Is tail biting in growing pigs reduced by a prolonged suckling period?

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Introduction

Weaning

Functionality of water supply

Status of health

Food changes

Group size

Material for occupation

Handling

Climate

STRESS
Introduction

• Stress of weaning
  - Early
  - Loss of the mother
  - Food change
  - New pen mates
  - New environment
  - New infectious agents

Aim: Influence of stress reduction during on tail biting during weaning
  - 5 weeks suckling period vs. 4 weeks suckling period
  - Group-housing vs. conventional farrowing crates
Materials & Methods

• Genetics
  – PIC X PIC 408
  – Porkuss X German Pietrain

• Immunization
  – Mycoplasma
  – PIA
  – Circo Virus
Materials & Methods

• SH-4: 4 weeks suckling period n
Materials & Methods
Materials & Methods
### Materials & Methods

#### Tail posture

<table>
<thead>
<tr>
<th>Inconspicuous</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curled</td>
<td>Wagging</td>
</tr>
<tr>
<td>Lifted, not curled</td>
<td>Hanging</td>
</tr>
<tr>
<td></td>
<td>Jammed between legs</td>
</tr>
</tbody>
</table>

1. Curled
2. Lifted, not curled
3. Jammed between legs
4. Wagging
5. Hanging

[Images and references: 1, 6, 7, 8]
Materials & Methods

Tail lesions

- No injuries
- Scratches, Unsevere bite marks
- Small injuries
- Large injuries

Tail losses

- Original length
- Tip loss (<¼ of the tail)
- Partial loss (>¾ of the tail)
- Complete loss

Materials & Methods

Statistical analysis

• **Program:** SAS 9.4 (Procedure: Glimmix)

• **Tail lesions:**
  - Fix effects: batch, group, rearing_week, batch*group, tail_posture, tail_posture_previous_week
  - Random effects: piglet number

• **Tail losses:**
  - Fix effects: batch, group, batch*group, tail_posture_previous_week
  - Random effects: piglet number
Results

Tail lesions over weeks after weaning

$p < 0.05$

Fraction of animals in %

<table>
<thead>
<tr>
<th>Weeks after weaning</th>
<th>No injuries</th>
<th>Scratches, unsevere bite-marks</th>
<th>Small injuries</th>
<th>Large injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>40</td>
<td>20</td>
<td>20</td>
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<td>2</td>
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<td>3</td>
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<tr>
<td>4</td>
<td>20</td>
<td>50</td>
<td>50</td>
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<tr>
<td>5</td>
<td>15</td>
<td>60</td>
<td>35</td>
<td>10</td>
</tr>
</tbody>
</table>
Results

Tail lesions and influence on tail posture

\[ p < 0.05 \]

- Risk Inconspicuous
- Risk actual week
- Inconspicuous actual week
- Risk week before
- Inconspicuous week before

- No injuries
- Scratches, unsevere bite-marks
- Small injuries
- Large injuries
**Results**

*Influence of interaction between batch and group on tail losses*

\[ p < 0.05 \]
**Results**

Relation between tail losses and tail posture of week before

\[ p < 0.05 \]

- **Risk**
  - Original length
  - Tip loss
  - Partial loss
  - Complete loss

- **Inconspicuous**
Discussion

• **Problem: terms of practice**
  - Infection with streptococcus-species
  - Ventilation in 2. batch not ideal
  - Not enough peat-basins

• **No influence of suckling period?**
  - Not long enough

• **No influence of group housing?**
  - Relatively less space and structure in growing pen
  - Less social partners in growing pen then in the group housing pen

• **The 2-weeks-mystery**
Summary

- No positive effect of a prolonged suckling period

- No positive effect of group housing during suckling period

- Tail posture is helpful to predict tail biting
THANK YOU FOR YOUR ATTENTION!

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Sources

[1] http://www.br.de/fernsehen/bayerisches-fernsehen/sendungen/unser-land/beschaeftigung-schweine-114__v-img__16__9__xl_-d31c35f8186ebeb80b0cd843a7c267a0e0c81647.jpg?version=7653c
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