Dry Period Lengths Revisited
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One thing about dairy researchers you have to appreciate is they never accept the fact that all information on a topic is known. Just when we thought the recommendations were finally settled about how long dairy cow dry periods should be, along comes another research report that tweaks the guidelines/recommendations a little more. The latest report is from the folks in the Animal Improvements Program Laboratory group in the Ag Research Service division of USDA. Their article was published in the May 2006 issue of the Journal of Dairy Science.

What the researchers did was to look at the DHIA actual lactation records (not standardized) of Holsteins that had calved between January 1999 and January 2004. Their objectives were to determine the dry period lengths that would maximize milk production across adjacent lactations, and also determine the dry period length that would maximize lifetime milk production. What they found from the analyzed data were the following:

1. The minimum days dry needed to maximize milk production across adjacent lactations depended on the parity of the cows. For total yield of milk to be maximized across the first and second lactations there was little loss in production with a minimum dry period of 40 – 45 days. However, for older cows that had completed their second and third lactations the dry periods needed to be 55 – 65 days long. The authors speculated that this difference for cows with more parities was due to the fact that the milk production persistencies of later lactation cows was lower.

2. Lifetime milk production was maximized when the dry period after the first lactation was 40 – 50 days long, while the dry periods between subsequent lactations needed to be only 30 – 40 days. Fewer days dry were required for older cows after their second lactation to maximize lifetime production versus maximizing adjacent lactation yield because they had more lifetime days in milk.

3. The authors further stated that while dry periods of 30 – 40 days can be used after second and later lactations without causing a reduction in lifetime yield, the benefit of the shorter dry periods is minimal. Additionally, dry periods shorter than 30 days and longer than 70 days should be avoided because of the reduction in lifetime milk yield.

So, how does this information match up with what has been published previously? Fairly well I think. In an article I wrote several months ago about how long dry periods should be, I said “The general recommendation I give when asked about what the dry period length should be is that heifers completing their first lactation should, in most cases, receive the traditional 60-day dry period to allow for body growth. Older cows, if in good body condition and fed correctly, can usually handle a 40-50 day dry period. Some people have even successfully reduced the dry period of their cows to about 30-35 days. The level of management given to the herd is the key to how short the dry period can be.” That last sentence says it all in my opinion. Dry period lengths should vary between herds because of the level of management. One set of dry period values is not right for every producer.