

Time Required to Change Yearling Steers from Roughage to High Grain Ration;  
Using Stilbestrol as an Implant and In the Feed; Worming Yearling Steers

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Sixty yearling steers were removed from bluestem pasture October 29, 1965 and trucked six miles to the KSU beef cattle research barn where they received prairie hay and had access to a self-feeder of 50% bran and 50% dry rolled sorghum grain. October 30 they were weighed and divided into three lots of 20 steers each.

The experimental treatment for each lot was:

Lot 21 - Change from mixture of 50% wheat bran and 50% dry rolled sorghum grain to concentrate mixture of 99% dry rolled sorghum grain in seven days with prairie hay unrestricted.

Lot 22 - Same as Lot 21 except change in 14 days.

Lot 23 - Same as Lot 21 except change in 21 days.

A supplement that supplied calcium, trace minerals, antibiotic, vitamin A and stilbestrol (10 mg per steer daily) was included in the concentrate mixture at 1 percent (20 lbs. per ton).

Ten steers in each lot of 20 were implanted with 15 mg. of stilbestrol. Half of the implanted steers and half of the steers not implanted in each lot (total of 10 per lot) were treated with a warming agent, thiabendazole, (3 grams per 100# body wt.) by drenching.

The test was from October 30 to November 19, after which all were fed together until marketed April 17, 1965.

#### Observations

All lots changed successfully to a high grain ration--in 6, 11 and 16 days. The 16-day change produced highest and most efficient gains. However, where roughage or roughage substitutes are limited or expensive, changing to a high grain ration may be accomplished in less time. No digestive difficulties were observed, however, one steer in the 6-day group and one steer in the 16-day group had foundered when marketed 170 days later.

Neither the worming treatment nor stilbestrol implants significantly effected gains.

	Wormed	Not wormed	Implanted with 15 mg. stilbestrol	Not implanted
No. of steers	30	30	30	30
Daily gain (170 days)	3.31	3.42	3.32	3.41

Table 17  
Time Required to Change Cattle to High Grain Ration

Days to change from 50% bran, 50% dry rolled sorghum grain ration to 99% rolled sorghum grain, prairie hay unrestricted.	6	11	16
Lot number	21	22	23
No. steers per lot	20	20	20
Initial wt. per steer, lbs.	747	740	742
Performance first 20 days on test, October 30 to November 19, 1965			
Daily gain per steer, lbs.	4.5	4.1	5.2
Feed consumed per steer daily, lbs.			
concentrate mixture	22.	20.	22.
prairie hay	1.7	1.7	1.7
Daily gain, October 30 to April 17, 1965, 170 days total (Steers fed together after first 20 days).	3.3	3.3	3.5