# ISSUE 75 Autumn/Winter 2021 Livestock NEWS www.paragonvet.com





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ACHIEVING EXCELLENCE IN HEALTH AND PRODUCTIVITY

**By Victor Oudhuis** 

# New Dynamic Parlour Testing service

By law all milk parlours need to have a static test carried out once a year, this is the equivalent of a vehicle MOT. It will pick up mechanical faults in the system and perishable parts will be replaced.

Another type of assessment called a "dynamic" test or Milking Time Test (MTT) can be undertaken during milking. It assess how the machine is actually performing and interacting with the cows. It measures vacuum and vacuum changes under milking conditions in the milk liners. Using the car analogy it measures vacuum levels "where the rubber meets the udder". By doing this we can determine in what way the parlour might be affecting mastitis levels on your farm or whether the parlour is performing efficiently or not.

As some of you may be aware, certain milk buyers are now requesting a dynamic parlour test to be carried out once a year in addition to the static test. Paragon is now offering the Dynamic Parlour Testing service to our clients using the Vadia recorders which are attached to the milk cluster (see picture) causing no interruption to the normal milking.

As well as the actual dynamic milk machine test a number of other important interactions in the parlour are recorded during a milking observation, including teat end scoring, hygiene scoring, assessment of pre and post dipping/

spraying, cluster alignment and the work flow of the milking routine.

There are several key areas a dynamic test can evaluate that a static test cannot measure:

**Pre milking teat preparation**: poor udder stimulation and delayed milk let down are highlighted by vacuum readings from different points in the liner.

**Over milking**: commonly a cause of teat congestion and/or teat end damage and caused by a number of reasons including incorrect ACR take off settings.

**Liner slippage and liner fit**: picked up on read outs from the testing equipment and can point to cluster alignment, vacuum or liner design issues.

The vacuum applied at the level of the teat end: assesses if operating vacuum is set too high/low



Taped to cluster during milking

If you are having mastitis or high SCC issues or feel your parlour is not performing as it should, a dynamic milk machine assessment would help you to get to the bottom of it.

A report will be produced from the visit and we will discuss the main points from the visit on farm and make practical suggestions to help reduce the risk of mastitis from the parlour. If you are interested in more information please ring the practice and ask for Victor.



# <u>Johnes</u>

#### By Jemma Reed

Johne's disease is a chronic, progressive intestinal wasting disease caused by infection with Mycobacterium avium subspecies paratuberculosis (Map). The classic symptoms that are seen in cattle are weight loss and diarrhoea. It affects multiple species but this article will concentrate on dairy herds as the upcoming deadline for the National Johne's Management Plan (NJMP) for dairy producers is 31st December 2021. The NJMP began in 2015 to engage farmers, milk purchasers and vets with Johne's control. In 2018 the requirement for a signed annual declaration was introduced and since then it has now become a mandatory requirement for dairy farmers under the Red Tractor Dairy Standards. The NJMP involves 3 steps in conjunction with a BCVA Accredited Johne's Veterinary Advisor (BAJVA).

#### (BAJVA). These are:

- Knowing your disease risks (risk assessment), knowing your disease status (testing) and creating a written Johne's disease management plan which will include one of the 6 recognised strategies for Johne's control in your herd: biosecurity, protect and monitor,

improved farm management, improved farm management and strategic testing, improved farm management, test and cull, breed to terminal sire or firebreak vaccination. Animals are usually infected with Map as calves. There are various methods of Map infection either prior to birth across the placenta, drinking infected colostrum and milk or most importantly, by ingesting Map infected faeces. More recently it has been found that calves from test positive cows will infect other calves around them. An infected cow can shed billions of Map for years prior to showing symptoms of the disease. Map may last for a year in slurry or on grazing land. Animals typically tend to show clinical symptoms between 2-5 years of age so there is a long, variable incubation period which makes its control difficult. Generally only 1-5% of infected cows in a herd will show clinical symptoms so hence the need for screening and testing in order to establish positive animals that appear healthy in order to manage them within the herd. Interpretation of your Johne's test results needs to be done carefully in conjunction with your BAJVA. Test results at times can appear frustrating as animals can test antibody positive then negative but key to take note of is that many cows run through 3 stages as they progress with the disease. Initially test negative, then fluctuating between test negative and positive before they finally consistently test positive. Key is not to ignore a one off positive test result. Johne's can cause serious economic impact within a dairy herd if the disease is allowed to spread. For every clinically diagnosed case of Johne's in a herd there are potentially 10-15 other animals within the herd incubating the disease. Johne's will cause reduced milk yield, greater susceptibility to mastitis and raised cell counts and an increased risk of early culling even before a cow shows the classic symptoms of weight loss and

diarrhoea.

With increased culling rates comes the increased requirement for replacements, be it purchased or home bred, which adds to farm costs. A 2013 study at the University of Reading showed that Johne's test positive cows were twice as likely to have a cell count over 200,000 and twice as likely to have a milk yield 25% less than the herd average. On top of this, within a high Johne's disease incidence herd, costs incurred escalate



to at least 1-2p/litre and remain for several years until the disease is brought under control.

Finally it is worth remembering that Johne's is almost always introduced into a herd through purchasing infected stock therefore emphasising the need for establishing the Johne's disease status of animals you are planning to purchase.

# Huskvacc and Scabivax Vaccine

Supplies of Huskvacc and Scabivax vaccine are very likely to be delayed or possibly restricted this coming spring. Huskvacc is

unlikely to be available until mid February. If you anticipate a requirement for either of these please let us know asap so we can be sure to try and secure your order.

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# Advanced Breeding

### By Rob Simmons

Paragon's Advanced Breeding department has been involved in a number of research projects over the past few years, including the development of the first cattle IVF service in the UK. We have recently started a new project alongside a vet practice in the South-West (St Boniface Vets) and Nottingham University looking to improve the conception rates to AI in dairy cows.

