



Late Summer Rations

Many dairy herds are on restricted rations now in attempts to manage feed reserves till pasture is again available. This has been the case through much of January too. Forage, or more correctly, silage reserves for many are inadequate to fully feed cows. This problem has been aggravated by very poor turnip/rape crop tonnages this summer, and quality hay availability.

Finishing cows in good BCS is essential, and in my opinion 'not negotiable'! We are far better off to restrict a hard season to this lactation rather than allow its effects flow on into next lactation. Poor dry-off body condition will predispose cows to calving problems without even considering the myriad of health and low production issues throughout next lactation.

Buying in of hay to supplement feed budgets needs to be viewed very carefully, and certainly will depend on individual financial circumstances. Grain is by far the best bought-in option but consideration of grain/forage ratio is essential (40/60 for safety). Grain, although expensive has the highest return on investment (high energy density), does not have reduced quality due to seasonal conditions (from reputable suppliers), and is not in short supply.

Rations over January have been falling roughly into 2 categories: 1) High fibre with inherent low intake, 2) Low fibre due to restricted intake of forage (silage).

The high fibre/low intake is very common every summer. Essentially, silage reserves are not a problem, and cows are well fed, but intake is restricted to about 16 kgs due to high NDF of the ration; an example ration on a dry matter (DM) basis – 10 kgs silage, 2 hay and 4.5 grain. This ration will support about 18 litres of milk/cow/day. It is a very low nutrient-dense ration, and cows will drop severely in hot weather.

It is quite healthy from the perspective of good rumen function due to high fibre, but a real restriction to the cow's genetic potential to produce milk. It is also a 'lazy' ration which will induce rapid milk declines to dry-off time, but should finish cows in reasonable condition.

The high fibre ration is very common in late summer and very simple to improve both nutritionally and profit-wise. An increase in grain as-fed from 5 to 6 or 7 kgs/cow/day will enhance this ration significantly, increasing both energy and protein density with virtually no substitution and increase milk produced quite profitably.

Wheat has an NDF (fibre) of 12%, while silage average might be 50+% NDF. In other words we can feed 1 kg of wheat with 13.5 MJME (energy) and cause a reduction in silage consumption 0.25 kgs DM with 2.2 MJME. We have increased ration total energy by 11 MJME, or production by near 2 litres of milk!

In times of heat stress, the most effective tool we have against milk decline, is to increase energy/protein density via the grain mix. In hot weather cow's intake of high fibre feeds decreases as fermentation of fibre creates large amounts of heat in the rumen which is very difficult for the cow to get rid of. Grain's main source of carbohydrate is starch which is very readily fermented with far less heat produced.

The second group of rations, which are becoming common this year, are low intake and low fibre and a cause for more concern. These rations are very low in fibre due to silage restriction and can be high in energy, both of which place the cow at high risk of acidosis. They may have only 6 kgs of forage and 5 kgs of grain which is high risk grain to forage ratio. Production will be low due to intake alone (10 – 11 kgs DM).

The only way to rectify this ration is increased fibre, hay or silage. I have seen a wide range of ration imbalances over January of both excesses and deficiencies of our three main parameters – energy/protein/fibre due to a variety of feeding strategies this year.

Keep a close watch on your daily milk tests. Generally speaking, sustained (over several days) changes are indicators of nutrition issues. Litres relate to intake; BF% to fibre; P% to energy; and BMCC (apart from management issues) to possible rumen acidosis. Weight loss often is related to low energy/high protein diets. Where rations have been inadequate in available forage I have reduced protein supplementation to prevent weight loss. It costs us in litres, but limits our troubles to this lactation.

Feed additives are essential at anytime, but even more so when our cows are under stress. Rumen modifiers (Rumensin/Tylan) to maximise rumen function and energy utilization, minerals, both macro (salt, calcium & magnesium) and trace (copper, zinc, cobalt, selenium, manganese & iodine), plus vitamins, must be maintained, also to limit our troubles to this lactation.