

Does A 40 D Dry Period With A Single Diet Increase Milk Production?

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It has been suggested that reducing the dry period from 60 d to 40 d and feeding a single diet during a short dry period, instead of separate “far off” and “close up” diets, do not reduce or increase milk production in the following lactation. This was tested in an experiment with 22 Holstein dairy cows. Cows were either dried off 60 d or 40 d before the expected calving date. Cows with the 60-d dry period received a “far-off” diet until 21 d before the expected calving date, and a “close-up” diet from that day onwards until calving. Cows with the 40-d dry period received the “close-up” diet during the entire dry period. After calving all cows received the same diet. Diets were total mixed rations and were fed once daily. On average, the “far-off” diet contained (dry mater basis) 1.29 Mcal/kg of Net Energy for Lactation, 12.4 % crude protein, and 42.9% neutral detergent fibre. On average the “close-up” diet contained (dry mater basis) 1.42 Mcal/kg of Net Energy for Lactation, 12.9% crude protein, and 41.7% neutral detergent fibre. The diet fed to milking cows contained, on average, (dry mater basis) 1.71 Mcal/kg of Net Energy for Lactation, 18.1% crude protein, and 33.9% neutral detergent fibre. Cows with the 40-d dry period had lower milk yields (41.7 vs.

45.0 kg/d), higher milk fat (4.16 vs. 3.80%), and lower milk protein yields (1.34 vs. 1.45 kg/d) during the first 3 months of lactation than cows with the 60-d dry period. Milk protein content and milk fat yield were not affected by the dry cow management, and averaged 3.40% and 1.75 kg/d, respectively. The dry cow management had no effect on body condition scores (1 to 5 scale), which were, on average, 3.45, 3.25, 2.99, 2.79, and 2.76, at drying-off, calving, 3 wk after calving, 6 wk after calving, and 9 wk after calving, respectively.

Implications. This study did not show that reducing the dry period for 60 to 40 d and feeding a single diet during the entire dry period improved milk production. Feeding a close-up diet throughout the 40 d period did not result in overly fat cows.