



Newsletter 2015, Q1

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Feeding the ewe in late pregnancy

With winter weather upon us and ewes getting closer to lambing, now is the time to think ahead about feeding ewes pre-lambing.

- **Group sheep according to requirements.**

Ideally scan all of the ewes to determine lamb numbers, as this will enable targeting feeding to requirements. Single-bearing ewes for example may need little concentrate feeding prior to lambing (depending on forage quality), which will save on expensive feed costs. Ewe lambs and gimmers can also be grouped separately if practical.

- **Body condition score all of the ewes.** This needs to be done at least 6 weeks off lambing, when the ewes are being handled for clostridial vaccination. Target BCS for a lowground ewe at this stage is 2.5 to 3.0. Grouping of ewes can then be modified based on BCS: thin twins for example can be moved into the triplet group. If there are more than 5% of the ewes below BCS 2.0, investigate for potential disease problems such as liver fluke.

- **Get forage sources analysed.** Forages can vary widely: for example the best quality hay can be equivalent to clamp grass silage. The worst quality hay can be the equivalent of straw..... Knowing what forage quality is like enables you to plan the ration for feeding in late pregnancy. For example if the forage is high in protein, then you may be able to save on some supplementary feeding.

- **Select concentrate feeding for late pregnancy.** This should have an energy content of at least 12.5 MJ/kg DM, and a good balance of both ERDP (rumen degradable) and DUP (bypass) protein sources. Feed quality at this stage.



- **“Ask the sheep what they think”:** **Blood sample to assess diet adequacy.** There are long-established procedures for blood sampling ewes in late pregnancy to assess their nutritional status before lambing:

- ✓ Sample **3-4 weeks prior to the start of lambing.**

- ✓ If ewes are scanned, sample **at least 5 ewes in each group** (singles, twins, triplets and gimmers/ewe lambs).

- ✓ If ewes are not scanned, sample **20** of the first ewes to lamb at random within the flock.

- ✓ BCS and details of the diet are also important to put the results in context.

- ✓ Sampling for energy status (BOHB), protein (urea-N and albumin) and major minerals will check whether the diet is working as planned. Trace element analysis can be added if thought to be a concern.

With the blood test results back within the week, adjustments can then be made to the diet to more precisely match feeding with the pregnant ewe's requirements. This should reduce problems with twin-lamb disease, weak lambs due to under-feeding energy in late pregnancy, and provide better quantity and quality of colostrum to get lambs off to the best possible start. Blood sample now, before it is too late.....

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Voluntary Draft National Johnes Action Plan

A draft plan for a national Johnes management programme (NJMP) was released by the industry group "Action Johnes UK" in November 2014. The aim of this voluntary industry-led initiative is to reduce the incidence of Johnes disease in UK dairy cattle. The plan is likely to be formally launched on the 1st April 2015. More information on the NJMP can be found at www.actionjohnesuk.org

Johnes Disease – Quick Overview

Johnes disease is a *fatal gut disease* of cattle and other ruminants such as sheep. It is caused by the bacterium *Mycobacterium avium* subspecies *paratuberculosis* (MAP). Initial infection typically happens in the *first few months of a calf's life*, but the animal may stay healthy for many years before signs develop. The main clinical signs of end-stage Johnes disease are rapid weight loss and diarrhoea. However in dairy herds *reduced milk yields and poor fertility* are likely to be the initial signs.

Johnes is an *infectious disease* which means it can spread from one animal to another. MAP is hardy and can survive in the environment for many months/years. It is resistant to heat, cold and drying.

Young animals are far more susceptible to infection than adults. Calves are infected when they swallow MAP bacteria that have been shed from the dung of an infected animal into the environment – eg. contaminated milk, suckling dirty teats, drinking colostrum from infected dams, dirty calving environment etc. Only a small amount of dung is needed for the disease to be passed on. Infection can also spread in Johnes infected cattle through the placenta to the unborn calf.

One of the problems when it comes to diagnosing /screening for Johnes disease is that milk and blood tests for infected cattle are not 100% reliable in the early stages of the disease. Apparently healthy animals will test negative yet still be infected with MAP, as the antibody response does not fully develop until the later stages of the disease.

Key Messages for Johnes Control:

- ✓ Newborn animals must be protected from infection by being born and raised in a clean environment. They also must be fed milk and water free from MAP contamination. The main source of MAP contamination is via dung from an infected animal.
- ✓ Adult animals infected with MAP must be identified and managed to ensure no young animals are exposed to their milk or manure.
- ✓ Consult with your own vet to decide on the best approach for you and your herd.



If there is an underlying Johnes problem in your herd, it will very likely reduce the lifetime productivity and health of your herd. One thing is certain, if management changes and testing policies are not implemented, the number of infected animals within your herd will only *increase* year on year.