Antibiotics have been approved for use in the feed of food production animals since 1951, after studies indicated the practice not only aided disease prevention but also increased rate of gain in poultry.

However, this practice—along with other uses of antibiotics—is getting new attention because of the growing concern over antibiotic-resistant infections in humans. According to the Centers for Disease Control (CDC), at least 2 million people in the U.S. become infected with bacteria that are resistant to antibiotics, and at least 23,000 people die each year as a direct result of these infections.

And while there is considerable disagreement about the role of production animal antibiotic use in these infections, there’s no denying that the use of antibiotics is being scrutinized and curtailed.

“FDA Guidance #209 asked for voluntary compliance related to labeling,” explained Mike Apley, DVM, PhD, DACVCP, professor of production medicine and clinical pharmacology, Kansas State University. “The guidance asks that claims related to rate of gain and feed efficiency be removed from labels. In addition, labels should require veterinary oversight for the use of antibiotics in food and water.”

Those requirements, which have been agreed to by all 26 pharmaceutical companies, will affect 283 product labels, according to Apley.

“It affects every antibiotic of importance except ionophores and three others that are not considered medically important for humans,” he offered. “Producers won’t have to have veterinary approval for ionophores, but by the end of 2016, veterinary authorization will be required for all but these four antibiotics in feed and water.”

Further, Apley predicts the pressure will build to expand extended regulations into the use of antibiotics for disease prevention and control in livestock. To prepare for that, he believes the industry must address these uses, especially in feed and water.

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“We must also be constantly searching for alternatives.”

Apley said he is starting to work with producers and veterinarians to evaluate which antibiotic uses are really beneficial for cattle. He suggests asking the question, “Is the 40-year-old label use still the most appropriate when used today?”

His efforts don’t emanate from a belief that antibiotic use in food animals is a major cause of drug resistance in humans. In fact, he said he thinks there is little evidence at this point to support that idea for many of the pathogens which are causing resistance issues in humans.

Nevertheless, he is convinced that cattle producers must use antibiotics more judiciously so that the drugs they need to treat animals in the future retain their effectiveness.

“You see, at the same time that strains of bacteria are outsmarting antibiotics by mutating and becoming drug-resistant, the number of antibiotics developed and approved for human medicine has been declining steadily. From 1980 to 1989, 30 antibacterial drugs were approved; from 1990-1999, 24 drugs; and from 2000-2009, just 14 drugs.” The number of new antibiotics approved for veterinary medicine has been much less than that.

“This isn’t just about human therapeutics,” Apley explained. “It’s also about still having the tools to address our concerns in food animals 50 years from now, because we aren’t going to be getting any new antibiotics in food medicine. The last new groups, the ones we are now using, were approved for use in 1978. There have been some very effective chemical alterations to create new members of these groups, but no new groups.”

So, what can producers do to help protect these life-saving antibiotics?

The first thing Apley recommends is that every producer have a relationship with a veterinarian who can provide sound advice about what drugs are...
appropriate and when to use them. He also urges producers to use antibiotics ONLY if:
- They don’t have an alternative to enhance the health and welfare of the animal or group of animals
- The antibiotic they are using has been proven safe and effective
- They are committed to using the product in a manner that is safe and effective
- They are constantly searching for alternatives to antibiotics so they don’t have to use them.

One of the steps producers sometimes neglect, Apley said, is conferring with a veterinarian whenever they use antibiotics.

“In 2008 the FDA released a summary of the results of their investigation of residues in culled dairy cattle,” Apley remarked. “They found that 70 percent of violating residues were cases where drugs had been given without a veterinarian being involved in the decision. That’s really, really key—and one of the places we can fall short. Always get the advice of your veterinarian when using drugs.”

So, it’s important to consult a veterinarian and to use antibiotics appropriately to minimize the risk of violative drug residues. Over the long term, it’s even more important in protecting the effectiveness of these drugs for generations to come.

