

Antibiotic-free pork production



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History

- 490 sows – conventional pig production
- Sale of pigs at 30 kilos
- Health status – Blå SPF+myc+Ap12
- AB-free project start in 2015
- Production 2016 – 2023 (DC shut it down)
- Economic compensation became less and less during the years

Requirements for antibiotic-free production

- No antibiotic from birth to slaughter
- Coccidial treatment allowed
- Treatment of sows during the lactation period is permitted
- Feed for weaners + Zinc oxide ÷ Fish & Blood
- Clear identification of pigs – ear tags
 - If the pig gets antibiotic the ear tag must be cut off
- Annual Danish control

Choices we made from the start

- Increased lactation period – 4 to 5 weeks => reduction in the number of sows from 490 to 450
- vaccines:
 - Influenza vaccine for all gilts and sows before farrowing (new action)

Choises we made from the start



Change in treatment

Day one treatment

Herd treatment of
weaned pigs



Stop for day one treatment

What happened?

- Inflammation of joints ↑
- Umbilical hernia due to infection ↑
- Respiratory tract infections ↑
- Piglet diarrhoea →



Stop for day one treatment

Measures to limit infection of joint and umbilical cord?

- Disinfection after washing
- Stalosan powder on the floor
- Extra straw in the pen
- Extra heating lamp for the smallest pigs
- 150W varmelampe alle
- Focus on the sows well-being



Stop for day one treatment

Measures to limit respiratory infections?

- Litters are locked at day 4
- Strict sectioning
- Installation of central heating
- Focus on the indoor climate



Foto: Vetteam

Stop for day one treatment

Measures we stuck to:

- Wash + soap – disinfection – drying out
- Stalosan powder - extra straw – soft bedding for the piglets
- Heating lamps from 100W to 150W
- Great focus on the sows
 - Feed optimization
 - Pain reliever and stress level (TLC)
 - "I am good" – after farrowing

Stop for day one treatment

What did we achieve?

- Joint infections could not be controlled as well as with antibiotics
- Increase in cases of umbilical hernia
- Unchanged antibiotic use
- Hard for the staff to make decision about the necessity of treatment.

Herd treatment of weaned pigs

Treatment cause:

Outbreak of diarrhea

All pigs in a pen were treated

Test showed *E. coli*, no Lawsonia

Lawsonia in the slaughter pig herd

Side effect:

Reduction of respiratory diseases



Stop for herd treatment

What happened?

- View of the case – who gets diarrhoea!
 - Big pigs who overeat
 - Little pigs who eat too little
 - When misfeeding
 - Diarrhea at 20 kg (Lawsonia?)



Stop for herd treatment

What happened to the respiratory infections?

- Pigs that collapsed
- More snot and cough
- Poor pigs from farrowing barns were most at risk

Stop for herd treatment

Measures we stuck to

- Optimal local environment
- Collection and treatment of the poor pigs
- Feed with a lower protein level
- Restrictive feeding
- Focus on water allocation
- Acid in drinking water (3 days at week)
- Potato flour every day on the floor
- Vaccines against Mycoplasma-PCV2-Lawsonia
- Individual care taking

Stop for herd treatment

What did we achieve?

- Pigs with healthy stomachs
- Few problems 1 week after weaning
- Few pigs that fall out of the AB-free concept
- Marginally lower growth than before AB-free
- Hernia always an issue
- Significantly lower antibiotic consumption

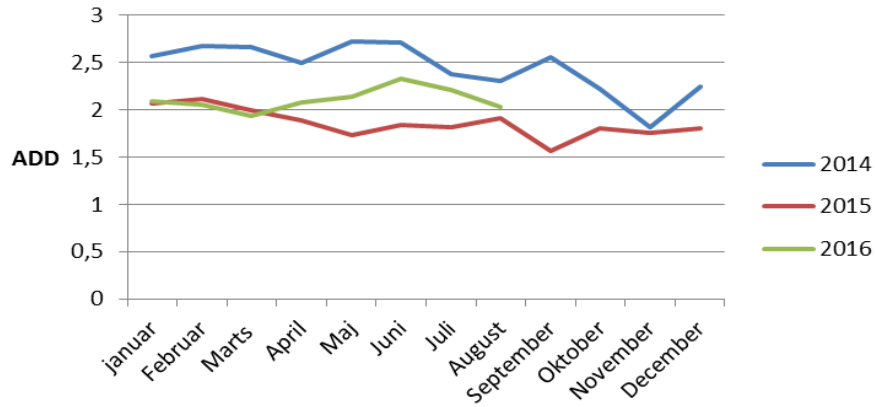
Brief about slaughter pigs

Changes that had the greatest impact:

