



## *Calf Starter Research Comparison of Starter Form and Composition*

Calves were purchased and randomly assigned to the one of four calf starters with similar protein (18% CP), energy, mineral, vitamin, and drug (11.35 mg/lb Deccox<sup>®</sup>) contents. Starter A was a complete pellet. Starters B, C, and D were textured starters made from steam-flaked corn, oats, a protein pellet, liquid molasses, and fat. Starter B contained 5% liquid molasses. Starter C contained 10% liquid molasses. Starter D contained 5% liquid molasses plus chocolate, sugar, and lactose to equal approximately the same sugar content as 5% liquid molasses. Calves were fed their 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% all milk protein protein, 20% fat, and contained Deccox<sup>®</sup> (22.7 mg/lb). The calves averaged 88 lb at the beginning of the trial and were weaned at 6 weeks of age.

There were no significant differences in gain or starter intake. Calves fed starters A and B had greater numeric gains and starter intakes by week 6. By week 8, calves fed starter B had the greater numerical gains. Each of the textured starters supported greater numeric gains post-weaning than the complete pellet. Calves fed starters B, C and D required more medical treatments and had higher fecal scores.

These results are consistent with other published research that show little difference between a complete pelleted or textured starter for calves under 8 weeks of age. These data do not support the use of high sugar levels from molasses or other sources. Ingredient costs will differ in different regions. Typically, a complete pelleted starter would be the least expensive to make and the more molasses or other sugars used will increase the cost of a starter, suggesting starters A and B would have been the most cost-effective.

Calf Starter	Daily Gain, lb		Daily Starter Intake, lb		Total Medicine Treatments 0-8 wk	Fecal Score, 1=Normal 5=Severe 0-8 wk
	0-6 wk	0-8 wk	0-6 wk	0-8 wk		
<b>A, complete pellet</b>	1.03	1.22	1.05	1.81	4.27	1.46
<b>B, 5% molasses</b>	1.03	1.26	.98	1.78	4.92	1.56
<b>C, 10% molasses</b>	.96	1.22	.84	1.59	6.36	1.66
<b>D, 5% mol + sugars</b>	.93	1.22	.86	1.65	5.40	1.64

(RRC0030)