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## Summary

Implanting incoming feedlot heifers with Ralgro® or Synovex-H® increased weight gain an average of 9.4%. Reimplanting half way through the 119 day feeding period did not improve gain significantly. There were no differences between Ralgro and Synovex-H when used as the initial or second implant.

## Introduction

Research has consistently shown that implanting increases feedlot gains about 10% and feed utilization about 8%. Reimplanting steers midway through the finishing period increases rate of gain and feed efficiency an additional 4 to 5%. This trial was conducted because there is little research on reimplanting finishing heifers.

## Experimental Procedure

Two hundred eleven Brahman-cross heifers averaging 600 lbs were randomly allotted to one of the following seven implant treatments: 1) control (no implant); 2) initial Ralgro, no reimplant; 3) initial Ralgro, Ralgro reimplant; 4) initial Ralgro, Synovex-H reimplant; 5) initial Synovex-H, no reimplant; 6) initial Synovex-H, Ralgro reimplant; 7) initial Synovex-H, Synovex-H reimplant. All cattle were fed in the same pen and handled similarly throughout the feeding period. All heifers were individually identified and weighed at the beginning of the 119 day trial. Final weights were calculated from individual hot carcass weights and the average dressing percentage (62.7%) of the entire group. Heifers in the reimplant treatments were given the second implant midway through the feeding period. All data were analyzed by Least Squares Analysis of Covariance to remove the effects of variation in initial weight.

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## Results

The results are presented in Table 30.1. All implant treatments increased (P<.01) daily gain over the controls except for the single Ralgro implant (P=.08). There were no significant differences between any of the groups that received a single implant or that were reimplanted. Daily gain of the heifers receiving a single implant was 2.79 lbs vs. 2.86 lbs for those reimplanted. Heifers reimplanted with Synovex-H gained 2.89 lbs per day vs. 2.83 lbs per day for those reimplanted with Ralgro.

Table 30.1. Effect of Implanting on Performance of Feedlot Heifers.

Treatment	Initial implant	Reimplant	No. heifers	Initial wt.,lbs	Least square means, lbs			
					Final wt.	Carcass gain	Total gain	Daily gain
1	None	None	29	595	905	568	304	2.55 <sup>a</sup>
2	Ralgro	None	30	593	927	581	326	2.74 <sup>al</sup>
3	Ralgro	Ralgro	28	599	937	587	335	2.82 <sup>b</sup>
4	Ralgro	Synovex-H	31	604	942	591	341	2.87 <sup>b</sup>
5	Synovex-H		31	610	939	589	338	2.84 <sup>b</sup>
6	Synovex-H		29	601	940	589	338	2.84 <sup>b</sup>
7		Synovex-H		599	948	594	347	2.91 <sup>b</sup>

abc Means with different superscripts are significantly different (P<.01).