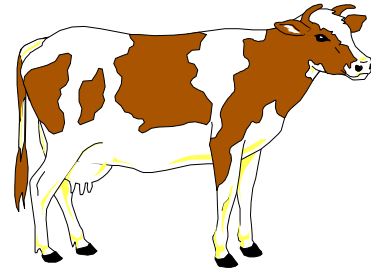


WOOD VETERINARY GROUP

June Newsletter



June 2009

BLUE TONGUE VACCINATION

We have been very pleased with the uptake of Blue Tongue vaccine. Most people have used it and presumably consider that the 65p per animal investment is worthwhile. Fortunately there have not been any reports of suspect adverse reactions this year and this applies even when the Blue Tongue vaccine has been used at the same time as wormers or other vaccines. Don't forget that for the younger stock, they need a second dose approximately four weeks after the first to be fully covered and then, of course, will need only one dose next year. Due to DEFRA "dumping" unused stocks, the price drops to 34p per dose from May to July, so surely everyone can vaccinate then!

SWINE? FLU

A variety of strains of Swine Flu have been quite common in the UK pig industry, although the current strain H₁N₁ is unusual. It has not been found in the UK and it's my understanding that it has not even been found in pigs in Mexico! The virus is a genetic mix of human flu virus, North American avian flu and swine flu and a Eurasian swine flu. So why we even call it swine flu is difficult to explain.

WHY DO COWS BECOME SICK AFTER CALVING?

The short answer is "I wish I knew"! There is no doubt that in the higher-yielding herds especially, cows going sick after calving, metritis etc, is becoming a significant issue. Unfortunately the following does not give any clear answers, but hopefully it gives a few suggestions for some areas worth investigating.

In every cow, as she approaches calving, there is a reduction in food intake, which peaks at the time of calving. Cows that start eating well after calving and which return to a normal appetite quite quickly, tend to be healthy. Cows that have a more severe reduction in food intake and take longer to recover their appetite are more likely to be sick. The illness might be retained cleansing, metritis, or 2-6 weeks later, cystic ovaries, ketosis, displaced abomasum or simply poor fertility. The other two things that happen to all cows at calving are i) a reduction in the rate of rumination and ii) a reduction in the cow's ability to mount an immune response. Most of you will be aware of the reduced rumination. If you go and look at the dry cows last thing at night and see them sitting cudding, then it is unlikely that they will

calve. If they are sitting still, not cudding and with staring eyes, then there is a fair probability that calving is imminent. This is a normal feature, but some cows then seem able to resume normal rumination soon after calving and others are less able. It is considered to be the amount of fibre present in the rumen that stimulates the resumption of normal rumination and hence the proposed advantage of the Keenan high straw type dry period ration.

The immune suppression in cows at calving is an interesting feature. It is well-known that even if the udder is full of colostral antibodies, it's freshly calved cows that get the worst mastitis. Cows that are carrying salmonella commonly undergo an activation of the disease and clinical signs may be seen around the time of calving. The evolutionary reasons for the immune suppression are unknown, but the proposals are:

- During the birth process there is a risk of foetal fluid (which is antigenically different to the dam) leaking into the maternal circulation and this could result in an anaphylactic shock reaction.
- There is also a risk of tissue trauma to the birth canal and hence immune suppression prevents the dam over-reacting to the trauma
- Large quantities of antibody are present in the colostrum and hence circulating antibody levels fall.

Having defined the problem, what can be done to prevent or at least reduce it? Probably the most important thing is to keep cows eating at the time of calving and perhaps to prevent a very rapid increase in yield immediately post-calving. Systems used are therefore:

1. Feed a DECAB ration. We know that cows that develop milk fever are much more likely to succumb to post-partum metritis and if anionic salts are added to the ration then the risk of milk fever and subsequent metritis is considerably less.
2. Feed a high straw/high maize silage ration. The maize silage will acidify the gut and has some DECAB properties, and the straw gets the cow used to eating a large bulk.
3. Avoid overfat cows. This is probably one of the disadvantages of TMR systems, in that there is a

risk that late pregnant cows get overfat. Fat cows are well-known for having reduced appetites at calving and to have a greater risk of fatty liver.

