

# Consumer's opinion on animal welfare and pig castration in Croatia

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**IRTA**



## Introduction

- Pig castration still a common zootechnical practice in Croatia
- Seriously questioned in most European countries
- Declaration of intention to abandon signed in 2010 – still scarce response in most EU countries; in Croatia alternatives have not yet been introduced
- Consumer opinion matters – before applying any alternative insight into consumer’s buying intentions and behaviour should be investigated

# 1. Questionnaire

- Self-administered questionnaires during 2017 in Croatia
- 301 consumers
- Selected by gender and age to follow the National distribution
- No previous information about production practices and meat quality
- Additional explanations given on field

# 1. Questionnaire - structure

## ANIMAL WELFARE

- ATTITUDES
- BELIEFS
- BEHAVIOUR

## CASTRATION

- ATTITUDES
- BELIEFS
- BEHAVIOUR



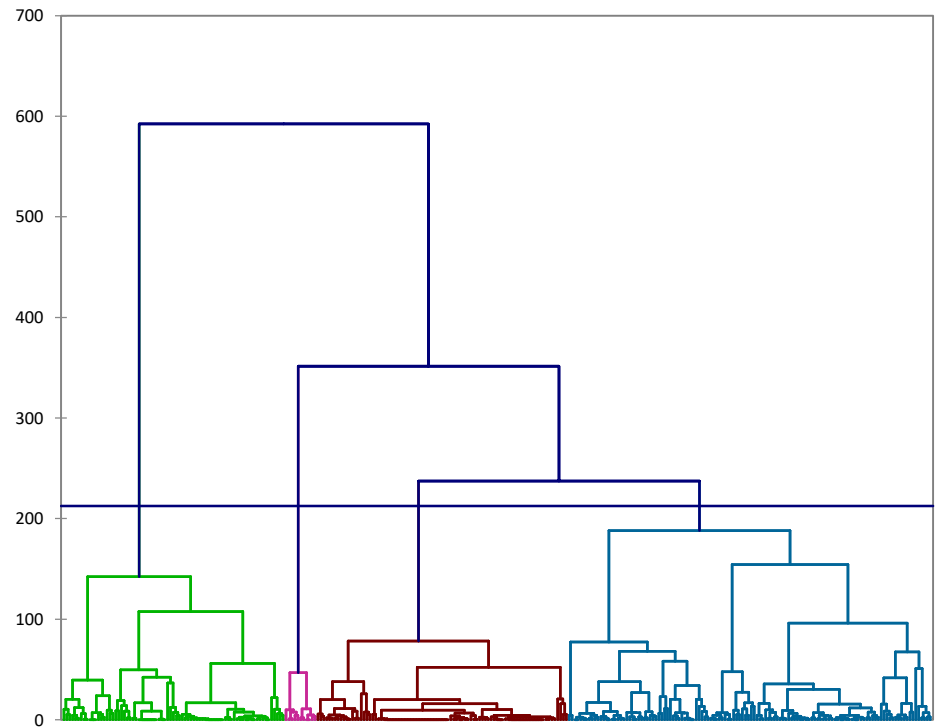
## 2. Statistical analysis

- XL STAT software
- Principal-component analysis
- Behavioural intention – by Cronbach’s Alpha Coefficient (Cronbach, 1951);
- Linear regression
- ANOVA – origin, place of living, economic situation



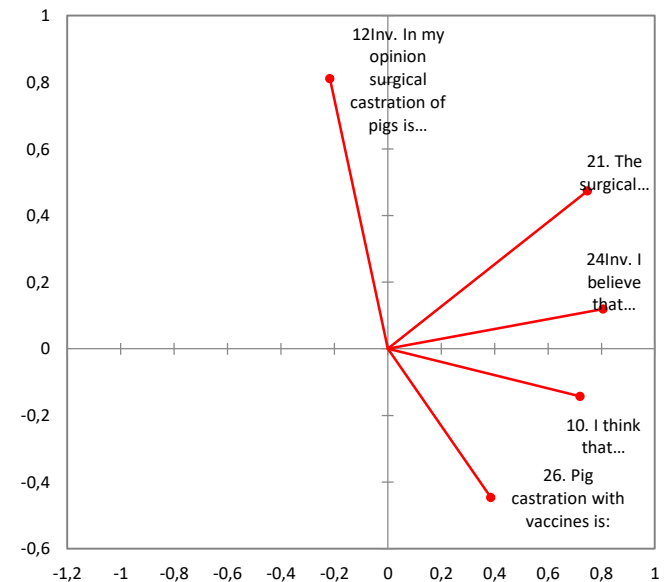
### 3. Results – pig castration

- 3 clusters identified
  - Cluster 1 – 88 consumers
  - Cluster 2 – 87 consumers
  - Cluster 3 – 126 consumers