“The things that producers need to understand is that when it comes to antibiotics, we pretty much have the tool set we are going to have in the future,” Apley stated. “So, we need to protect it, not only as part of our obligation to human medicine, but as part of our obligation to the health and welfare of the animals we raise. In some food animal species, we’ve seen a few isolates that are resistant to most everything we have to treat them. That is a signal, and if we choose to ignore it, we are making a grave mistake.”


Accuration® Range Supplement and Wind and Rain® Minerals Reduce Winter Management Challenges

Winter always brings a new set of challenges for managing your herd. Obviously, cows need extra care during the winter months; demands on a cow’s body skyrocket since she must nourish her own body as well as that of the unborn calf. During winter months, the more difficult the weather condition, the more your cows will need attention.

Remember that basic needs still must be supplied. Cows need plenty of clean, fresh water and shelter from the wind. Be sure vaccinations are up-to-date, cows have been dewormed, and that you provide control of lice as needed. It is especially important to provide proper nutrition at all times to assure your calf crop is not at risk and the herd’s health is maintained.

Winter forage can vary in quality and availability during harsh conditions. Forage likely will have lower levels of energy and protein, so it becomes harder for the rumen microbes to break down. This in turn slows digestion and causes the cows to consume less. Their condition suffers, fetal development is compromised and future reproductive performance can become questionable. If your cattle are grazing or you are feeding hay, proper supplementation will help to assure your herd is healthy and productive.

Purina has made it easy to assure your cows receive proper nutrition all winter long. Products such as Accuration® Range Supplement and Wind and Rain® Minerals will help to make your job much easier when the temperature drops and snow begins to fall.

Accuration® feeds contain the Intake Modifying Technology®, feeding system which causes cattle to consume multiple, small “snacks” of the supplement daily, optimizing the flow of nutrients in the digestive system. Forage intake and utilization, as well as cattle performance, are increased. Fed according to recommendations, Accuration® feeds balance the nutritional deficiencies in forage, regardless of the forage quality.

With over 30 years of research behind Accuration® feeds, they have been formulated to control intake based on the cattle’s nutritional needs and the quality of the forage being consumed. Fed on a free-choice basis, Accuration® Range Supplement improves forage utilization over conventional hand-feeding. In fact, Purina research showed a 15-20% increase in grazing time and forage intake. So, when weather, cattle requirements, or forage quality change, supplement intake may change too, but performance will remain constant.

Every nutritional program must be completed by providing the necessary minerals to balance deficiencies in the forage. The new Wind and Rain® Storm® formula minerals are more water and wind resistant than previous formulas. Conventional mineral particles are so small that they often blow out of the feeders, and won’t allow water to pass through. When minerals get wet and clump, they are no longer palatable and cows won’t eat them. Wind and Rain® Storm® minerals offer consistent intake, and are designed to optimize herd health and breed-back rates. While the new Storm® technology resists water, digestion is not affected so production is enhanced.

The future of your herd is determined by each year’s calf crop. Investing in a quality nutrition program will help assure the future of your herd, not just for this season, but for years to come.

Make sure your herd is receiving a properly balanced, quality winter nutrition program. Talk to your Purina dealer today about additional Purina® products that are available to customize a winter nutrition program for your herd.
Oklahoma Beef, Inc. was founded 40 years ago by a group of 20 Hereford and Angus breeders who wanted to help smaller breeders compete. Tim Stidham’s family was “in on it from the beginning,” and since 1987 he has been managing the feedlot operation.

Their bull test station is the second largest in the United States and follows guidelines established by the Beef Improvement Federation (BIF).

“They tell us what age is good to feed cattle, which is right after they are weaned until they are a year old,” Tim said. “That’s when they do the most growing, and you can tell most about what they will look like when they mature. There are also guidelines about how often they should be weighed and what characteristics the bulls must have to be sold with a guarantee,” he added. “Our bulls are guaranteed to be a breeders and guaranteed against anything for six months (through a pharmaceutical company).”

Tim grew up on a registered Hereford ranch in the northern part of Oklahoma, often called the Osage area. He earned a degree in animal science from Oklahoma State University (OSU), and is a third generation Hereford breeder, with his own cow-calf operation. Tim also breeds and trains quarter horses, some of which are used to work the bulls at the test station. His three daughters and son grew up helping at the test station, and he employs college students to assist in the operation today.

