



Reducing milk fever at grass

Everyone involved with dairy cows is only too aware of the high risks of milk fever and metabolic disorders arising from an excess of calcium in the dry cow diet. And it's not just a problem when grazing.

Consider this. The target calcium level in a dry cow diet is 30g/day. The average calcium content of UK grass silage is 8-10g/KgDM, so if a dry cow eats 12kg of forage DM per day, that's up to 120g of calcium per day. This excessive level of calcium will prevent the cow from mobilising supplies from her bones right when she needs it, at the point of calving.

The problem can be exaggerated at grazing. Heavily fertilised grass is high in potassium which creates an alkaline effect in the blood, causing the blood pH to rise and reducing bone calcium mobilisation.

The principle behind feeding low calcium diets is to encourage the cow to use her natural defence system for preventing hypocalcaemia. There is a massive increase in calcium demand at the onset of lactation, with calcium requirements doubling in the 2-3 days immediately pre-calving.

A cow giving 35 litres requires approximately 1.2g of calcium per litre. This means she has to produce 42g of calcium per day. The exchangeable pool of available calcium is approximately 12g, so if this is not replenished this pool of calcium will be exhausted within 10 hours, hence the need for her to mobilise bone calcium quickly at the time when she needs it.

Cows at a higher risk of milk fever include:

- High yielders
- Jerseys, due to the higher milk quality
- Older cows, as their ability to mobilise calcium is diminished.

What we can do to reduce the risk?

- Speak to your Massey nutritionist about having a forage mineral test. This will flag up any risk-factors such as silages high in potassium. A bespoke dry cow mineral pack can then be formulated. For example, dietary phosphorous levels can be increased to bind excess calcium in calcium-rich silages.
- Feed sufficient magnesium. 40g per day is the requirement to allow the magnesium dependant enzymes to regulate calcium homeostasis. This can be supplied in 2kg of Massey dry cow rolls or in our dry cow minerals. Adding Mag-chloride flakes to water troughs is a widely practised way of getting magnesium into cows but it does affect water palatability and you can't be certain about intakes.
- Feed anionic salts in the TMR. Again, these can reduce palatability but if intakes are correct then they are effective.

However, these approaches may not always be practical-particularly at grazing, so consider using a calcium binder.

Feeding a calcium binder in the two weeks prior to calving reduces the uptake of dietary calcium such as that in grazed grass and in silage. The principle is straightforward. It binds the calcium in the small intestine making it less available for absorption. This primes the hormonal system to mobilise the bone reserves of calcium at the time of calving.

It can be fed in a TMR down the barrier. The controlled trials show an effectiveness of 100% under practical farming conditions and there have been no negative side-effects associated with feeding it. More recently, its effectiveness has been backed up by trials done in association with Harper Adams University.

For more information on our dry cow products contact your feed specialist or speak to Dawn Jones at Holmes Chapel.



Emma Hutcheon
Ruminant Sales Specialist
07787 104576



Farming thoughts

There is never a dull moment in agriculture!

As we hopefully now come out of the rollercoaster ride of low milk prices, we now have the uncertainty of the Brexit negotiation process. We know for certain that Article 50 will be triggered in March, followed by two years of negotiation before we finally leave. This, together with the American situation and what's to come with Mr Trump is having an enormous impact on the markets. Since the New Year we have seen sharp price rises in fertiliser and feed raw materials.

Just as we are coming to terms with some of these issues the poultry industry is reeling from the Avian Influenza outbreak. The H5N8 strain has been confirmed on a number of units across Britain since the first farm outbreak on 16th January 2017 in turkeys. Since then it has been found in breeding pheasants, commercial pheasants, partridge, ducks and the latest outbreak on a 23,000 poultry unit in Mid Suffolk (14th February 2017).

As a company we are taking this matter very seriously and are continuing to maintain very high levels of biosecurity for all our vehicles that enter poultry sites, with careful planning of loads at all times. Our sales and poultry specialists are following the government biosecurity guidelines.

Wild bird faeces are the main threat to poultry, which is why birds are housed until 28th February when new regulations come into place. One key message to all producers is the cleanliness of water sources when the birds are eventually let out. The game keepers have my greatest sympathy with this at the moment.

