

The role of live yeasts in maximising milk from forage



Dr Nicola Walker,
AB Vista Ruminant Product Development Manager

The potential role of live yeast in maximising milk from forage and improving feed efficiency - both top priorities for UK milk producers at the moment - is often overlooked.

Yet analysis of the research data has shown that on average yeast inclusion produces a 0.4kg rise in dry matter intake (DMI), a 1.2 litres/cow lift in daily milk yields and an extra 0.05% butterfat. The gains can be even greater if rumen function is under pressure from acidic silages, high levels of starch or low fibre forages (including spring grass).

Live yeast works by optimising rumen conditions and increasing the activity of fibre-digesting microbes, and it's the combination of mechanisms involved that make a metabolically active yeast like Vistacell so consistently effective:

1. Scavenging oxygen

Even trace quantities of oxygen will reduce rumen activity and have an impact on the populations of beneficial anaerobic fibre digesting microbes in the rumen. As much as 200 litres of oxygen enters the rumen daily via rumination, eating, drinking and blood supply across the rumen wall, so its utilisation by

Vistacell is critical to good fibre digestion.

2. Competition for sugars

By competing for sugars within the rumen, Vistacell limits its availability for conversion into lactic acid by certain bacteria. The strongest acid produced in the rumen, lactic acid quickly reduces rumen pH and is the primary cause of acidosis, leading to reduced performance.

3. Stimulate lactic acid utilising organisms

Vistacell further reduces lactic acid build-up by stimulating microbes capable of converting lactic acid into propionate, a key volatile fatty acids (VFA) absorbed from the rumen to supply energy to the cow.

4. Improved rumen microbe diversity

Certain metabolites from Vistacell directly boost growth of beneficial microbes, as well as anaerobic fungi that 'open up' forage fibre for bacterial digestion. This increases microbial numbers and diversity, shortening the lag time before fibre digestion begins.

The net result is a significant boost to the efficiency with which forage is digested within the rumen...as long as the yeast used is a live one!



For more information on Vistacell yeast visit www.abvista.com or phone 028 9447 3478.