

Kite

update

issue 38, 2018

in this issue...

- Recap on heifer feeding
- **Should we be communicating or celebrating dairy farming?**
- Highlights from Florida Nutrition Symposium 2018
- **Making Tax Digital**
- General Data Protection Regulations (GDPR)



Recap on heifer feeding



Tanya Colman tanya.colman@kiteconsulting.com

A recent training session on calf feeding with Trouw Nutrition highlighted two key factors of heifer rearing that can significantly impact future performance...

Know what's in your milk powder

The milk replacer market is a competitive one and understanding the implications of ingredient choices and inclusion rates is important. Things like Vitamin A and Vitamin D3 tend to be included at a fairly standard rate across the board, but other areas can be more of a minefield.

Protein

Aim to maximise protein from dairy-based sources (skimmed milk or whey-based) as these offer the highest levels of digestibility for calves. Hydrolysed wheat gluten is highly digestible and has high levels of protein, but be wary of powders containing a high level of soya-based protein as these tend to be economical, but not so great nutrition wise. Pea-based proteins are highly digestible, but are susceptible to sedimentation and are physically more difficult to feed.

Fat

Commercial milk replacers are often compared based on the percentage of fat on the label, but it is the components of this fat that will impact the subsequent



digestion, absorption and growth with the size of the fat globules having an effect on digestibility. Coconut oil is equally as useful for calves as it is for humans thanks to its antimicrobial and antiviral properties, but needs using in conjunction with other oils to prevent scours. Aim for coconut oil to make up a minimum of 30% of the overall fat content. Lower oil/fat milk powder formulations may include higher levels of lactose which, while a good energy source,

can impact the osmolality of the product and therefore should be less than 45% of the entire formulation.

Fibre

Calves do not necessarily have an upper tolerance level for fibre, but this measure can sometimes be linked to raw material quality. Higher fibre levels (>0.05%) can indicate higher inclusion of non-dairy proteins/fillers.

Continued on page 2...

Continued from front page...



Advance SuperStart milk powder is a 23% protein milk replacer (of which 28% is dairy protein). Oil/fats (20%) includes 47% coconut oil and fibre is 0.03%.

Visit www.advancesourcing.co.uk to find out more.

Are you feeding enough milk to your calves?

Set high growth targets in the pre-weaning period. Every 100g of average daily weight gain in the first two months of life will result in approximately 250kg of extra milk in the first lactation. A calf is born with an under-developed rumen and the quantity and quality of milk it receives will directly impact its future rumen efficiency. This epigenetic effect can be likened to the queen bee who shares the same genes as her workers, but due to the quantity

and quality of feed (royal jelly) she consumes, she grows far more swiftly than her peers, and develops the ability to rapidly reproduce.

Research has proven that the idea that 'feeding more milk solids costs more' does not stack up over an animal's life – in fact, every kilogram you feed in the first two months of life will cost you less overall in the cow's lifetime.

For more information on feeding during the pre-weaning period, please contact your consultant.

Should we be communicating or celebrating dairy farming? Lessons learned from #Februdairy



Dr Jude L. Capper, Livestock Sustainability Consultancy, Oxfordshire, UK.
Email: jude@livestocksustainability.com Twitter: @Bovidiva

Every New Year, many experience a fleeting obsession with health and fitness, during which gym memberships soar and supermarkets roll out new ranges of beetroot and kelp smoothies. This year, Veganuary – the challenge to try a vegan diet for a month – was adopted by 168,500 people worldwide. Less than 3,000 participants who'd previously enjoyed an omnivorous diet decided to continue with a vegan lifestyle after the end of Veganuary, so it's not convincing evidence that we should sell cows to plant almond trees. However, as somebody who sees a great deal of anti-dairy rhetoric on social media, I suggested on Twitter that we should subsequently celebrate #Februdairy.

The #Februdairy concept was simple - 28 days of positive dairy posts, everything from cows to cheese sandwiches, to try to improve the public image and answer questions about dairy farming. The response from people throughout the global dairy industry was amazing, with excellent photos and videos showcasing real-life dairying and great conversations. However, some vegan activists also started campaigning against #Februdairy,

often using foul or emotive language to denigrate dairy farming practices (e.g. referring to A.I. as rape) and spreading misinformation.

