



Welcome to our December Newsletter

With winter feeding of cows well under way our team have been working with you to improve forage digestion—some of which is a little more lignified this year. The team have also presented (via zoom) to The West Cornwall Grassland Society with some great participation from the audience in discussing forage intakes.



“A well rested cow eats and ruminates more...”

Feeding management plays a key role in cow health. Management should enhance rest and rumination, any management that impairs lying time reduces rumination and feeding. Bach et al. 2008 shows that 56% of variation of milk yield is as a result from non-dietary factors. For example every 5%-unit increase in variability of long particle length (> 19 mm) results in a decrease in 2.6 lb/d of milk yield and 2.6% decrease in FCM/DMI (Sova et al. 2014). Management should focus on a healthy rumen environment from feed and feeding conditions as well as farm practices and procedures.

Feed and Feeding Conditions

- Rumen pH—feeding conditions affect rumen pH more than diet
- SARA risk increases with an increase in stocking density or overcrowding.
- De novo Fatty Acids reflect rumen function predominately fibre fermentation so milk fatty acid profile can be a tool to measure optimal rumen fermentation conditions.
- 65% variation explained by bunk space (Woolpert 2016).

Farm Practice and Procedures

- Increasing bunk space by 4 in can improve milk fat +0.06% and decrease SCC –13% (Sova et al. 2013).
- High fat and protein herds have ≥ 18 in/head of bunk space, $\leq 110\%$ stocking density, deliver feed 5x/d (Woolpert et al. 2016).

Ideal Feeding Management

- Feed available 24/7
- Consistent feed quality and quantity along the bunk
- Bunk stock density $\leq 100\%$ (≥ 24 in)
- TMR fed 2x/d
- Push-ups 2 hr post-feeding (keep feed in front of cows)
- ~3% feed refusal target
- Bunk empty no more than 3 h/d (ideally never)

**Our Vision is to Empower and Support our Farmers to Maintain a Healthy Herd and Business
Sharing Scientific Knowledge and Expertise to Provide Targeted Solutions to the Farming**

Looking back at 2020 with our farmers...



Jig and Amanda Berridge

“We have achieved a great cereal crop this year despite the challenging weather & we are very pleased with the cows condition”

Quentin Thomas

“We have reached our goal of getting our maize better processed this year”

There has been a real focus from our farmers this year on improving crops. Improving forage crops allows the cow to eat more and produce more from home grown forage. Cows are at the centre of everything we do and increasing forage intakes leads to healthy cows and therefore healthy profits.



Congratulations!

We would like to congratulate Emma and Tori on passing their R9. ASSESSMENT - FAR RUMINANT TRAINING 1 & 2 to become assured ruminant nutritionists.



Protected B Vitamins help the body to convert feed

Cows need the fortification to convert feed to fuel. You wouldn't short your cows on fuel or protein, don't short her on the vitamins she requires to burn that fuel.

All B vitamins help your cows convert their rations (carbohydrates) into fuel (glucose), which is "burned" to produce energy. These B vitamins also help the body break down and use fats and proteins.

B complex vitamins are necessary for healthy hooves and liver function. Certain B Vitamins regulate the formation of red blood cells. Others are additionally used as antioxidants. Still further several of the B Vitamins interact with one another and are therefore essential in adequate amounts to ensure that all vitamins can complete their many specific roles.

All the B vitamins are water-soluble, meaning that the cow does not store them.

Dairy cows and other ruminants are unique. The microorganisms digested from their rumen are a source of B Vitamins for the cow. This is an advantage for the cow. This same rumen, however, is a huge barrier for B Vitamins from her ration. B Vitamins are destroyed to a large extent in the rumen. When you feed unprotected B Vitamins, much of what you purchased or have grown is wasted.

Technology exists today to coat B Vitamins, enabling your cows to receive a known, balanced fortification of vitamins to ensure optimum milk production, health and reproduction.

How B Vitamin supplementation support cow metabolisms?

During Transition, proper liver function is crucial for the health and later reproductive performance of the cow. Protected B Vitamin supplementation is crucial at this period to deliver the necessary supplemental B complex vitamins. Healthy calving = improved reproduction.

During lactation, protected B vitamins deliver the required amounts of specific vitamins to grow strong hooves, to efficiently convert carbohydrates to glucose, to produce fats and proteins for greater butterfat and protein yield in milk and to breed back early.

Effect of protected B Vitamins during transition

Ketosis*	Without	With
Subclinical Ketosis	29,9%	15,0%
Reproduction *		
% pregnancy < 120 DIM	30,4%	49,5%
Culling **		
% culling < 190 DIM	32,7%	22,0%

** Trial done in Wisconsin, USA, in 2 commercial farms (1150 and 1250 cows)*

*** Trial done in California, USA, in a 4000 cow commercial farm*

Dominique Bouchut
Ruminant and Rabbit Market Manager
Jefo

A VERY MERRY CHRISTMAS FROM ALL OF THE SC NUTRITION TEAM!



WE WISH YOU ALL THE BEST FOR 2021!

Silage in Cornwall



33	Dry Matter %
14.2	Crude Protein %
10.5	ME
53	NDF %
40.5	Sugar %

Steve Chapman - Technical Director

07718 086911

steve@scnutritionltd.com

Emma Tristram - Ruminant Nutritionist

- Newsletter editor

07712 165609

emma@scnutritionltd.com

Tori Leggott - Ruminant Technician

07500 205974

tori@scnutritionltd.com

Fiona Aird - Office Manager

01872 278058

fiona@scnutritionltd.com

'Springfield', Barrack Lane, Truro
Cornwall, UK, TR1 2DW