The enterprise now has 100 members and leases 60 acres from OSU. Not only are bulls weighed monthly, but Tim and his staff are in the pens with the bulls twice each day, on foot or horseback, to check feeders and water and make sure the bulls are healthy.

“We make each bull get up and walk so we can check for soundness issues or respiratory problems,” he offered. “I wouldn’t think twice about sending a child in there. If any bulls get wild and crazy, we get them out of here. All my laborers are college students who probably didn’t grow up in production agriculture, so I have to be able to trust the bulls.”

When it comes to nutrition, what Tim trusts is Purina® products. He reported that he was with another feed company—one that was local—for 30 some years.

“The main reason I switched in 2011 was cost,” he remarked. “Then, when I figured the savings on labor and what the bulls looked like in the end product, I realized I should have done it a lot sooner. I saved my end customers $230 a bull and averaged $750 more per bull when I sold them.”

To accomplish that, Tim uses Purina® Accuration® Starter Complete followed by 17.5 percent Purina® Accuration® Grower and 82.5 percent cracked corn, as well as Purina® Stress Care™ Tubs “from the day the bulls arrive until they go home.” He reports fewer sick bulls, and bulls that are more fertile when checked for sale.

“I told Dr. Steve (Steven Myers, nutritionist with Purina Animal Nutrition) we could probably hit one or two of our targets when we switched to the Accuration® program,” he explained. “But we hit every target the first year we used it. We wanted the bulls to come out with less fat and be more athletic. We did that.

When we ultrasounded the bulls, we had more intramuscular fat and better ribeye with the same or better average daily gain as before.”

In addition, Tim reported that the Purina® Stress Care™ Tubs help cattle received in poor condition catch up with their contemporaries. What’s more, the Purina® products have lightened his workload.

“I told people, ‘if you aren’t feeding the Accuration® program, you are just making work for yourself,’” he said. “I use college student labor, and with the Accuration® program I can come and go and interact with customers as I need to and leave the boys in charge without worrying. The feed takes care of itself.”

Tim said it used to take two weeks to get calves on feed. Now, after processing, they send bulls straight to the pen to a full feeder without worrying about the timid ones. He said they find feed within 12 hours. “Even the calves that are not weaned properly will walk right up to the feeder,” he said. “And once they do, they are hooked.”

Purina’s Intake Modifying Technology® feeding system, used in Accuration® feeds, allows producers to leave feed out without worrying about cattle overeating and getting too fat. Its proprietary blend of ingredients encourages cattle to eat smaller, more frequent meals, thereby enhancing digestion and controlling weight. Oklahoma Beef feeds in five transitions, starting with 100 percent Accuration® Starter Complete and ending with a mix that contains 17.5% Accuration® Grower Concentrate and 82.5% corn.

Of course there are challenges, such as getting cow-calf operators to wean their calves so they can achieve their full potential … or convince large breeders that the long-held stereotype of feedlot bulls being fat and out of shape doesn’t apply to Oklahoma Beef. But Tim said he loves the flexibility of his work, as well as interacting with customers daily, and selling them cattle they will be proud of.

As for Tim, he’s not only proud of those bulls, but also of the results he’s achieved using Purina® products.

“My highest average bull sale was after I started the Purina® program. We sold 170 bulls for an average of $4,300,” Tim stated. “Growing up, Purina might have had a reputation for high prices. But, when you feed like the research tells you to, it’s less expensive in the long run. Producers need to talk to their local Purina salesman or dealer—and listen to what they say. You’ll do better and take half of the labor out of your work.”
Second Trimester Offers Unique Opportunity to Build Cow Body Condition

Many cattle producers underestimate the importance of nutrition in the second trimester of pregnancy. Building a cow's body condition during this time can lower winter feed costs and better prepare a cow to succeed in the next production cycle.

Opportunity is knocking this fall. Do you hear it? That's because the second trimester of a cow's pregnancy is the least nutrient demanding of the beef cow's cycle. So it offers a window of time to dramatically improve cow body condition.

