

Winter feeding for efficient performance
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Introduction

In Northern Ireland dairy herds' feed is the single largest cost. Within CAFRE benchmarked farms' purchased feed (concentrates) represent a sizable portion of variable costs accounting for almost 70%. Therefore, improved feed efficiency on farm represents an opportunity to improve herd profitability.

Where to start?

Silage analysis

A good starting point is to analyse all forages on the farm, as this determines key information such as dry matter, metabolisable energy and protein, which will form the basis for concentrate type and quantity to feed. It is important to point out that the feeding of your herd should not be based on one silage sample taken early in the season. Forages should be sampled monthly from at least 9 sampling points in a W formation from the silo face, as silage quality may change.

Establishing a maintenance + (M+)

After silage analysis has taken place, diets can now be formulated and concentrate levels determined. Setting the M+ is deciding how much milk you can get from forage/TMR diets. For example, if the M+ is set at 8 litres based on silage analysis, and a cow is yielding 26 litres, 18 litres needs to come from concentrate. Generally, cows are fed at a rate of 0.45kg of concentrate per litre of milk above M+, so in this example the cow requires 8kg (18 litres x 0.45 = 8kg). Irrespective of your feeding system it is important to set the M+ based on diet supplied, then feed to yield thereafter. Remember if the M+ is set too low or high, this can result in either overfeeding of concentrates, or significant body condition loss and reduced performance.

Grouping of cows

The main objective of grouping cows is that feed, particularly concentrates, can be targeted to cows based on production level and nutrient requirement. Grouping is critically important, particularly in a TMR feeding scenario, as there is a risk that low yielding cows can be overfed. If grouping is not practical in a TMR scenario, set the M+ for the lowest yielding cow in the group.

Practical aspects to consider

- Determine the quantity of forage cows are actually eating (DM basis)
- Calibration of weigh cells on the diet feeder and parlour feeders
- Make use of computer software/tail tape in terms of feeding to yield

Performance monitoring

An important aspect of feed efficiency is to assess how your cows are performing.

Monitor some key performance indicators on a monthly/weekly basis such as:

- Milk output/quality
- Total dry matter intakes
- Body condition scores
- Fertility

Summary

Cows need to be fed based on their requirements, which is balanced with the quality of forage available. Improving feed efficiency does not necessarily mean feeding less concentrates, it is feeding cows more smartly.