What We’ve Learned About Out-Of-Feed Events

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Out-of-Feed Events

- Empty bulk bins – human error
  - Increases with toll milling
- Bridging of feed
  - Fat + hammermill + 700 microns
  - DDGS (Distillers Dried Grains w/Solubles) inclusion
- Equipment failures
  - Proximity switches
  - Motors, etc

Out-of-Feed Impacts

- Health (Enteric Issues)
  - Hemorrhagic bowel syndrome (HBS)
  - Salmonella
  - Ileitis
  - Ulcers
  - Tail biting?

- Welfare

Research Results, U of Nebraska

- Out-of-feed 0 or 1x every week
  - Random day
  - Noon to 8 am (20 hrs)

Daily Gain Impact, lb/d

P=0.001  P=0.746  P=0.008

Wk 0-8  Wk 8-16  Wk 0-16

Daily Feed Impact, lb/d

P=0.003  P=0.24  P=0.023

Wk 0-8  Wk 8-16  Wk 0-16
Dead/Pull/No-sale (<=205 lb)

- Never 4.3%
- Weekly 9.0%

Multiple OOF on ADG, lb/d

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**Ad Lib – full fed**
Disrupted = 2 random 2-hr access periods
58 lb on test wt 6 wk trial

- **ADG**
- **ADF**
- **F/G**

**Conclusions to date:**

- **Out-of-feed impacts daily gain** (4 of 5 trials)

- While the pig adjusts, weekly events result in longer days to market.

- No consistent measure of welfare impact
Conclusions to date:

- Don’t know:
  - Nursery carryover?
  - Stage of growth vs no. of events
  - Length of events (5 vs 10 vs 15 vs 20 hr)
  - Timing
    - 8am-8pm same as 8pm-8am?

Economic Impact

- Out-of-Feed
  - Loss in wt in constant time system
    - If 5# less sale wt @ $0.45/lb = $2.25/pig
  - Yardage fees if more days $0.12/d x 5 days = $0.60/pig

Economic Impact

- Out-of-Feed
  - Increase in lights and culls from 5% to 10% in 1,000 hd room = 50 pigs
  - 50 pigs sold at $60/pig vs $120/pig = $3,000
  - $3,000/1,000 pigs = $3/pig

Haemorrhagic Bowl Syndrome (HBS)

- Associated with:
  - Whey feeding
  - Once per day feeding
  - Over-eating of any type of feed following feed deprivations

Appears to be related to rapid and large intake of highly fermentable ingredients

Haemorrhagic Bowl Syndrome (HBS)

- Thought to be due to increased production of gas in the intestine, especially the colon (Buddle and Twomey, 2002).

- Gas causes distension and enlargement of intestines, pressuring organs
  - Gastric torsion
  - Strangulation of intestinal blood flow.
Haemorrhagic Bowl Syndrome (HBS)

• Increased gas production
  – Increased amounts of highly fermentable substrates
  – Altered microflora

• Disease progression
  – Reluctance to eat, mild discomfort and mildly distended abdomen
  – Restlessness and preference for cool areas
  – Dog sitting posture/reluctance to move
  – Distended abdomen
  – Extreme discomfort/pain – death within 2 hrs

• Current thoughts
  – Anti-microbials in feed
  – Probiotics in first meal after out-of-feed event
Wean-to-Finish 12 weeks after placement - 2006

Little Pigs Get Hot Too!
Chart begins 44 days post weaning

Data courtesy Herdstar.com
Experience is the name everyone gives to their mistakes!

Oscar Wilde