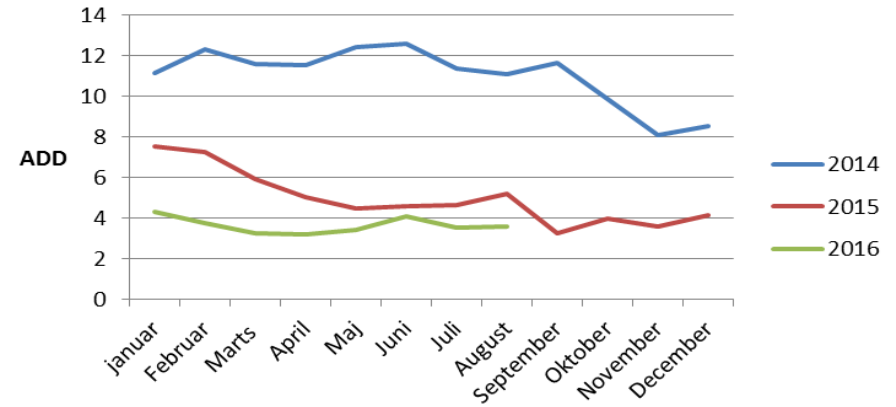
- Better wash – disinfection – drying out
- Gentle startup
- Restrictiv feeding
- Stop for "welcome treatment"

Antibiotic consumption

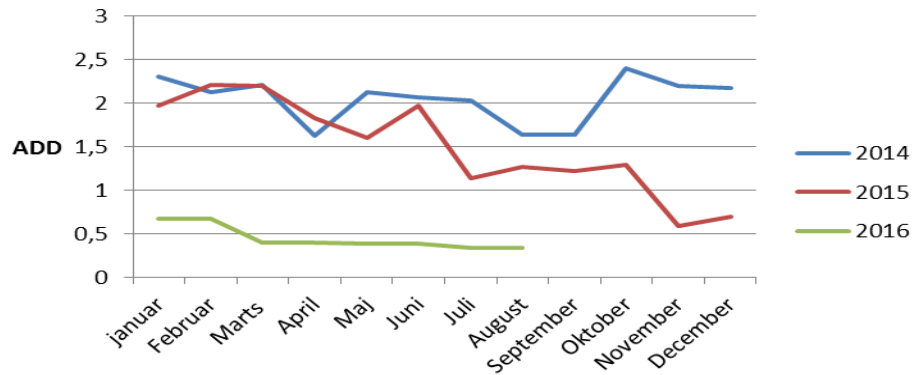
Søer og pattedrise



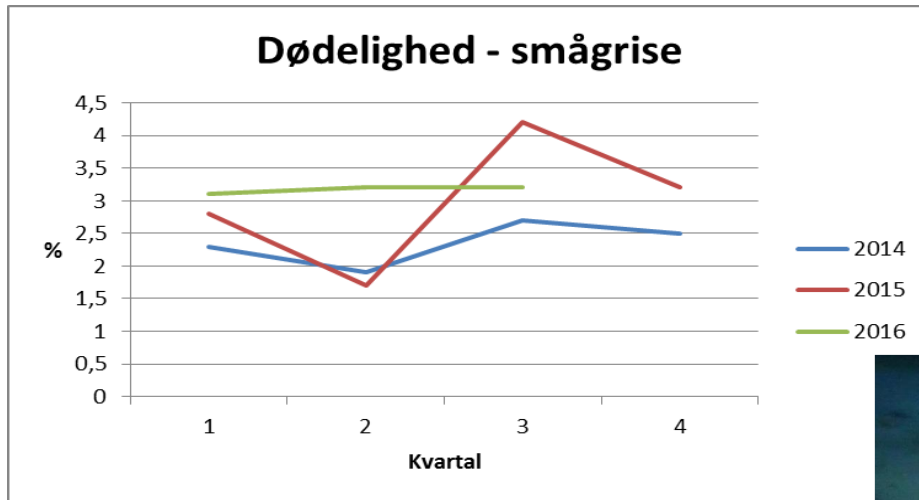
Smågrise



Slagtesvin



Something about hernia



Is antibiotic-free production possible?

- Yes – definitely – we achieved 70% approved
- It costs more – need higher price for the meat
- It requires the right staff – not everyone can
- Good health status and relevant vaccines
- Keep the infection pressure down
 - Find and treat sick pigs
 - Maintain high hygiene
 - Keep a strict sectioning
- Accept that individual animal care takes time

A good start is essential

A good growing pig starts its career with a mother who works from day one:

- Easy farrowing
- High amounts of colostrum
- No fever after farrowing
- Piglets without wounds and scratches
- Piglets who don't become latecomers
- Piglets who can eat food before weaning

Any concerns?

- More pigs will be put down because of hernias
 - Must we accept that?
 - Can we get employees who accept that?
 - What about the consumer – will he accept that?
- Can we recruit the right employees?
- Can the meat be sold at the required additional price?
- OR – is there a third way?