“Too often producers overemphasize the third trimester, overlooking the critically important second trimester,” says Cliff Lamb, PhD, professor and assistant director of animal science programs at the University of Florida. In fact, he said, the second trimester is the least expensive time during gestation to improve a cow’s body condition. Waiting until the third trimester may be too late. By this time the fetus is gaining ½ to ¾ of a pound each day, and the cow's protein requirements are at a peak.

“It’s important for producers to understand the intricate relationship between nutrition and reproduction cycles,” Lamb explained. “Energy, protein, minerals and vitamins all affect a cow’s reproductive efficiency in various ways. The hypothalamus, pituitary, and/or the ovaries can be materially affected by a nutritional deficiency.”

Mature cows

Mature cows are usually still nursing their present calves during the first and often into the second trimester of pregnancy. Sometimes the nursing calves can be removed in order to put weight on a cow and get her in proper body condition. Waiting until the third trimester to put on weight is risky, Lamb warned, because the fetus needs a lot of nutrition in the third trimester.

Ideally, the cow is no longer lactating in the second trimester, the fetus is not growing very rapidly and this combination presents an opportunity to build the cow’s health. Cows can do well on many types of forage and feeds as long as they contain adequate nutrients. Mature cows generally need less care than first-calf heifers, but they should not be neglected because of their maturity and experience in breeding and calving.

First-calf heifer – nemesis of the cow-calf operator

For most producers, replacement females replenish 15 to 20 percent of the cow herd annually. Heifers represent the future of the cow herd, so nutrition and management are even more important than with mature cows.

However, according to Lamb, “First-calf heifers can be a nemesis to cattle operations because these young, growing cows need additional nutrients at the same time they must supply nutrients to their fetuses. From a physiological standpoint, they have not yet experienced the trauma of giving birth. Plus, their pelvic areas are generally smaller than mature cows, which increases the chances for dystocia. And, they will soon be raising a calf for the first time, a stress that a mature cow no longer experiences.”

“Even in ideal settings, many producers tend to expect first-calf heifers to perform at unrealistic levels,” Lamb added. However, if managed properly, first-calf heifers will conceive by the end of the second breeding season, making the goal of approaching 100 percent calving more achievable going forward.

Here are a few special considerations Lamb recommends:

• Feed first-calf heifers to maintain a body condition score (BCS) of 5 to 6 throughout the second (and third) trimester. (Purina Animal Nutrition research shows that a BCS of 6 throughout pregnancy offers the best results.) First-calf heifers in optimum body condition will have a better opportunity to rebreed after calving.
• Put first-calf heifers on the best pastures and feed them high quality hay or supplemental feed.
• Keep first-calf heifers separated from the mature cows. Bred heifers require more attention than mature cows, and it’s easier to care for them when not commingled with mature cows. You can watch them more closely, especially as calving time approaches, and provide additional supplemental feed during gestation as necessary.

Purina Animal Nutrition offers a wide range of supplemental feeds, including Accuration® Range Supplement, which help to provide complete, balanced nutrition. (For more details, see “Accuration® Range Supplement and Wind and Rain® Minerals Reduce Winter Management Challenges” on page 2.) Contact your local dealer or Purina representative to learn how these products can help your cows stay in top condition this winter.
From the time she was young, Samann Vest Watkins knew what she wanted to do when she grew up. She told her sixth grade teacher she wanted to operate her family ranches, which have their roots back in 1887 when Samann’s great great grandfather established the first Vest Ranch.

And, that’s just what she’s doing today, along with her husband of 25 years, Ty, who joined her in managing the two Texas ranches 12 years ago.

Their Angus cow-calf operation encompasses 150,000 acres. About 40,000 acres of rolling hills and steep canyons are located in the eastern panhandle, near Childress. The remainder, 320 miles southwest near Monahans, consists of tighter ground above the cap rock and sandhills below. They sell their calves to individuals and feed yards at about 750 lbs, after weaning and backgrounding.

Like most west Texas ranchers, they’re still dealing with the after-effects of the droughts of 2011 and 2012, when they weren’t able to keep replacement heifers. But Ty says that began to change last year, and they’re anticipating keeping even more in 2014.

