



DN NEWSLETTER

issue 28

The rumen is the engine room of the cow. When feeding cows, we need to look after the rumen first. The rumen has the capacity of a wheelie bin, 120 litres. It needs a low oxygen environment, so the oxygen needs to be removed. The pH needs to be 6-7 to optimise feed digestion. The rumen population is dependent on the diet and fluctuates with diet changes.

The microbial population needs a consistent diet; water; balanced energy, protein and fibre; stable rumen pH; and low oxygen. Modern efficient dairy animals have a large blood supply and flow around the rumen, which creates a challenge to the low oxygen environment in the rumen.

Grazing Hints:

Graze an 18-21 day rotation from the 2nd grazing on the grazing platform; from April/May. If early grazing, February, then use a longer rotation of 50 days.

These periods will optimise covers and maintain grass quality.

Good quality swards with high levels of perennial ryegrass will allow for higher milk production.

Grass quality depends on grazing the correct pre-grazing covers of 2600-3000 kg DM.

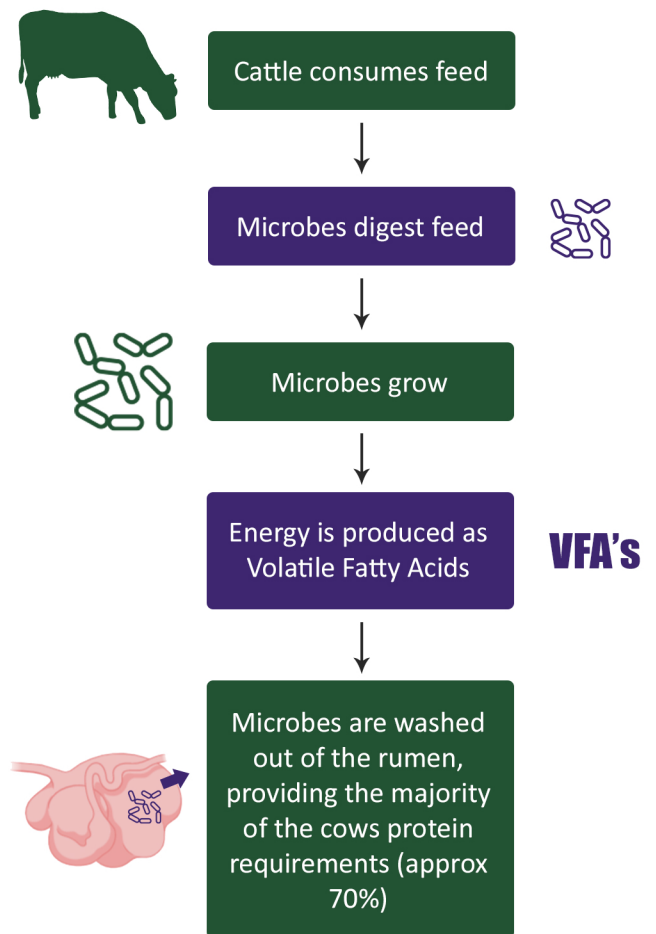
Grazed grass is highly nutritious, low cost feed, as low as 5p/kg DM.

The biggest difficulty is predicting dry matter intake with variable dry matters and nutrient values.

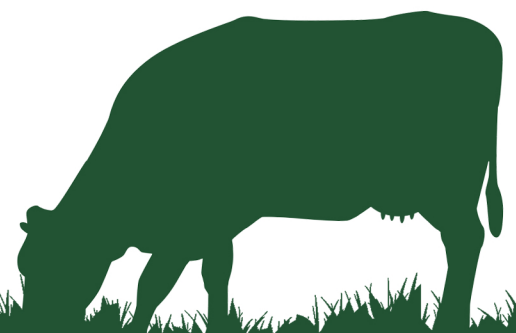
Lush spring grass contains high levels of crude protein (25%+) which is rumen degradable. In excess this is degraded to ammonia and leads to an excess of ammonia in the rumen. This leads to energy deficit in early lactation, body condition loss, ketosis and embryo mortality.

High sugars in grass are rapidly fermented to rumen microbes which lowers the rumen pH.

Low grass fibre levels limit rumen scratch factor which leads to a reduction in rumination, saliva flow and rumen buffering.



OUR TOP TIPS FOR TURNOUT



TOP TIPS FOR TURNOUT

1. Gradual Turnout

It takes 3 weeks for the bugs to adapt. Abrupt changes in diet lead to a reduce amount of feed digested. Aim for a few hours a day grazing initially, cows can consume 5kg DM in 3 hours. Increase steadily over 7-10 days to the full period between milkings.

2. Don't Overestimate DMI

Don't overestimate dry matter intake as the moisture content can vary in the Spring. Aim to lose no more than ½ body condition score in early lactation. Issues are less in PD +ve cows.

3. Manage Excess CP

Manage excess crude protein. This leads to high blood urea. Levels can be >25%/kg DM in lush leafy Spring grass, especially after fertiliser application.

4. Buffer Feeding

Use forages of high energy content and digestibility. Starch-based forages help increase microbial protein synthesis due to the fermentable energy and help to maintain milk quality.

5. Look Out for Poor Rumen Function

Look out for poor rumen function. UCD 2006 showed 53% cows at grass had rumen pH < 5.8. Need to optimise feed digestion and intakes using minimal concentrates. If fibre digestion decreases, so does butterfat.

6. Top Up Diets

Feed 14-16% crude protein feed with a balance of highly digestible fibre, cereals and bypass protein. Aim to optimise rumen fermentation and maximise performance. Ensure supplement minerals and vitamins low in grass, especially Magnesium.

7. Cow Signals

Cows should have a good rumen fill 2-3 hours after milking and at this time 65% of the herd should be laid down chewing their cud. Check dung consistency and body condition.



8. Monitor Milk Quality

A drop in butterfat or protein of 0.3% or more in a week gives a warning sign of poor rumen function and occurrence of sub-acute ruminal acidosis. Ideally butterfat : protein should be 1.2:1, any less indicates acidosis.

9. Optimise the Rumen Environment

Actisaf live yeast helps optimise the rumen environment by removing the Oxygen. This allows the bugs to adjust quicker and work better. More propionate is produced enabling more energy to be utilised.

For further advice, please contact your local DN Sales Specialist or call DN HQ on 01200 420200.

