

Kite

update

issue 36, 2018

in this issue...

- Fine tuning fat %
- **Welcome to Jess**
- Looking ahead – heifers in the pipeline
- **Introducing compact feeding**
- Visit us at Dairy-Tech 2018
- **Making Tax Digital**
- New Succession Planning Service



Fine tuning fat %



By Victoria Hicks victoria.hicks@kiteconsulting.com

With many milk contracts now offering substantial financial returns for higher butterfat levels, we take a look at two nutritional factors that could help fine tune your fat percentage:

Unsaturated fats

A combination of acid load, fast fermenting starch and quantity of unsaturated fat in the diet all have a part to play in causing low butterfats. However, all unsaturated fats are not created equal; each fatty acid has different biological properties depending on its chemical formation. There is one unsaturated fat in particular that is to blame for our butterfat woes and we have unwittingly been feeding rather a lot of it.

The culprit is linoleic acid, or C18:2, and it is found in many feed ingredients including maize silage, succulents and liquid products.

All unsaturated fats will be biohydrogenated (broken down) by a specific pathway in the rumen into their saturated form. If this

pathway is altered because of rumen pH dips and microbial population changes then the products of biohydrogenation are also altered. This is why linoleic acid in particular is problematic for butterfats because the alternate biohydrogenation pathway will produce trans fatty acids, which once escaped from the rumen block butterfat synthesis in the udder.

If just 5g of trans fatty acids leave the rumen, it can lead to a drop of 0.5% in butterfat, so maintaining the right rumen conditions for complete biohydrogenation to occur is key to maintaining butterfats. Limiting slug feeding, time away from the feed fence, quantity of fast fermenting starch which is fed and avoiding diet inconsistencies will all help rumen stability.

Limiting the amount of linoleic acid fed also needs to be a consideration when formulating diets. Do not be lulled by the overall oil percentage, it is the type of fatty acid and the grams fed that has the biggest impact. A TMR with 5.7% oil (which includes 300g of palm fat),

57% forage and at a DMI of 23kgs, could supply 600g of linoleic acid.

Magnesium

Magnesium is an activator for over 300 enzymes and has a pivotal role to play in the metabolism of fats and carbohydrates. The forestomach is the absorption site for the majority of magnesium in the rumen but this can be blocked by excessive potassium in the diet, which will be common in grass silages, particularly those from fields that have received large amounts of slurry.

If your starting diet contains 0.25% magnesium, then adding 50 to 70 grams of magnesium oxide will raise magnesium levels to around 0.35%, which we have found can raise butterfats by between 0.1 to 0.2%. At a cost of approx. 2p a cow per day, that will provide a significant return if your milk contract is paying for fat. However, the availability of magnesium depends upon the source of magnesium oxide as this varies depending on the temperature at which the magnesite ore was calcined. French sources are preferred over Chinese for this reason.



Welcome to Jess

Jess Buss has recently joined the Kite team, based in the Midlands. Her previous experience in business management, farm consultancy, knowledge of the industry and communicating with farmers, will see her support some of Kite's many business and technical projects, as well as on-farm business planning and budgeting.

Jess can be contacted on **07525 237710** or at jess.buss@kiteconsulting.com

Looking ahead – heifers in the pipeline



Andrew Marlow andrew.marlow@kiteconsulting.com

It is clear from national cow culling data (see graph) that during the darkest months of the last milk price crisis, producers ramped up culling as an economic response.

At extremely low milk prices, passangers cannot be tolerated and frankly, many just needed the cash. Consequently, annual rolling culls rocketed but as milk price has recovered culling levels have softened. There is only so far you can go with culling and alongside a much better milk price:feed price ratio, I would expect to see lighter culling levels through to next autumn.

In the year to October 2017, the number of animals in the dairy herd has shrunk by only around 2%. Had it not been for a healthy supply of heifers coming into the herd, this figure would have been much more pronounced.

Up to the autumn of 2018, the indications are that there will continue to be a good supply of heifers and with the potentially lighter culling (noted above), we might see the national herd size stabilise and grow a little. But thereafter, there will be less heifers in the system to replace the herd at a time when culling levels will be returning to more normal levels.

