



PIG HEALTH

UPDATE

PIG PRODUCTION NEWSLETTER FROM MSD ANIMAL HEALTH

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THE MEASURE OF SUCCESS



Measuring pig performance and welfare at an individual level has just become a little easier. A recent trial with Teagasc of the LeeO tagging and monitoring system is already delivering impressive results.

“It was really important to us that we had practical experience on how LeeO would work in Ireland. Although there are hundreds of farms using it across Europe, we wanted to be confident that it was practical, flexible and robust enough for production systems over here,” explains Laura Boyd, LeeO Lead at MSD Animal Health.

The trial involved tagging and weighing piglets at birth. They are weighed again at weaning and throughout the production cycle. Management protocols like cross-fostering and pen changes are also recorded as well as administration of medication. The first pigs tagged are just at the finishing stage now.

“It will be very exciting to be able to see the results across the herd right through to slaughter. It’s a great measure of how some sows or genetics are working and the importance of birth weight and weaning weight throughout the life of the pig,” added Laura. “It’s a fantastic tool for precision farming.”



After a few difficult years in the pig industry, it is great to see that things are slowly improving. As I talk to farmers and vets, it seems that it is often the small changes on farm that yield results. In this issue we explore how monitoring FCR can help farmers to reduce their feed bills, improve productivity and potentially reduce their carbon footprint.

Our recent LeeO trial has shown that recording and analysing results can give us real insight into what is working and what is not. MSD Animal Health recently invested in another business utilising AI based weighing technology to further enhance our swine monitoring capabilities. We hope to be able to bring these products to the market in the months to come.

We look forward to meeting many of you at IPHS on 16th April at the Curragh.

Thomas Gallagher,
Swine Business Unit Director

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For information on side effects, precautions, warnings and contra-indications please see the Summary of Product Characteristics or contact your veterinary practitioner or MSD Animal Health, Red Oak North, South County Business Park, Leopardstown, Dublin 18 Ireland. Tel: +353 (0)1 2970220. Email: vet-support.ie@msd.com Web: www.msd-animal-health.ie



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FEED CONVERSION:

SAVING THE PENNIES AND SAVING THE PLANET

Feed makes up 70% of the cost of pig production and although prices have steadied recently, they still remain at historically high levels. With over 40% of pork’s carbon footprint coming from feed, it’s easy to see how maximising feed conversion can also improve the industry’s sustainability.

What is the feed conversion rate?

Simply put, it is the amount of feed required to produce a kilo of pork.



In a farrow-to-finish system with stable numbers in every stage of production, this can be done by calculating the total amount of feed (on a weekly or monthly basis) divided by pigs to slaughter in the same period. You will need to take into account any gilts being moved out of the main system.

Teagasc estimates that the top 10% of farms achieve a weaning-to-sale FCR of 2.25 compared with an average of 2.45 equates to 33.4kg less feed required.

In the UK, AHDB benchmarking for finishers is 2.47 (average); 2.1 (top third); 1.65 (top 10%).



The Effect of Post-Weaning Ileitis on Feed Conversion



Ileitis is one of the most common digestive diseases in growing pigs and is caused by the Lawsonia bacteria. The dose of bacteria ingested by pigs will determine disease severity, as well as the pigs' diet, genetics, immune response, including maternal antibody presence, intestinal microflora and general health and stress.

Lawsonia infection causes inflammation and thickening of the ileum making it unable to absorb nutrients, especially lysine, which pass into the large intestine where it disturbs the microbiome. This can result in diarrhoea or faecal looseness that can often be grey or pasty in appearance.

One of the unique features of ileitis is the long-term damage to gut integrity. Thickening of the gut caused by the disease remains for the rest of the fatter's life. Because the ileum is so essential to the way feed is digested, farmers see a significant impact to FCR and ADWG right up until slaughter.

Management of intestinal disease on farm has relied heavily on the use of zinc oxide and in-feed antibiotics, but with recent legislation changes, farmers are looking to alternative measures including vaccination.

The Porcilis Lawsonia vaccine can be given by intramuscular injection or intradermally using the IDAL vaccination device and has been proven to reduce diarrhoea, reduce intestinal lesions and reduce loss of daily weight gain.

Porcilis Lawsonia has been shown to increase ADWG in fatteners by an average of 57g compared to unvaccinated pigs, and the same field trial also showed a reduction in FCR from 2.47 to 2.21. A recent study in a British indoor farrow-to-finish unit showed that vaccination with Porcilis Lawsonia also improved ADWG and days to finish when compared with in-feed antibiotics.

ENVIRONMENTAL IMPACT OF IMPROVED FCR

It is possible to calculate the environmental impact of improved feed conversion. The calculation encompasses two elements: what goes in (the carbon footprint of the feed itself including imported soya meal) and what comes out (ammonia and unabsorbed Nitrogen and Phosphorus excreted by the pigs).

A study in Germany demonstrated that Lawsonia vaccination delivered an improvement to FCR that reduced the carbon footprint by up to 6.23%.

