Minimising Butterfat Reduction

The inclement weather in April 2023 and 2024 reduced the incidence of falling butterfat percentage as grass covers were heavier and more silage was in the diet. However, given the good weather this spring it is something we need to consider this year.

First round grass is more fibrous than second round grass which is lusher and contains higher fat levels. This means that the cow's diet will change significantly once the second grazing rotation begins, and this lack of fibre has a particular effect on milk butterfat percentage. In severe cases, i.e., butterfat levels of 3.6% or lower, for typical Holstein Friesian herds, low butterfat indicates rumen acidosis in the herd.

Therefore, a lack of fibre can result in reduced milk value from low butterfat percentage and sick cows. Maintaining an April butterfat of 4.08% vs 3.93% for a supplier producing 50,000 litres in the month will give an extra 1.0 cpl on milk price or €500 extra sales value for April milk.

Butterfat %	Protein %	Milk Price
3.93%	3.4%	54.98 cpl
4.08%	3.4%	55.96 cpl

To minimise (not eliminate) the negative effect that second rotation grass can have on milk butterfat percentage as well as minimise the likelihood of acidosis, it is vital to look at all the options that can help reduce the effect:

1. Gradually transition into you're second grazing rotation by starting it before you finish the first rotation. This will reduce the shock effect of going from all first-round grass with higher fibre to lusher second round grass. Giving the cows a few days to acclimatise to second round grass will make a big difference, no different to trying to build up animals on to higher feeding levels of concentrates.

2. Provide a source of fibre to cows during the second grazing rotation. This can be done by giving cows access to a dry baled silage, haylage, straw or hay at milkings (Table 1):
    - 1 kg or less fresh weight, morning and evening will suffice so there will be little negative effect on milk protein.
    - If intakes of silage/ straw/ hay are high, there is likely a larger feeding issue present, i.e., not enough grass allocated.

Table 1. The estimated amount of time that one bale of silage, haylage, straw and hay would last if cows were just eating enough to get minimum fibre

Herd Size	Round Silage Bale (570 kg)	Round Haylage Bale (250 kg)	Round Straw Bale (150 kg)	Round Hay Bale (200kg)
50 cows	11 milkings	5 milkings	3 milkings	4 milkings
100 cows	6 milkings	2.5 milkings	1.5 milkings	2 milkings
150 cows	4 milkings	1.5 milkings	1 milking	1 milking

The weights of silage, straw and hay bales are presented on a fresh weight basis

3. Using a feed with buffers and yeast will ensure that the cows rumen will continue to perform even if the butterfat levels drop as rumen pH is maintained at the correct level.

What type of concentrate can be fed during the second round to provide yeasts and buffers, but still help balance the cows diet?

Option 1: The Drinagh 14% Supergraze dairy nut will provide a good diet for milking cows (high levels of maize) and contains the yeasts and buffers necessary to maintain rumen pH at correct levels.

Option 2: The Drinagh 14% Maxi-Solids dairy nut will provide a good diet for milking cows (high levels of maize and barley) and contains yeast to maintain rumen pH at correct levels. It also contains additives to improve milk butterfat percentage (RumenSmart™), milk protein percentage and milk yield (MetaSmart™).