



A COMPARISON OF A-MAX CONCENTRATE AND DIAMOND V XP ON MILK PRODUCTION IN DAIRY COWS.

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Introduction: Feeding yeast to dairy cattle has become common place. Yeast cultures: the media and nutrients produced after the yeast have been fermented on a specific substrate. It contains some live yeast cells, however, the counts are usually variable and not guaranteed. In addition, the degree to which the yeast itself has been fermented on the substraight will dictate the relative proportion of yeast cells and media (substrate) that will be present in the product. In addition, the type of drying process and/or final product preparation (extrusion) can dictate the total count and viability of the yeast in the final product.

Objective: To compare the affect of A-MAX™ Concentrate and Diamond V® XP™ on milk production of lactating dairy cows.

Materials and Methods: The study design was a switch back and conducted with cows housed in a freestall area divided into two equally-sized groups, fed on a group basis. There was a two-week preliminary period where all cows received a TMR with no yeast. During the next 28 days, half of the cows received A-MAX Concentrate (2 oz/d) and the other half received Diamond V XP(2 oz/d). During the next 28-day period, those receiving Diamond V were switched to A-MAX and those receiving A-MAX were switched to Diamond V. The final 14-day period, all cows received the TMR with no yeast Milk production was collected on all animals on a daily basis and intakes were recorded on a group basis. Data were analyzed by a split-plot-in-time analysis for repeated measures within each period.

Results: No significant milk production differences were observed between yeast treatments. However, during the first test period, cows receiving A-MAX produced 1.7 lb. more milk than those receiving Diamond V. During the second period, those receiving A-MAX produced 1.1 lb. more than those receiving Diamond V. In addition, cows receiving A-MAX were more persistent in milk production than those receiving Diamond V. When the yeast products were removed, both groups dropped in production during the post-treatment period.

Conclusion: In the present study, A-MAX Concentrate performed equally and numerically better than Diamond V XP in milk production. Assuming a \$13.00/cwt of milk, feeding A-MAX would result in \$.22/cow/day more return than feeding Diamond V.

Results Tables:

Table 1. The effect of A-MAX™ and Diamond V® yeast products on milk production of dairy cows.			
Variable	Group A	Group B	% difference from D-V (lb)
Blocking criteria			
n	37	38	
305d ME	23,573	23,700	
Lactation No.	3.2	3.3	
Days in Milk	66.8	60.7	
Preliminary Period (2 weeks)			
Treatment	None	None	
DMI (lb)	51.5	51.1	
Milk (lb)	96.9	96.2	
Period 1 (4 weeks)			
Treatment	Diamond V	A-MAX	
DMI (lb)	50.9	51.2	+3
Milk (lb)	92.2	93.9	+1.7
Period 2 (4 weeks)			
Treatment	A-MAX	Diamond V	
DMI (lb)	49.7	49.3	+4
Milk (lb)	90.1	89.0	+1.1
Post Period (2 weeks)			
Treatment	None	None	
DMI (lb)	48.4	48.6	
Milk (lb)	83.2	82.5	

