

# TECHNICAL BULLETIN

## DAIRY



## WHY SHOULD WE FEED LIQUID SUPPLEMENTS WITH TODAY'S MILK PRICES?

### Key point: sugar supplementation increases value of milk components

Many dairy producers have already experienced the pain of low milk prices, but there is still hope on the horizon. The good news is our milk fat price is still strong, and cows with good milk components can certainly help producers generate more profits.

Numerous studies have shown that dietary liquid sugar supplementation is a feasible way to help increase milk component yields. A meta-analysis by independent scientists was performed on a database of 24 published scientific research trials. The study found that dietary sugar supplementation increased milk fat and protein yields, and the optimal response was observed when total dietary sugar is between 6.75 to 8% of DMI. Specifically, cows producing more than 74 pounds of milk **had 0.18 pounds increase of milk fat, 0.2 pounds increase of milk protein, and 4.7 pounds increase of 3.5% FCM.**

In January 2016, the advanced **component prices are \$3.03/lb. and \$1.25/lb. for milk fat and protein,** respectively. Below is an illustration of how sugar supplements may increase the value of milk components, based on the above meta-analysis results.

- Feeding sugar supplements to cows producing more than 74 pounds milk are expected to have \$0.55 additional income for fat (0.18 lb. increase of milk fat x \$3.03/lb. fat = \$0.55) and \$0.25 additional income for protein (0.2 lb. increase of milk protein x \$1.25/lb. fat = \$0.25), which is a **total of \$0.80/cow/day added income** (\$0.55 + \$0.25 = \$0.80).
- If we feed QLF product while replacing some other ingredients such as protein or fat sources, the additional cost for liquid supplements should be less than \$0.10/cow, considering also the cost for increased DMI at \$0.16 (1.32 lb. increase in DMI x \$0.12/lb. DM = \$0.16), which is a **total cost of \$0.26/cow/day** (\$0.10 + \$0.16 = \$0.26).
- Therefore, by considering merely the increased value of milk complements, feeding sugar supplements in cows producing more than 74 pounds milk can help generate an **additional net income of \$0.54/cow/day** (\$0.80 – \$0.26 = \$0.54). The actual net return would be much higher because we have not considered the increased milk volume, improved cow health, enhanced feed conditioning, and reduced feed shrink in this calculation.

In short, dietary liquid sugar supplementation is a feasible way to help increase milk component yields and values, especially in today's tough milk market. Sugar supplements are expected to generate an additional net income of 54 cents per cow per day for medium to high producing dairy cows.