FARM ANIMAL NEWSLETTER - MARCH 2022

Dairy Cow Nutrition Meeting

At the end of February, we had a visit from independent nutritionist Emma Redfern. Emma spent a few hours passing on her top tips for dairy cows – in particular dry cows and fresh cows. She sought to answer common questions and address common misconceptions about diets.

Below are a few of the topics we talked about and over the next few weeks we will put some short videos of the session onto the Dalehead App, website and Facebook page.

How do you feed your dry cows?

Emma talked about the benefits of a two group system – far off cows only need 90 MJ of energy whereas close ups need 120MJ, if you run them as one group how best can you cater for this change in energy demand. Is it better to feed too much energy or too little?

Intakes, Intakes, Intakes:

One of Emma's key messages was ensure intakes are good in our dry cows. A good TMR (Total Mix Ration) is ideal – but what if you only have a small group of dry cows – can you feed every other day and if you do, what product can you use to ensure the TMR isn't spoilt by day 2?

Protein and starch pre-calving:

Why are both of these constituents important for our dry cows? Good quality protein is essential in our dry cows to ensure good colostrum quantity and quality – what are the best proteins to use? Starch pre-calving is essential for preparing the rumen bugs for a starchy milking cow ration. How should we use lead feeding to ensure a good transition?

Milk fever:

A good dry cow diet is essential to ensure calcium balance post calving. Certain constituents and forages can increase the likelihood of milk fever post calving – what products should we avoid and how can forage mineral analysis help ensure we get the balance right?

Dry cow minerals and DCAB (Dietary Cation—Anion Balance):

Magnesium is essential in a dry cow diet for mineral balance, magnesium chloride is used in DCAB – but this only has 11% magnesium in it, so is not enough to rely on for magnesium supplementation. Are you utilising dry cow minerals and DCAB to minimise milk fever risk, or in some cases are you doubling up on your mineral requirements when you could be using less?

For the answers to all these questions and more, watch our videos!

RATTLEBELLY/ WATERY MOUTH CONTROL

At our recent annual sheep meeting we discussed control strategies for rattlebelly/watery mouth/slavvers now that the licensed oral antibiotic doser for prevention/treatment of rattlebelly (Spectam Scourhalt) has ceased production.

Rattlebelly is the result of an E. Coli infection of young lambs (usually 12-36 hours of age) resulting in symptoms such as gut stasis causing abdominal distention with build up of gas/liquid (rattlebelly), going cold in the mouth with excess salivation and loss of suck reflex (slavvers) and sometimes with constipation. Affected lambs are dull, reluctant to feed and will usually die if not treated.

Colostrum contains antibodies which provide the lamb with protection against rattlebelly. At our sheep meeting we discussed the 5 Q's of colostrum management for lambs.

1 – Quantity

Lambs should receive 50mls/kg of colostrum asap after birth and 200mls/kg in total over the first 24 hours.

2 – Quality

The ewes own colostrum is usually the best source of antibodies that are specific to the farm. The next best option is colostrum from another ewe or good quality cow/goat colostrums, although colostrum needs to be collected asap after birth as the quality deteriorates as it is diluted down by milk production in the udder. Artificial colostrum substitutes vary greatly in quality, **Immucol** and **Lamaid** are two of the best quality options containing high levels of protective antibodies.

3 – Quickly

In the first few hours of life the antibodies in the colostrum are absorbed through the gut wall into the bloodstream more efficiently than they are when the lamb is over 6 hours old. By 24 hours of age virtually no antibodies are absorbed.

4 – sQueaky Clean

When collecting colostrum from a ewe or administering with a stomach tube or teat it is important to be as hygienic as possible. Disinfect tube feeders between lambs and use different tubes for feeding sick lambs and colostrum administration to newborn lambs.

