



Prairie Swine Centre E-Zine

Volume: 2
Edition: 11
May 11, 2012

Predictable in Performance and Profit

Today, feed costs make up the majority of a producer's budget, so improving feed efficiency results in improved profit for producers. Poor health resulting in sick and dead pigs negatively impacts feed efficiency, as every producer knows. In a recent webinar, Dr. Steve Dritz of Kansas State University set out to clarify some of the underlying effects health has on feed efficiency. Some of the topics covered include the spreading of pathogens that disrupt growth, the impacts of mortality, how PRRS and PCV2 hurt feed efficiency, and how biosecurity and sanitation are very important to herd health.

Pigs in an unhealthy environment with exposure to pathogens have trouble converting feed into muscle growth. A pig's immune system requires energy, protein, and nutrient resources to fight pathogens; a healthy pig uses these resources for productive growth. A pig that dies has no productive output but consumes feed over its life, this has a negative impact on feed efficiency, and an even greater impact if the pig dies later in its life (having consumed more feed).

PRRS infected pigs have a higher mortality rate than non-infected pigs which results in lower ADG and poorer feed efficiency. Dritz estimated that if a pig is infected in the sow phase, a producer is missing out on \$7.31 of profit per pig, if infected in the nursery \$2.28/pig and if infected in the finisher \$1.81/pig. Surprisingly if a pig is able to recover from PRRS, there will be minimal impact on feed efficiency.

If a group of pigs are not vaccinated for PCV2 the mortality rate of the group will be up to three times higher than if the group were treated. This high mortality rate has a direct impact on feed efficiency. Like PRRS, if pigs are able to survive the infection they will have little to no impact on feed efficiency.

Sanitation and biosecurity are very important when it comes to pig health. The difference between a clean barn and a dirty barn can have significant economic impacts. Dritz states that unsanitary barns, with poor entrance protocol, visible manure and visible organic matter, can have up to 73% of pigs infected with PRRS (vs. 48% in clean barns), lower ADG, poorer feed efficiency, and higher mortality rates than barns considered clean.

This was calculated to cost the producer almost \$4/pig.

Our next webinar in the series is Tuesday, May 22 at 10:30 (SK time) and features Dr. Rod Johnson, University of Illinois addressing the topic "Fueling the Immune Response: What is the Cost?". We look forward to seeing you there.



For more information on this topic and others related to feed efficiency can be found in our PorkInsight database found on our website at www.prairieswine.com/advanced-search/

Biosecurity in Swine Production: Widespread Concerns?

<http://www.prairieswine.com/biosecurity-in-swine-production-widespread-concerns/>

Implementing a Systematic Approach to Disease Control and Prevention

<http://www.prairieswine.com/implementing-a-systematic-approach-to-disease-control-and-prevention/>

Dr. Steve Dritz's presentation "Influence of Health on Feed Efficiency"

<http://www.prairieswine.com/influence-of-health-on-feed-efficiency/>

