

# Feasible solutions to producing intact pigs: an introduction

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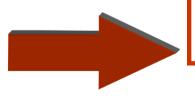


## MUTILATION









Acute and chronic pain

## Tail docking

Is likely to cause

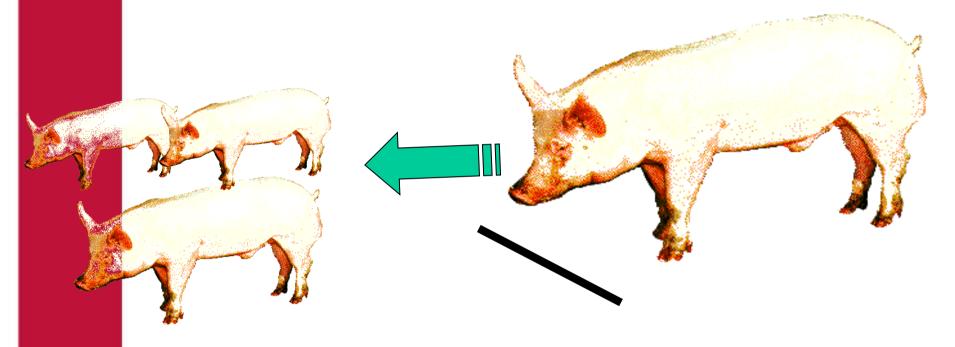
- immediate pain
- prolonged pain from neuroma formation

Is detrimental to the welfare of pigs





## Low level of sensory input

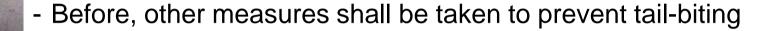


In barren pens with concrete o slatted floor pigs could not perform foraging behaviour



## Tail docking





 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



## Council Directive 2001/88/EC



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** 

### Initiatives for implementation

## EUWelNet >

Training tool to standardise understanding of the legislative requirements, as well as problems and solutions related to tail biting.

https://euwelnetpigtraining.org/



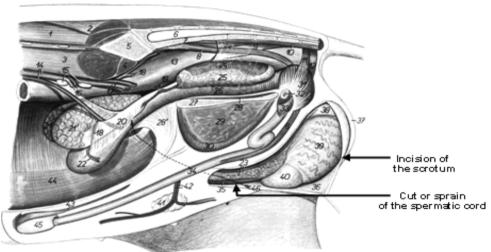


Tool-boxes for on farm use to assess:

- > 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



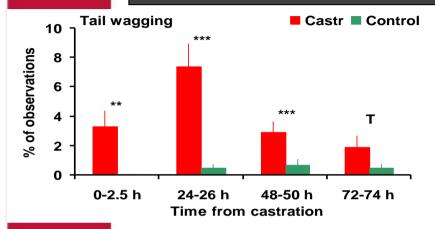


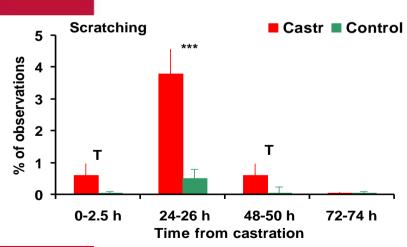
(Prunier et al 2005)



- Behavioural indicators
- Physiological indicators

#### After castration





Hay et al. 2003

Post-surgical pain can last for 5 days.

Behavioural alteration:

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



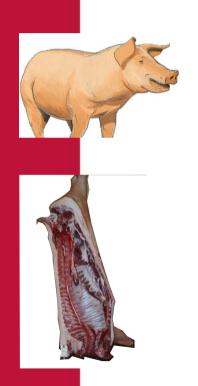
## Production of entire males

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

Advantages	Disadvantages
Greater alimentary efficiency	Increase of aggressions and mountings
Leaner carcasses	More damage in the carcass
Higher content of unsaturated fatty acids	Greater incidence of DFD
Lower excretion of nitrogen	Softer fat
Lower production costs	Greater incidence of boar taint



## How to manage boar taint?



Decrease the incidence of boar taint



Sort out tainted carcasses



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



