

EAAP 2009

Session 55

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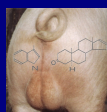


## AN ETHICAL ANALYSIS OF PIG CASTRATION AND THE ALTERNATIVES

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## The PIGCAS Project

Attitudes, practices and state of the art regarding piglet castration in Europe



SSA Specific Support Action  
To examine the various alternatives to surgical castration without anaesthesia

### WP3 Evaluation

To evaluate available research work and other information in order to examine the various **alternatives** to surgical castration without anaesthesia and derive **research priorities**

Alternatives	Surgical castration without anaesthesia	New methods for surgical castration	Alternative castration methods	Entire male pigs	Other alternatives
Perspectives					
Attitudes	✓	✓	✓	✓	✓
Practice	✓	✓	✓	✓	✓
Animal welfare	✓	✓	✓	✓	✓
Pork quality	✓	✓	✓	✓	✓
Economy Efficiency	✓	✓	✓	✓	✓

## Integration Seminar (Girona, March 2008)

- 57 Experts from different disciplines (38 participated in a scoring exercise)
  - PIGCAS project participants
  - EAAP Working Group on "Production and Utilisation of Meat from Entire Male Pigs"

## An Ethical Overview

RESPECT FOR	WELLBEING	AUTONOMY (choice)	JUSTICE (fairness)
Animals	Animal welfare	Behavioural choice	Intrinsic value (integrity)
Farmers	Satisfactory income and workplace	Managerial freedom (independence)	Fair trade rules
Consumers	Food quality and safety	Choice and democracy (public wishes)	Affordability
Environment	Conservation	Biodiversity	Sustainability

Mephram & Millar (2001)

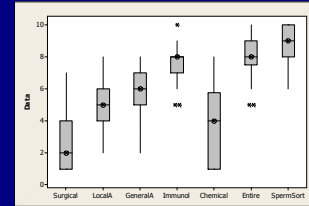
## Animal - Wellbeing

	W	A	J
A			
F			
C			
E			

- Wellbeing reduced by
  - Pain of surgical castration and stress of handling (Use of anaesthetics/analgesics can reduce pain)
  - Handling for 2 injections with immunocastration
  - Painful local reactions with chemical castration
  - Detrimental behaviours at puberty in entire males
  - Deep intra-uterine insemination for sexed semen

## Median and IQ Scores (1-10 scale)

### Welfare



Future potential

## Animal - Justice

	W	A	J
A			
F			
C			
E			

- Integrity compromised by
  - Any form of castration
  - Immunocastration affects a smaller proportion of the animal's life
  - Semen sexing distorts the natural sex ratio

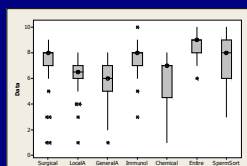
## Farmer - Wellbeing

	W	A	J
A			
F			
C			
E			

- Profit reduced by
  - Reduced feed efficiency of castrated male
  - Cost of anaesthetics, vaccines, chemicals or sorted semen
  - Need to pay a veterinarian to give anaesthesia
  - Possible taint penalty when marketing entire males
- Workload increased by
  - Need to castrate by any means
- Safety at risk from
  - Immunocastration vaccine (minor risk of self injection)

## Median and IQ Scores (1-10 scale)

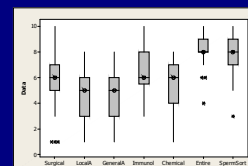
### Economy



Future potential

## Median and IQ Scores (1-10 scale)

### Practicality



Future potential

## Farmer - Autonomy

	W	A	J
A			
F			
C			
E			

- Autonomy reduced by
  - Need for external supply of anaesthetics, vaccines or sorted semen
  - Need for veterinary administration of anaesthetics

## Farmer - Justice

	W	A	J
A			
F			
C			
E			

- Justice impaired if
  - Poor farmers cannot source or afford anaesthetics, vaccines or sorted semen
  - Taint concern restricts market options for meat

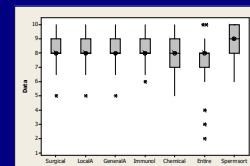
## Consumer - Wellbeing

	W	A	J
A			
F			
C			
E			

- Wellbeing impaired if
  - Chemical castration agents carry some residue risk
  - Meat from entire males has increased boar taint

## Median and IQ Scores (1-10 scale)

### Pigmeat Quality



Future potential

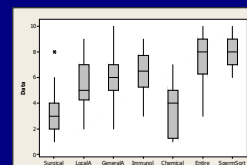
## Consumer - Autonomy

	W	A	J
A			
F			
C			
E			

- Autonomy impaired if
  - Cannot satisfy preference for higher welfare meat
  - Cannot satisfy concerns about vaccines, chemicals or sexed semen

## Median and IQ Scores (1-10 scale)

### Public Attitudes



Future potential

## Consumer - Justice

	W	A	J
A			
F			
C			
E			

- Justice impaired if
  - Product price is significantly increased for low income consumers
- May occur due to costs of vaccines, chemicals or sexed semen
- May occur due to costs of handling entire male carcasses by meat industry
- Effects on product price are lower relative to effects on production cost

## Environment - Justice

	W	A	J
A			
F			
C			
E			

- Justice impaired if
  - Castrates use feed less efficiently than entires so give greater environmental impact

## An Ethical Overview (future scenario)

RESPECT FOR	WELLBEING	AUTONOMY (choice)	JUSTICE (fairness)
Animals	Entires Sperm sorting		Entires
Farmers	Entires	Surgical Entires	Surgical
Consumers	Any castration Sperm sorting	Entires Sperm sorting	Sperm sorting
Environment			Entires

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