It's vital that we reach out to consumers and to communicate effectively. We need to share our values: to help others understand that we care deeply about animal welfare, environmental impacts and our local communities while producing safe, affordable, high-quality dairy products. We all have dietary choices and should respect those of others, staying polite and focused rather than being dragged into name-calling. When answering questions, avoid being defensive or launching into long, complicated justifications, but keep it simple and transparent – we do have some issues that we need to admit to and correct – trying to hide will backfire eventually. In some instances, it's better to agree to disagree or simply walk away from the conversation – remember, we will never convince diehard opponents, but we may influence onlookers who are not actively participating.

Having a visible presence on social media can be daunting, although most online activists do not appear to represent a real-life threat. Nonetheless, we also have huge

opportunities to reach out to our local communities via Open Farm Sunday or hosting visits from local community groups and schools. The latter is particularly useful, as we need to influence the future generation of dairy consumers. If we can give school children a positive image of dairy farming and help them to understand food production at an early age, we have a much better chance of them choosing dairy products now and in the future. My 4-year-old daughter talked more about the visit that her pre-school class made to the local sheep farm during lambing ("a lamb came out of its mummy's bottom!") than she has ever done about any other school activity and it's led to many follow-up questions when she sees other farm activities.

Many consumers have an appetite for information as great as their appetite for dairy products. If we fail to satisfy that appetite, we cannot complain when the information that they receive and believe is very far from the truth. The best way to overcome misinformation is by changing the background understanding – if consumers are knowledgeable about and confident in British dairy farming, activist misinformation cannot gain traction and will simply be dismissed as nonsense.

Highlights from Florida Nutrition Symposium 2018



Tim Davies tim.davies@kiteconsulting.com

1) Are there financial advantages in grouping and feeding cows by nutritional need?

According to Prof Victor Cabrera, Wisconsin University, the answer is yes!

In the UK many dairy herds have moved to one diet systems for simplicity, and to avoid the drop in yield when moving cows from one group to another.

This study was carried out by simulated modelling of 5 Wisconsin commercial dairy herds and is a reminder that grouping cows by nutritional needs increases income over feed costs, and these gains can be substantial. In general 3 groups is optimum for herds of less than 1000 cows, and 4 groups for herds over 1000 cows. Having a heifer group at the expense of other groups reduces margins over feed cost for the herd. Better apparently to have the heifers grouped with the cows in 2-3 groups.

Nutritional grouping can be beneficial because it:

Reduces feed cost	Improves herd health
Improves feed efficiency	Reduces emissions
Can increase productivity	Increases income over purchased feed

Grouping cows by nutritional needs gives a better distribution of condition score, with less very thin and less very fat cows, and less losses because of this. It is interesting that this paper has come from the same University as John Fetrow, who has different views.

2) Rapeseed meal as a protein source for cows, Antonio Faciola, University Florida

This paper showed yet again that when rapeseed meal replaces soyabean meal results are positive. In this trial rapeseed meal increased dry matter intake, milk yields (by approx. 1 litre) and milk protein yield. This was a repeat of work carried out by other researchers which shows that rapeseed meal is generally a superior protein source for cows than soyabean, and both rapeseed meal and soyabean meal are better than either wheat or maize distillers. Why rapeseed works so well remains unclear, but it is thought to be because it has a better amino acid profile, particularly for methionine, and a better undegradable protein fraction. In this piece of work rapeseed meal was found to improve the overall digestibility of the TMR.

3) Ruminant Acidosis

There were three papers on this, with one particularly good paper called 'Ruminant Acidosis – Much more than pH' by Ian J Lean from Australia.

What was clear is that acidosis is not just one thing and it is a much more complex condition than just a drop

in rumen pH, and measuring pH and lactic acid in the rumen is a very poor predictor of the condition. There are a whole load of toxic peptides formed when cows suffer acidosis and it changes the epithelia cells lining the gut, hinders nutrient transportation systems into the body and causes long term adaptation. High propionate, valerate and low ammonia are far better predictors of acidosis than looking at pH or lactic levels in the rumen. This is a big area of research which is going to grow.

4) Copper

Dr Bill Weiss, who is on the NRC mineral committee thinks that copper, while an essential element, is also more toxic than we think. Copper toxicity as we know is a big problem in the UK and Dr Weiss recommends that in the absence of an obvious antagonist, we should not feed copper above 20 mg/kg DM, as at 20 mg of copper per kg DM, a cow could be accumulating 250 mg of copper per lactation in the liver. Classic copper toxicity is thought to occur when liver copper concentrations exceed 2,000 mg/kg DM.