Once the virus is exposed to sunlight the risk of infection falls rapidly, so lets hope that an early warm spring together with all the biosecurity measures the industry are taking as the wildlife migrates away from our shores will see the industry get over another crisis!

For further guidance on avian influenza phone the defra rural services helpline: 03000 200301.



Phil Stirk
Sales Director
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Team approach to improving grassland productivity

Ted Birch, who farms at Fold Farm Sheen Staffordshire took advantage of the experience and knowledge of the Massey Feeds team and our associated partners to increased production from forage with his 60 cow autumn calving herd.



Infrastructure changes

A ten acre field which had previously been grazed as a single block was split into four paddocks. Troughs were placed in the fence line so each paddock had sufficient access to water. The paddocks meant grass was grazed at the correct growth stage and back grazing was eliminated, increasing total grass yield. An additional ten acres were converted to paddocks the following year.

When silage aftermaths are introduced to the grazing block they are still strip grazed and Ted has created a track using electric fencing to help reduce back grazing here too.

"The paddocks produce the best quality grazing all year round and controlling back grazing has improved output all season," he says.

To further maximise grazing and silaging yields the focus moved to soil fertility with soil samples and analysis by Origin fertilisers. A fertiliser plan has been created to balance any excesses or deficiencies identified in the soil to increase productivity. Selenium was highlighted as a particular problem to address.

Bespoke minerals

Ted also highlighted a problem he had observed with the herd, with cows licking urine during the winter months. He had tried using rock salt but this hadn't stopped the problem.

Richard organised a silage mineral analysis which showed the silage had very low sodium but very high chloride. This explained why the rock salt hadn't worked, as although it contained sodium it also contained chloride and so wasn't addressing the problem. Working with David Wilde from Premier Nutrition, Richard Ford was able to target the problem scientifically instead of simply feeding mineral supplements ad hoc. A tailored mineral was formulated to eliminate this problem.

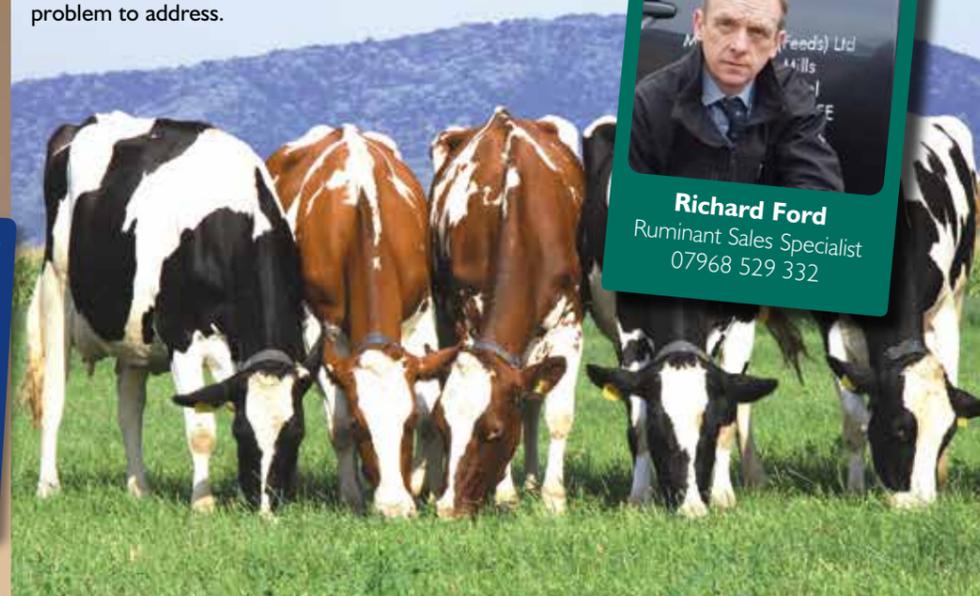
A problem with copper deficiency was also identified, mainly during the summer months when cows were on low concentrate feed rates. By feeding the FIMLAC Prograze dairy compound with a higher mineral inclusion we were able to eliminate this problem.

