

# Texas Dairy Matters

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## THE LONG AND SHORT OF DRY PERIOD LENGTH

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It has long been the standard for the dry period to last for approximately 60 days to allow for udder involution and recovery for the subsequent calving and lactation. However, allowing for a shorter time frame between lactations would allow for improvements in cow productivity by lengthening the period the cow spends in the lactating phase. While a shorter dry period may occur unintentionally for some animals, a more thorough study is necessary to validate or refute this topic.

A series of studies from Wisconsin were conducted with Holstein cows to compare the effects on milk production and reproduction parameters of a shortened (S) (34 days) dry period to a more traditional (T) dry period of 55 days. Overall, an advantage in milk production was reported for T (96 lbs. vs. 91 lbs) from 1 to 100 DIM, with similar results present from 1 to 300 DIM (87 lbs. vs. 83 lbs.). However, there was an advantage in milk protein percentage for S (2.83 % vs. 2.68 %) for the 1 to 100 DIM time frame, while there was no difference between S and T for total milk fat and protein or milk fat percentage.



Reproductively, days open for S was 20 days less for third lactation and greater cows when compared to T. A difference was not seen for days to first AI or second AI, nor were there differences in the percentage of pregnancies per AI at either first or second service.

In a separate study by researchers at the Animal Improvement Programs Laboratory, historical data was compiled

from over 73,500 Jersey cows, to estimate the effects of days dry on the subsequent lactation. It was reported that maximal yields of milk, fat, and protein occurred for cows that were dry from between 61 to 65 days, however percentages of fat and protein improved with decreasing days dry. The number of days open was negatively impacted by days dry as the addition or subtraction of days dry from 61 to 65 led to increased days open. While this is a tight range, a variation of 10 days as suggested by the authors would not result in significant production losses and would place the optimal days dry within the targeted range for the traditional dry period of 55 days, as stated in the previously discussed research results.

Shortening the dry period appears to have a positive impact on milk production and limited effects on reproduction in Holstein cattle with Jersey dairy cattle better suited for a more traditional dry period with some opportunity for small deviation. However the application of this change in management strategy may not be suitable for all operations and requires careful scrutiny by each dairy management team to discern what is appropriate. Prior to application it is important to weigh the costs and benefits of altering management schemes and ensure that all involved are on the same page so that the transition will commence more smoothly. If changes are made, monitoring of the results is key to determine the positive and negative impacts of the newly adopted program.

## References

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