



THE MYCOTOXIN MENACE

Victoria Hicks Victoria.Hicks@kiteconsulting.com



You may or may not know it, but you are feeding mycotoxins to your cows. It is virtually impossible to avoid them, but at what level do they become an issue for cow performance?

Mycotoxins exert several negative effects on ruminants; affecting their feed intakes, absorption of nutrients, hormonal balance and immune systems. A herd under a mycotoxin challenge could exhibit lower than expected yields, sub-par fertility performance and increased metabolic issues. These are all very generic issues that could be attributed to a number of causes. Therefore, it is difficult to pinpoint mycotoxins as the root cause, especially as mycotoxicosis can be in sub-clinical form.

The rumen is capable of detoxifying most mycotoxins, however, our high producing dairy cows will have an increased rumen outflow rate and hence a reduced time period for this to occur. Similarly, anything that upsets the rumen environment such as stress, negative energy balance or low rumen pH will also affect its detoxifying capacity.

Last year's hot and dry growing season provided ideal conditions for mycotoxin growth in the field, which can continue to grow in the harvested material. The annual Mycotoxin Report from Biomin found a 62% global risk of mycotoxins from 2018 harvest samples, with Europe at 46%. Despite this only being classified as a moderate risk for ruminants, what is of concern is the much higher risk level found in samples of wheat and maize from North and South America. As the origin of purchased feeds is not always known, a precautionary stance on mycotoxin levels is advised.

Preventing mouldy feed from entering the mixer wagon is a good starting point, but when this cannot be guaranteed

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feeding a mycotoxin sequestering product is a good insurance policy. There are many different types of mycotoxins so you need a product that not only 'binds' but also 'deactivates' to give you the best protection. Unfortunately, testing methods to quantify the level and type of mycotoxin burden are costly and, as is often the case, the damage will already be done by the time the results are back.



Bentonites are the only EC approved substance for binding mycotoxins and yeasts are effective at providing sites to deactivate them. There are many products on the market so make sure that you choose one with both modes of action.

Feeding a deactivator product such as Ultrasorb will cost approx. 6p/cow/day at a feed rate of 20 grams. This can be increased to 40 grams in high-risk situations. You could also consider adding Ultrasorb direct to your mineral pack at a rate of 10 grams a head, therefore saving on space and time measuring out an additional feedstuff.

Do not forget your dry cows either. Straw can be a large source of mycotoxins, originating from the standing plant and from any weather damage post-harvest too. With the high straw content of dry cow diets and the dip in immunity at calving, this group could benefit most from adding a mycotoxin deactivator into their diet.

BREEDING FOR YOUR MILK CONTRACT

David Levick davidlevick@kiteconsulting.com



The vast majority of farms breed a significant number of replacements from their heifers as these are often considered to be the best animals in the herd. This is a pretty good route to improve your genetics, tried and tested over time. However, the work we have undertaken with some of our clients recently suggests that there are far more significant gains to be made by breeding from carefully chosen first and second lactation animals, as well as selected heifers.

Fundamentally, you need to be breeding cows that are best suited to make the most of your milk contract and your farm. Those on an Arla contract, for example, will be chasing high constituents in conjunction with yields, whilst a Müller contract would encourage more yield, some fat but no protein. The idea is to identify the most profitable animals in your herd and based on your milk contract breed from these with sexed semen. This is a very commercial approach that allows you to make rapid progress. Clearly, those first and second lactation animals will have actual milk recording data to work from. We then combine this with genomic testing of heifers to only breed from the most profitable genetics in the herd and, of course, to use the bulls which have the traits to correct any management and type issues that you may have. Genomic testing gives you data that is as reliable as that of lactating animals.

As an example, one of my clients has a top-quality herd that is already very much above average. We have worked out that his average genetic milk value is +414 kg at +21.5 kg of combined fat and protein. Breeding from just his heifers this year will

push the latter to +23kg, but (because of previous bull choices) will reduce overall milk value to +360kg. However, if he targets replacements from the very best across his herd, including some of the older cows, his genetic value shoots up to over 600kgs milk and over 32kgs of combined solids. The difference is huge, in fact I have looked at this with many clients now and in every single case there are significant improvements to be gained from being more focused on selection pressure.

The key is to choose your heifers wisely and the good news is genomic testing is now very affordable and continuing to reduce in price - you should not be paying any more than £25/test. Making the sort of gains listed above will pay for the testing many times over. Also, by strategically only using sexed semen for replacements and beef semen on the rest draws in another significant income stream from beef calf sales.

We have been working closely with Cogent to develop this analysis for some time now and feel this is only the start of the story. Any herd that milk records can benefit from this approach and even those herds in the top 1% have the opportunity to make very real progress, it is not a case of diminishing returns. If you consider that the top performing herds in the US are averaging 20,500 litres, there is still a lot to play for!