4. Avoid diets that predispose to milk fever. On one occasion inclusion of hay in the pre-calving ration appeared to produce an increase in metritis. Returning to straw led to an improvement. Of course there were no controls, so we can't be sure of the effects.
5. Supplement with calcium at the time of calving. Many people give a bottle of calcium to all older cows and others give a calcium bolus. Whilst this undoubtedly produces benefits, in some ways it's a bit like plugging the gap.
6. Feed an initial ration that does not stimulate high milk production. There are two ways of avoiding the early lactation energy gap: the first is to feed a very high density concentrate ration to fresh calvers. This is fine and may work, but if this simply stimulates high levels of yield it may make the energy gap worse. A number of people maintain cows on a lower spec ration for the first few days or weeks, i.e. until they have got over the stress of calving, and then start increasing the energy content of the ration. This is exactly what is done in pigs. If you feed a sow with high levels of food and a high quality ration immediately after farrowing, then she simply produces too much milk and develops farrowing fever. Hence pig farmers always reduce food intakes at farrowing and for a few days afterwards, always making sure the sows are slightly hungry. This keeps them eating.
7. Stimulate food intakes by ensuring the freshly calved cows clear up their food, thus keeping an "edge" on their appetite. Some people achieve this by systems such as out of parlour feeders, making sure that the out of parlour feed ration is only introduced slowly in the post-calving cow. The same feeders can be used to ensure that cows do not get overfat in late lactation, before drying off. Exercise is also considered to be important. Within reason, the more exercise that fresh calved cows are given, the less udder oedema you get and the better the cows perform.

As I said at the beginning of this section, I just wish I knew the answer. For many herds fresh calver problems have become the major herd health issue, as mastitis was 5-10 years ago. The two syndromes are also connected. Cows that develop metritis are much more likely to develop mastitis. This is simply because many cows carry udder infections, but only a few go down with clinical mastitis. This

difference, i.e. between being *infected* with the organism and *affected* by the disease, is largely governed by factors affecting immune suppression, i.e. what we have talked about in the above. I suppose there will not be a "one fits all" system, i.e. there are various ways of controlling the problem. It will be apparent that I have not discussed fresh cow treatment programmes, for example regularly taking daily temperatures and dosing cows with Ketoglycol, injecting with antibiotics etc. It's not that I'm against such programmes. They are often necessary. However it seems to me that this is simply trying to treat a syndrome that should not be present in the first place. Surely what we should be doing is feeding or managing the cow so that she does not develop the syndrome, and these management programmes are then not necessary.

BRITISH FRIESIAN CENTENARY – Open Day at Home Farm Churchdown GL3 2PS.

Ben and Adam Pullen are holding an Open Day on Wednesday 24 June 2009, 10.30a.m. start. This is an Open Day event and all dairy farmers (whatever your breed!) will be most welcome. Trade stands, food and of course, Friesian cows.

FLOCK CHECK

Intervet is again offering free laboratory testing for Enzootic Abortion and Toxoplasma in barren ewes this year. It's an excellent opportunity to increase output, and put into plan control measures for next year. If anyone is interested, please contact Wendy for details.

STAFF CHANGES

Stuart has managed to get himself a very attractive post in Derbyshire, partly working with the Royal Veterinary College, and will be moving on in July. We wish him all the best for the future. His position will be taken by Phillipa Lord. Phillipa has a good background in farm animal practice from Wales. She was originally going to do part-time TB testing for us, but now joins the practice full time.

PIG EVENING

Our next client evening is on Thursday 11 June 7-9p.m. All are welcome.

DIY AI REFRESHER

I have had a request for a half-day course (say 11a.m. to 2p.m.) but need three more people. Is anyone else interested?