COWS-R-US Transition Cow Feeds

Supporting milk production

A loose supplement to be mixed on farm with grain, or a complete mix, it is designed to prevent milk fever and stimulate milk production in cows after calving.

During the last 15 years, one of the greatest advancements made in dairy cow nutrition has now become the widespread practice of Transition Feeding dairy cows prior to calving. This research was conducted by Professor Ian Lean and his colleagues at Scibus and CRU. This crucial time when these feeds must be fed is during the last 3 weeks before calving. This is also known as the Late Dry or Transition Period where “Springers” are fed their Transition Feed.

What are the main aims of Transition Feeding?

- to meet nutritional demands for maintenance, foetal growth, and cow body condition.
- to allow rumen microbes and papillae to adapt to elevated levels of concentrate feeding.
- to enhance dry matter intake (DMI) before calving and so increase milk yield.
- to improve fertility through better feeding.
- to aid in the prevention of metabolic diseases such as ketosis, milk fever, LDAs, calving paralysis, udder oedema and retained membranes.

Why do we need to "Transition Feed" the dairy cow in this unique way?

- to try and prevent the usual drop of DMI in the late dry period. This can be as much as a 30% decrease a week before calving.
- the nutrient density of the cows' diet must also increase in energy and protein due to the further drop in DMI in the 7 days before calving.
- the nutrient requirements of the foetus for glucose and amino acids (protein) also increase rapidly putting more demands on the cow.
- The cow has a specific need for bypass protein also, to meet the demands of the foetus as well as to put in her own body reserves. She also has a need for non-bypass protein to keep her rumen microbes working effectively.

What should we be Transition Feeding our dry cows in the 3 weeks before calving?

- they need access to max 2-3 kg DM of pasture, if possible, that has had NO potash fertilizer applications as potassium can lock up magnesium and cause milk fever.
- they need decent quality cereal hay, again preferably from paddocks that have had no potash added. Cereal or pasture hay is ideal but NOT legume hay.
- they need superior quality concentrates such as barley/wheat or whatever energy source is going into the fresh cow feed to prepare the rumen microbes for what type of feed is about to come after calving.

What specific nutrients are important in Transition Feeds?

- ENERGY is especially important if they are going to have to get used to 8kg of concentrates during lactation, then we give them 4kg in the Transition period to help the rumen microbes adapt to a high concentrate diet.
- PROTEIN supplementation is essential to keep the rumen microbes working effectively as well as to supply a source of bypass protein. Lesser amounts of lupins and canola are suitable and also BIOCHLOR, which is an excellent source of protein and palatable ANIONIC SALTS. The protein in BioChlor is an excellent source of bypass protein but also stimulates microbial protein growth.
- dry cows MUST NOT have access to sodium bicarbonate, copious quantities of molasses or any lactating cow minerals as these could all induce milk fever.
- additives such as RUMENSIN can be fed to help support blood glucose levels and so help prevent ketosis, but also reduce retained placenta.
- other additives can be used in the 4kg CRU Transition Feed as used in the Milking Cow Feed e.g. CRU RFT 50 pellets which allows the additives and trace minerals to be the same.
- we must include ANIONIC SALTS in the mineral part of the late dry feed to help with milk fever prevention. These salts are acid salts and include Epsom salts and Gypsum.
- when we feed ANIONIC SALTS, we can feed calcium to the cows and a source of magnesium is also important to stimulate the cow to bring calcium off her bones and into the blood where it is needed. All the CRU Transition Feeds are formulated this way.

What production and health benefits do we get by giving our dry cows a CRU Transition Feed?

- Fewer incidences of those common post-calving metabolic diseases mentioned earlier in the article.
- higher DMI pre-calving allows the cow to achieve greater DMI post-calving which means more milk.
- more blood glucose and blood calcium mean less downer cows and fewer cows with calving difficulties.
- less retained membranes and so less reproductive problems.
- higher milk production due to the sparing of protein reserves in the dry period, which can then be put to effective use when the cow comes into lactation.

Do heifers receive help from being fed a CRU Transition Feed?

- heifers do benefit in the same way as mature cows from being fed correctly before calving. They do not get milk fever but do have other issues related to hypocalcaemia.
- the problems they face during that first calving period, can be markedly reduced, by being fed the same Transition Feed as the rest of the herd and getting used to being in the herd.
- problems such as calving paralysis and udder oedema can be minimised as well as grain poisoning or acidosis being reduced markedly by getting the heifers accustomed to being with the herd and being fed the same feed before calving.

In summary for an average cost of about $40.00 per cow per 3-week transition period the health and production benefits of feeding cows and heifers correctly prior to calving do certainly outweigh any cost and savings in vet and medicine bills can be reduced. A huge Cost: Benefit!

Any clients keen to have a Custom CRU Formulated Transition Cow Feed
based on your own individual forage Mineral Nutrition Analyses please contact:

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