



## Milk Replacer Research Akey White Gold Compared To Other All-Milk MR

Calves were purchased and randomly assigned to the *Akey White Gold* or one of 3 commercial all milk protein milk replacers (MR). All calves had access to a constant supply of fresh water and calf starter. Calves were fed their respective MR twice daily at the rate of 1 lb of MR diluted into 1 gallon of warm water per calf daily. All milk replacers were 20% protein, 20% fat, and contained Deccox<sup>®</sup> (22.7 mg/lb). The calves averaged 92 lb at the beginning of the trial and were weaned at 6 weeks of age.

Performance data (0 - 6 weeks) are tabulated below. Economic data are tabulated on the reverse side of this page. Daily gains were 15 to 23% greater and starter intake was 17 to 26% greater in calves fed the *White Gold* MR compared to the other MR. Feed efficiency was 5 to 12% better in calves fed *White Gold* MR. There were fewer medical treatments and a better scour score in calves fed *White Gold* MR compared to calves fed commercial MR B and C. The value of gain and value over starter and medicine costs were \$8 to \$13 per calf greater when *White Gold* MR was fed, while the feed cost per lb of gain was 11 to 16% better or \$.10 to \$.15/lb less compared to the other MR. This trial and previous trials (see reverse side of this page) show that calves fed *White Gold* MR perform better than calves fed other commercially available MR even though the levels of nutrients and ingredients look similar. The quality of the proteins (amino acids) and fatty acids are important reasons why calves fed *White Gold* MR outperformed calves fed the commercial MR.

**Table 1. Performance of calves fed 4 different milk replacers**

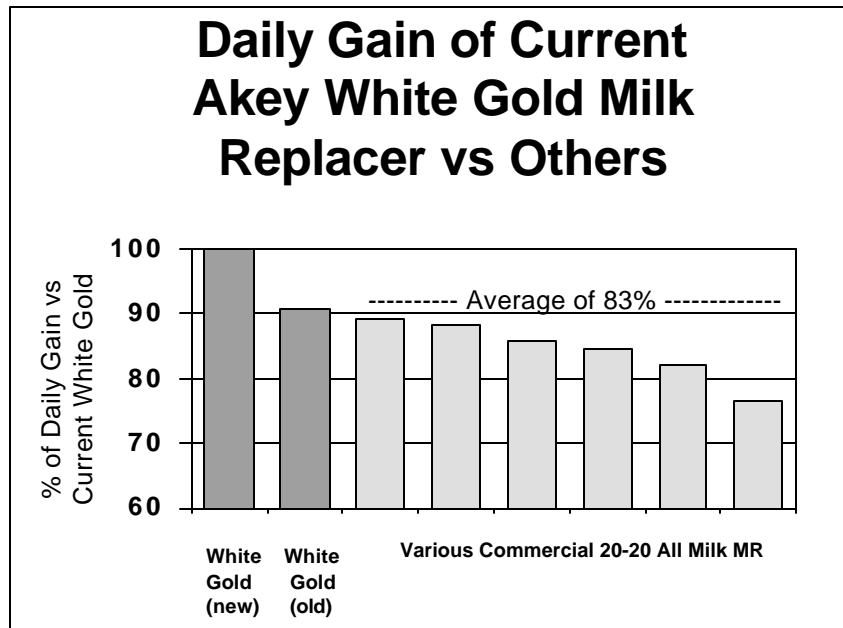
Milk Replacer	Daily Gain, lb	Total Gain, lb	Total Starter Intake, lb	Feed Efficiency, MR+starter/Gain	Medicine Treatments Per Week	Fecal Score, 1=Normal 5=Severe
<i>Akey White Gold</i>	1.05	44.1	44.9	1.97	1.03	1.42
Commercial MR A	.91	38.2	37.5	2.08	1.04	1.43
Commercial MR B	.89	37.4	35.4	2.08	1.30	1.53
Commercial MR C	.85	35.7	38.3	2.25	1.18	1.55

**Table 2. Economic evaluation of milk replacers**

Milk Replacer	Value of Gain, \$/head	Value of Gain over Starter&Medicine, \$/head	Feed Costs/lb gain, \$/lb
<i>Akey White Gold</i>	\$66.15	\$47.18	\$.817
Commercial MR A	\$57.33	\$39.12	\$.919
Commercial MR B	\$56.07	\$34.86	\$.937
Commercial MR C	\$53.55	\$34.04	\$.974

Assumed costs: \$.15/lb for the starter, \$.70/lb for the MR, \$2/medicine treatment, and \$1.50/lb of calf gain.

Recently we introduced our current formulation of Akey White Gold that supports 9% greater gains than our old formulation. Prior to developing our new formulation, we compared various commercial all milk protein MR to our original White Gold MR. In each trial we have observed improved gains and overall performance, plus better economics of gain vs other commercial MR. The figure below shows the difference in daily gains among our old White Gold MR and 6 different 20% (all milk) protein, 20% fat MR relative to our current White Gold MR. The differences in daily gains among the various MR are large and economically significant.



(RRC0011)