Body Condition Important for Future Cow Production

Body condition is an important factor in a cow's overall production, not only from the milk production perspective, but it can also have significant impact on her reproductive potential and milk fat percentage throughout lactation.

It is recommended that cows are dried off at a Body Condition Score (BCS) ranging between 5 → 5½ and that they maintain this condition until calving. It is easier to put condition on a cow while she is still milking than when she has dried off. This can be done by increasing energy levels feed to more than the cow requires for milk production in her last two months of lactation.

Cows that calve in a high BCS (> 5.5) are at risk of reduced reproductive performance, as are those that are in a BCS of < 4.5. Over-fat cows have restricted dry matter intake when fresh and therefore lose more weight in early lactation as they cannot meet their energy demand for milk production. These cows are also prone to metabolic problems such as ketosis. Cows with a BSC <4.5 also have reduced reproductive performance, as it takes them longer to begin cycling after calving and milk production will suffer as a result of the cow putting nutrient into body condition instead of milk.

Body condition can also impact on milk fat percentage. Cows with adequate body reserves at calving are able to produce more milk fat than cows that are in lower body condition, as they literally "milk off their backs" when they are fresh and bridging the gap between energy intake and energy required for milk production. Increased component levels are able to be produced throughout the lactation, as the cow isn't trying to catch up, given that she is fed a balanced diet.

Putting condition on cows towards the end of lactation can often be considered a waste of money, but in actual fact this weight gain is setting her (and you!) up for a successful next lactation.

Metabolic Diseases over Winter.

By Kim Brister

LATE LACTATION MILK FEVER

Recently we have had a few enquiries of cows with late lactation milk fever. This may be due to the cows milking harder towards the end of lactation and may not have enough calcium left in her reserves.

Cows need calcium for bone and teeth formation, transmission of nerve impulses, muscle excitability, cardiac regulation, blood clotting and the activation and stabilization of enzymes. Basically, it is a very important mineral to the cow and makes up nearly 2% of her body weight.

Most farmers would have seen milk fever in the herd immediately after calving. Milk fever occurs due to the inability to digest and utilize dietary calcium, or mobilize bone calcium quickly enough to satisfy demands for milk production.

The frequency of late lactation milk fever increases with

- cold, wet weather conditions
- higher producing cows
- as the age of the cow increases so does the risk
- higher body condition score cows
- jerseys seem to be more susceptible

It is most important for the late lactation milk fever cows to be fed a lead feed ration prior to calving, like Springer MP. The anionic salts help the cow absorb calcium from her diet and at the same time mobilize more calcium from her bones. Cows with late lactation milk fever will be at a greater risk of developing milk fever around calving.

GRASS TETANY

Grass tetany or hypomagnesaemia occurs when blood magnesium levels fall below a critical level - hence the term hypomagnesaemia (low blood magnesium). Autumn pastures often have low concentrations of magnesium and with time the cow also becomes depleted.

Magnesium plays an important role in the cow's skeletal development, neuromuscular transmission and activity and in many enzyme systems. About 70% of the cows magnesium is stored in the skeleton, very little of this is able to be mobilized when the diet is deficient. The cow relies on dietary magnesium each day to maintain blood magnesium levels.

Grass tetany generally occurs in cows grazing pasture with high ryegrass content, especially young, very lush pastures (high in potassium and nitrogen) that are grown in highly fertilized soils. Cold and wet windy weather with little or no shelter, resulting in short periods of fasting, can also encourage the onset of grass tetany.

Symptoms may include restlessness, over-alertness, being excitable and in some cases, aggressive. In severe cases, animals may fall down and go into convulsions or just die without warning.

Contact your Tech Services rep to talk to them about dealing with grass tetany, some extra magnesium can be added to your feed to help prevent the symptoms.

Did you know???? That a cow producing 6,500L/ year equates to 8kg calcium in her milk. Therefore, it is very important to ensure adequate calcium has been supplied throughout the entire lactation to replace the calcium that has been sent out the front gate.