



WEBINAR
**Realizing market acceptance
for entire male pigs**

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PIG PROGRESS



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Content

1. Quality attributes and customer satisfaction
2. Market specifications: slaughter weight and backfat thickness
3. The pork supply chain
4. Producer incentives: payments by weight and backfat
5. Producing and marketing meat from entire male pigs
6. We have learned that
7. Product specifications for the market
8. Practical solutions
9. Remaining issues for opening new markets
10. Concluding comments



Not everything is what it appears to be

Quality attributes and customer satisfaction

It is important to know customer perception on product quality attributes: is it related to enablers or to disablers?

- *Removing disablers is relevant in the B2B context (must-be needs)*
- *Providing enablers is relevant in the B2C context (attractive needs)*

Needs	Explanation	Example
Attractive	Not expected delighters causing joy	Everything that evokes the wow factor Climate neutral pork meat Very tasty meat
Must-be	Hard requirements	No scandals that affect reputation Low bacteriological prevalence
Performance	The more, the better	Easier product preparation Lower price for same product



Market specifications weight & backfat thickness

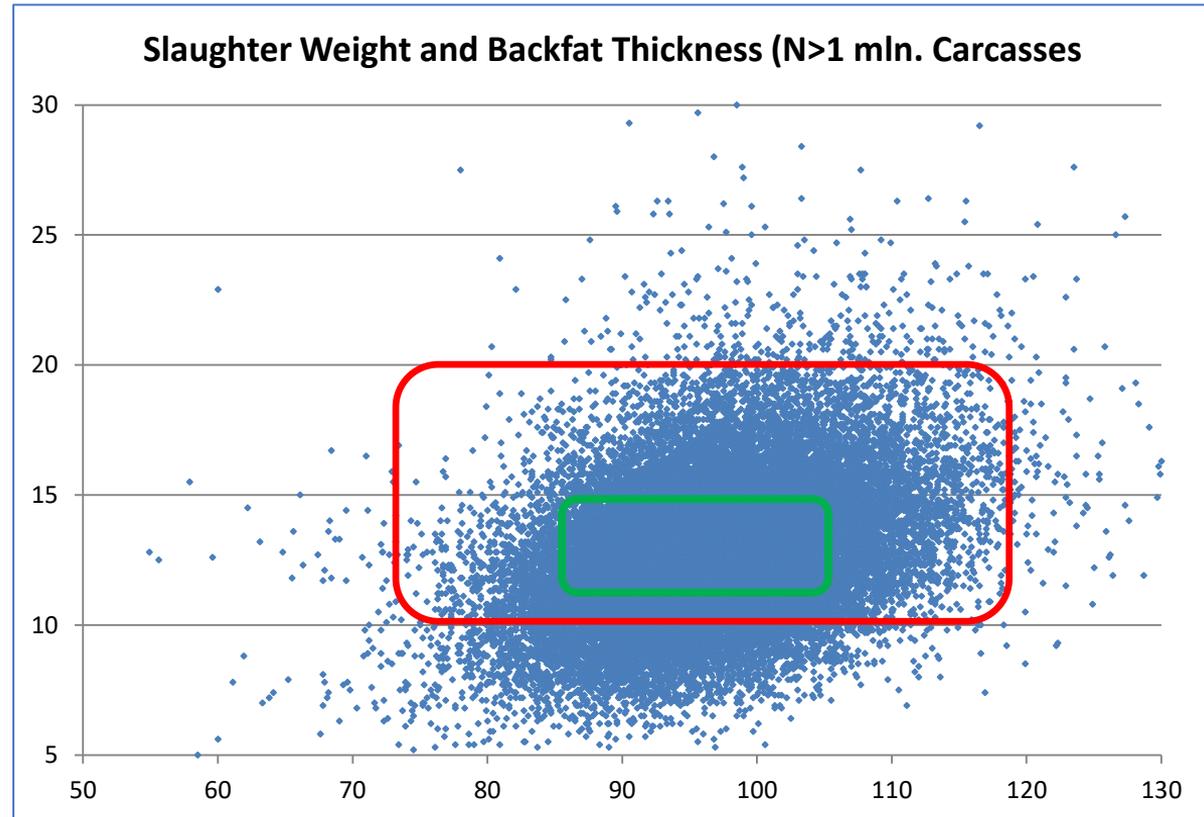
Product specifications

Dutch retail & meat products industry

- Weight 85-105 kg
- Backfat 12-15 mm

International sales

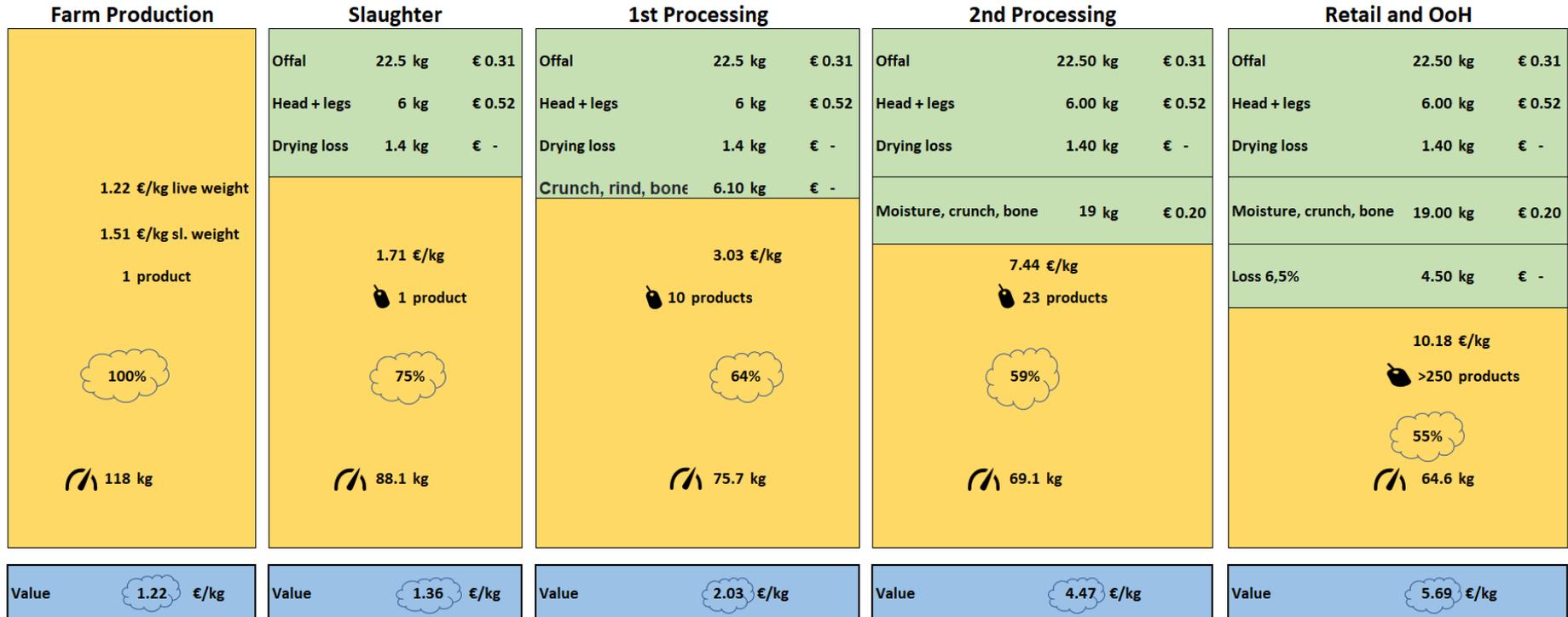
- Weight 75-120 kg
- Backfat 10-20 mm



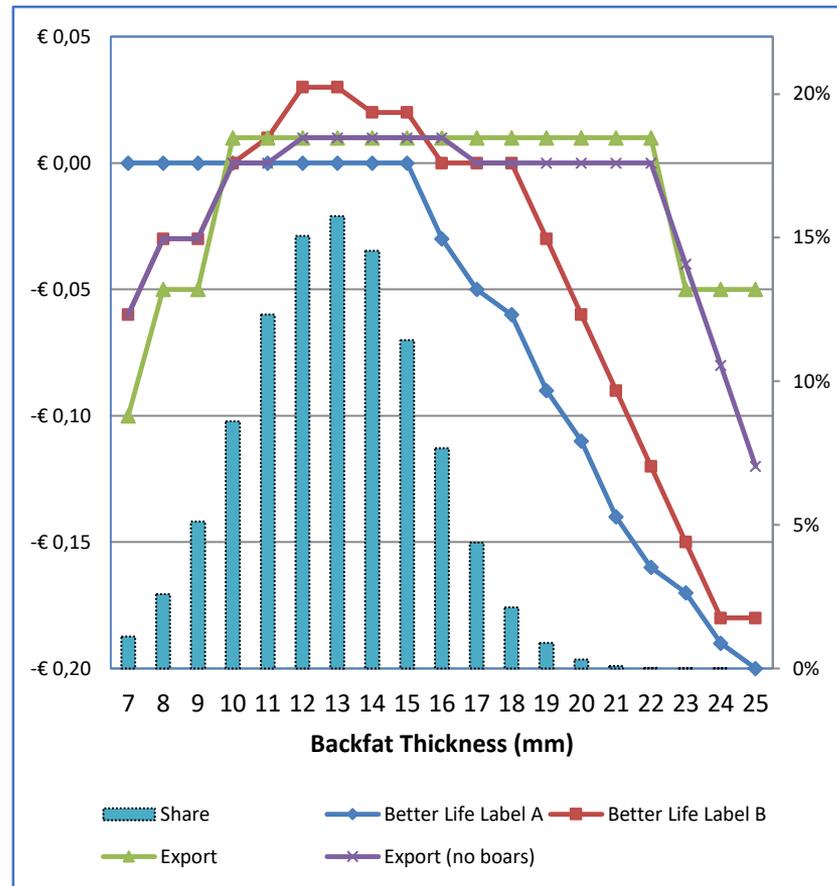
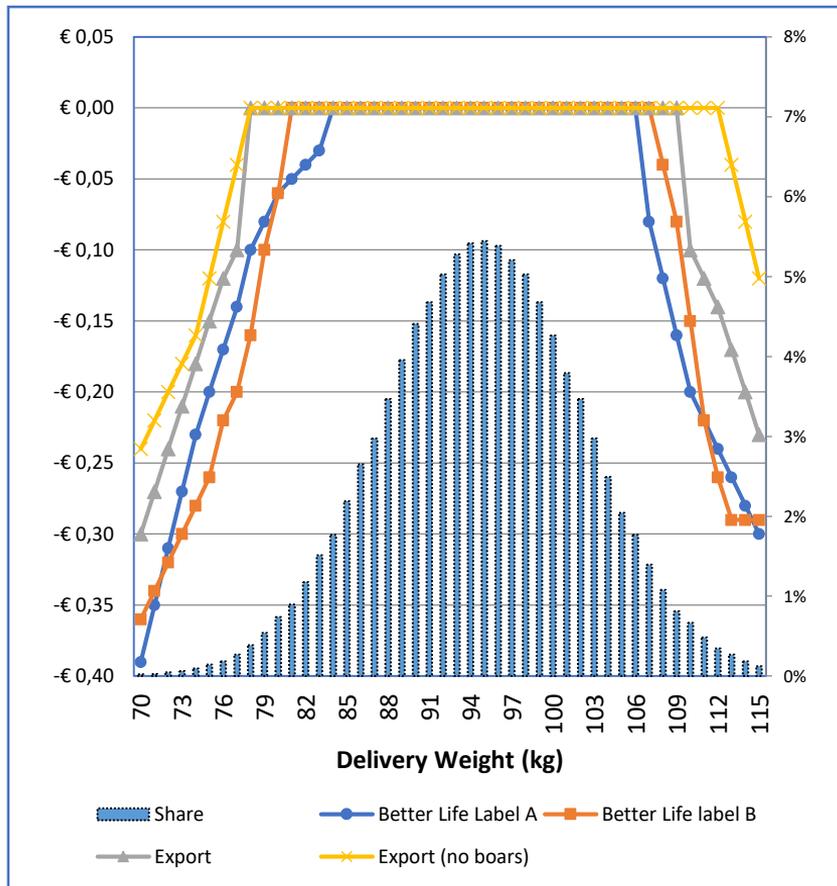
The Pork Supply Chain

The pork supply chain is a complex disassembly process.