GETTING THE BEST FROM MULTICUT SILAGE AND COMPACT FEEDING



Paul Macer paul.macer@kiteconsulting.com

Many customers have benefitted significantly from adopting the multicut principle for making grass silage. With each passing season experience is gained and techniques fine-tuned, but the essentials of an early first cut followed by short interval cutting throughout the season coupled with high dry matters do not change.

Beware of clamp slippage

Chop length is an area over which there is much debate with shorter chops having to be balanced with clamp stability. As a general rule, as dry matter decreases then chop length should increase to avoid clamp slippage. There were much fewer reports of clamp issues last year, but we did have a very dry season and higher dry matter silages and there is close correlation between the two.

Historically we have been working on chop lengths down to 25mm when grass dry matters have been 32% DM or above as a reasonable compromise. A number of farmers are now compact feeding which requires forages to be chopped very finely at feeding (see article in Kite update 41) and the question has been asked about when this is best done.

“...if you are consistently producing grass silage of a minimum of 32% dry matter then chop lengths can be taken below 25mm”

Make full use of forager power

The forager is designed to chop material accurately to a desired length, the knives in a feeder wagon are more rudimentary, therefore, it is logical to use the horsepower and the chopping cylinder on the forage harvester to do as much of this work as possible. Few foragers are using all the power they have available in grass silage crops, so there is scope to harness some of this to chop more finely. Therefore, if you are consistently producing grass silage of a minimum of 32% dry matter then chop lengths can be taken below 25mm. We are even seeing some advocates of compact feeding successfully going as low as 10-12mm at harvest.

Good clamp consolidation is key

At these extremes, it is crucial that the clamp operators are highly skilled and know what they are trying to achieve. However, in all cases layers of grass should be thin, slopes shallow and long and there should be enough kit available on the pit to achieve a density of finished product of 250kg DM/m³. For those not practising compact feeding, there is still a benefit from shorter chop material in terms of forage dry matter intakes. However, the length does not have to be as extreme but remember, whatever the situation, if dry matters reduce get the chop length up to avoid problems in the clamp.





LEARNINGS FROM NEW ZEALAND

Laura Teasdale laura.teasdale@kiteconsulting.com

During February, along with 11 others from the UK agricultural industry, I was lucky enough to travel to New Zealand spending three weeks on the Louise Hartley Memorial Study Tour.



The purpose of the study tour was to have a broader look at New Zealand Agriculture, rather than specific system facts and to discover what lessons can be brought home to help British farmers post-Brexit and post-subsidy.

The tour started in Christchurch, visiting dryland sheep and beef farms before continuing north to Marlborough and Nelson where we experienced salt flats, fruit, vines, hops, honey, garlic, velvet and mussel farming in addition to sheep, beef and dairy. We then continued to the North Island to the dairy area of Taranaki where we visited businesses, research facilities and government bodies, including Dairy NZ and the Ministry for Primary Industries, in Wellington and Auckland respectively.

We met some great people on our travels and Doug Avery summed up the positive attitude of them all with the phrase “bounce forwards, not back”. Since the removal of subsidies, the productivity in New Zealand has increased significantly; the national ewe flock has decreased by some two thirds while lamb production has remained

relatively unchanged. Dairy cattle numbers have grown exponentially and new industries such as wine are increasing in landshare due to the higher income per hectare that can be achieved.

But, has New Zealand reached peak cow? As agriculture is such a big part of the NZ economy then the industry contributes a far greater proportion of the country’s greenhouse gas emissions than here in the UK. Significant work is being done to find practical ways to reduce methane production from livestock and we saw examples of a methane vaccine, an inhibitor bolus plus work being carried out on feeds and breeding selection for lower methane producing lines. Water quality is also big concern to the public of NZ who want to be able to swim in any of the waterways in the country. Here, fencing and planting of waterways is being enforced on farms.

There is significant pressure on dairy farmers in New Zealand to bring about environmental improvements in both water quality and emissions, to shed the ‘dirty dairy’ image of recent years. As such a significant exporter, New Zealand agriculture is dependent on its ‘clean and green’ story – it is a message



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which all products from the country capitalise on and is something that it cannot afford to lose. With sustainability so high on the public agenda, many predict that cow numbers will decrease over time in favour of sustainability. How this will affect world markets, and indeed the UK market, remains to be seen.

PROMOTING AND PROTECTING THE DAIRY INDUSTRY

Whether it is carbon production, animal welfare or 'factory farming', the dairy sector continues to receive a substantial amount of attention from a variety of pressure groups. Whilst seemingly distracting from the day job, it is important to remember that if handled correctly, the collective responses we make to the issues raised have the potential to actually increase trust and subsequent value in the industry.

