

# Dairy Management Column

BY  
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## Are We Feeding For Production Needs?

NEWARK, DE — Not really! We think we do. Professionally, as dairy farmers and as consultants, we assume we do. And we got away with it for a while, when most of our cows milked less than 20,000 pounds in 10 months. But our luck is going to run out as we move into the major league of dairying -- into the bio-hi-tech era. Into not just computer-aided dairying but, beyond that, into metabolically and nutritionally manipulated cows.

The lazy and fat dairy cows are disappearing from our herds, just as the low-genetics cows have, thanks to A.I. and DHIA. Now, we have rumen manipulators, that is, "isoplus" supplements. And soon we'll have growth regulators, BST and others that make high-efficiency feed converters out of our cows.

When this happens, milking 10 percent of body-weight will no longer be the exception, but the rule. Just imagine. No more fat cows, and no more lazy ones, either. And no more complacency on our part in assuming we're feeding our cows according to production needs! We aren't.

You'll no doubt agree that we tend to feed our cows according to

the daily pounds of milk they produce, individually or in groups. In general, we try to feed those animals yielding above 50 pounds or so a certain formula or certain amount of ration once or several times a day. But cows with less milk -- the so called "low milking group" -- receive a smaller amount of supplements.

The logic seems clear. We feed cows at the level that they earn, plus a certain "challenge" ration. And once a month, right after the DHIA test, we hurry to readjust those rations. We want to save some feed from those cows that don't deserve it anymore.

Why do I insinuate that this is wrong, that this is not feeding according to production needs?

Because, while trying to save money by not overfeeding, we are losing money as our cows don't get bred when they should two months after calving, thus prolonging the lactation beyond the 12-month calving interval that is optimum in terms of profitability.

We are correct nutritionally to feed a certain cow what she deserves at a daily production level of 39 pounds, for example. But we are not correct physiologically to feed every 39-pound milker the same amount of supplement regardless of her stage of lactation -- first month, second month, fifth month, seventh month, or tenth month!

We must change to a system of feeding to meet physiological needs! If a cow who milks 39

pounds is in her first or second month of lactation, she is in the rising phase of her lactation towards peak production, just like another cow who may be milking 80 pounds in her first or second month. And this rising phase of production has two important characteristics.

Nutritionally, it's the time when the cow is usually in a deficit. She needs at least 20 to 25 percent more nutrients -- not feed, but nutrients -- per day than what she is offered or is eating. Physiologically, she is supposed to be producing another ovulation for the next heat cycle and the next pregnancy. But she's in a nutritional deficit and won't produce another egg right away. She'll wait a bit, 'til she gets nutritionally straightened out.

Am I being far-fetched or overly simplistic? I don't think so. At the recent American Dairy Science meeting in Edmonton, Canada, I heard again that our problem is more widespread than we want to admit. More than 32 papers were presented on aspects of BST, the bovine growth hormone, application. In most cases, milk production per cow per day was increased and, while there seemed to be no problematic side effects, a significant number of the cows involved in these studies did not get bred in time or as soon as the controls did. Conclusion: They were not fed correctly for their increased nutritional and physiological needs. Therefore, the cows decided they'd wait a while in producing another egg.

How can you tell whether you are doing right or wrong in your feeding program? Protein content of milk is a good indicator. We usually ignore this, however, cows that are in nutritional deficits usually test low in milk protein -- 3.2 percent or less -- because the mammary gland needs energy to produce milk protein. And if the cow is starving, she will produce less, just as she waits to produce another egg.

Thus, if we want to move towards higher milking cows with higher physiological efficiencies, we must feed them for pounds of milk produced plus stage of lactation needs. Otherwise, we'll lose money instead of making it on our cows.

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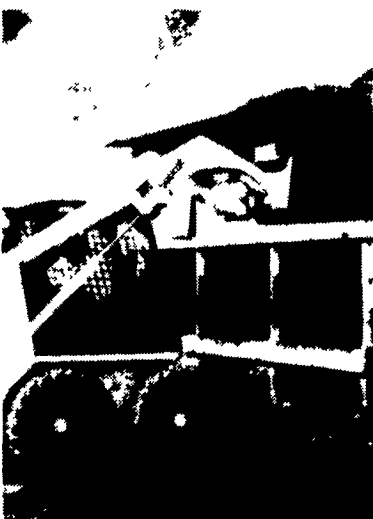
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