It has been long-recognised that many cows fail to recognise pregnancy in the very early stages, which is why although 80-90% of inseminated cattle have a fertilised embryo in the days following AI, only around 40% 'recognise' the pregnancy and allow it to implant and develop. Our 'cowstopper' embryo service helps this recognition by transferring an embryo in addition to the AI, which releases more hormones and helps this recognition.

This newest project aims to help boost this recognition, and thereby increase AI conception rates, by transferring a version of an embryo, which will release the necessary hormones to help the cow hold to AI, but will not produce a calf itself, so doesn't risk leading to a twin pregnancy. This is undertaken the week after AI. We are looking for farms to be involved in trialling this - we'd aim to transfer into a proportion of served cows, leaving the rest so we

can see if the expected increase in pregnancy rate is met. This is funded by the project, so you wouldn't be charged. We hope to start transfers in late Spring or early Summer 2022.

If you are interested in being involved, or for more information, please speak to your vet, or the Advanced Breeding team on 017684 39101.



#### LIVESTOCK NEWS

## Nutrition update - SARA By Philip Wilkinson

Clinical acidosis is rarely seen in dairy herds, but the less severe sub-acute ruminal acidosis (SARA) is common among early and mid-lactation cows. SARA is caused by a drop in rumen pH, which is the result of feeding a ration with a high acidic load. It is often the result of adding high starch, rapidly fermentable feeds to compensate for poor quality silage.

The symptoms can often go unnoticed, but estimates are that SARA could be costing the UK dairy industry as much as £25m each year.

Some poorer quality silages being fed on many units this year means that producers should be particularly vigilant for signs of SARA this winter.



Because silage ME is lower on some farms this year, it can be tempting to add more starchy feeds to rations in a bid to maintain and improve milk yields. But feeding a 'hot' ration is not without risk. Rapidly fermentable ingredients will increase the risk of SARA, as will 'slug' feeding concentrates in the parlour or out-of-parlour feeders. Little and often is the key here and never more than 2kg of concentrate per feed.

Depressed milk yields and/or low milk butterfats, below 3%, are often the first sign of a problem. The cows themselves may exhibit poor cudding, loose dung, tail swishing (resulting in dirty flanks), variable and low feed intakes, and poor fibre and grain digestion (indicated by quantities of either in the dung).

The total cost of the condition is undoubtedly much higher once treatment costs and the impact on cow health and fertility are taken into account. SARA is implicated in reduced fertility and a higher incidence of lameness, along with an increased susceptibility to mycotoxins and pathogenic bacteria as a result of the acidic rumen environment. Cows suffering from SARA are also more prone to production diseases such as mastitis, LDA and endometritis as well as risk of developing liver abscesses.

To rule out SARA, we would take a tiny sample (just 2 or 3ml) of rumen liquor from a dozen cows in your herd, and check pH and microbe population. A healthy rumen pH should be above 6 and, viewed under a microscope, microbes should be lively and 'swirl' around.

Formulating rations to produce the right balance of energy release in the rumen is the first step in keeping SARA under control. The second is accurate and thorough ration mixing to ensure that cows actually eat the planned ration – and can't sort through it.

# Pay close attention to the chop length of straw to minimise sorting (aim for 5cm), and include a moist feed or liquid feed if rations are dry or unpalatable. Both will help mask

unpalatable feed ingredients, bind finer particles to the forage and promote consistent intakes. And make sure the ration contains enough structural fibre to stimulate rumen function and promote cudding. Watch your cows and aim for at least 60 chews per cud. It is essential to ensure good production of saliva, which is the cow's best natural rumen buffer.

If you think your cows are showing signs of SARA, getting on top of it sooner rather than later will benefit your cows in the long run.

# <u>Spectam</u>

By Rhys Hopkins

Autumn/Winter 2021

# Expected Spectam shortage lambing 2022

We suspect there could be a supply issues with Spectam this lambing time.

Spectam has been used for the prevention of watery mouth caused by E.Coli in lambs. Watery mouth is considered to be a bacterial overgrowth in colostrum deprived lambs. Antibiotic resistance in E.Coli is rising therefore any antibiotic use should be targeted to help reduce levels of resistance.

### We want to emphasise the importance of:

- Hygiene at lambing time and in the lambing environment
- Colostrum supply (200ml/kg in first 24hrs of life = 900ml for the average 4.5kg lamb) to new-born lambs to prevent watery mouth.
- Appropriate ewe nutrition and body condition score (BCS)
  - Lowland ewes 3-3.5/5
  - Hill/Upland ewes 2.5-3

# \*\* Ewes not hitting this target will have poor colostrum quality making the lambs more susceptible to disease in the first week of life\*\*

Pre-lambing bloods can be done in the final 2-3 weeks of pregnancy. These are used to check ewes' energy and protein levels to make sure ewes are in optimum condition to produce good quality colostrum.

Any antibiotic treatment should be targeted to high-risk lambs e.g. triplets, lambs with low birth weight and lambs born towards the end of lambing when disease challenge is higher.

For discussion about an antibiotic alternative treatment if necessary please speak to one of the vets.



# <u>Bird Flu</u>

Bird flu is continuing to be a problem throughout the UK. Please make sure your birds are inside to minimise contact with wild birds.

Maintaining effective biosecurity is more important than ever. Find out what more you can do to keep your birds free of disease by registering for one of the 'stop the spread' DEFRA webinars.

Visit <u>https://bit.ly/3ywHFjQ</u> to register.



If you spot a dead or ill bird, please \*do not\* touch it and contact DEFRA on 03459 33 55 77 or call the practice for advice on 01228 710208.



# **Contact us:**

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