

## Improve Milk Fat to Improve Profitability

Milk fat prices are high. Based on internal modeling, year over year milk fat prices and industry outlook along with positive consumer sentiment toward high fat dairy adds to many forecasters' predictions that this trend will continue. Still, rising protein costs have producers searching for opportunities to secure predictable feed costs while also ensuring consistent milk and component production—**Is this a situation where feeding a supplement that modifies rumen fermentation makes sense?**

*Dr. Chris Canale, Cargill Technical Service Lead, shares his team's research on AAlphaTek, a supplement that modifies rumen fermentation in dairy rations resulting in higher milk fat and energy-corrected milk yield, and income over feed cost.*

Producers are keenly aware of the current economic return from producing more milk fat. Cash for milk fat yield is high – and has the potential to stay high. If you are trying to capitalize on the fat market, you are most likely dealing with expensive and rising ingredient costs. Improving income over feed cost through increased milk fat yield involves changing both fat yield and milk fatty acid composition — **This is where feeding a supplement like AAlphaTek makes sense.**

AAlphaTek offers an easy way to improve income over feed costs and is backed by multiple research trials and industry use. AAlphaTek modifies rumen bacteria to enhance protein supply to the intestine; the result is an improved amino acid supply capable of increasing milk fat yield.

Cows producing 75 to 85 pounds of milk responded positively to AAlphaTek supplementation. In controlled experiments, cows in this targeted group increased milk fat and energy-corrected milk yield compared to cows not supplemented with AAlphaTek. If your cows qualify you can expect similar results – an increase in milk fat yield.

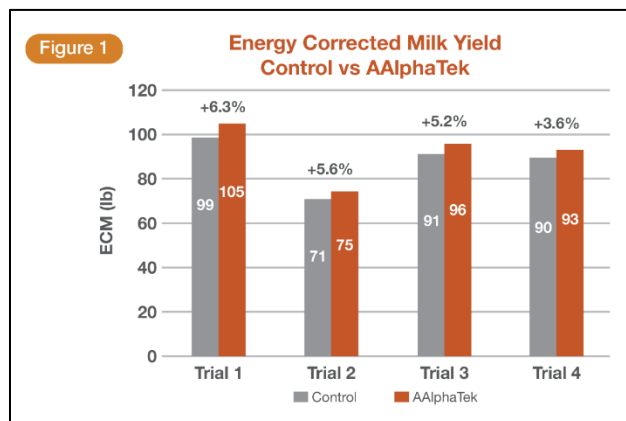
### The Economics

- Given current milk fat pricing, the average income over feed cost across trials was at \$0.20 to \$0.30/head/day
- A 4:1 return on investment<sup>1</sup>

## AAlphaTek Feeding Trials

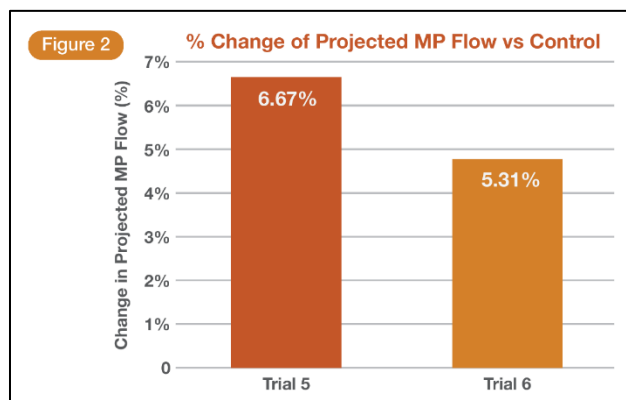
### Increases in Energy Corrected Milk Yield

In research trials with lactating cows, an increase in energy corrected milk yield was showed when AAlphaTek was incorporated into the diet.



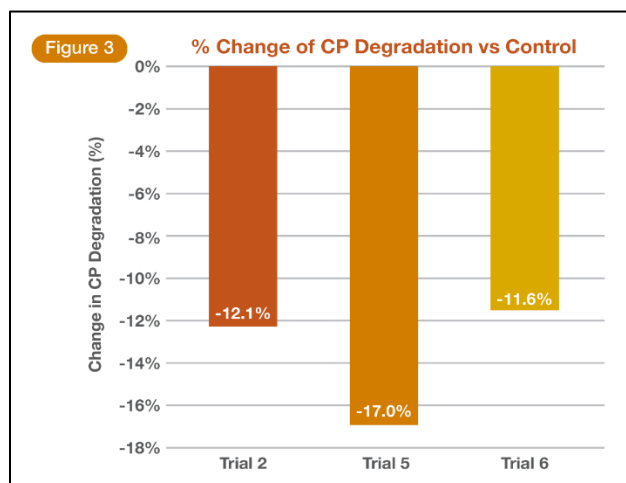
### Increases Flow of Metabolizable Protein (MP) from the Rumen

Reducing ruminal degradation of protein sources increases the flow of MP to the cow's small intestine.



### Reduces Protein Degradation in the Rumen

Supplementing with AAlphaTek shifts rumen degradable protein (RDP) to rumen undegradable protein (RUP) increasing bypass protein, or RUP, concentration of diet.





## **Our nutritional recommendation:**

### **Recommended Feeding Rate**

AAAlphaTek is designed to be added to a ration at the rate of 0.1 lbs./head/day. The observational period is between 30 to 60 days for the effects to milk fat yield.

### **Recommended Use**

1. In diets high in RDP, keep diet formulation similar and incorporate AAAlphaTek into the diet. The net result is an increase in the flow of MP to the hindgut to support added production.
2. Where expensive RUP sources are used, there is an opportunity to reduce the supplemental protein cost by making greater use of RDP sources. The net result is a similar flow of MP to the hindgut at a lower cost.

**Join the 150,000 cows already benefiting from AAAlphaTek. Contact your local nutritionist or feed mill to learn more.**

[Learn More About AAAlphaTek](#)

Proprietary Data from the following – Trial 1: Plymouth AAAlphaTek Trial (2004); Trial 2: Nottingham AAAlphaTek Trial (1999); Trial 3: RD2101 AAAlphaTek Trial (2021); Trial 4: Proprietary Data. RD2102 AAAlphaTek Trial (2021); Trial 5: Barcelona AAAlphaTek Trial (2004); Trial 6: West Virginia University AAAlphaTek Trial (2008).

<sup>1</sup> Proprietary data from trials 1, 2, 3 and 4 and two other field demonstrations not shown.