

Cow condition

With the pinch on feed quantity and quality most dairy cows have been under varying degrees of feed stress. This stress has had, and will have, a number of undesirable consequences such as:

- dry cows – a higher than normal incidence of abortions reported.
- a risk of higher than normal incidence of metabolic problems.
- in lighter cows the risk of difficult calvings and retained fetal membranes is increased, and there may be underweight calves and higher mortality rates in both cows and calves.
- immunity in lighter cows will be suppressed, increasing the risk of new mastitis cases and the recurrence of chronic infections.
- elevated facial eczema spore counts were recorded in South Wairarapa during the summer/autumn period, with several clinical cases reported. Liver damage resulting from even subclinical facial eczema can be a contributing factor to many metabolic problems and unexplained deaths at or near calving.
- any trace element deficiencies, for example low copper, will be of greater consequence when stock are under stress.

So, what can be done to maintain cows, especially those in lighter condition, in a healthy state?

The importance of cow condition

In early lactation a cow must derive energy from feed for both maintenance and milk production. This requirement rises to a peak 5–8 weeks after calving. Peak feed intake is usually later than peak milk yield, so body condition is used to maintain the high levels of milk production.

A lighter cow will still produce a lot of milk in early lactation. If they don't have a store of body reserves to tide them over they must be fed particularly well to ensure they do not lose too much condition. Underfeeding any cow, most especially lighter cows, in early lactation will reduce peak milk production, and it is production at peak which will dictate potential production for the full season.

Extra milksolids are produced when better condition cows are able to use their body reserves.

One extra condition score at calving will produce an extra 15kg MS/cow (\$104 at a \$7.00/kg MS payout) and, on average, the cow will return to oestrous five days earlier. Protecting the ongoing health and fertility of the cow is the major advantage of this extra condition – a high producing empty cow is not the aim of the game!

The extra cost of higher levels of pasture feeding or the inclusion of supplements into the diet can generally be justified when compared against the alternative cost from the cows not cycling and/or not holding to first insemination. The cost of the latter would be at least 21 days of lactation missed @ 1.5 kg MS/cow/day x \$7.00 kg MS = \$220 per affected cow. A prolonged calving spread is difficult and expensive to correct in subsequent seasons.

If possible, calve in paddocks with shelter from the wind and rain. A cold cow will shiver to keep warm, burning up valuable energy derived from feed or body condition. This energy would be better used keeping the cow healthy and producing milk.

Pushing feed ahead

In early lactation the main emphasis should be on ensuring the herd is fully fed. That said, however, sometimes it is not always possible to do this. To keep the first round extended until pasture supply exceeds herd demand (usually mid-September), intakes during August can be held a bit tighter. This will ensure the herd can be on a rising plane of nutrition during September for peak production.

If you have a larger herd, consider separate mobs for high and low-condition cows and/or hold late calvers on maintenance rations only.

Feed a higher ratio of hay to your dry cows. This will free up more pasture for the milkers.

If your cow condition and pasture covers are low, it's probably not the season to be inducing. Inducing a large number of cows increases the amount of feed required, and it can put the feeding levels of the entire herd at risk.

Metabolic problems

Rapidly growing spring pastures are low in magnesium and the cow does not store it in her body, so the daily provision of sufficient magnesium is essential. This will alleviate the risk of grass staggers and reduce the incidence of milk fever (magnesium enhances the cow's ability to absorb calcium). Magnesium supplementation should start 2–3 weeks pre-calving and continue until early November at which time pasture is mature. Get in touch with your vet if you need to verify dose rates.

To further minimise the risk of grass staggers and milk fever, pre-calving applications of potassium fertilisers should be avoided, as should high rates of nitrogen during winter/early spring. Both of these reduce the uptake of magnesium and calcium by the pasture.

Milk fever occurs at the start of lactation when calcium is drained from the body for colostrum synthesis, and the calcium absorption from food and bone reserves is initially not rapid enough to offset this. The pre-calving feeding of hay, barley straw or maize silage minimises the risk of milk fever because it encourages the body to call on calcium reserves from the bones.

Monitor herd health and feed the cows well, a short-term saving on expenditure such as extra supplements may turn into a long-term cost.

Sandy Dean

Baker & Associates