Whether a lamb develops symptoms of rattlebelly is often down to whether the size of the environmental challenge of E. Coli is greater than the protection provided by the antibodies in the colostrums. The environmental challenge of E. Coli is usually greater in lambs born inside in the second half of lambing time as infection builds up. Twin and triplet lambs or lambs which have been slow to get to their feet after lambing are most vulnerable because these are the lambs most likely not to have had enough colostrum quickly enough after birth.

5 – Quantify

The quality of colostrum can be measured using a Brix refractometer. Lambs can be blood sampled to ensure they have received sufficient colostrum.

Preventive Strategies

The two most important preventive strategies for preventing rattlebelly in lambs are maximising good quality colostrum intakes ASAP after birth and environmental hygiene to avoid build up of infection. Oral dosers containing a rapidly available energy source (**Lamb QuickStart**) will give lambs an energy boost which may encourage them to get to their feet and take colostrum from their mothers. Preventative antibiotic treatments should only be considered for the most vulnerable lambs.

Please speak to the farm vets to discuss the most appropriate course of action for your flock.

ABORTION IN SHEEP

Any farm experiencing over 2% abortions or premature lambings is likely to have an infectious cause of abortion present. It is always worthwhile investigating the cause of abortion as control measures will vary depending on what is found. We have already had diagnoses of Enzootic Abortion, Toxoplasma and Campylobacter this year.

Enzootic Abortion

Key Points:

Enzootic Abortion is highly contagious from sheep to sheep.

- 99% of infection takes place around lambing time with ewes and lambs picking the infection up from aborted lambs, infected cleansings and vaginal discharges (which can last for up to 3 weeks) from ewes which have aborted.
- Enzootic Abortion organisms can survive for up to 6 weeks in the environment.
- Once infected a ewe/lamb will carry the infection until she next becomes pregnant and will then abort, usually in the last 2-3 weeks of pregnancy.
- Ewes aborting this year were probably infected at lambing time last year.
- A ewe should only abort once due to Enzootic Abortion but even though she may produce full term lambs in subsequent years, she can still contaminate the environment with infectious vaginal discharges.
- **Enzootic Abortion is contagious to humans - pregnant women should stay well away from lambing sheep.**
- Rams are not thought to be significant in the spread of Enzootic Abortion.
- Action to be taken in the face of an outbreak:

1. Isolate ewes which abort from all other sheep (including ewes which have already lambed) until any vaginal discharges have cleared up (approximately 3 weeks).
2. Remove aborted lambs and afterbirths from the lambing pens ASAP and destroy any contaminated bedding.
3. Injecting 'in contact' ewes (i.e. those in the group which are yet to lamb) with a long acting Oxytetracycline (1ml per 10kg into muscle as a single injection) will greatly reduce the number of sheep aborting this year.
4. Breeding ewes can be vaccinated in the autumn at least 1 month prior to tupping with a live vaccine (Enzovax or Cevac Chlamydophila).

For further information on Enzootic Abortion in ewes, please speak to one of the farm animal vets.

Toxoplasma Abortion

Key Points:

- There is no sheep to sheep spread of Toxoplasmosis.
- Sheep become infected if they eat feed (pasture, hay or concentrates) or drink water that is contaminated with cat faeces which contains Toxoplasma.
- Toxoplasma oocysts can survive in the environment for many months.
- Cats become infected by eating small animals (especially mice) which are persistently infected with Toxoplasmosis. Once infected a cat will usually only be contagious for a few weeks, after which it will have a lifelong immunity and not be at risk of infecting sheep.
- Infection of sheep in early pregnancy kills the foetus and ewes may present as barren.
- Infection of ewes later in pregnancy may result in abortion, stillbirths and weakly live lambs, often accompanied by a mummified foetus.
- Following infection sheep are immune and should not abort again due to Toxoplasmosis.
- Toxoplasmosis can also cause serious disease in pregnant women.
- Action to be taken in the face of an outbreak:
    1. Even though there is no direct sheep to sheep spread of Toxoplasmosis it is good policy to isolate aborted ewes from all other sheep until any vaginal discharges have cleared up (approximately 3 weeks), and to remove aborted lambs/afterbirths from the lambing pens in case there is more than one cause of abortion present.
    2. A vaccine (Toxovax) is available for future years to be administered at least 1 month prior to tupping (vaccine cannot be given to pregnant ewes).
    3. No drugs are effective in the face of an outbreak to prevent further losses during this lambing time.
    4. Diagnosis of Toxoplasma Abortion is by examination of aborted lambs and placentas or blood sampling sheep which have aborted. Typically, placentas from ewes which have aborted due to Toxoplasmosis have white spots on the cotyledons (buttons).

