



# Boars heading for 2018

*Eber unterwegs ★ Verri per via ★ Beren onderweg  
Verrats en route ★ Cerdi en camino ★ Orner på vej*

## Factsheet

### Producing and marketing entire male pigs

#### History

2012 Declaration of Brussels  
Target: ending castration in 2018 within the EU

#### Current EU status

Most countries behind schedule  
UK - almost 100% entire male pigs (no castration)  
ES - partly castration, depending on end products  
NL - over 60% entire male pigs  
DE - most castrated male pigs, slowly and carefully moving  
DK – discussing; working on animal welfare issues  
BE - in progress, moving towards entire male pigs  
FR - small part entire male pigs; hardly progress  
IT - 100% castrated male pigs  
Eastern Europe - no issue; no progress  
Nordic countries – very slowly moving

#### Research

Long term/various subjects throughout the chain  
DG Sanco  
National projects

#### (Dis)Advantages boars in the pork supply chain

Pigs An end to painful measures  
Farmers  
An end to an unpleasant job  
Better technical and economic results  
Slaughter and processing  
Cost of detection system  
Market acceptance challenges  
Retail and out-of-home  
Corporate Social Responsibility  
Societal appreciation  
Consumers  
Hardly knowledge  
Golden standard (preventive measures/safety net/no complaints)  
Environment  
Due to better growth less feed needed  
Less feed production less agricultural land needed for feed and less manure.



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## Barriers

- Difficult to change 50 years old habits
- Traditional attitudes in supply chain
- Lack of knowledge and trust
- Strong hesitations
- New inline detection system (lack of knowledge and trust)
- Genetic selection effective, but long term solution
- Strong existing views/resistance to change

## Opportunities and benefits

- Improving animal welfare >> consumer appreciation
- Profitable for pig farmers
- Contribution to environment >> less feed/sustainable
- Improving image supply chain

## Experiences

- UK no problems
- ES no problems
- NL no consumer complaints since introduction boar meat
  - Consumption in line with European trend
  - 1.1.2014: only pork from entire male pigs in Dutch supermarkets

## Castration and alternatives

- Surgical castration as has been implemented for decades whereby the young boar piglets' testicles are cut off.
- Immunocastration whereby the boar is injected twice with a substance that restrains the growth of the testicles.
- Non castration, for this optimum husbandry conditions is needed; correct accommodation, genetics, nutrition, hygiene and calm in the shed, play materials.

- Surgical castration is (by far) the most common method employed.
- Immunocastration is used to a lesser extent as it is expensive, labor intensive, retains animal interventions and isn't accepted everywhere by the market.
- Non castration is the most cost efficient method.

## Possibilities

- High level of expertise available ([www.boars2018.com](http://www.boars2018.com))
- Sharing facts and figures creates trust
- High level market intelligence available
- Reliable detection method available (proof)
- Increased worldwide focus on sustainability and animal welfare



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## Producing entire male pigs

Combination of preventive measures and safety net at slaughter line

Preventive measures : breeding, feeding and farm management

Breeding is very (cost) effective, but long term solution

Farm management based on do's and don'ts

Do's >> hygiene, group size, feeding system  
>> regularity, tranquility/calmness

If not >> undesired, risk on aggressive behavior

## Marketing entire male pigs

Large scale sales of boar meat Dutch supermarkets since 2011

No meat from castrated pigs in Dutch supermarkets since 2014

Dutch per capita pork consumption over 2010-2013 developed favorably compared to other countries e.g. France and Belgium.

A carcass that is detected for boar taint has a lower market value, ranging from 15 to 25 euro per tainted carcass. With 4% tainted carcasses of male pigs, this is equal to 0,60 to 1,00 euro over all carcasses of male pigs. This is still considerably lower than the reduction in feed costs of 6,00 euro per carcass of a male pig. .

## Quality guarantees

Detection for boar taint on line

Example: HNS (human nose system)

A sensory detection system, used in slaughter plants

HNS system applied in commercial slaughterhouses since 2008

HNS system on large scale in slaughterhouses since 2011

(total tests: over 2 million of carcasses)

Proof human nose: the best guarantee control for wine

The HNS system is implemented in a few large slaughterhouses in

Belgium, Germany and The Netherlands and also used by one in France.

Research shows that meat quality is based on meat-fat relations.

This can be unfavorable but can be the case with all pigs.

Good nutrition at the end of the fattening period can eliminate this.

## Meat with boar taint: no waste

Boar tainted meat is not wasted, but fully used. The meat can be used for all pork products that are not sold as fresh meat. Examples of these products are Bacon, luncheon meat, sliced sausages, salami, farmers sausage, ham, fricandeau, liver sausage, black pudding.



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## Characteristics HNS system

Scoring scale (yes-no or 5 point scoring scale)

Heating of neck fat with heated metal plate

(Neck is preferred to belly for reasons of convenience)

Maximum 30 minutes by trained assessor, followed by minimum rest of 15 minutes

Selection/training protocol assessors

- sensitive to androstenone and skatole solutions

- 3 day training in laboratory setting

- evaluation performance at slaughter line compared to trainer

Daily control of each assessor performance

Weekly quality assessment of each assessor

Slaughter line speed up to 650 pigs/hour

Located in slaughter line after splitting and before cooling area

## Commercial application HNS system

Applied in a few large slaughter plants in BE, DE and NL

Mean percentage boar taint detection: around 4

Spread from 10% to close to 0% per farm

## Detection as predictor of consumer perception

Any detection system should predict consumer perception as good as possible.

HNS system is compared with the use of androstenone or skatole as predictors.

HNS system performed best, followed by skatole.

## Conclusive

- Boars is only design challenge (not a problem)

- Strong existing views/resistance to change

- Barriers, but also benefits and solutions

- Consumer golden standard (quality guarantees)

- Detection: proof of pudding in eating

- Do's and don'ts boar management available

- Lower food print boars (5 – 8%)

- Genetic measures effective and in use

- Quality guaranteed pork from entire male pigs possible

- Worldwide focus on sustainability/animal welfare increasing

- Brussels declaration : 2018 nearby