

Milking Frequency – How Often For Your Herd?

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Progressive dairy producers are always looking for new or different feeding programs, mastitis prevention and treatment procedures, and other herd management practices that can increase milk production. While the effect on milk production it is important, it is also important to consider the profitability of the different practices. A practice that I believe can have a significant impact on both milk production and profitability is the number of times a day cows are milked.

Herds have traditionally been milked two times a day. Producers who have increased that number to three times a day have usually obtained a milk production response of about 10-15%. A summary of 40 research trails with Holsteins conducted over several years revealed an average increase of about 8 pounds milk per cow per day by milking 3x versus 2x. The profitability of milking 3x, however, was not calculated or estimated in those trials (at least it was not reported). I suspect that many producers who are milking 3x also have not calculated or estimated the profitability of milking their herds 3x.

To estimate the potential profitability per cow of switching from 2x to 3x, I used university developed dairy cow budget figures to determine the extra supply and utility expenses, estimated the extra feed costs to produce the additional milk, projected what the additional labor requirements and cost would be for a 160 cow herd, and used a milk price of \$13/cwt. Using those values, I calculated that cows which would respond by producing 8 pounds more milk daily when milked 3x would each be returning about \$45 more profit per lactation. Since each herd's costs and situations are different, each producer who is milking 3x or who might be thinking about switching to 3x should determine his own profitability figures. Your actual or potential profitability from milking 3x may be a surprise to you.

In the last few years researchers have reported on the effects of other milking frequency protocols on milk production. Trials have shown that by doubling the number of milkings of fresh cows for just the first 3 weeks of lactation from 2 to 4, or from 3 to 6 times a day (then switch to 2x or 3x for the rest of the lactation) can affect the level of production for the entire lactation. Studies conducted to date have found that cows responded with an average increase of about 6 pounds milk daily for the entire lactation. As with most research, there was variation in response. Producers who have tried this practice have also found variation. I suspect that cow body condition at the time of freshening, and the feeding program during the lactation are important factors in determining how the cows responded to the double milking frequency.

To estimate the potential profitability of doubling the milking frequency in early lactation, I adjusted the figures for supplies, feed, labor, and milk price that I used

for estimating the profitability of milking 3x. Using those figures, I calculated a potential marginal profit per cow per lactation of about \$128 from milking 4x for the first three weeks of lactation, and then switching to 2x for the remainder of the lactation. This figure is nearly three times that calculated for cows producing 8 pounds more daily when milked 3x for the entire lactation. As stated above, producers should use their own cost figures to estimate the potential profitability of milking cows 4x – 2x.

If this milking frequency protocol is as effective at increasing milk production in private herds as it has shown to be in university trials, it could have a significant impact on the potential profitability of dairies. It may not be a practice all producers will want to adopt, but it certainly is one that most producers should estimate the economics of incorporating into their milking management program.