In any business it is important to continually self-evaluate in order to improve. When questions are asked about our industry, it forces us to reflect on what we do. For example, the recent focus on methane production on farms has driven measurement in this area, which not only gives us data about carbon sequestering and production which we can share with campaigners, but as forward-thinking businesses give us benchmarks to improve against, often with financial rewards. Similarly, the increased attention on animal welfare has pushed farmers to be much more open with the public about what they do and why, and in some cases has triggered the use of CCTV on farm, to prove the industry has nothing to hide. This transparency is key to building trust with end consumers and also gives the supply chain confidence in its primary producers.

To be truly effective communicators it is important that farmers, processors and retailers use a combination of measures to engage with consumers and pressure groups.

Be an ambassador for your industry at every opportunity

Remember around 95% of UK households have a dairy product in their fridge and the majority of consumers are very interested to learn more about farming and the way food is produced. It is a subject that you can talk about with confidence, so be open in your dialogue and answer questions truthfully, but as with anything, try not to get bogged down

in technical detail! Most people will not be looking to catch you out and you can rest assured that your passion for the industry will naturally shine through.

Proactively promote the industry

Creating good PR is not a one-off project. A steady drumbeat of positive messaging is key for any brand. Not only does it keep you front of mind, it means you have lots of goodwill 'in the bank' for if/when a potentially negative story breaks. This is activity that everyone involved in farming could and should be doing in some way. Ideas include:

- a business or personal social media account sharing good news stories and 'myth busting' information about agriculture. It does not always have to be original content, it is fine to share others' stories too.
- involvement in Open Farm Sunday-type events
- volunteering to write occasionally in parish magazines or local papers about the activities taking place on your farm
- be bold in your recruitment adverts and really sell the benefits, both financial and lifestyle, of working in agriculture

React professionally to activism

There may be times when you or your team are targeted by activism, either online, or on-farm. Here, it is really important to be calm and confident and keep in mind that there is usually limited value in engaging in debate. Your milk buyer will very much appreciate being kept in the loop if something arises, in case campaigners then turn to them to ask questions about your business. Do keep a record of the activity, either written or photo/videographic, and report the incident to 101 if you experience threatening behaviour.

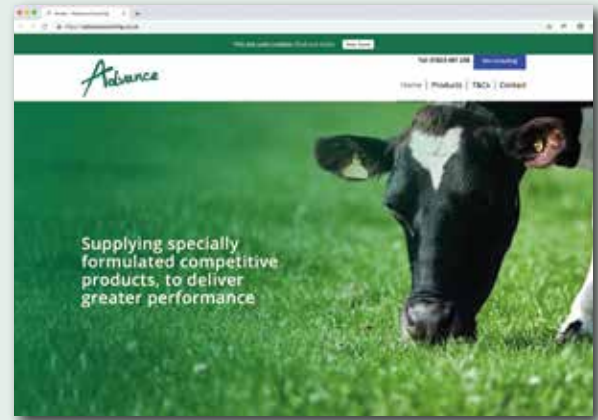




GRANT WALKER JOINS KITE

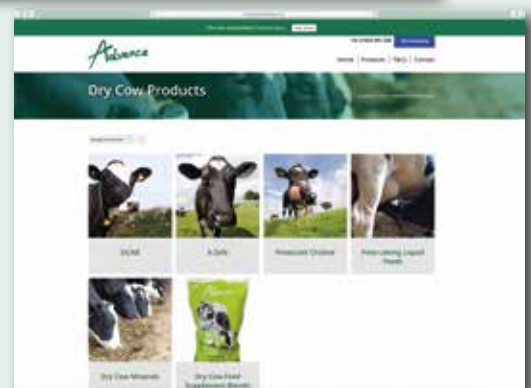
Meet the newest addition to our team, Grant Walker:

"I graduated from Newcastle University with a BSc Hons Agriculture in 2013. After university I worked on a dairy farm in Canterbury, New Zealand for five months before returning to our home farm in southwest Scotland. I have been at home on the family farm for five years where we milk 540 cows. I am joining the Cheshire, Shropshire and Wales team and am looking forward to a new challenge undertaking both business and technical consultancy. I have dairy experience from around the world including America, Europe, New Zealand and South America and look forward to using my staff management skills to help farmers as well as encouraging the use of software and technology to improve and simplify on-farm management."



Advance

Check out www.advancesourcing.co.uk! Our sister company, Advance Sourcing has a brand-new website - do take a look at the range of products available to add value to your business.



NMR/RADDF GOLD CUP

Kite is one of the sponsors of this year's NMR/RADDF Gold Cup Open Day at Metcalfe Farms in Leyburn on June 18th 2019. The title of the day is 'Progression for Succession' and the full programme will shortly be available on the RABDF website. For more information and to register, in order to attend, go to www.rabdf.co.uk/gold-cup-open-day.



For enquiries regarding the information in this newsletter please contact:

**Kite Consulting | The Dairy Lodge | Dunston Business Village | Dunston | Staffordshire | ST18 9AB
Tel: 01902 851007 | Email: enquiries@kiteconsulting.com**

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