



Following on from Ciara's series on PWD, at our January Pig Clubs we looked at why zinc oxide (ZnO) is used in diets, the importance of gut health in the newly weaned piglet and we invited speakers from Anpario, Sens Nutrition and Alltech to talk about the alternatives products that they have available.

So why DO we use ZnO?

- ⊗ Reduction in susceptibility to *E.coli* infections
- ⊗ Reduced inflammatory response
- ⊗ Improved barrier function of the gut
- ⊗ Zn is required for cell repair and so high localised levels improve gut repair

The problem is, it's not going to be around forever – well, not at pharmacological levels. In fact, we are already 2 years into our 5-year count down, after the European Commission confirmed an EU-wide ban. The ban was largely based on environmental fears.

Ciara has covered some of the causes of poor gut health and the importance of looking after the villi (finger like projections in the gut responsible for absorption of all the good stuff in your feed!). Below are a couple of pictures of villi at different stages:

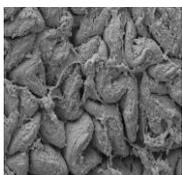


When suckling



When weaned

And what we would like to avoid them looking like:



Damaged villi

The longer a piglet takes to eat after weaning day, the shorter the villi become and the longer they take to recover and, while recovering, growth and FCR take a hit – so all in all not a great start for your weaned pigs or you.

Genex Weaner (Anpario) was the first product up – a blend of organic acids, essential oils and plant extracts combined to aid gut development and reduce stress at weaning. It contains inulin, which stimulates the production of good bacteria which in turn produces

volatile fatty acids contributing to gut development. It also contains a protected butyric acid; this means that the acid is able to get to the part of the gut that it is needed and so helps to maintain gut integrity. Fermented undigested protein in the hindgut is a problem commonly found in newly weaned piglets and to minimise this, Genex Weaner has yucca plant extracts in the formula.

Next was **HiZox (Sens Nutrition)**, potentiated zinc oxide that only needs to be included at 150ppm – the amount that will be allowed at nutritional levels. It is produced under a low temperature creating a porous crystal and therefore a high surface area; this means that it has better bioavailability than regular zinc and can be included at a much lower rate. It has the same benefits that are currently seen with zinc at pharmacological levels.

Finally, we heard about **Actigen (Alltech)**, a product formed from fractions isolated from the cell wall of certain yeast strains. It works by preventing the colonisation of pathogenic bacteria by occupying the receptor sites of the bacteria. This means that they cannot attach to the sugars on the surface of the epithelial cells which would normally allow the bacteria to replicate. The pathogenic bacteria remain bound in the gut and beyond, so once they are passed into the environment, they are unable to infect other pigs. By binding the pathogenic bacteria, gut health and architecture is promoted and therefore enhances the utilisation of nutrients that are provided in the diet.

These are just three of the alternatives to ZnO that are on the market and no one product will work for every farm. All three companies are interested in undertaking product trials on commercial units so if anyone is interested in trialling one of them with the support of Garth, please speak to your unit vet or Nicola.

This is just one example of the topics we cover in our pig club meetings. Garth run two pig clubs, one in North Yorkshire and one in East Yorkshire, from October to March. They are closed meetings to our clients and are a great opportunity to discuss current issues in the industry, as well as highlighting areas that we think will be of interest. If anyone is interested in receiving information about them, please contact Rachel either at the practice or by email (rachel@garthvet.co.uk)

Resources to help keep ASF out

If you have public footpaths running alongside your farm, you need to make sure everyone is aware of the rules and risks of feeding food scraps to pigs. To help with this the AHDB are doing free fence signs that remind passers-by not to feed your pigs, and these can be ordered by emailing comms@ahdb.org.uk.



AHDB are also doing posters available for you to print off at home and these come in Chinese, Romanian, Lithuanian or Polish as well as English reminding staff not to bring items containing pork onto the farm, which is perfect for the staff room. We have enclosed a A4 copy, should you require more copies or one in a different language please copy the link below;

<https://pork.ahdb.org.uk/health-welfare/health/emerging-diseases/african-swine-fever/>

or contact Christine at garth@garthvet.co.uk



Topical Talk

AHDB WebHAT

Whether pigs are kept in straw yards or slatted houses tail biting is a common problem. Producers are reminded that the AHDB WebHAT online platform allows you to build a personalised risk report for each unit. It identifies major risk factors and suggests measures to improve them in order to reduce incidence of tail biting.

It is recommended to be used as a checklist and is helpful for Red Tractor audits to prove producer action in tackling the problem of tail biting on farm. It is also useful to use as a guideline the section on recording of tail biting and has links to templates to help record tail biting incidence.

The link to the overall homepage is: www.webhat.ahdb.org.uk

New Copper Legislation

The changes to the allowed copper levels in feed were relatively overshadowed by the announcement of the zinc ban and the continued drive for reduced antibiotic use last year. The reductions are however likely to have a significant impact on the growth and performance of piglets.

Like Zinc, the reduction in levels is due to environmental concerns. Copper is an essential element required for life however increased levels in piglet feed has been shown to help piglets fight disease.

Initially, levels were expected to be reduced to only 25mg/kg (currently 170mg/kg) in all diets however the NPA and the animal feed industry, amongst others, explained to the European Commission the impact this would have on piglets and their campaigning has resulted in much more realistic levels being passed.

So from 13th February 2019, levels have been reduced as below:

- 🕒 150mg/kg up to four weeks after weaning
- 🕒 100mg/kg to eight weeks after weaning
- 🕒 Then to 25mg/kg

These reductions are however likely to be significant. Reduced growth rates and a 2-3% loss in performance has been shown with reductions in copper levels from 160mg/kg to 120mg/kg (Bikker et al). Increased looseness and diarrhoea may also be seen with the reduction in copper levels.

Love Pork Campaign

Lovepork.co.uk has been created with the principle aim of providing recipe inspiration to encourage people to cook with pork at home, and to provide information about pork, pork cuts and how healthy pork can be. Recipes can be found following the web address below:

<https://www.lovepork.co.uk/>

