

DN NEWSLETTER *issue 29*

Problems with cows at calving can be traced back to problems during the last trimester of lactation and the dry and transition period. When we have a problem, it is important to look up stream to identify the cause and the origin of the problem.

Transition Update and Revision

Every dairyman will be aware of the issues caused by having over conditioned cows in the dry pen. These cows are at risk of developing transition diseases, having poor milk production, reproductive performance and are even at greater risk of leaving the herd early. Interestingly, cows which have a poor transition are also more at risk of becoming lame.

If we were to look back at the history of these cows we will, in most cases find that these cows will have had a poor transition at the beginning of the last lactation, been lame during the previous lactation and had an extended lactation as a consequence. Again, it is pretty clear that problems flow from upstream to impact the current and future performance downstream.

For over 20 years now we have been made aware of the 6 most important factors of managing transition cows to ensure a smooth trouble-free lactation.

- Adequate bunk space for pre- and post-fresh cows (75cm)
- No pen changes between 7 and 2 days prior to calving
- Adequate lying space (10m²) or an adequately sized comfortable free stall for pre- and post-fresh cows
- 0% lame cows in close-up pen
- Avoiding social stress
- Heat abatement of pre and post fresh cows in summer

These 6 factors were shown to help maintain DMI up to the point of calving and reduce stress in close-up cows. Compromised DMI in close-up pen and elevated levels of stress are known to cause elevated levels of

metabolic stress which can result in unnecessary systemic inflammation or immune activation which can actually increase the risk of transition problems.

Last year Nigel Cook of the University of Wisconsin presented an update to the original Wisconsin Dairyland initiative transition cow blueprint.

Included in the update was 3 additional areas which can be improved in order to increase the performance of transition dairy cows:

1. A quiet, undisturbed place for calving

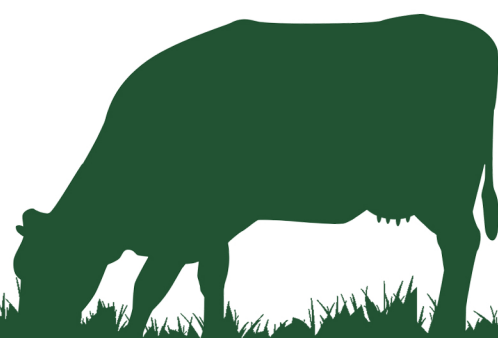
The first addition was the importance of a quiet undisturbed place for the cow to give birth. A quicker labour results in less stress and reduced risk of dystocia all of which are shown to reduce the incidence of retained placentas and metritis.

2. Effective fresh cow protocols

The second was the importance of effective fresh cow protocols for the early identification of sick cows and administration of early preventative therapies for at risk cows. This recommendation consisted of the following main elements, firstly the ability to recognise and monitor at risk cows (twins, lame, thin/fat), an effective system of monitoring DMI immediately post milking and thirdly access to headlocks for fresh cows and headlocks in the heifer pens so that the animals are accustomed to using them.

3. Good nutrition

The final addition was the importance of good nutrition, forages and presentation of the TMR.



TRANSITION COW NUTRITION

In terms of nutrition, here are 7 areas on which to focus:

1. Managing calcium status during transition requires an effective DCAD or Calcium binding strategy
2. Controlled energy diets are critical
3. Metabolizable protein (MP) content of the diet has a positive effect on protein metabolism during lactation
4. Improving the supply of specific amino acids to Transition cows improves fat metabolism and immunity
5. Restricting the fermentability of the transition diet because of the fear of acidosis in early lactation holds back performance
6. Supplementary fat is not just energy, and all fats are not equal. Some combinations can help to maintain body condition others can help to control inflammation
7. Feeding Zinpro performance minerals improves transition cow performance



Investing in the dry period both in terms of improving facilities and nutrition is an investment that will yield significant returns.

Although the dry period is roughly only 20% of the entire production cycle of the cow it influences the performance achieved during the lactation phase which accounts for 80%. Focus on the 20 to optimise performance in 80!

Product Focus - Replenisher 321

Replenisher 321 is a high specification dry cow feed to support health, transition and colostrum production.

Features and benefits include:

- 6mm fully mineralised nut
- Available in bulk and 25kg bags
- Good levels of quality protein with high bypass levels for preparation for colostrum & milk production
- High level of magnesium to help reduce issues of milk fever at calving
- Lift to support liver function
- Actisaf to support rumen function
- High spec dry cow premix
- Good levels of soya

