

## SELF-FEEDING OATS TO CALVES FROM WEANING TO MARKET

North Dakota produces both high quality feed oats and top quality calves. Research work to date shows that the returns from feed grain can be more than doubled if the grain is marketed as beef.

This trial, in its second year, compares feeding oats either whole, ground or rolled to calves from weaning to slaughter. The oats was self-fed while the hay and minerals were hand fed. The rations as fed are shown in Table 7. A charge of \$2 per ton for rolling or grinding was added to the cost of these rations. The calves were worked up on feed (14 days) until they were getting 7 pounds per head per day before they had access to the self-feeders. One steer was removed from the ground oats lot due to a bloat condition. Table 6 shows the results for 1970-71 while Table 8 shows the two year combined results for the whole and rolled oat lots.

**Table 6. Data from 1970-71 Oats Trial**

<b>Data on:</b>	<b>Whole Oats</b>	<b>Rolled Oats</b>	<b>Ground Oats</b>
Number of head per lot	7	7	6
Initial weight per lot	3025	3015	2640
Average per head	432.1	430.7	440.0
Final weight per lot	7455	7710	6590
Average per head	1065.0	1101.4	1098.3
Gain per lot	4430	4695	3950
Average per head	632.8	670.7	658.3
Days fed	331	331	331
Average daily gain per head	1.91	2.03	1.99
Hot carcass weight per head	618.0	656.4	652.0
Average dressing percent <sup>1/</sup>	58.03	59.60	59.40
Average grade	10.10	10.14	8.33
Average carcass value <sup>2/</sup>	\$301.96	\$320.12	\$314.38

<sup>1/</sup> Choice – 10, 11, 12, good – 7, 8, and 9.

<sup>2/</sup> Choice @ \$49.50, good @ \$47.00.

**Table 7. Ration Fed Per Head in 1970-71 Trial**

	<b>Whole Oats 7 Head</b>	<b>Rolled Oats 7 Head</b>	<b>Ground Oats 6 Head</b>
<b>Ration per head per day:</b>			
Oats (lbs.)	15.01	14.46	14.22
Tame hay (lbs.)	1.73	1.73	1.73
Alfalfa (lbs.)	1.97	1.97	1.97
Minerals (lb.)	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total	18.91	18.36	18.12

**Table 8. Two Year Results with Whole vs. Rolled Oats**

Data on:	Whole Oats		Rolled Oats	
	1969-70	1970-71	1969-70	1970-71
Number of head per lot	8	7	7	7
Initial weight per head	370.6	432.1	370.0	430.7
Final weight per head	1005.6	1065.0	1060.7	1101.4
Days fed	314	331	314	331
Average daily gain per head	2.02	1.91	2.20	2.03
Hot carcass weight – per head	571.9	618.0	636.1	656.4
Average dressing percent	56.87	58.03	59.97	59.60
Average grade	7.38	10.10	9.29	10.14
Cost per hundred – pound gain	\$14.26	\$16.03	\$13.19	\$15.37

**Summary**

This trial clearly shows that calves can be economically self-fed from weaning to slaughter using only oats and hay plus minerals. Although rolled oats has given the best returns of the three rations fed, rate of gain, efficiency, and carcass quality have been satisfactory in all lots. Efficiency was improved in both the ground and rolled oat lots over whole oats by about 80 pounds of feed per one hundred pounds gain. The carcass grades on the steers fed ground oats averaged lower than expected for some unknown reason.

Looking at the two year results for whole vs. rolled oats, we see that feed consumption was similar in both years, averaging slightly less than 2 percent grain intake per one hundred pounds of body weight.