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Weaning Calves Early

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Summary

Growth rate of 38 calves after being weaned at an average of 91.6 days was compared with growth rate of 37 calves averaging 91.2 days of age and continuing to nurse their mothers the same period.

Average daily gains (lbs.) were 3.09 for the early-weaned calves and 3.23 for those nursing their mothers the same 128 days. TDN consumption (lbs.) for each early-weaned calf and its mother for the 128-days from May 22 to September 27 was 2,714.8, and 3,215.2 for nursing calves and their mothers.

Introduction

Confinement systems for managing beef cows might lead to cheaper calf production if the calves were weaned early to reduce feed required by their mothers. That idea was tested during the summer of 1973 and again during the summer of 1974.

Experimental Procedure

Seventy-five part Simmental calves, 45 bulls and 30 heifers, born to cows in confinement were used. Calves were randomly assigned by age and sex to either an early-weaning group or a continued nursing group. Five times during the test (May 22; June 5 and 6; July 10 and 25) calves approximately 90 days of age were weighed and those weaned early were separated from their mothers. All calves were weighed again September 27 when the trial ended.

All calves had access to creep feed (table 3.1) throughout the trial.

Calf performance (table 3.3) was measured from each weighing date to September 27. Creep feed and TDN intake were measured from May 22 to September 27.

May 22 all cows were divided into four groups: dry cows, lactating cows to have calves weaned early, and two groups of lactating cows that would continue to nurse calves throughout the test. When a calf was weaned, its dam was moved to the group of dry cows. Dry cows received approximately 60% of the TDN intake of the lactating cows. Feed and TDN intake during the trial (table 3.2) are for total consumption from May 22 to September 27, for both groups.

Results and Discussion

Calves weaned early had lower ADG rates (3.09) than calves that continued to nurse their mothers (3.23). However, it took fewer pounds of TDN per pound of growth for the early weaned calves (8.33) than for calves that continued to nurse their mothers (9.40), considering TDN intake by both cows and calves.

Table 3.1. Creep Ration for Nursing and Early-weaned calves.

Ingredient	Lbs.
Rolled oats	1275
Flaked milo	359
Dry molasses	150
Soybean oil meal	82
Salt	10
Aurofac-10	14
Alfalfa crumbles	90
Pre-mix ^a	20
Soy oil	30

^aPre-mix, lbs. per 100 lbs: soybean oil meal, 444; ground oats, 443; vitamin A, 33; Auremycin-10, 30; trace mineral, 50.

Table 3.2. Feed Consumed during 128 Days (5/22-9/27) by Indicated Beef-cow Dams.

Ingredient	Dams of calves weaned early		Dams nursing calves	
	Total intake (lbs.)	TDN intake (lbs.)	Total intake (lbs.)	TDN intake (lbs.)
Alfalfa	1534	759.2	2103	1040.8
Rolled milo	1285	925.1	1988	1431.3
SBOM	151	110.0	155	112.8
Total		1794.3		2584.9

Table 3.3. Performances of Early-weaned and Nursing Calves Compared

	Early weaned	Nursing
No. of calves	38	37
Age when first weighed (days)	91.6	91.2
Weight when first weighed (lbs.)	240.7	248.2
Weight September 27 (lbs.)	566.6	590.4
Total gain (lbs.)	325.9	342.2
A.D.G. (lbs.)	3.09	3.23
Creep feed/calf (lbs.)	1380	945
TDN in creep feed (lbs.) eaten	920.5	630.3