Transition Management – “Place Your Name Here”

WYNNSTAY
Wynnstay Group Plc
Eagle House
Llansantffraid
Powys
SY22 6AQ
Tel: 01691 828512
Fax: 01691 828690
Email: info@wynnstay.co.uk
www.wynnstay.co.uk

If our fresh cows have a problem on our dairies, that problem has a first and last name and it’s – “Place Your Name Here"

Experiencing health problems with freshly calved cows?

- Ketosis
- Metritis
- Retained placenta
- Milk fever

As Dr Gordie Jones, DVM, said when he spoke at a Maryland Dairy Convention, “If our fresh cows have a problem on our dairies, that problem has a first and last name and it’s “Place Your Name Here“.

Dr Jones explained that the single most important phase of production is a phase many dairy farmers fail to manage: The Transition Period.

To get the balance right, two things are needed, sound nutrition coupled with good stress-free housing and both are needed. **So where do we start?**

Body Condition Scoring (BCS)
At drying off, the ideal is a BCS 3, on a 1 to 5 scale. This should remain the same throughout the transition period. Look at your cows eight weeks before drying off, assess their condition and adjust feeding to arrive at the right BCS on drying off. Cows that lose 1 BCS in transition had greater incidence of milk fever, ketosis, D.A and retained placenta than cows that maintained their BCS in dairy transition (Kim and Suh 2003). Over conditioned cows carry a higher risk of ketosis and fatty liver.

Dry Period
It is necessary to have a minimum of 21 days and some prefer a 42 day period. Either is fine, provided you do not allow the cows to gain or lose weight during this period and that you have dried them off at condition score 3/3.5.

Diet
The diet should be designed to maximise intakes and should be a controlled energy diet rather than a high energy diet. “Feeding a low energy diet pre-partum results in increased DMI post-partum, increased milk yield and alleviation of Negative Energy Balance (NEB)” (Huany et al 2014).

Dry Matter Intake (DMI) is crucial during the dry period, allowing both time and space for feeding is essential, low DMI will lead to fat mobilization, ketosis, impaired liver function and poor immune function. Dr Gordie Jones’ “Goldilocks” diet is generally accepted as the standard high fibre diet, an example is:

- 5kg Dry Matter (DM) whole crop cereal
- 3.5kg DM chopped straw
- 3.5kg DM grass silage

- 75g calcined magnesite
- 1.25kg specialized dry cow mineral

The diet should be supplying a crude protein content of 13-14%, with a starch level of 12% and an energy density of 10mj/kg/DM. Within the Dry Cow mineral, due to the suppression of the cow's immune system at this time, it is recommended that a high level of Vitamin E be fed, 2000iu's, along with Selenium; shortages of these two minerals have shown to cause retained placentas, fresh cow mastitis or elevated Somatic Cell Count (SCC). Additionally, it is now well proven that both Rumen Protected Choline together with Rumen Protected Methionine and Rumen Protected Lysine are essential for transitioning cows well.

- Rumen Protected Choline decreases fatty liver, increases milk production, decreases Reactive Oxidation Species (ROS) and serves as a methyl donor for methionine regeneration
- Rumen Protected Methionine is required for protein synthesis, DNA and is the start (Codon) of every protein generated in the body. Importantly Protected Methionine plays numerous roles in cell structure, protein synthesis, milk production and embryo viability. (White 2016)
- Rumen Protected Lysine fed 4 weeks prepartum has the greatest effect postpartum producing increased milk fat, protein, casein and lactose yield and milk yield. Due to the mammary gland utilizing RP Lysine for regeneration and growth prepartum which primes the mammary gland for enhanced performance postpartum.

Nutritionists should target an MP flow of 1300g per day in close up cow diets. (Van Saun and Sniffen 2014). Adequate MP benefits are:

- Improved disease prevention
- Improved reproduction performance
- Improved milk component yield
- Improved colostrum quality

It is also important that the feed fence is never empty as this will compromise the cow's immune system and lead to metabolic disorders post calving. Always aim for 5% refusals for the transition cow fence and ensure they are pushed up throughout the day. Also, be mindful of feeding rates, they differ for heifers and cows. Pre-partum feeding rate for a heifer is 66g/DM/min and for a cow 95g/DM/min and very little difference post calving; 78.8g/DM/min for a heifer and 106.7g/DM/min for a cow. So, feed space is vitally important for the heifers, to ensure they have time to eat to maximise both yield and growth.

Stressors:

- Minimise cow movements, especially five to seven days prior to calving
- Regrouping a cow can be compared to the most stressful event in our lives
- Overcrowding in a close-up pen decreases yield
- Primiparus cows: 2.95kg/d increase in yield (1st 83DIM) when stocked @ 80% v. 120%
- For each 10% increase in close-up stocking density above 80% there was a 73kg/d decrease in milk yield

Attention to detail and you can remove "Your Name" on the plate above the transition pen!

Ken March | Dairy Technical Specialist

Contact Details: **m:** 07454 015610 **e:** ken.march@wynnstay.co.uk