



Calf Starter Research Fatty Acids for Starter and Grower Feeds

A blend of short chain fatty acids, medium chain fatty acids, and essential fatty acids has been shown to improve calf performance. The mode of action is through increased development of the intestinal mucosa and pancreas, antimicrobial properties of the fatty acids, and supply of essential fatty acids that are deficient in the diet. This paper reports the results of some of that research. The product is marketed for starter feeds under the name of **A-Boost**. In three starter trials, 48 calves were purchased and randomly assigned to starters with and without **A-Boost** each with similar protein (18% CP), mineral, vitamin, and decoquinatone levels. Starters were fed free choice throughout the trial. Calves were fed milk replacer twice daily at the rate of 1 lb of MR diluted into 1 gallon of warm water per calf daily. The milk replacer was 20% protein, 20% fat, and contained decoquinatone. The calves were weaned at 6 weeks of age. Additionally, two 56-day trials were conducted with weaned calves from 2 to 4 months of age. These calves were fed 18% CP growers with and without **A-Boost** blended with 5% chopped timothy hay.

In both starter (Table 1) and grower trials (Table 2) calves fed **A-Boost** had greater average daily gains, feed efficiency, and changes in hip widths with no change in starter intake or body condition scores (BCS).

Table 1. Performance of calves fed A-Boost or a control starter.

Item	Daily gain, lb/day	Starter intake, lb/day	Feed efficiency, gain/feed	Hip width change, lb/day	BCS change	Days with scours
Trial 1						
Control	1.07	1.93	0.469	1.1	0.3	6.6
<i>A-Boost</i>	1.24	2.20	0.524	1.4	0.3	5.9
Trial 2						
Control	1.40	1.37	0.667	1.2	0.5	4.2
<i>A-Boost</i>	1.50	1.38	0.711	1.5	0.5	3.5
Trial 3						
Control	1.32	1.24	0.670	1.3	0.7	7.3
<i>A-Boost</i>	1.45	1.26	0.729	1.7	0.7	4.9
Average						
Control	1.26	1.51	0.602	1.20	0.50	6.0
<i>A-Boost</i>	1.40	1.61	0.654	1.53	0.50	4.8
Change	10%	--	8%	27%	--	-21%

Table 2. Performance of calves fed A-Boost or a control grower.

Item	Daily gain, lb/day	Starter intake, lb/day	Feed efficiency, gain/feed	Hip width change, lb/day	BCS change
Trial 1					
Control	2.09	5.97	0.35	2.0	0.3
<i>A-Boost</i>	2.31	5.92	0.39	2.1	0.3
Trial 2					
Control	2.12	6.06	0.35	2.0	0.3
<i>A-Boost</i>	2.33	6.13	0.38	2.1	0.3
Average					
Control	2.11	6.01	0.35	2.00	0.30
<i>A-Boost</i>	2.32	6.03	0.39	2.10	0.30
Change	10%	--	10%	5%	--