“We’re pleased the ranch is in recovery mode,” said Ty, who grew up in Odessa, rode bulls professionally and was an elementary school principal before joining Samann at Vest Ranch. “The Childress ranch is now 65–70 percent stocked.”

Through it all, they’ve continued to emphasize herd quality improvement, through data collection and interpretation, along with advanced genetics and nutrition strategies.

Ty said they’ve partnered with Bradley Three Ranch for their Angus bulls, which total 54 at their Childress location. They utilize HD 50K to identify traits or characteristics within the cow herd, then analyze carcass data on their progeny to get what he calls a “treasure trove of information on our cows.” Then, if they find traits that are less than desirable, they improve on them by acquiring bulls with traits that are specific to those cows’ needs.

“In the past we kept replacement heifers and looked for bulls with good maternal traits to improve quality,” he explained. But now that we have identified cow traits, we can purchase bulls with EPDs that target specific traits for cows bred to produce replacement heifers, and other bulls, for the remainder of the cow herd that emphasizes growth.”

To make sure those genetic improvements could be expressed—especially during drought years—the Watkins’s knew they needed the best possible nutrition program. So at the suggestion of their veterinarian, they started working with John Gardner, their Purina rep, and their nutritionist, Dr. Kelly Sanders, about 12 years ago.

“The team Purina offers is second to none. Whenever we do body condition scoring in the spring or fall, John and Kelly come by the ranch, as well as when we are assessing the progression of calves that are still nursing and evaluating weaning condition and weights. They have been instrumental in helping provide nutritional feedback on our herd to make sure we get calves weaned and to the feed yard healthy.”

Ty said they started with Sup-R-Lix® liquid feed as part of a Sustained® Nutrition program. For developing heifers, they use Accuracy® dry feed. Wind and Rain® Minerals, loose and in tubs, are another regular component of their nutrition program, including Wind and Rain® Minerals with Altosid® for fly control in the summer.

They like the results they see.

“With year-round nutrition, our herd health and reproduction rates have risen, and death loss in calves born to calves shipped is virtually nonexistent,” Ty said.

“A large part of the credit for that goes to the Sustained® Nutrition program, especially through 2011. I don’t think we could have had the breedbacks we had without that.”

Ty said they were also pleased with how their steers graded, a process they just started last year. Ninety-eight percent were choice or better: 80 percent choice and 18 percent prime. And, he says such outcomes are a direct result of quality genetics that can be fully expressed as a result of Purina’s well-researched nutritional program.

“The research and development Purina puts into every product is unbelievable,” he offered. “When they put a product out there, they know what it is going to do.”

Samann and Ty even use Purina® AntlerMax®, a mineral supplement for deer for their commercial hunting operation on the Childress Ranch.

Their emphasis on quality extends to how animals are handled. Ty said they put animal well-being and safety first, handling cows and calves “with kid gloves,” an approach that reduces stress and enhances health, productivity and carcass quality.

In addition, they’ve implemented the USDA (United States Department of Agriculture) NE3 program at the Childress Ranch and plan to expand it to Monahans. NE3 prohibits the use of hormones, antibiotics or animal byproducts, a practice that Ty says results in higher prices—about 11 percent higher he hopes—for their calves.

Ty says he and Samann are focused on not only improving the herd, but also leaving the land “better than we found it.” And the results that they and their employees see on both ranches make all their efforts worthwhile.

“We have an unbelievable team working hard every day to make sure the care and nutrition of our cattle is top-notch,” said Ty. “When they see these results in the quality and growth of calves and hear buyer feedback, they know their effort and time have a purpose. Everyone on the ranch takes a lot of pride in ownership, and that’s really what I’m proudest of, along with knowing that my wife’s grandparents would be pleased that we’re putting more into the ranch than we’re taking away.”
Each year cow-calf operators produce a new crop of calves for sale to feedlots. Those feedlots often want larger incoming calves—650 lbs. and up. Cow-calf producers are focused on efficiency, which might be viewed as the antithesis of producing larger calves. Both parties can win, however, when proper nutrition and management practices are followed.