5) Magnesium

This is an essential mineral which milking cows often run short of. In recent times more has been learnt about magnesium availability. The following table summarises how knowledge on magnesium availability has changed and shows that feeds in basal diets (forages, cereals etc) are better than previously thought, while supplements are worse.

Magnesium availability levels	NRC 2001	Correct, 2017 (at 1.2% potassium)
Basal diet	0.16	0.30 +/- 0.16
Good Mag oxide	0.7-0.5	0.2-0.25
Mag sulphate	0.9-0.7	0.24-0.35

It has also become apparent that dietary potassium is more of an antagonist for magnesium absorption, than high protein diets or diets high in long chain fatty acids. In a diet with 1% potassium, magnesium absorption sits at 25%, but at 4% potassium magnesium absorption drops to 2.5%, and a shortage of magnesium knocks feed intake, milk and butterfat production, and cow health.

Dr Bill Weiss believes 0.25-0.3% magnesium in the diet dry matter is normally enough for milking cows, but on high potassium diets, as in the UK, then we might need to feed magnesium at levels of 0.3-0.35% DM. There are also big differences in the availability of magnesium from salts such as magnesium oxide (cal mag), with different sources of magnesium oxide having magnesium availability ranges of between 10-100%.

Further highlights from this conference were covered in the February Kite Update – visit our website to download a copy.

FOCUS ON HIGHLIGHTS FROM FLORIDA NUTRITION SYMPOSIUM 2018

Making Tax Digital

Ros Hughes & Katie Keiley

ros.hughes@kiteconsulting.com
katie.keiley@kiteconsulting.com



With 'Making Tax Digital' coming into force in April 2019, many of our clients are reviewing the way they administrate their accounting systems. Here at Kite we are setting many clients up on the Xero accounts package (see leaflet included with this newsletter for more details).

Carole Harrison from Low Meathop Farm, in Grange-Over-Sands, Cumbria is one Kite client who has recently

started using the Xero software for the family farm's accounts:

"Our farm secretary was looking to reduce her workload and our consultant Ros Hughes suggested that we should look at the Xero package. Although I'm IT literate, I have no experience of farm book-keeping and had a number of reservations about moving to the unknown! Ros assured us that the system was very user-friendly - Katie Keiley from Kite came to the farm to set up everything so I was ready to go, including inputting farm-specific coding so that our figures would provide useful reports for us and allow us to benchmark our figures against other Kite client's data if we wanted.

"The system links to the bank so I can quickly see what is going in and

out and where we stand in real time. There are also lots of easy reports I can run which quickly alert me to any issues and allow me to drill down and investigate them. Before, if we did have a query we would need to phone our farm secretary and get her to look into it, and that's if we picked up the query at all.

We've only had the system a few months but it has been really easy to get to grips with and gives me much more peace of mind. We have backdated data to give us a full financial year, this process was a great learning curve for me. I find Xero very intuitive and am delighted with the level of control it gives us over our farm accounts, I really would advise anyone with the same reservations as myself to take the plunge!"

General Data Protection Regulations (GDPR)

As you may be aware the new General Data Protection Regulations (GDPR) for data control and management are nearly upon us. We, as a company, are committed to protecting all your data and are fully on board with the new regulations, which are designed to improve the safety of your personal data.

To ensure that you continue to receive our updates, latest news and invites we will be sending out an email in the next few weeks for your agreement to continue to do so. We may contact you prior to this for your email details if we don't already hold them.

The revised Privacy Policy for both Kite Consulting and Advance Sourcing will be available to view on our websites; this document tells you what we do, and your rights as a data subject. Please feel to contact us at dataprotection@kiteconsulting.com or dataprotection@advancesourcing.co.uk if you have any queries, or for more information about GDPR please visit <https://ico.org.uk>



Gold Cup Open Day 2018

14th June 2018 at The Leen, Pembridge, Leominster, HR6 9HN

Pre-registration is essential at www.rabdf.co.uk/gold-cup-open-day

*All pre-registered visitors will receive a free bacon roll on arrival, courtesy of Kite Consulting.

Please call 02476 639317 for more information



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