

ANALYSIS OF THE STAKEHOLDERS' ATTITUDES FOR BANNING OF CASTRATION OF MALE PIGS IN EUROPE: FOCUS GROUP METHODOLOGY

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Abstract – Pig production is one of the major activities in Spain. Less than 20% of pigs are castrated mainly for meat quality purposes and to avoid boar taint. Due to the negative impact of castration to animal welfare European Union has planned to voluntary end surgical castration by 2018. The aim of this study was to know the attitudes of different stakeholders about this banning. Focus group methodology was used to assess it with the different stakeholders involved. Results showed that the stakeholders from farms and industry feel that because production of entire male pigs in Spain is already high, ending castration might not be a problem in a near future. Farmers, industry and retailers think that exceptions to the declaration for high quality products such as differentiated quality and Iberian pig production have to be listed.

I. INTRODUCTION

Pig production is the most important livestock farming activity in Spain. A total of 41.6 million of pigs were slaughtered during 2012, which represents 3.5 million tonnes of pig meat; 29.7% of Spanish meat production is exported to other countries. Nowadays, less than 20% of male pigs in intensive production are castrated –this accounts for about 8 million pigs/year–. Animals are castrated according to legislation (Commission Directive 2001/93/EC), mainly to maintain good meat quality traits. Castration avoids the presence of boar taint on carcasses and produces an accumulation of intramuscular fat improving sensory quality of fresh meat and meat products. Boar taint is caused by two compounds which are

accumulated in the fat of entire males: androstenone [1] and skatole [2]. Different studies have concluded that the presence of boar taint on meat from entire males may affect negatively the acceptability of pork by consumers [3-5].

However, castration of pigs has generated a debate on European Union (EU) due to its negative impact on animal welfare. In a meeting with representatives of European farmers, meat industry, retailers, scientists, veterinarians and animal welfare NGOs committed themselves to voluntarily end surgical castration of pigs in Europe by January 2018 (European Declaration on alternatives to surgical castration of pigs [6].

The aim of this study was to gain insights on attitudes from representatives of various types of stakeholders from Madrid and Barcelona about the impact of a potential banning of piglet castration in Europe by 2018.

II. MATERIALS AND METHODS

The focus group as a qualitative methodology was used to assess the attitudes of stakeholders. Focus groups are particularly useful when there are powerful differences between the participants and decision-makers or professionals and when it is interesting to explore the degree of consensus on a given topic [7].

The Focus groups were organized in the two main cities where the majority of the pork stakeholders

are located, Barcelona (21st November 2012) and Madrid (12th February 2013). The following stakeholders were identified: farmers, meat industry, retailers, HORECA (Hotels, Restaurants and Catering), consumers' organizations and government representatives. Two representatives from each stakeholder were invited. For each city, stakeholders were distributed in two sessions: FG1 included stakeholders from farms, meat industry (abattoirs and cutting plants) and government representatives. FG2 included stakeholders from retailers, HORECA and consumers (including consumers' organizations and individual consumers). A total of 26 participants were distributed in the two types of focus groups. The participants in FG1 were: representatives of 2 farmer associations, stakeholders from meat industry with one representative of a big slaughter company, 2 small cutting plants, 1 big meat industry and 2 small ones, and 5 government representatives. The participants in FG2 were: 3 representatives from retailers, stakeholders from butcheries with 3 individual butchers and 1 representative of a butchers association, one representative of a big catering company and the owner of a restaurant as HORECA stakeholders, and consumer stakeholder with 3 individual consumers and a representative of a consumers' organisation.

Focus groups were conducted following the standard procedures [7]. All the sessions were made in an appropriate room where a moderator led the session. Each focus group lasted 55-60 min. The Focus group sessions were recorded and field notes were also taken during the sessions. Discussion topics were chosen carefully to reach properly the objective of the study (Table 1).

Table 1 Focus Group Topics

1	Impact of banning castration on pig production – Boar taint
2	European Declaration on alternatives to surgical castration of pigs
3	Differences in meat quality between castrated and entire males
4	Impact on Exportations
5	Quality criteria when purchasing pig meat
6	Relative importance of animal welfare

Transcriptions and field notes were then analysed and all data were organized according to the proposed questions.