**PRECONDITIONING**

Preparing calves for the feedlot—often called preconditioning—includes vaccinations, balanced nutrition and a management program designed to help young cattle withstand the stress of shipping and adjusting to life at the feedlot. Preconditioning may also include various management tasks at different points in a young calf’s life:

- **Young calves (1 to 3 months age)**
- **Older calves (3 to 4 weeks before weaning)**
- **Calves at weaning time**

**Castration and dehorning.** If calves were not castrated or dehorned shortly after birth, it should still be done several weeks before weaning. Waiting until weaning is very stressful and gives little time for the calves to heal.

**Deworming.** Economic losses from parasite infections can be costly. Calves are more susceptible to worm loads than are older cows. By the time cattle reach maturity, their immune systems are well established and better able to ward off negative effects of worms. It’s considered optimal to deworm calves after two months of age, since internal parasites decrease growth rates in young animals. Additionally, deworming weaning-age calves at least two weeks before vaccinating allows them to mount a better vaccine response.

**Vaccinations.** Calves should be vaccinated between 2 and 8 weeks of age, and again just before weaning as a booster. Producers should work closely with their herd veterinarian in developing a vaccination program that targets the critical diseases to vaccinate against.

“One round of vaccinations is better than none,” said Robbi Pritchard, PhD, distinguished professor of animal science with South Dakota State University (SDSU). “But two rounds are much more effective. And the vaccination process should not resemble a rodeo. Stressed, excited calves with elevated cortisol levels respond poorly to vaccines. If we work them quietly, the calves will be calmer and the vaccinations more effective.”

**Minerals.** Forages can be a good source of minerals, such as calcium and potassium. However, the trace minerals in forages can vary considerably because of differences in soil. The resulting imbalances can manifest in many ways. It’s important to have mineral supplements for the cows and the calves throughout their lives, Pritchard stated.

**Weaning.** Weaning calves is a critical component of an efficient and profitable operation. Nursing calves can be weaned between 3 and 8 months of age. Calves can be weaned at less than 2 months of age, but this younger age can be
problematic and stressful for the calves. The desire to early wean should be tempered with the stress that is placed on calves.3

The rumens of calves normally function properly at 120 days of age and can provide satisfactory gains without the benefit of the dam’s milk or milk replacers. Thus, weaning March- and April-born calves in late July to early August is preferred to an earlier weaning date.4

“Some operators can dry-lot wean, others might use the fenceline method, and many ship calves right off the cow,” Pritchard explained. “Since there are more risks and inputs to weaning at home and not all feedlots will pay a premium for weaned calves, it’s imperative to know your customers.”

It’s important to get calves eating as soon as possible after being separated from the dam. Calves that were creep fed before weaning will adjust more quickly to being separated from their dam. “Calves that start eating dry feed soon after separation from their dam have lower incidences of morbidity and mortality than calves that do not eat for one or two days,” Pritchard offered.

**External parasites.** Watch calves for anything that may be interrupting a normal grazing pattern. External parasites can prevent calves from gaining weight and will noticeably increase stress levels. The most common practice is to treat for external parasites at weaning. There can be occasions of extremely heavy infestations when calves should be treated prior to weaning, however. There are many insecticides on the market today to control external parasites on cattle. Your vet or extension office can advise on the most appropriate and effective for your situation.5

**DON’T GO IT ALONE**

Pritchard said he often observes situations where a producer’s strong sense of independence goes too far. “Don’t try to solve everything by yourself,” he advised. “Go to the nutritionists, veterinarians, extension offices, etc., for inputs and information. The local professionals know the local conditions. The investment in time and money can really pay back.”

Your local Purina dealer is a great resource for help in preparing calves for feedlot life and the products that will be most effective for your herd. So, contact your Purina dealer or local representative today. They can help develop a plan to keep your calves healthy and nutritionally sound. Ask them about products such as Accu-Creep™ creep feed, PreCon® starter feed, Stress Care™ starter supplement and Wind & Rain® Minerals, which provide key nutrients and help calves adjust to feedlot life.

