

## HALF WHEAT - HALF BARLEY RATIONS COMPARED WITH ALL-BARLEY RATIONS IN THE FEED LOT

A feeding trial was begun in June, 1964, to compare rations made up of half wheat and half barley with all-barley rations. A second trial was continued again in 1965.

The trial included two levels of feeding, 6 pounds, and 10 pounds of concentrate per day plus 1 pound of supplement and corn silage free choice.

Yearling Hereford steers used in this trial were implanted with 36 mg. stilbestrol at the beginning of the trial.

The animals were sold on a grade and yield basis and their carcasses compared and evaluated.

Table 31 summarizes data from the feed lot performance of animals in this trial the second year.

<b>Table 31. Gains, Feed Costs and Carcass Data in a Trial Comparing All-Barley and Half-Barley Half-Wheat Ration at Two Feeding Levels for 1965.</b>				
	Barley 5 Lbs. Wheat 5 Lbs.	Barley 10 Lbs.	Barley 3 Lbs. Wheat 3 Lbs.	Barley 6 Lbs.
Initial Weight	424.0	424.5	425.6	424.5
Final Weight	1003.0	1004.5	1009.4	975.5
Gain	579.0	580.0	588.8	551.0
Days Fed	257	257	257	257

Average Daily Gain	2.25	2.26	2.27	2.14
Feed/100 Pounds Gain	1436.9	1482.2	1587.0	1606.8
Total Feed Cost/ Head	\$77.99	\$71.05	\$70.41	\$62.43
Feed Cost/100 Pounds Gain	\$13.47	\$12.25	\$12.06	\$11.33
Average Grade	7 Choice 2 T. Good 1 A. Good	5 Choice 5 A. Good	3 Choice 1 T. Good 4 A. Good	5 Choice 1 T. Good 4 A. Good
Average Dressing Percent	56.7	56.6	56.1	55.6
Average Carcass Weight	569.2	568.4	565.8	542.5
Average Carcass Value/100	\$39.45	\$38.75	\$38.44	\$38.85
Average Carcass Value	\$224.55	\$220.26	\$217.49	\$210.57
Carcass Value Less Feed Cost	\$146.56	\$149.21	\$147.08	\$148.14

**Table 32. Average Daily Ration and Cost of Feedstuffs in the Trial Comparing All-Barley Rations With Half-Wheat Half-Barley Rations for 1965.**

Feedstuff	Price Per 100 Lbs.	Barley-Wheat 10 Lb. Level	All Barley 10 Lb. Level	Barley-Wheat 6 Lbs. Level	All Barley 6 Lb. Level
Corn Silage	\$0.36	21.88	22.94	28.19	26.39
Alfalfa Hay	\$0.90	1.0	1.0	1.0	1.0
Rolled Barley	\$1.77	4.24	8.49	3.0	5.46
Rolled Wheat	\$2.50	4.24	--	3.0	--

Supplement	\$3.42	1.0	1.0	1.0	1.0
------------	--------	-----	-----	-----	-----

Tables 33 and 34 average the two year's results on gains, feed costs and carcass data in the trial comparing all-barley and half-barley half-wheat rations at two levels of feeding for 1964 and 1965.

