35-Day Dry Periods: A New Management for Today's Cows?

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Actual recommendations suggesting 60 days as the optimal length for the dry period are based on studies which took place several decades ago. Since today's cows are still producing important quantities of milk 60 days prior to calving, it has been suggested that a 35-day dry period management strategy could be beneficial. The present study involved 850 Holstein cows from 13 commercial dairy herds to compare the effects of 2 dry period management strategies on production, health and reproduction, as well as the economical impact. Every two months and within each herd, cows were assigned to a conventional (60 days; dry-off ration until 21 days pre-calving and then precalving ration) or a short (35 days; pre-calving ration during the whole dry period) dry period management. Herds were visited every two weeks from January 2007 until December 2008. On average, cows assigned to the short dry period produced an additional 530 kg milk at 4.4% fat and 3.8% protein at the end of lactation, due to the extra days in milk. Energy-corrected milk yield for the following lactation was not affected by the dry period management used, although 2nd lactation cows produced 2.5% less milk following a short dry period (not statistically significant). Short dry period management decreased incidence of ketosis and had no effect on displaced abomasum, milk fever and mastitis. Incidence of retained placenta was increased in 3rd or greater lactation cows following a short dry period, but this did not lead to increased metritis occurrence. Body condition score was not affected. Reproduction was slightly improved following a short dry period management, with a decrease of 0.2 breedings per conception in 3rd and greater lactation cows. Economical analysis suggests this new management could be beneficial for today's producers.

Implications: Present results support the idea that short dry period management could be beneficial for today's dairy cows. Additional milk is obtained at the end of lactation, with no major effects for the following lactation.