Management of antibiotic free pigs

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With current trends leaning towards either reduction or elimination of the routine use of antimicrobials, the demand for pork that is certified free of antibiotics has grown tremendously.

Raising pork without antibiotics is not uncommon. Many of the operations within the USA and Europe currently perform this task on a daily basis and reap the benefits of such a production. However, the limitations inherent with the programme (no antibiotics) can create some interesting challenges.

Each farm/system can have a different definition of what antibiotic free (ABF) really means.

In some systems, it means no antibiotics after pigs are placed into nursery; for others it means no antibiotics after 150lb; another definition can state no antibiotics whatsoever during the lifetime of an animal.

Table 1. Risk factors.

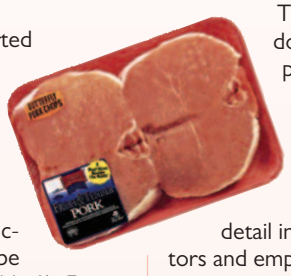
- Initial health of the target herd
  - What diseases are currently present? (PRRS, mycoplasma, ileitis, E. coli)
  - Preventative measures (vaccines)
  - Sow treatments
- Location near similar status farms or finishing farms
- Sanitation, sanitation, sanitation
- Finishing infrastructure – can we group these pigs together? Owned vs. contract?
- Treatment of disease outbreak
  - Injections?
  - Targeted antibody (water application or oral paste products)
  - Burn the barn?

Sanitation

- Keeping bacterial load down is critical
- Dry time important to break and control potential disease processes
- Need to have clean environment since can not treat for 'mistakes'
- Use degreaser/detergent as well as disinfectant
- Hot water wash

For Premium Standard Farms, the definition of the ABF programme is no antibiotics administered to the pig from birth to slaughter.

Premium Standard Farms started the ABF programme in the summer of 1998 in response to a customer's demand for pork products that were guaranteed with no antibiotics. In order to maximise the productivity of this type of pork production certain risk factors had to be identified and managed (see Table 1). For management of any ABF programme, it is imperative to have or to try to reach the highest herd health possible. If you are not fighting significant pathogens, like PRRS or mycoplasma then running an ABF farm can be less challenging.



In summary, raising pork without antibiotics could potentially become a standard rather than a unique programme.

The 'one size fits all' approach does not apply for this type of production as each farm/system has its own unique dynamics and challenges that create the need for alternative solutions.

Antibiotic free production does take more attention to detail in management of key risk factors and emphasises the need for creative approaches to disease control and treatment. ■

Herd health criteria

- Highest herd health status possible
- Production changes – parity segregation
- Target vaccine use to known problems – E. coli (inoculum), salmonella, ileitis, influenza, HPS, A. suis, Clostridia difficile/perfringens type A, mycoplasma
- Medicated feed for sows (CTC; BMB; other)
- Manoligosaccharides
- Segregate from dissimilar production
- Separate from finisher site

Finishing co-ordination

- Group ABF together to better manage
- Target health to best finisher sites
- Contract versus owned management

Treatment options

- Removal from the programme (cost of loss of production)
- Essential oils (oregano)
- Acidifiers (feed and water)
- Vaccination strategies: timing? administration?
- Antipyretics
- Targeted antibody products (water application and/or oral paste products
- Other production aids – Compost-a-mat, Mistral/drying agents