AIDAN'S TOP TIPS TO IMPROVE FCR



1. Get it right early in life:

Genetics, colostrum, weight at weaning, minimising stress and first diets all have an impact on gut health and development and subsequently weight gain throughout their life.

2. Nutritional balance:

Review diet formulation at every stage of production to ensure your pigs are getting exactly the right level of nutrition they need.

3. Don't waste a thing:

Can you reduce feed waste? Make sure lines, troughs and drinkers are working efficiently and providing just the right amount needed. Control vermin.

4. Improve health status:

Review biosecurity and vaccination. This is especially important as we reduce zinc oxide and antibiotics. Healthy pigs grow faster than sick pigs, but subclinical disease can be hard to identify. Ask your vet to run diagnostic tests if you're concerned.

5. People and pig management:

Environment, stocking density and production flows have been shown to have an impact on FCR. Involve staff in ensuring that on-farm systems work effectively and where possible record weights throughout the unit.

This newsletter is intended to supply useful information for the pig industry and we endeavour to ensure all information is accurate. It does not replace the need for farm-specific advice given by your veterinary practitioner.

Mycoplasma hyopneumoniae (M Hyo) Pneumonia

Maureen Prendergast MVB, PhD, MRCVS, Technical Manager Integrated Livestock, MSD Animal Health



Swine enzootic pneumonia is the most common respiratory disease in pigs in Ireland and endemic in most farms in Europe. Caused by *Mycoplasma hyopneumoniae* (*M Hyo*) it results in widespread and chronic disease. *M. hyo* infection leads to epithelial damage of the swine respiratory tract, either directly, through bacterial toxicity, or indirectly, by causing a strong and damaging host inflammatory response.

It is quickly spread via nose-to-nose contact between pigs but can be carried by people (in the nose) for up to 48 hours. *M. hyo* infection is often found in conjunction with other viral infections, especially PRRS and PCV2 infections and bacterial infections such as *P. multocida*, *B. bronchiseptica*, *Strep. Suis*, *A. pleuropneumoniae* and *H. parasuis*, as part of PRDC (porcine respiratory disease complex).

Typically, pigs of two to six months of age present with a persistent dry or hacking cough and laboured breathing with reduced growth rate in even sub clinically affected pigs of over 20g/day, poor feed efficiency and increased medication use. When pigs are roused, a non-productive cough is the most common sign and while most pigs are affected the mortality is not usually high. However, pigs of all ages are susceptible to *M hyo* and can be very severely affected if meeting the disease for the first time and can carry and shed the microbe for up to 7 months.

Diagnosis is usually made on the clinical signs; laboratory tests on blood and on tissues; or most commonly, on examination of lung lesions at slaughter.

Control is dependent on good management to reduce environmental pressures and disease transmission and strict adherence to 'all-in/all-out' pig flow. Attention to improved husbandry includes washing, disinfecting and drying accommodation between batches.

Vaccination is currently considered one of the most effective ways to control *M. hyo* at herd level. Licenced vaccines are available to provide protection against *M. hyo* infection during risk periods. Early vaccination should be discussed with your vet to maximise the piglet's immune response prior to challenge. It may be possible to vaccinate at the same time as other piglet vaccines. As gilts are considered important shedders, an effective gilt acclimation programme involving vaccination should help control *M. hyo* on farm.

MSD Animal Health provides an intramuscular *M. hyo* vaccine in combination with PCV2 as a two-shot regime starting from 3 days or single vaccination from 3 weeks of age lasting to the end of the fattening period. A complete single vaccination from 2 weeks of age is available through the IDAL device. All MSD Animal Health piglet vaccines are approved for administration together, either mixed or alongside. Please talk to your vet about vaccine choices.

Mixable with
Porcilis[®] Lawsonia

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PCV M Hyo

Single injection.  Dual protection.



Porcilis PCV M Hyo offers **ready to use** protection against both PCV2 and *Mycoplasma hyopneumoniae*. In a single shot from 3 weeks of age or split dose from 3 days of age

ASK YOUR VET FOR DETAILS

Use Medicines Responsibly
 Always read the complete package leaflet or SPC before use. Porcilis PCV M Hyo suspension injection for pigs contains: Porcine circovirus type 2 (PCV2) ORF2 subunit antigen and *Mycoplasma hyopneumoniae* J strain inactivated. Porcilis Lawsonia contains inactivated *Lawsonia intracellularis* strain SPAH-08. Withdrawal periods: zero days. Legal categories: ROI [POM] NI [POM-V]

Further information is available from your Veterinary Practitioner or MSD Animal Health, Red Oak North, South County Business Park, Leopardstown, Dublin 18, Ireland
 Tel: +353 (0)1 297 0220. Email: vet-support.ie@msd.com Web: www.msd-animal-health.ie

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Use medicines responsibly.

Legal Category: ROI [POM] NI [POM-V]

Please refer to the product packaging and leaflets for information about side effects, precautions, warnings and contra-indications.

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