For further information on Toxoplasma Abortion in ewes, please speak to one of the farm animal vets.

Campylobacter Abortion

Key Points:

- Campylobacter Abortion in ewes is caused by infection with the bacteria *Campylobacter Foetus Foetus* and is highly infectious from ewe to ewe.
- Ewes become infected orally by contact with feed or water infected with Campylobacter or by direct contact with aborted material from other ewes.
- Carrier sheep are believed to be the most important means of introducing the infection into a naive flock although carrion eating birds such as magpies and crows and people who have handled aborted material may also play a role in mechanical transmission of Campylobacter.
- Abortion occurs 7-25 days after infection.
- Following infection ewes mount a good immune response and seldom abort a second time due to Campylobacter.
- There is minimal carry-over of infection in the flock from one year to the next.
- Action to be taken in the face of an outbreak:
    1. Unfortunately, treatment in contact ewes with antibiotics is of limited benefit.
    2. There is no vaccine available in the UK to prevent Campylobacter Abortion.

For further information on Campylobacter Abortion in ewes, please speak to one of the farm animal vets.

Leptospirosis, BVD & Lungworm (Huskvac) Vaccinations Prior To Turnout

In the spring, prior to turnout, is when the majority of breeding cattle are vaccinated to give protection against BVD and Leptospirosis. In addition to single annual boosters for cattle already in a vaccination system, previously unvaccinated animals may require a course of 2 injections approximately 4 weeks apart to become fully protected (**BOVELA BVD** vaccine just requires a single injection followed by annual boosters).

It is recommended to complete the initial vaccination course prior to service so consideration needs to be given to which animals are going to be served through the summer. It is particularly important that BVD vaccinations of replacement stock are completed prior to service to avoid infection of susceptible animals during the first 3 months of pregnancy leading to the production of PI (Persistently Infected) calves.

Although we don't know of any supply problems with BVD and Leptospirosis vaccines this spring we would recommend ordering early if you know your likely vaccine requirements.

Farms that vaccinate heifer replacements against lungworm will also need to vaccinate calves over 2 months of age with 2 doses of **Huskvac** 4 weeks apart, with the second dose being at least 2 weeks prior to turnout. Huskvac is currently unavailable from the manufacturers with the next batch available shortly after 16th March. If you know the number of calves that you wish to vaccinate against lungworm this spring please contact the surgery in good time so we can place an order for you to ensure delivery when you want it!

For further advice on the most appropriate timings for vaccination protocols, which vaccines can be given at the same time and which worming products may be most appropriate after lungworm vaccination, please speak to one of the farm vets.

Historically, lungworm infection (husk) has been most commonly associated with youngstock but now almost 75% of reported cases are in adult animals which can have a very significant impact on the profitability of a herd. Husk is one disease where an animal's natural immunity must be allowed to develop as it matures. Sometimes, overuse of wormers in the first grazing season, coupled with poor grazing management and extended dry seasons can mean that an adult animal that has seemingly been protected for several seasons suddenly becomes naive and likely to get husk infection.

Vaccination remains the most effective method of controlling husk. On farms with a previous history of husk, vaccination with Bovilis Huskvac should be a priority. This is a live vaccine made from irradiated larvae; a process which makes them incapable of causing disease. The vaccine produces a very good immune response against disease. Contact one of the farm vets to discuss protecting your herd with Huskvac.