"By making use of the full resources that Massey Feeds customers have available to them I have been able to make the grassland more productive, getting higher yields of grazing and silage," Ted Birch comments. "Yield per cow has increased from 5500 litres to 6000 litres and I am now producing 42% of all milk from forage compared to 35% before I made the changes. I have been able to reduce total purchased feed use by 20%."

Highlighting areas for performance improvement and developing a plan using all the resources available through Massey Feeds have helped to keep costs down in this tough economic climate and means Ted has a more efficient system as milk prices recover.



Richard Ford
Ruminant Sales Specialist
07968 529 332



Quality pays when creep feeding lambs

If you have limited grazing or poor quality silage and want to market your lambs sooner, then creep feeding might be the right option for you. Creep fed lambs will finish sooner and will take advantage of the better prices that may be available from early marketing.

If creep feeding lambs it pays to use a quality creep feed as it will be formulated to meet the requirements of lambs and exploit their growth potential. A quality lamb feed costing £250/t and giving a 5:1 Feed Conversion Efficiency (FCE) will cost £1.25/kg liveweight gain compared to a cheaper feed costing £200/t but with an 8:1 FCE, which will cost £1.60/kg liveweight gain.

Because young lambs convert feed more efficiently, an early introduction will be more cost effective. If offered ad-lib with good grass a lamb should be expected to eat 35- 40kg by the time of sale.

A note of caution however. If creep is fed to older lambs it must be introduced gradually to avoid gorging and dietary upset.

Massey Feeds have two pelleted products and a Harvest Mix (Blend) which will help ensure lambs grow quickly and cost-effectively:

Lamb Creep Pellets - Designed to encourage early intakes of dry feed with adequate starch to help promote rumen development. Good rumen development will encourage earlier weaning and rapid growth. Includes Bio-Mos to maintain a healthy digestive tract and lower the incidence of nutritional disorders.

Hi Gain Lamb Pellets - The perfect follow-on ration to Massey Lamb Creep Pellets for fast finishing lambs. Can also be offered from birth to finish as a 'one-ration-fits-all'.

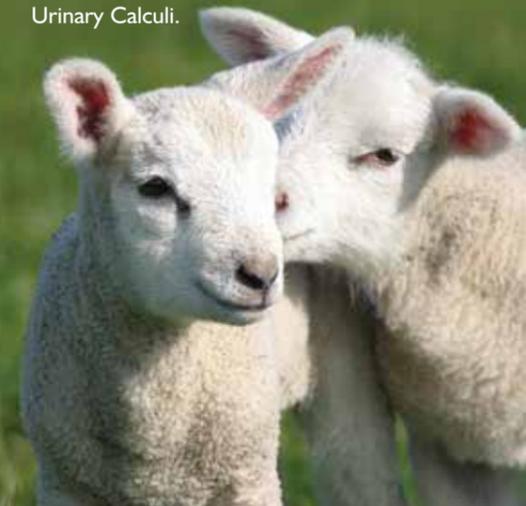
Harvest Lamb Mix - A blend of quality raw materials to promote fast lamb finishing.

On receipt of a veterinary prescription we can supply Lamb pellets medicated with 1.67 Deccox to help prevent coccidiosis.

All our lamb feeds contain a fully balanced mineral package using the organic form of selenium (Sel-Plex) and zinc (Zinc Bioplex). Ammonium Chloride is also added to help prevent Urinary Calculi.



Paul Drake
Beef and Sheep Specialist
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Feeding higher starch levels safely

Feeding treated wheat will allow increased starch levels in diets without compromising rumen health.

Feeding higher levels of starch, particularly wheat, in a dairy diet can increase the acid load level in the rumen. This in turn leads to poor rumen function, reduced feed efficiency, impaired performance and health issues. When the pH of the rumen falls below 5.5 rumen function declines and the acid level, leading to decreased microbial activity which compromises fibre digestion and overall performance.

This can be drastically reduced by treating the wheat with Maxammon. Maxammon is a complementary feed which, when combined with urea and grain, results in a nutritionally enhanced, higher pH feed, which also has a higher protein level.

To compare:

- Maxammon Treated wheat pH 8.8
- Dry Grain pH 6.5
- Crimped Grain pH 4

Maxammon also increases the protein content of the grain by 30% on average, reducing the need for additional protein in the diet, although it may be necessary to increase the quality of other proteins in the diet to balance the ration correctly.