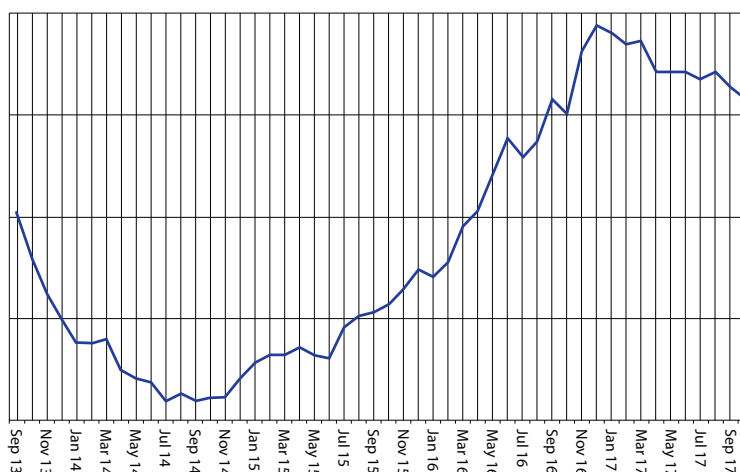
The drop in heifers has been the obvious consequence of dairy farmers switching from dairy inseminations to beef during the very low milk price period (spring '15 to Autumn '16).

I would expect to see supply tightening for UK heifers from Autumn 2018 onwards and there is the potential for the national herd to decline in the following year to 18 months (depending on how many heifers are purchased from the EU). If 2018 is going to see lower milk prices as expected, then a milk price recovery in 2019-20 might coincide with a lower heifer supply, driving prices higher.

The important message in all this is that for those who buy in a lot of replacements, they should be



Rolling annual culls



aware of what is heading down the track and plan accordingly. Make sure the business is in a position to keep buying at higher prices so that your herd size does not take a hit, compromising farm productivity.

This may mean taking opportunities to replace at a higher level prior to this potentially expensive period or to buy in some breeding heifers so

that you mitigate some risk. Also, anyone who is planning to expand on the back of purchased heifers in 2019-20 would need to bear all this in mind and build these factors into the decision-making process.

For those with plenty of heifers, contributions from stock sales could be significant in the 2019-20 milk year.

BCMS Figures - Youngstock

| Younger dairy heifers | Oct 16 | Oct 17 | |
|-----------------------|----------------|----------------|--------------|
| < 1 year old | 473,258 | 449,776 | -5.0% |
| 1-2 years old | 472,981 | 454,779 | -3.8% |
| Total | 946,239 | 904,558 | -4.4% |

Introducing compact feeding



By Sam Evans and Will Jones sam.evans@kiteconsulting.com | will.jones@kiteconsulting.com

The issue of cows sorting rations is an important one. We know that dominant cows will often go to the barrier first and hunt out the goodies in the diet, leaving the younger or sicker cows, (who possibly need the nutrients more) eating the leftovers. Either way, it means hardly any cows are consuming the ration carefully formulated by your nutritionist! Cows will naturally sort a diet but key clues to look for are barriers that often need pushing up (cows are rooting for certain ingredients) and inconsistent dung across the herd.



Danish researcher, Niels Bastian Kristensen, recognised this as an issue and trialled a new technique named 'compact feeding' designed to make the diet impossible to sort, an approach that has had quite an uptake across Denmark. The idea is to pre-soak the dry ingredients of a mix (such as pelleted concentrate and grains) in additional liquid, normally water, so that when the forages are added to the mix, all elements stick to the 'skeleton' forage in the diet. Most pellets will burst when soaked for an hour, but more resistant ones such as sugar beet pulp require longer (8 – 12 hours).

The amount of water required depends on the ration and on the dry matter (DM) of silages added to the mix but the suggestion is to bring a typical 45-50%DM diet to nearer 38-40%DM.

To ensure the mix is truly combined and can no longer be sorted, mixing

needs to take place for a lot longer too, (around 30 minutes rather than ten). The aim is to end up with a mix that looks just like silage alone because all the other ingredients have been mixed so well – and the floor underneath should be clean, as all of the small elements should be stuck to the grass. Neils believes by doing this the feed 'opens up' more for the cows, allowing it to be broken down in the rumen more quickly, diverting the energy saved into additional milk production. This concept aligns with current thinking that the 'scratch factor' does not actually have an impact on rumen performance, in fact adding more straw often makes the real problem of diet sorting even worse.

Results from initial trials in Denmark were positive, with a two-year study in 2012 seeing an uplift in milk yields of 5% from dedicated

compact feeders, compared to the national herd (using a mixture of feed methods including compact feeding). Other trials have also shown that as long as feed never runs out (i.e. there is always more than 2% in the barrier) cows fed a diet in this way soon learn that every mouthful is the same. This translates into less of a rush when the feeder wagon comes down the barrier and reduced time spent feeding as cows eat from the top of the pile rather than rooting the feed about. A knock-on effect to this is increased lying times and reportedly better feet.

