Should Cows Be Milked More Frequently?

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For decades dairy producers believed that milking cows only two times a day was the way it had to be done. There were many other things to do around the farm and labor wasn=t hired just to take care of and milk the cows. A few producers milked cows three times a day, but they owned mainly purebred registered cattle, and wanted to attain high production records. However, in more recent years as producers have looked closely at the economics of their operations, many have switched to 3x milking to increase their efficiency and profitability. Now the question being considered by some producers is “Should they be milking more frequently than 3x to further increase profitability?@.

Researchers have studied the effects of 3x milking for many years, but it has only been in recent times that they have looked at the effects of greater milking frequency. Scientists in Israel were among the first to look at the effects of 6x versus 3x milking. They milked a group of cows 6x for the first 6 weeks of lactation, and then switched to 3x milking for the remainder of the lactations. Control cows that were milked 3x for their entire lactations produced an average of about 78 lbs per day for the first 6 weeks. For the remainder of their lactations they averaged about 83 lbs per day. The 6x cows averaged about 94 lbs per day for the first 6 weeks, and surprisingly, continued to average nearly 94 lbs per day for the remainder of their lactations after they were switched to 3x milking. The 6x milked cows took longer to return to a positive energy balance and attain a body condition score above 2.5.

Researchers at the University of Illinois and The University of Maryland have conducted studies recently on 4x and 6x milking, and have found similar milk production response results. A Maryland field study in a large commercial herd found that the multiparous cows milked 6x daily for the first 6 weeks of lactation produced about 13 lbs more milk per day than the 3x milked cows. For the entire lactation the cows milked 6x per day for the first 6 weeks produced about 6.5 lbs more milk per day than the cows milked 3x for the entire lactation. Conception rate, SCC scores, and body condition were not affected by the 6x milking treatment.

The Illinois researchers compared 4x milking for the first three weeks of lactation with 2x milking in Jersey cows. They found that the 4x milked cows produced about 11 lbs more milk per day. This difference persisted for the next three weeks (the length of the study) after the cows were switched to 2x milking. The researchers also investigated possible causes for the production increase that persisted after switching to the 2x milking. Their data suggests that the additional daily milkings for the first several weeks after calving causes more prolactin to be released from the pituitary gland. The additional prolactin probably causes more secretory tissue to be formed in the udder the first few weeks after calving, which could result in more milk production that persists throughout the lactation.

Summary:
Studies have shown that milking cows 4x or 6x daily for the first several weeks after freshening (probably 3 to 6 weeks) will increase milk production for the entire lactation. Other studies have shown that the intervals between milkings do not have to be exactly equal to get a production response. To increase the milking frequency of fresh cows to 4x or 6x daily from the current 2x or 3x, Illinois and Maryland scientists suggest that fresh cows be milked at both the beginning and end of each of the regular milking periods. How the fresh cows would be grouped or separated as they leave the parlor so they could be double milked at each milking period may be a logistical problem for some producers. Since the production response and the financial return of 4x or 6x milking should be positive for most herds, producers should give serious consideration to incorporating this practice

into their management program.