

I hope everyone is getting on well and managing to get silage in around this unpredictable weather!

Thank you to all who attended the Cow Convention last week, it was a very informative day and seemed to be enjoyed by everyone. We hope to run it again next year so watch this space.



In this newsletter I will be discussing ketosis. As always, prevention of disease through strict management in the transition period is of utmost importance, but there are a couple of options available for cows who slip through the net and we find at higher risk of the disease.

What is ketosis and how does it occur?

Ketosis occurs when a cow is in negative energy balance, i.e. her energy expenditure outweighs what she is taking in. Cows are at high risk around calving due to increased energy demand starting milk production, combined with reduced feed intakes. When the cow is in negative energy balance, body fat is broken down to try and fill the energy gap. This leads to production of ketones such as beta-hydroxy-butyrate (BHB). If these are produced in excess we see issues associated with ketosis. A lot of the fat which is broken down travels to the liver. If fat mobilisation is high, the liver mechanisms get overwhelmed and fat ends up being stored there, leading to 'fatty liver.'

The tip of the iceberg

Classic symptoms associated with ketosis would be milk drop, loss of appetite, poor rumen fill and 'pear drop breath'. Often we find that farms see few animals sick with ketosis, which can lead to the assumption that it is not an issue in the herd.

MEETINGS COMING UP

SELEKT pump Servicing Clinic

Come along to have your Selekt Pump serviced FOC

Thursday 23.6.22 at the Practice

11am-1pm

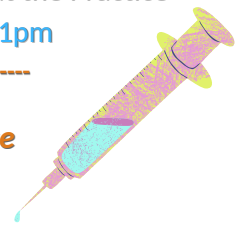
Medicine Handling Course

for Beef and Sheep

Wednesday 30.6.22

@ The Practice - 11am-1pm

£75 + Vat



SUSTAINABILITY **Farm Walk**

Sunday 31.7.22

Contact the farm office
for more details



The threshold for an animal being at risk of disease associated with ketosis is 1.2mmol/l of BHB in the blood. Often at this level, the cow won't appear sick, so this is known as subclinical or 'hidden' disease. If 0.5% of animals present with visible signs of ketosis, you can assume between 10 and 60% are suffering from hidden disease.

Although appearing healthy, these animals are at higher risk of associated disease such as metritis and LDAs, as well as having an increased risk of culling. Cows with subclinical ketosis have been shown to give 358kg less milk a lactation, as well as being 50% less likely to hold to the first service. Costs associated with hidden ketosis have been estimated at £220 per animal.

Regular monitoring of groups of cows between 5-21 days can give a guide as to the level of subclinical ketosis in your herd. This can be done by us, or you can purchase a 'Ketometer' and do the tests yourself. Milk strips can be used and these provide a guide, but blood testing is a far more accurate measure. If monitoring suggests an issue is present in your herd, your farm vet can work with you to look at management around the transition period to reduce the risk.

Which cows are at highest risk of ketosis?

Various factors can leave individual cows more vulnerable to developing ketosis. A good way to remember who these animals are is to think of them as **SOFT**:

- **Sick**– cows who have been lame or sick in the dry period
- **Old**– Lactation 3 and above cows
- **Fat**– animals with a body condition score of >3
- **Twins**– Cows who are pregnant with twins (if PD'ed early enough your vet should be able to identify these on scanning.)

Other risk factors include cows who have had a prolonged dry period, heifers calving in >27 months old. animals who have lost condition in the dry period and those with reduced dry matter intake around calving.

What can we do for at risk cows?

Even with the best transition management we will find some cows are still at risk of ketosis, and there are 2 options which can reduce the chance of these animals developing associated disease.

Kexxtone boluses

A lot of you will be familiar with these as they have been around for a few years now.



Kexxtone is an intraruminal bolus which can be given to high risk animals 3-4 weeks prior to calving to reduce ketosis risk.

The bolus stays in the rumen for 95 days and releases monensin, which changes the make up of bacteria in the rumen to favour production of propionic acid which is readily converted to glucose so providing the cow with energy.

Cholevit boluses

These will be less familiar as they are a relatively new product. Another intraruminal bolus, these can be given to high risk animals at calving.

They contain choline and vitamin E:

- **Choline** helps the cow to export fat from the liver, reducing the risk of fatty liver disease.
- **Vitamin E** acts as an anti-oxidant and assists the immune system.

If you think you would benefit from some additional monitoring to check for signs of ketosis on farm, or would find either of the boluses beneficial then have a chat with your farm vet.

All the best,

Sarah



Sarah Metcalfe
BVet.med MRCVS



Practical on-farm learning for a sustainable future

Cultivate CPD has been created due to the demand we have seen from within the veterinary and farming industries for quality training, provided by companies and people who are actually implementing the things they teach on a day-to-day basis. The George Farm Vets has a long and successful history of practical education. Cultivate CPD also allows us to make the most of the skills we have within our team and to positively affect the health and welfare of the animals by improving the skills of the vets and farmers looking after them.

Our Vet-led courses will be aimed at providing events and on-farm learning for Vets, farmers and all allied professionals. Future courses will be advertised at CultivateCPD.co.uk



Follow us on



E: farm@georgevetgroup.co.uk - Contact Office 01666 823035



Mike is cycling from Lands End to John O'Groats from 21st May until 4th June to raise money for 2 charities which are close to his heart (hopefully by the time you are reading this he will have finished!

MIND, because we all need and deserve positive mental health services.

www.justgiving.com/fundraising/mike-actionforpulmonaryfibrosis

ACTION PULMONARY FIBROSIS, in memory of our friend and colleague Tim Hirst who we sadly lost from the disease in 2019.

www.justgiving.com/fundraising/mike-actionforpulmonaryfibrosis

If you can spare anything to support these two great causes it would be massively appreciated.