**Tips for Receiving Calves at the Feedlot**

Whatever the source of new calves, their first days and weeks at the feedlot are crucial in cementing their health and growth—and your profits.

Here are a few tips to get those calves off on the right foot, and make your life a lot easier in the long run.

- Buy from operations you know or can verify have sound health programs.
- Use haulers whose handling techniques create the least stress possible for calves.
- Secure vaccination records if at all possible.
- Avoid calves under 400 lbs. as they are more likely to have disease and parasite problems.
- Don’t commingle calves from multiple groups. This will minimize the introduction and spread of disease.
- If possible, select calves that have been weaned, backgrounded and creep fed as they will adapt more quickly to feedlot life.
- Make sure arrival pens are clean and dry, with plenty of access to clean water and feed. Calves can consume as much as 15 gallons of water per day.
- Provide long-stem grass hay that is free of dust, mold and weeds for the first 2-3 days. Place it in the bunks or on the apron the first few days and sprinkle ration on top. Increase the amount of ration each day.1
- Because calves will wander the perimeter upon arrival, locate feed and water there so they can find it easily and quickly.
- Develop a processing plan for each particular group of calves, including resting time, vaccinations, implants and parasite treatment.
- Offer a palatable ration, such as Purina® Accuration® Starter Complete, that includes digestible energy, protein and micronutrients.
- For stressed and freshly weaned calves, consider Purina® StressCare™ 5 supplement, a fortified pelleted feed with vitamins, minerals and yeast culture, which enhances palatability and encourages rumen microbe development.
- When calves arrive at weaning or receiving pens, Wind & Rain® Minerals with Availa® 4 or Purina® StressCare™ Tubs should be available to help calves through the stress of traveling or weaning.


What the New FDA Guidelines on Antibiotics Mean for You

In December, the U.S. Food and Drug Administration (FDA) published a “guidance for industry” related to the way antibiotics are used in food animals. Many cattle producers know this, but are unsure about how these new rules will affect them.

Luckily, the ramifications have been outlined clearly by Russ Daly, DVM, DACVPM, associate professor and extension veterinarian at South Dakota State University. Here are some of the most important changes in the new FDA guidance:

- **“Medically important” feed-grade antibiotics—tetracyclines, penicillin, cephalosporins and fluoroquinolones—will no longer be labeled for use for growth promotion and improvement in feed efficiency.** The growth-promoting antibiotics in this category are tetracyclines, tylosin and neomycin. Drug manufacturers have three years to make these voluntary label changes, which may include new indications for treatment, control or prevention. After that, these uses will no longer be legal, because extra-label use of feed-grade antibiotics is illegal.

- **These medically important feed-grade antibiotics will no longer be dispensed over the counter (OTC).** Rather they will require a Veterinary Feed Directive (VFD) to be filled out by a veterinarian who has oversight for the herd. The VFD, specifying the farm, animals to be treated, and the drug and duration of treatment will be required by a distributor or mill before supplying feed.

- **Recordkeeping should be easier.** First, records must be maintained for only one year, instead of two. Also, the VFDs, which can be stored and transmitted electronically, will no longer include an estimate of the amount of medication the animals will consume in a given time frame.

At the same time, many things will remain the same when it comes to antibiotic use on cattle operations.

- **Feed-grade antibiotics can still be used to treat, control or prevent bacterial diseases.** (Prevention implies a very high risk of illness without the antibiotic.) However, a VFD will be required.

- **Non-medically important feed-grade products are not affected.** These include ionophores, coccidiosis medications and certain growth-promoting medications, which are rarely, if ever, used in human medicine.

- **Injectable antibiotic uses will remain the same.**

- **Extra label uses of feed-grade medications will remain illegal, as they are currently.**

- **Distributors will have no additional restrictions on what medications they supply.** However, VFDs will be required more often.

- **Veterinarians should be involved in decisions related to feed-grade antibiotics.** Your herd veterinarian is the best source of information about the appropriate use of any pharmaceuticals in your operation. By building a close relationship with your veterinarian, you will assure the drug is being used properly, which will maximize your budget, prevent illness more effectively and help you comply with government guidelines.