III. RESULTS AND DISCUSSION

1. Impact of banning castration on pig production – Boar taint

Regarding the impact of banning castration on pig production, participants from FG1 stated that from their point of view, if the castration is banned in the near future there will not be a problem: “*Since nowadays only 30 % of pigs are castrated, this means that 70% are not castrated and that we do not have a problem at all*”. However, from the farmers' point of view, pigs are castrated due to animal behavior grounds: “*entire male pigs are more aggressive and have anomalous behavior. That's why we decided to castrate piglets*”. During the discussion, FG1 participants were also concerned about the idea that Iberian pigs could be affected by the potential banning of piglet castration.

Taking into account the opinions expressed in FG2, most of participants (HORECA and consumers) were not aware that pigs might be castrated. However, from the retailers point of view, it is important to know the sex of the animal and if the pig has been castrated or not.

2. Knowledge about the European declaration on alternatives to surgical castration of pigs.

The knowledge about the European Declaration on alternatives to castration of pigs was different among the different stakeholders. Stakeholders representing government, farmers and meat industry showed high knowledge about it. They knew and reinforced that it is a voluntary declaration until 2018 and that so far, there is not a compulsory regulation. However, they all agreed in having the feeling that this would become a compulsory regulation. They were also aware that the declaration also considers a list of traditional productions (products that require pigs with certain amount of fat or heavier pigs) which might be an exception to this declaration: PSO (Protected Designation of Origin), PSI (Protected Geographical Indication) or TSG (Traditional Specialties Guaranteed), although “*this list has not been prepared yet*”. The other stakeholders

(HORECA and consumers) were not aware about the European Declaration.

3. Differences in meat quality between castrated and entire males.

Regarding productive and quality traits differences between castrated versus non castrated pigs, participants agreed that *“entire males have higher performance than castrated pigs”*. For farmers in FG1 *“the reason for abandoning piglet castration was the productive performance”*.

Since the production of entire male pigs is also related to boar taint, farmers also said that *“if you don’t exceed certain weight, boar taint doesn’t appear”*. In general, most of participants agreed that the slaughter weight of pigs has decreased lately mainly to avoid boar taint: *“entire male pigs are slaughtered at an earlier age, around 6 months old”*,

At this point, retailers said that they do not like to sell meat of these young animals because *“the meat is not mature”*.

Although not all the retailers were aware about the relationship between the production of entire male pigs and boar taint, some of them were very concerned about the potential accumulation of boar taint. Being or not being aware of boar taint, all retailers agreed that *“knowing the sex of the animal is important; meat from castrated animals is good to produce high quality products because of the higher fat content”*.

Producers and retailers agreed that boar taint is more problematic in fresh meat than in cured products.

Retailers commented that consumers want meat with less fat content because they feel that it is healthier.

4. Impact on Exportations

Dealing with the potential impact of a possible compulsory banning of castration on pig meat exportation, participants from FG1, mainly farmers and meat industry, said that this potential banning of piglet castration would not be a problem for exportation because *“market is mainly driven by price instead of meat quality”*. In fact, they agreed that *“the rate of castration is already low in Spain and the exportation quote is higher.”*

5. Quality criteria when purchasing pig meat.

Participants were also asked about their purchasing criteria when buying meat. Answers were mainly focused on *“meat color”*, *“fat content”*, *“general aspect of meat”* and *“humidity”*. They also agreed that texture and taste are also important, but these later attributes are only perceived after the consumption of the meat. They pointed out other attributes such as *“origin”*, *“freshness”*, *“preservation of meat”* and *“age”* of animals which was related to meat tenderness. *“Price”* was only mentioned by an individual consumer, but the other participants agreed with him.

6. Relative importance of animal welfare.

Results showed that in Spain, the animal welfare is not a determinant factor when purchasing meat. In addition to high quality products, some consumers could demand *“a welfare certification including no-castration”*. However, consumers’ stakeholder stated that despite the fact that *“Spanish consumers are less concerned about animal welfare [in comparison to northern countries] and are not aware of current practices of piglet castration”*, for Spanish consumers it is important that *“the animal does not suffer”*. If pigs were castrated as pets are, it wouldn’t be a welfare problem.

IV. CONCLUSION

According to Spanish stakeholders representing farmers and meat industry, in conventional pig production a ban of piglet castration in Europe by 2018 might not be a problem because currently a high percentage of entire males is already produced. However, there is a concern for meat used to produce high quality products, in which fat content is important. On the other hand, from the retailers’ point of view, the fact of using lighter carcasses (with the aim to reduce the prevalence of boar taint) is not a good alternative because of meat quality traits. We can detect a conflict of interest depending on the type of stakeholder. Consumers’ stakeholders and individual consumers were not fully aware of common practices for piglet castration, and in fact, comparing it to the common practices of castration of pets, they are less concerned about this point.

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