infected within a herd in winter months as well due to unsanitary equipment used for castration, tattooing, and vaccinations.

## Preventative management

Every cattleman knows it is easier, and more cost-effective, to prevent disease rather than treat it. Through the years, CTC has often been used to proactively deal with bacterial infections in the feedlot and on-pasture. However, in the age of the VFD, it is important to recognize that veterinarians are bound by the FDA-approved claims, or applications, for a given antibiotic. Off-label use is not allowed. For example, CTC is cleared for prevention of respiratory disease and control of anaplasmosis infection, with only the latter having a free-choice mineral option. Veterinarians cannot write a VFD for either foot rot or pinkeye prevention, as there is currently no legal claim for prevention of these common diseases. Managing cattle with a focus on the herd health program, nutrition, minimal stress and a stable microbial population in the gastrointestinal tract should be viewed as the new tools for promoting good health rather than routinely scheduling pulse dosing of antibiotics.

## Fly control and free-choice minerals

One proven method to reduce stress and provide benefits to both the cow herd and cattleman is to provide minerals with feed-through fly control. It is easy to see how miserable cows are when they are subject to the stress of a heavy horn fly infestation. These biting pests consume 20 to 30 blood meals per day. Cattle expend energy constantly working to swat, shake off or dislodge the fly by any means possible. Cows graze less, produce less milk and wean lighter calves. To make matters worse, cattle will resort to their usual herd instinct when confronted with stress: they group together. Cattle look for relief in low-lying areas, often standing in mud or on soil wet from urine and manure. Standing shoulder to shoulder in tight groups with tails whipping eye-level with the calves and hooves stomping the wet ground, this creates a fertile environment that spreads the last thing we need on pasture: foot rot and pinkeye.

Fly control minerals do not need to contain CTC to be effective, nor do they need a VFD when made without antibiotics. However, the formula does need to be registered with the Environmental Protection Agency (EPA) to be floor stocked without an FDA-regulated medication such as CTC. Keep in mind that the only approved free-choice mineral with CTC is for the prevention of anaplasmosis, and, to date, the FDA has not given approval for including feed-through larvicide for fly control in this formula. Therefore, minerals with CTC and fly control cannot be sold together unless used in a TMR and not offered free-choice. Hubbard Feeds will be offering three new fly-control minerals in 2017, registered with the EPA and eligible to be floor stocked by our feed dealers. **STOCKMASTER® Sweet Phos 4 Altosid** is an excellent, all-around maintenance mineral suitable for fly control in stock cows, replacement heifers, and yearling steers. **STOCKMASTER® Sweet Mag 14 + TM Altosid** targets prevention of grass tetany and fits well in areas of the eastern U.S., where high-magnesium minerals are needed throughout the entire summer. **Advantage Cattle Mineral Altosid** is fortified with organic sources of zinc, copper, manganese and cobalt, and it is recommended to enhance fertility, immunity and performance in grazing cow/calf pairs. Check with your local Hubbard Feeds dealer for availability, and start feeding before the horn flies appear. For best results, provide one mineral feeder per 30 head of cattle and feed minerals with fly control from 30 days before the last frost in spring to 30 days after the last frost in the fall.

The VFD has certainly changed the way we obtain feed-grade antibiotics, and it has clearly defined the number of mineral products eligible for free-choice feeding. More than ever, it is important for cattle producers to be aware of legal clearances and applications as they work with their veterinarian to develop a herd health program. Hubbard Feeds ensures that these free-choice mineral options are approved by the FDA to control anaplasmosis and the EPA to control horn flies. Using the right mineral in the age of the VFD will serve to reduce stress for both cattle producers and their herds.

<sup>1</sup>Feed Additive Compendium. 2017. Page 19.

<sup>2</sup>Whittier, D., N. Currin, and J. F. Currin. 2009. Anaplasmosis in Beef Cattle. Virginia Cooperative Extension, Publication 400-465.

