John Lyne's
DAIRYTECH
Dairy Production Specialists
Performance Products - Nutrition Services
ABN 62 656 293 974

P.O. Box 26,
Timboon Victoria 3268
0438 170 949

Finishing Cows
Next Lactation's Potential

As our title infers, finishing cows off, that is, body condition score (BCS), has significant impact on next lactation's performance. An analogy I use regularly of the 'fly wheel', both for production momentum and lactation potential, needs considerable weight, in this case BCS, to truly benefit its function as a 'fly wheel'.

We start the 'fly wheel' spinning with transition management, but the weight behind the 'fly wheel' really determines its potential to sustain speed, or lactation peak and persistence.

I prepared a supplementary paper early in February entitled "January Milk Drop", which was circulated to my clients in addition to my article for February. (Copies available on request.) I wrote this paper as I had become concerned at the excessive drops in milk this January. My concern for milk production and profit were eclipsed by a greater worry for dry off BCS, as nutrient density had declined rapidly, compounded by dry matter intake declines from a ration higher in fibre than normal due to low rainfall since Christmas and generally a failure of low fibre summer fodder crops in South Western Victoria.

We need a ration specification of around 18-20 kgs of dry matter intake/cow/day, with a nutrient density of ME (energy) 11, NDF (fibre) 38 and crude protein at 16-17%. This will give us a dry off BCS of 5 if fed over the last 100 days of lactation. Last January/February this was not a problem with most rations achieving these specs comfortably by virtue of good summer rains. This summer has presented some real challenges in meeting this ration. For many dry land dairies silage and grain, with very minimal turnip crop have fallen well short of our 2005 ration resulting in significant milk drops over January.

Our cow's genetic potential for milk production drives her to produce as best she can, even when her intake is inadequate to meet her milk production. Consequently, rations have fallen very low in both intake and nutrient density to produce the big drops in milk over January, especially when supplemented by body condition depletion to keep them milking even at reduced litres. I am convinced many cows, although not visible in early February, have lost BCS and body weight, a precursor for calving problems and reduced performance next lactation.

Despite higher fibre rations this summer, generally silage and moderate grain feeding (5-6 kgs/cow/day) intakes are often up to 4 kgs lower than NDF (fibre) would allow. This

indicates a further problem of low appetite, or accessibility to silage to enable cows to eat all they can. Low crude protein, and many rations are running around 14% and lower will certainly contribute to intake issues. We regularly use canola meal in grain mixes as an appetite driver. Imbalances between energy and protein favouring energy, will contribute to acidosis, even in a sub-clinical status, impacting on appetite and feed utilization. Supplementing protein, particularly by-pass protein with either canola meal or lupins and vetch hay will improve our situation.

Decreased summer crop availability that has not been replaced by silage or other feed sources, are by far the greater problem. A decline of 4 kgs DM turnip crop can only be replaced by about 2.5 kgs of silage, but any attempt to increase intake will benefit.

When silage is the staple diet we need to feed it in compliance with the 'meals' principle. Cows can only eat about 4 kgs DM forage at a meal. To feed-out the days silage at 9 am will decrease intake substantially. Around 11 am when cows are ready for another 'meal', silage will have lost considerable palatability resulting in cows just picking at it instead of devouring another 4 kgs DM. Feeding as many 'meals' during the day as is practical will increase intake and milk production, and our goal of dry off condition score. Silage that is not inoculated is inherently low in 'true' or 'useable' protein, despite feed tests figures for crude protein indicating otherwise. This of course only adds to the low protein dilemma described above.

Increasing grain fed will contribute to increased dry matter intake, however it needs to be done with consideration to its impact on total ration energy/protein balance. Excessive sugars and starches in the blood from increased cereal grain feeding without a balance of protein will cause cows to deposit fat excessively and set our cow on the road to 'fatty cow syndrome' at calving and its companion health and productivity problems then and beyond.

In summary, fully feeding cows using the 'meals' principle, a sound energy/protein ratio will enable a good dry off BCS of 5. Even when we can't meet a nutrient density of ME 11 and crude protein of 16-17%, but can keep them in balance at a lower density, we may lose some litres now but be well prepared for the bigger picture of next lactation.

Fax: (03) 5598 3335 AH: (03) 5598 3912
www.dairytechnutrition.com.au Email: johnlynedairytech@bigpond.com.au