<b>Table 33. Two years Results on Gains Feed Costs and Carcass Data in the Trial Comparing All-Barley and Half-Barley, Half-Wheat at the 10 Pound Level of Feeding for 1964 and 1965.</b>						
	Barley 5 Lbs.-Wheat 5 Lbs.			Barley 10 Lbs.		
	1964	1965	Average	1964	1965	Average
Initial Wt.	580.5	424.0	502.3	585.5	424.5	505.0
Final Wt.	1040.5	1003.0	1021.8	1032.0	1004.0	1018.0
Gain	460.0	579.0	519.5	446.5	580.0	513.3
Days Fed	196	257	226.5	196	257	226.5
Av. Daily Gain	2.35	2.25	2.30	2.28	2.26	2.27
Feed Per 100 Lbs. Gain	1795.7	1436.9	1616.3	1825.9	1482.2	1654.1
Total Feed Cost/Hd.	\$65.41	\$77.99	\$71.70	\$58.89	\$71.05	\$64.97
Feed Cost/100 lbs. Gain	\$14.22	\$13.47	\$13.85	\$13.19	\$12.25	\$12.72
Av. Grade	8 Cho. 1 U.B. Gd. 1 Gd.	7 Cho. 2 T. Gd. 1 A. Gd.	15 Cho. 5 Gd.	8 Cho. 2 D. Gd.	5 Cho. 5 A. Gd.	13 Cho. 7 Gd.
Av. Dressing Percent	55.9	56.7	56.3	56.5	56.6	56.55
Av. Carcass Wt.	581.7	569.2	525.5	583.1	568.4	575.8

Av. Carcass Value/100	\$35.14	\$39.45	\$37.30	\$34.74	\$38.75	\$36.75
Av. Carcass Value	\$204.43	\$224.55	\$214.49	\$202.55	\$220.26	\$211.41
Carcass Value Less Feed Cost	\$139.02	\$146.56	\$142.79	\$143.66	\$149.21	\$146.44

**Table 34. Two Years Results on Gains, Feed Costs and Carcass Data in the Trial Comparing All-Barley and Half-Barley Half-Wheat at the 6 Pound Level of Feeding for 1964 and 1965.**

	Barley 3 Lbs.-Wheat 3 Lbs.			Barley 6 Pounds		
	1964	1965	Average	1964	1965	Average
Initial Wt.	591.0	425.6	508.3	585.5	424.5	505.0
Final Wt.	1010.0	1009.4	1009.7	1030.0	975.5	1002.8
Gain	419.0	583.8	501.4	444.5	551.0	497.8
Days Fed	196	257	226.5	196	257	226.5
Av. Daily Gain	2.14	2.27	2.21	2.27	2.14	2.21
Feed Per 100 Lbs. Gain	2035.5	1587.0	1811.3	2041.0	1606.8	1823.9
Total Feed Cost/Hd.	\$55.59	\$70.41	\$63.00	\$53.63	\$62.43	\$58.03
Feed Cost/100 lbs. Gain	\$13.27	\$12.06	\$12.67	\$12.07	\$11.33	\$11.70
Av. Grade	7 Cho. 3 Gd.	3 Cho. 1 T. Gd. 5 A. Gd.	10 Cho. 9 Gd.	8 Cho. 1 D. Gd. 1 Gd.	5 Cho. 1 T. Gd. 4 A. Gd.	13 Cho. 7 Gd.
Av. Dressing Percent	56.6	56.1	56.4	54.7	55.6	55.2

Av. Carcass Wt.	571.7	565.8	568.8	563.7	542.5	553.1
Av. Carcass Value/100	\$34.90	\$38.44	\$36.67	\$34.92	\$38.85	\$36.89
Av. Carcass Value	\$199.52	\$217.49	\$208.51	\$196.86	\$210.57	\$203.72
Carcass Value Less Feed Cost	\$143.93	\$147.08	\$145.51	\$143.23	\$148.14	\$145.69

The two years results from this trial indicate that wheat has about the same value as barley, pound for pound, when not more than half of the ration is wheat. When the ration using half-wheat is compared to an all-barley ration the rate of gain is about the same, and the cost per one hundred pounds gain is slightly less with the all-barley ration.

---

[Back to 1965 Research Reports Table of Contents](#)

[Back to Research Reports](#)

[Back to Dickinson Research Extension Center \(http://www.ag.ndsu.nodak.edu/dickinso/\)](http://www.ag.ndsu.nodak.edu/dickinso/)

[Email: drec@ndsuent.nodak.edu](mailto:drec@ndsuent.nodak.edu)

---