Its efficiency depends on the added value and the limitation of failure costs.



Producer incentives: payment by delivery weight and back fat thickness



Producing and marketing meat from entire male pigs

By now large pork food supply chains in eight major pork producing EU countries have established successful directions for solutions for ending surgical castration, although some countries had already a tradition of not castrating male pigs.

- Entire males do not behave like castrates and females
- Farmers have learned how to adapt their husbandry practices
- Concerns about taste hamper consumer acceptability
- Carcasses of entire male pigs may also be too lean, which makes the processing of good quality dry-cured products difficult
- Boar taint prevalence and issues with intramuscular fat and fatty acid composition can be reduced with nutrition and genetics
- Still boar taint should be checked on the slaughterline
- Processing possibility to deal with tainted carcasses, provided there are few of them
- Selection goals need to find a balance between feed efficiency and meat quality

We have learned that

Realizing market acceptance depends on boar taint and fat quality

- Consequent detection for boar taint as a safety net at the slaughter line is crucial
- Farm level management and housing system can play supportive role, but not replace detection
- With less backfat thickness some carcasses become too lean and less suitable (e.g. dry hams)
- And, fatty acid composition influences fat firmness
- For both boar taint and fat quality preventive measures are available (e.g. genetics and feed)

- Market acceptance needs concerted action at all levels of the supply chain
 - In order that efforts made at a given level are not nullified by lack of action at another level
 - To agree on a compromise between performance and quality
 - To share costs and benefits associated with the various alternatives in a fair way

Product specifications for the market

Fat quality

- Lean carcasses should have >12 mm back fat thickness for marketing dry hams
- Bellies should have <15% poly unsaturated fatty acids (PUFA), and Iodine value < 70

Boar taint prevalence

- Sufficiently low percentages (2-3%) enable masking strategies to be an effective tool

Farmers will be induced to implement effective genetics and feeding measures, with appropriate incentives and an equitable distribution of costs and returns (more difficult for non-integrated chains).

Practical solutions

- Pigs to be housed in stable groups with sufficient provision of space in structured pens, with natural enrichment materials.
- Feeding pigs with adjusted diets will often solve fat quality problem.
 - *But this will not be enough for systems targeted to dry-cured products.*
- Increasing intramuscular fat content by breeding or nutrition is advisable and will contribute to alleviate toughness issue.
- Selection, nutrition and management strategies help to reduce the incidence of boar taint at farm level.
- Tainted meat less suitable for fresh meat consumption can to a certain extent be sustainably used in processed products.

For more detailed information

<http://www.ca-ipema.eu/> (with information in 14 languages)

<https://ec.europa.eu/food/system/pigs-castration-alternatives-establishing-best-practices.pdf>

<https://www.boarsontheway.com/>

Remaining issues for opening new markets

Intrinsic quality

- Outdoor housing provides higher risk of boar taint prevalence
- Additional to focus on feed efficiency, incentives on fat quality are needed

Extrinsic quality

- Perception by market actors in third (Asian) markets

Other societal concerns: Increased sense of urgency to reduce carbon footprint

- The 6-10% lower carbon footprint of meat from entires may become an incentive for food companies to shift away from castrates

Concluding comments

- Ending piglet castration long-term and complex process,
- Unraveling reactions consumers on meat from non-castrated pigs crucial
- Only supply chain wide solutions will really work
- Pork supply chains better and better equipped to become successful
- Still some open ends
 - *Potential of available knowledge not fully utilized*
 - *Role of feeding as a direction for solution not enough in the picture*
- FINAL MESSAGE: Objectivity and fact based working are key factors