



## **LSU AgCenter Beef Cattle Fact Sheet**

Feeding Optaflex in the Beef Cattle Industry

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### **INTRODUCTION**

As the beef cattle industry redefines itself to better meet consumer needs and demands, there are new technologies and new products being developed to enhance this effort by improving production, performance and quality in all segments of the industry. Beef cattle producers have to make important management decisions on what inputs to wisely invest their money on to remain competitive and profitable even when cattle prices are good. Technologies and products increase average daily gain, improve feed efficiency and increase yield grade. Improvements in these areas have the potential to give producers the edge in possibly making a profit on a set of cattle. One new product, Optaflexx was approved in 2003 by the United States Food and Drug Administration for use in some beef cattle diets. Optaflex was the first product for cattle approved by the FDA that was evaluated for both meat and eating quality.

### **WHAT IS OPTAFLEX?**

Optaflexx is a feed ingredient fed to cattle during the final 28 to 42 days of the finishing period to increase live weight gain, improve feed efficiency and increase red meat yield while maintaining beef's natural taste, tenderness and juiciness. Optaflex improves nutrient utilization thereby allowing cattle to increase red meat yield on the same amount of feed. Optaflex, made by Elanco Animal Health (division of Eli Lilly and Company), is the trademark for ractopamine hydrochloride fed to cattle, is a beta-agonist. Beta-agonists repartition nutrients toward muscle tissue deposition. Ractopamine hydrochloride has been fed for a number of years in the pork industry under the Elanco trademark Paylean. The FDA has concluded that consumers would detect no differences in meat quality attributes of taste, tenderness, palatability and juiciness when they eat beef from cattle fed Optaflex. Also, the firmness and texture of beef are not impacted by the use of Optaflex. These studies were conducted with trained sensory panels at Iowa State University.

### **OPTAFLEXX GROWTH PERFORMANCE RESEARCH**

The research was conducted at many commercial feedlot research facilities across the United States during the fall, winter and spring of 2003. The growth performance of cattle fed Optaflex for the last 28 to 32 days of the finishing period were compared to cattle not fed Optaflex. Final live weights were heavier for Optaflex-fed cattle than for the control cattle. The average daily gain was higher for cattle fed Optaflex. Average daily gain was increased 9.5 percent and 17.4 percent over the control cattle for 100 mg/hd/day and 200 mg/hd/day, respectively. This resulted in an additional weight gain over control cattle of 8.0 lbs for cattle fed Optaflex at 100 mg/hd/day and 14.8 lbs for cattle fed 200mg/hd/day. Feed intake was not affected by Optaflex feeding. Feed efficiency and gain efficiency were improved by feeding Optaflex at both the 100 and 200 mg/hd/day levels. Compared to the control cattle, feed efficiency was improved 9.2 percent and 15.9 percent and gain efficiency was improved 9.9 percent and 17.9 percent at the 100 and 200 mg/hd/day levels, respectively.

### **OPTAFLEX CARCASS RESEARCH**

The carcass weights of cattle fed 100 mg/hd/day were 5.3 lbs heavier and cattle fed 200 mg/hd/day were 12.3 lbs heavier than those for the control cattle. Dressing percent was higher for cattle fed 200

mg/hd/day versus the control group. Twelfth rib fat thickness and percent KPH were not affected by Optaflex. Rib eye area was increased 0.1 and 0.3 square inches for cattle fed 100 and 200 mg/hd/day, respectively, compared to the cattle in the control group. Optaflex did not influence carcass marbling score, skeletal maturity, lean maturity or overall maturity. Also, Optaflex did not affect the incidence of dark cutting beef.

#### CONCLUSIONS

As a beef cattle producer that retains ownership of your cattle through the feedyard, whether you market your cattle on a live, hot carcass or grid basis, you may want to inquire about the possibility of feeding Optaflex. The cattle that were on the 2004-2005 Louisiana Calf to Carcass Program were fed Optaflex the final 42 days and it has been estimated that after the cost of the product, it netted producers an average of \$8.00 more per head marketed. Most grid programs reward producers for increased quality grades and increased red meat yield and discount cattle that are overfinished, low yielding or light muscled. By increasing red meat yield with no effect on marbling, Optaflex may have the potential to increase your profits on fed cattle.



