

# LITTER LETTER

1610 W ARMSTRONG RD FRANKFORT IN 46041 765-659-4482 FAX-765-659-4202

**MAX T RODIBAUGH, DVM**      **JEFFREY W HARKER, DVM**

mrodibaugh@amvcms.com

jharker@amvcms.com

**SHANNON SCHIMMEL, JOAN HODGEN, MANDA ADAMS**

## **Iron deficiency effects on the brain:**

A study by Yeats from the University of Illinois showed that iron deficiency in the first 4 weeks of a piglet's life impairs the development of key brain structures. These abnormalities remained even after pigs were later supplemented with iron. Because iron deficiency early in the life of people results in delayed motor development by 10 months of age and several effects that are noted later, this information also provides a way to study iron deficiency brain effects in humans. Pigs are useful as a model because they have some of the same nutrient and metabolic requirements as humans. New infant formulas are actually tested in pigs before they can be used in clinical trials of human babies. This study also provided some information on non-invasive ways to study the pig's brain development that could be applied to humans.

## **African Swine Fever in China:**

Recent reports indicate that African Swine Fever is spreading rapidly in China. Thus, creating lots of nervousness among US producers importing certain feed ingredients from China. Due to work from Dee et al, it appears that this virus can survive on inanimate objects for up to 47 days. This is in conditions like the trip a feed container would take from China to the US. Thus, many feed companies are taking steps to make sure that ingredients have adequate down time in storage prior to being fed to pigs, to allow for the virus to die off before pigs are exposed. Also, with the wide spread distribution of the virus in China, concern about other objects used on the farm such as boots, coveralls and other plastics and parts for equipment has arisen. Disinfection of these objects is critical to be certain that you are not bringing in contaminated items to the hog farm. According to USDA the best disinfectants for African Swine Fever are chlorine, phenol, peroxide and iodine based. Please discuss

specific products with one of the vets. Maximum biosecurity farms already fumigate, or spray items entering their farm. This recent outbreak of disease heightens the awareness for even standard biosecurity commercial farms in bringing in products manufactured in China. If this virus were to make it to the United States, we must be vigilant and aware of what the clinical disease looks like so that the very first case can be rapidly identified. Thus, watch closely for acute death loss of pigs with severe bleeding issues. These are unusual deaths of good doing pigs with dark or blood appearing lesions on the skin, ears and other extremities or blood coming out the nose. On necropsy, these pigs will have hemorrhagic lesions on many of the internal organs. This virus is not contagious to humans so no concern for employees or people consuming meat from infected pigs. However, the mortality rate in pigs is very high. Thus, an economically devastating disease to herds that would contract it as well as the pork industry due to the lack of exports to countries that are still free of the African Swine Fever. Currently there is insurance being offered for African Swine Fever. This is the same company that offers insurance for PRRS and PED.

Steps producers need to take:

1. Check with your feed supplier that they are considering down time for anything sourced from China above 45 days.
2. Disinfect or fumigate all incoming supplies to the farm with a disinfectant that is effective on viruses such as African Swine Fever.
3. Be vigilant in looking for acute death pigs that show unusual lesions that may indicate a foreign animal disease.
4. Notify your veterinarian as soon as possible.
5. Be prepared for this potential by purchasing insurance or market protection by hedging.

**Post Weaning Feed Intake:**

Encouraging pigs to eat aggressively post weaning is an on-going challenge for many producers and production systems. In a recent article, Ph D Nutritionist, Ioannis Mavromichalis presented his views on targets for starting weaned pigs. He notes that just before weaning pigs nursing a highly productive sow are consuming just over two pounds of milk per day! This milk is approximately 25% solids and provides an average daily growth rate of 250 grams (just over .5lbs), which is close to a 1 to 1 feed efficiency. In current production situations, piglets now are expected to consume no more than 50 grams per day in the first 2-3 days post weaning and on average 150 grams of feed during the first week after weaning. Obviously with this low of feed intake we cannot expect over .3 average daily gain during the first week. This nutritionist challenges us to try to achieve 200-250 grams (of daily or even over 300 grams) of daily feed intake for the first week. In his challenge he did not address the cost of these diets or the return on investment. Obviously maximizing feed in-take the first week post weaning includes factors other than providing a high-quality feed; temperature, air quality, water quality and availability and management techniques such as mat and gruel feeding are all critical. Treatment and or prevention of disease in the early post weaning stages is also important.

**New Products:**

Various products are used by farms to encourage post weaning feed and water consumption on small pigs and/or pigs that have refused to eat. Tonicity is one of these products. A recently introduced new product with claim similar to Tonicity (and a lower cost) is Proteolyte from TechMix.

**Biosecurity Review:**

Now is a great time to review biosecurity for cooler months. Viruses and bacteria are more likely to survive in cooler, damp or cold conditions. In addition, it is more difficult to clean areas of risk during these weather conditions. Therefore, review all transport protocols including internal movements, culls, or lights, and market hogs. Any trucks that go to collection points or terminal markets are at high risk for contamination and need

to be cleaned, disinfected and dried prior to return to pig sites. If truck washings are done at a commercial truck wash, be sure to ask about recycled water use (high risk) and disinfection procedures. Disinfection contact time is important and during the winter additives may need to be utilized to delay freezing, especially if trailers are not able to be dried in heated facilities. Additionally, any drivers of transport or feed vehicles should wear clean shoe covers or boots when getting out of the truck. Shoe covers must be removed and disposed of at entry back into the cab of the trucks and disposal needs to be into garbage bags or a designated "dirty" container. Defined "clean/dirty" lines are important to avoid carrying disease into units. Obviously in many situations, showers are important as people enter units. Products, supplies or equipment entering units can be fogged, sprayed with disinfectant or double packaged so that outside containers do not enter the units. Review biosecurity of manure handling equipment whether it be owned or contracted.

**Instructions for Writing on Blank Tags:**

- Clean tag with alcohol first (this removes the anti-stick agent used during manufacturing)
- Write slow with plenty of ink using the special tag pen from AllFlex
- Write over the number a second time for best results.

\*\* Stay up to date on information that pertains to your Indiana hog farm. Indiana Pork is dedicated to delivering updates on pork industry issues to its producers through the most desirable forms of communication. **SUBSCRIBE TO PRODUCER TEXT MESSAGING!** Text PRODUCER to 33222.

Condolences to the Kenny Moore family on the passing of Kenny's father.

Congratulations to Mr. & Mrs. Eric Scott, growers for Moss Farms, on the birth of their son.

Condolences to the family of Bob Cochran on Bob's passing.

Congratulations to Brandon Gaskill – Oracle Pork on the birth of his son