Feasible solutions to producing intact pigs: an introduction

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MUTILATION

- Teeth clipping
- Castration

ACUTE PAIN

- Tail docking

Acute and chronic pain
Tail docking

Is likely to cause
- immediate pain
- prolonged pain from neuroma formation

Is detrimental to the welfare of pigs
In barren pens with concrete or slatted floor pigs could not perform foraging behaviour

Low level of sensory input
- Only where there is evidence of Injuries
- Before, other measures shall be taken to prevent tail-biting
- Permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities (straw, hay, wood, sawdust, mushroom compost, peat)
- Review the composition of the feed
- Review environmental conditions (ventilation, handling etc)
- Separate animals with tail wounds

Prohibition of tail-docking routinely

[...] pigs must have permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities, [...] 

Little evidence of the type and quality of the enrichment material

• Chains, chewing sticks, balls..?
• Adverse effects on other aspects (contamination, heat stress,..)

➢ Inconsistently implemented in many Member States
Training tool to standardise understanding of the legislative requirements, as well as problems and solutions related to tail biting.

Initiatives for implementation

https://euwelnetpigtraining.org/

Tool-boxes for on farm use to assess:

- The functionality of the supplied manipulable material.
- The presence and strength of risk factors for tail biting.
  - Genetics
  - Nutrition
  - Climate
  - Health
  - Social competition
  - Lack of functional enrichment
Surgical castration

- Behavioural indicators
- Physiological indicators

(Prunier et al 2005)
After castration

Post-surgical pain can last for 5 days.

Behavioural alteration:

- ↓ Activity
- ↑ Huddling up, tail wagging, scratching the rump, desynchronization
- Possible long-term effects on immunity & health

Hay et al. 2003
### Production of entire males

European declaration: to stop the surgical castration of pigs from 1st of January 2018 by voluntary agreement

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Greater alimentary efficiency</td>
<td>Increase of aggressions and mountings</td>
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<tr>
<td>Leaner carcasses</td>
<td>More damage in the carcass</td>
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<td>Higher content of unsaturated fatty acids</td>
<td>Greater incidence of DFD</td>
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<td>Lower excretion of nitrogen</td>
<td>Softer fat</td>
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<tr>
<td>Lower production costs</td>
<td>Greater incidence of boar taint</td>
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How to manage boar taint?

- Decrease the incidence of boar taint
- Sort out tainted carcasses

How to control boar taint?

How to assess boar taint?
Solutions to reducing tail biting

8:45 Housing and management strategies to reduce tail biting

9:30 The effect of mixing after weaning on tail biting during rearing

9:45 Higher space allowance and straw rack as effective measures to reduce tail biting in fattening pigs

10:00 Frequent delivery of straw for slaughter pigs – effect on behaviour and welfare

10:45 Curly tails: the Dutch approach

11:00 Tail biting; what we do and do not know from a genetics perspective
Solutions to rearing entire pigs

11:30 Relationship between sperm production and boar taint risk of purebred or crossbred entire offspring

11:45 Slaughter related factors and season and their effect on boar taint in Belgian pigs

12:00 Using genetic markers to select Canadian Duroc sires for lower boar taint levels in commercial hogs

12:15 Effectiveness of genomic prediction of boar taint components in Pietrain sired breeding populations

Posters

- Fattening and carcass quality of entire male pigs as an alternative to surgical castration
- Inclusion of chicory fructanes in the diet reduces fat skatole levels
- Familiarity with boar taint and previous sample affect perception by human nose methodology
Thanks for your attention!

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