As with all things, there is a 'but' and there are some potential problems in terms of rumen health that need navigating carefully. Firstly, getting enough water into the diet in the pre-soaking phase is crucial as adding too little can create a dough-like mix that will struggle to incorporate the other ingredients, leaving balls of concentrate that can be toxic. Secondly, pre-soaking can also affect acidosis if not carried out correctly so careful protocols need to be followed. We are aware of farms that have seen no or a negative response to compact feeding, but as well as the Danish controlled tests, we have personal experience of farms where this process is working well. It is a very exciting concept and we are currently running trials in Wales to learn more about how this approach affects the cow and what we need to be aware of going forward. Do talk to your consultant about how it might work for you.

^^^ FOCUS ON INTRODUCING COMPACT FEEDING

Visit us at Dairy-Tech 2018



We are delighted to be a sponsor of the first ever Dairy-Tech day on Wed 7th February at Stoneleigh Park, Coventry.

Please join us for light refreshments from 8am on The Gallery, which overlooks Hall 1 and is accessed via stairs at the rear of Hall 1.

We have also recently commissioned a survey with the RABDF on UK farmers' dependence on migrant labour and Kite's Edward Lott will be presenting the results as part of a seminar on 'Labour shortage - technology and innovation is the answer' with RABDF policy Director, Tim Brigstocke, at 9.45am in the Dairy Hub.

Making Tax Digital



With Making Tax Digital being introduced for VAT in April 2019, we have been looking at the farm accounting options available for our clients

This is particularly important for clients doing manual or spreadsheet accounts or those not getting useful

cashflow and profit reports from their current system. We have put together an offer with Xero which is a cloud-based online accounts package. For clients already using landmark Key prime we have an offer using their Newage package.

Cloud-based systems will save you time on data entry - they are very slick, easy to use and can be accessed from your mobile, tablet or computer. One particularly exciting feature is the automatic bank account feed which means that all your bank transactions are already in the system. We will set up your accounts on Xero using the Kite codes so that you can easily share your financial information with us in the cloud (rather than sending us

through monthly figures). We will then be able to provide you with monthly, quarterly and year end management reports to monitor the financial position of your business and track unit costs. Some clients are using Xero already and are very pleased with the functionality of the system and the reports they are receiving to help drive their businesses forward.

What's more, by setting up Xero through Kite, with clients all using the same codes benchmarking will be more accurate which will be of further benefit to your business. Keep an eye out for further information in future Kite Updates or contact : Helen.Evans@kiteconsulting.com

New Succession Planning Service

It is a harsh reality to face but unfortunately none of us are going to be around forever. However, this does not prevent a huge number of farming families from kicking the issue of succession firmly into the long grass until the last possible minute, more often than not causing a lot more harm than good to everyone involved.

In terms of succession, farming is a unique industry in that businesses are very often family-run, requiring long-term investment that sometimes spans generations. In very simple terms, if a farm business is not handed over in a timely manner, then the family farm or tenancy risks being relinquished in order to split the assets between children. Even if the intention is for the next generation to 'buy the others out', the appetite for this may reduce as they too grow older.

Here at Kite we see first-hand the strain that is put on families where

clear plans are not in place for how the next generation might take on the business. Not only are relationships put under pressure, but the issue also often stalls the business. Sometimes there may be clear plans in place, but they are not shared with those affected; an equally counter-productive state of affairs! In an ideal world, succession planning should start when a child is born and retirement plans should be mapped out and shared openly throughout a farmer's lifetime.

While many farms are not currently in this ideal situation, most do recognise the importance of starting this conversation. At Kite, we have been working to find an accessible way to help you with this and are pleased to report that two of our consultants, Jo Speed and Laura Teasdale (pictured), are now fully trained as Family Farm Business Facilitators - two of only five people in the UK who have undertaken this training.



We are now able to offer a package whereby we will bring all the family members from a farm together in a neutral venue for a full one-day meeting. As well as arranging and facilitating the meeting, we will follow up the day with a written record plus an action plan detailing agreed outcomes to realise the agreed family vision. The idea is to provide a constructive way of discussing the future plans for the business, mediate difficult conversations and identify and open up any blockages that are currently holding the business back.

For more information or to arrange this, please contact the Kite office or your individual consultant.



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