Feed rates of up to 7kg/day of treated wheat can be achieved in dairy diets, allowing much higher starch levels than would normally be associated with rolled grain. This combined with better rumen health leads to:

- More milk and better milk quality as starch drives both yield and protein content. In addition, better rumen health results in better fibre digestion leading to improved butterfats.
- Fewer foot and lameness problems as a consequence of improved rumen pH
- Improved body condition and fertility
- Better returns due to improved performance.

We can supply treated and processed Maxammon wheat, ready to put straight into the feeder wagon, available in various load sizes to suit. We can also ration your cows to balance the product with the correct blend, mineral and compound feed so that your cows achieve optimum performance.



Tom Furnish
Dairy Commercial Manager
07976 418 027



Increase protein efficiency of cows this spring

With turnout fast approaching, cows' diets will soon be changing, and this will have an impact on the rumen. Lush fresh grass can contain up to 28% crude protein and we all know the effect this has on cows!

Novatan is a product developed to help reduce the protein degradability in the rumen and improve the efficiency of the diet. It works by targeting specific bacteria called HAP (Hyper Ammonia Producer). By reducing the HAP activity, it reduces protein breakdown without affecting the other functions of the rumen.

Novatan helps to stimulate microbial protein synthesis and increase the quantity of digestible protein (by-pass protein) in the intestine by as much as 35%. This has a direct effect on ammonia production, with reductions as large as 40%. This reduction in ammonia, and subsequently urea, has a positive proven impact on conception rates and cow fertility.

As a direct result of improved protein efficiency and better rumen pH, milk yields can increase by up to 1.5 litres/day, milk protein content can improve and blood and milk urea levels will reduce.

If we are going to pay good money putting high quality grass into our cows we should aim to maximise the nutritional potential. Novatan is included as standard in our FiMLAC QHS range of summer diets.



Alan Webster
Technical Trading Manager
07787 104 578

Lifeline lamb and ewe buckets

We are now stocking Lifeline lamb and Lamb buckets.



For more information talk to your feed specialist or call your local mill

Maximising forage potential meetings

We have arranged two 'maximising the forage potential' meetings with **Dr Dave Davies** from Silage Solutions



Thursday 30th March

11.00am

Stubbs Partners Ltd, May Farm, Whitgreave, Stafford, ST18 9SP
Clamp meeting
(Refreshments to follow)

7.15pm

Leek Cricket Club, Leek, ST13 8SG
(Hot food available from 7.15pm with the meeting starting at 8pm)

About Dr Dave Davies

Dr Dave Davies worked at the Institute of Grassland and Environmental Research in Aberystwyth until 2010. His research focused on all aspects of silage and interactions with the rumen and ruminant. In 2010 he left academia and established his own company. He continues to conduct Research experiments on silage, but also spends a lot of his time talking to farmers across Europe and beyond discussing practical issues with silage making and feeding. Dave is from a farming background and has never forgotten his roots with a strong desire not only to get the best advice and information to farmers but also to ensure his research is of use to the practicing farmer. He is currently conducting a survey of silage clamps across English farms, funded by AHDB Beef and Lamb, to look at silage quality, DM losses and variability both within a single clamp and between farms.



The complete feed for working dogs

The FED2WORK range of dog food has been developed to supply the best possible nutrition for working dogs.

Based on customers' requirements we have created a range which focuses on:

- Health and vitality
- Increased energy
- Taste and palatability
- Oral care
- Skin and coat condition

Containing only high quality ingredients, all feeds are available in easy to handle 15kg bags. They are available for collection from all our locations or can be delivered along with your bag order.

For more information or to place an order, call 01477-536300.



New addition to the sales team

A well-known and popular member of our Customer Services team at Holmes Chapel, Dawn Jones has recently joined the Sales Team in a new role sourcing all alternative products such as minerals, mineral/feed buckets, liquid feeds, additives, milk powders, grains, moist feeds and the new FED2WORK working dog food.

Dawn can be contacted on 07787 104558 or dawn.jones@masseyfeeds.co.uk and will be pleased to discuss your requirements.



Dawn Jones
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