The GEORGE Pig Practice

TALKSHOP

Talk Shop – August 2025

Pig Fair

Please keep an eye out for your invite in the next talkshop to our annual Pig Fair 2025, this year topics will include:

Fly control; Water Hygiene; Pig Health Scheme Updates; National, Regional and Local Biosecurity and we will also go through some of the trials we have been running on farm from within our team. We will also have the usual stands from allied industry and a bit of food to round the day off! It would be great to see as many of you as possible, whether you are an Business owner, Stockperson or Contractor the topics are suitable for all.

Date: Wednesday 6th November

Location: Taunton Rugby Football Club

Timing: 2-6pm

We look forward to seeing you there

Colostrum the building blocks for a healthy pig not just the neonate!

Lets take it back a step, think of a piglet as it is being born. No energy source, a rudimentary immune system and likely to be coming into a 'dirty' environment. A good comparison would be to think of receiving a car with no mileage on it and an empty fuel tank, nice to have but no good for getting around! It will have some cost to fill it up but once you've put the right fuel in it you can get from A to B. Piglets are the car and colostrum is the fuel.

A new born piglet has basic immune cells sit within the gut wall, and mucous lines the intestinal wall as a physical barrier, there are no antibodies (immunogloblulins) in the blood and minimal energy reserves to support the immune system in any case, as piglets are born with very little energy reserve. Survival of the fittest really applies here.

When we think of colostrum we tend to think of it's immune-supportive function as it contains rich amounts of antibodies (immunoglobulins) which carry out a number of roles in the bodies defence against pathogens. Immunoglobulins are readily absorbed by the gut at this stage in piglets life – perfect! But time is limited and the gut will be closed after 18 hours.

These immunoglobulins will be representative of the pathogens or vaccines that the sow was exposed to around the time of colostrogenesis (colostrum production) which starts to begin two weeks prior to farrowing. It is right to think of the immune-supportive function of colostrum but it does have other roles too.

Colostrum quality also relates to fat and sugar content, piglets are energy deficient at birth and therefore fat is hugely important to them for longer term energy demands and sugars (lactose) can be used instantly. As we said earlier there is an energy requirement from the immune system and therefore it is vital that colostrum is as rich possible.

So let me put a scenario to you, 'hyperprolific sows' can mean we are having litters of 16 and upwards, a piglet needs approximately 250ml of colostrum to gain adequate protection. Sows produce roughly around 5L of colostrum,

that's enough for 20 piglets if they were all born at the same time and all suckled equally. We all know piglets don't suckle equally and piglet number 16 could be 2-3 hours later than piglet 1. This presents a problem as piglet 16 is unlikely to receive a full 250ml and added to that the colostrum quality rapidly starts to reduce from 6 hours post farrowing. Meaning that piglet 16 has only 3-4 hours to get the full intake vs piglet 1 who has the full 6 hours.

Digital refractometers can be used to indirectly measure IgG levels !

So why do I present you with this problem? I just wanted to refresh everyone's memory of why colostrum management is important. The three main factors to consider are as follows:

1) **Quality**
   Requirement - High levels of immunoglobulins, High levels of fats and Lactose
   How can this be achieved? - Correct sow feeding during colostrogenesis, Animal vaccinated on time and gilts exposed to pathogens well in advance of service and subsequent farrowings
   Can we measure it? – Yes!

2) **Quantity**
   Requirement – **~250ml/piglet**! (studies show that this drops pre weaning mortality to less than 5%)
   How can this be achieved? – Split suckling, correct sow feeding during colostrogenesis, colostrum supplementation (not every piglet but maybe the smallest?)

3) **Timeliness**
   Requirement: Within 6 hours of farrowing but as close to birth as possible

If we achieve all of the above we are setting the neonatal piglet up and giving it as much chance to thrive as possible. Immunoglobulins from the mother stick around for a while depending on the pathogen and when we see these wain is when we start to see the post weaning diseases of piglets. The better we do the better the piglet does.

Markers for poor colostrum uptakes could be: High pre weaning mortality; poor growth rates pre and post weaning; increased disease levels in farrowing and post weaning.

To summarise, colostrum is the building block for a healthy piglet. Colostrum's immuno-supportive function is important as it's fat and lactose content. The principles to manage colostrum by are Quality, Quantity and Timeliness. If you want to investigate it further we are always happy to advise!

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