The Facts about Optaflexx™: Ractopamine for Cattle

Jason Cleere Ph.D., Beef Cattle Specialist, Texas AgriLife Extension

Competition is tough at junior livestock shows across the U.S. and cattle exhibitors are always looking for ways to gain that “extra edge” needed to be competitive in the show ring. Many products are available that contain any combination of vitamins, minerals, probiotics, fat, etc. and all claim they can help improve the nutritional status of your steer or market heifer. However, we all realize that while these products may help eliminate deficiencies in the diet, they cannot take the place of good management and care. Starting out with a good quality animal is the foundation of any successful exhibitor. The second most important part is your calf’s basic nutritional needs, which are met with a high quality feed. Finally, the amount of time and effort you invest in your steer or market heifer project will ultimately determine how successful your project is.

On January 28, 2004 Elanco Animal Health made Optaflexx™, a new medicated feed additive for finishing cattle, commercially available. The active ingredient in Optaflexx™ is Ractopamine Hydrochloride which is the same compound in Paylean™ (labeled for use only in swine). Optaflexx™ has been shown in numerous research trials to increase rate of weight gain, improve feed efficiency, increase rib eye area, and increase red meat yield in cattle fed in confinement. Research scientists also noticed a slight increase in muscle conformation (visual assessment of muscling in the sirloin and round). Optaflexx™ cannot turn an average calf into a champion, but it may help improve the performance of your calf and slightly increase muscle conformation. The effects of the product occur at the cellular level and do not affect the hormonal status of the animal (not a steroid). The product is a medicated feed additive that is labeled only for use in steers or market heifers (not breeding heifers or bulls) during the last 28-42 days on feed.

The following questions address many of the common questions that may surface about feeding Optaflexx™ to show cattle. Much of the information was adapted from Elanco Animal Health educational materials.

- **How does Optaflexx™ work?**
  Optaflexx™ repartitions nutrients targeted for fat deposition as the animal approaches maturity to protein synthesis, which results in increased size of muscle fibers, and therefore more lean meat yield.

- **How will Optaflexx™ affect the performance of my steer?**
  Steers fed Optaflexx™ during the last 28-42 days of the feeding period have shown improved live weight gains by 10 to 21 pounds and improved feed efficiency by 14 to 21 percent.
• How will Optaflexx™ affect the carcass of my steer? Optaflexx™ has been shown to increase rib eye area up to 0.5 square inch, has no effect on backfat thickness, and does not affect marbling score or quality grade.

• Are there any possible negative effects of Optaflexx™ on my steer? Researchers have not observed any negative effects on animal conformation. However, in cattle with poor skeletal structure (post legged, straight fronted), the added muscle mass could cause these problems to be more evident.

• Why is Optaflexx™ labeled for use late in the feeding period? As cattle begin to mature during the final days of the feeding period, market steers or market heifers begin to deposit additional fat and less muscle. The active ingredient in Optaflexx™ increases muscle deposition and reduces the amount of fat deposition during the last 28-42 days of the finishing period. Young growing cattle will demonstrate little or no response when fed Optaflexx™ because most of their nutrients are already directed to protein synthesis rather than fat synthesis. Furthermore, feeding young cattle Optaflexx™ is off-label and illegal.

• Why is Optaflexx™ not labeled to be fed for more than 42 days? Research trials have shown that the effect of Optaflexx™ decreases rapidly after the first 35 days of feeding. Performance returns to the level prior to using Optaflexx™. The body essentially will become desensitized to the active ingredients in Optaflexx™. Most importantly, feeding longer than is recommended on the label is illegal!

• What happens to my market steer or market heifer when I stop feeding Optaflexx™? Approximately 4-8 days after Optaflexx™ is removed from the diet of the animal, performance begins to return to the level prior to using the product. The animal will begin to shift more to fat synthesis rather than muscle synthesis.

• Can I feed more than the recommended dosage? More is not better when feeding Optaflexx™! Research trials have shown that feeding Optaflexx™ at higher levels show little or no effect on animal performance or muscle deposition. Additionally, this would be off label use and illegal!

• What is the withdrawal period of Optaflexx™? There is no withdrawal period.

• Can I also use Optaflexx™ in my pigs, lambs, goats, etc.? NO! Optaflexx™ is approved by the FDA for use in cattle only. Any use in species other than cattle is illegal.

• Is Paylean™ different than Optaflexx™? Paylean™ is labeled for use in swine and Optaflexx™ is labeled for use in cattle. Both contain ractopamine hydrochloride but at much different concentrations. Remember it is illegal to feed either product to species other than what is listed on the label.

• Can I feed my breeding heifer or bull Optaflexx™? NO. The product is not approved for use in breeding animals. Studies have not been conducted to determine the effect Optaflexx™ may have on reproduction. Additionally, this would be off label use and illegal!
*All medicated feed additives are to be used in accordance with the FDA approved label. Extra-label use of medicated feed additives is strictly prohibited by federal law and no one has the authority to adjust the dose as labeled, including veterinarians.

This publication is an educational resource for market steer and market heifer exhibitors and does not serve as an endorsement by Texas AgriLife Extension. If you have additional questions please feel free to contact Jason Cleere at (979) 845-6931 or jjcleere@ag.tamu.edu. Additional information is also available from Elanco Animal Health 1-800-428-4441.