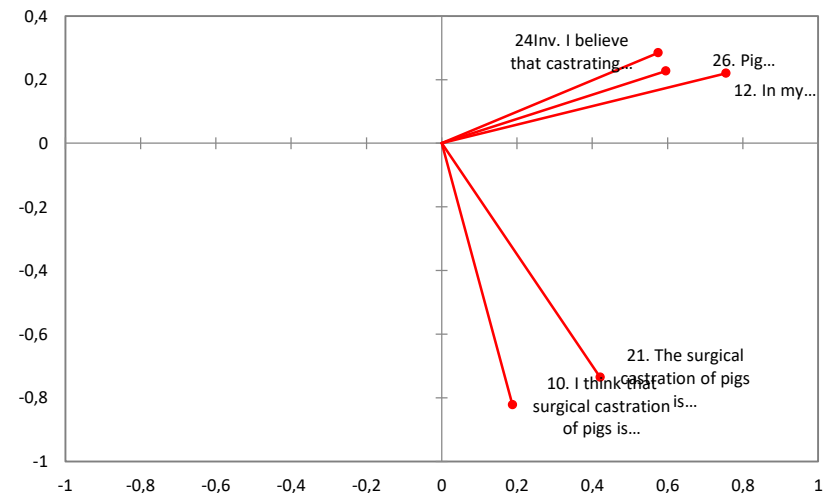
## Cluster 1 – pig castration

- Believe that surgical castration is unnecessary procedure that produces pain to the animal
- Do not think that castration is savage because it is easily performed
- Believe that castrated pigs produce leaner meat, but the quality of their meat is not better than the meat from uncastrated pigs
- Accept pig castration using vaccines, as they believe it improves pork quality



## Cluster 2 – pig castration

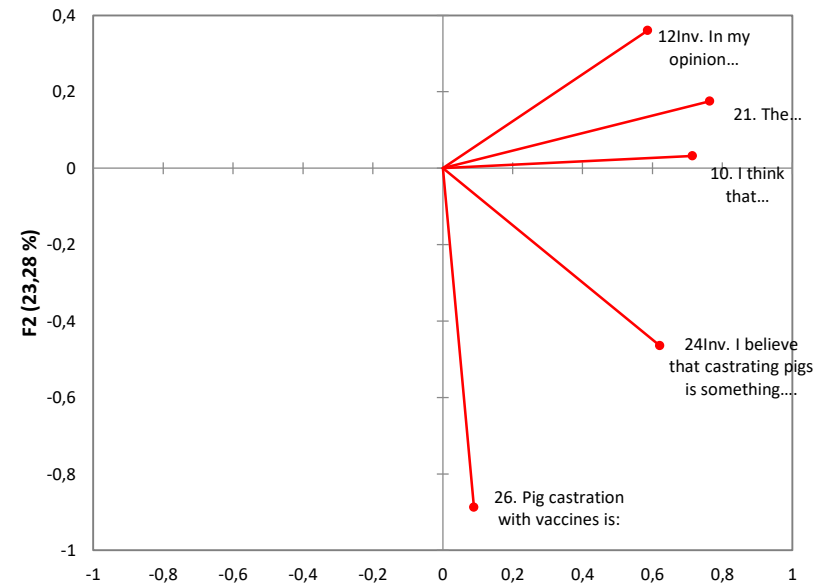
- Do not believe that castration produces pain to the animal and that this is a procedure harmful for the animal
- Believe that castration is necessary and easily performed, as well as that meat from castrated pigs is more expensive
- Believe that immunocastration improves pork quality





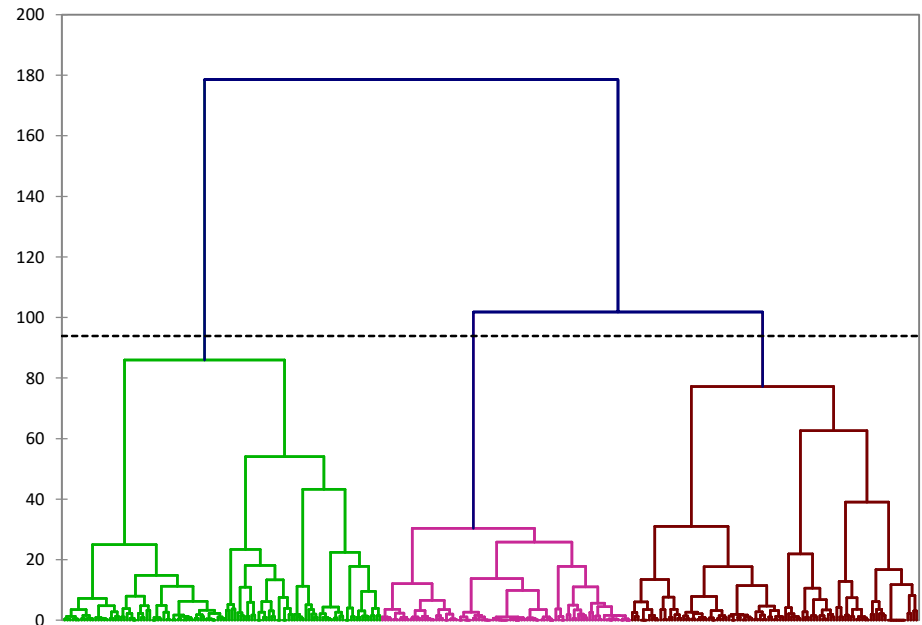
## Cluster 3 – pig castration

- Believe that castration is necessary, easily performed and natural.
- Think that meat from castrated pigs is leaner and of better quality than uncastrated pigs.
- Prefer to eat meat from castrated animals, but do not believe that immunocastration improves meat quality.



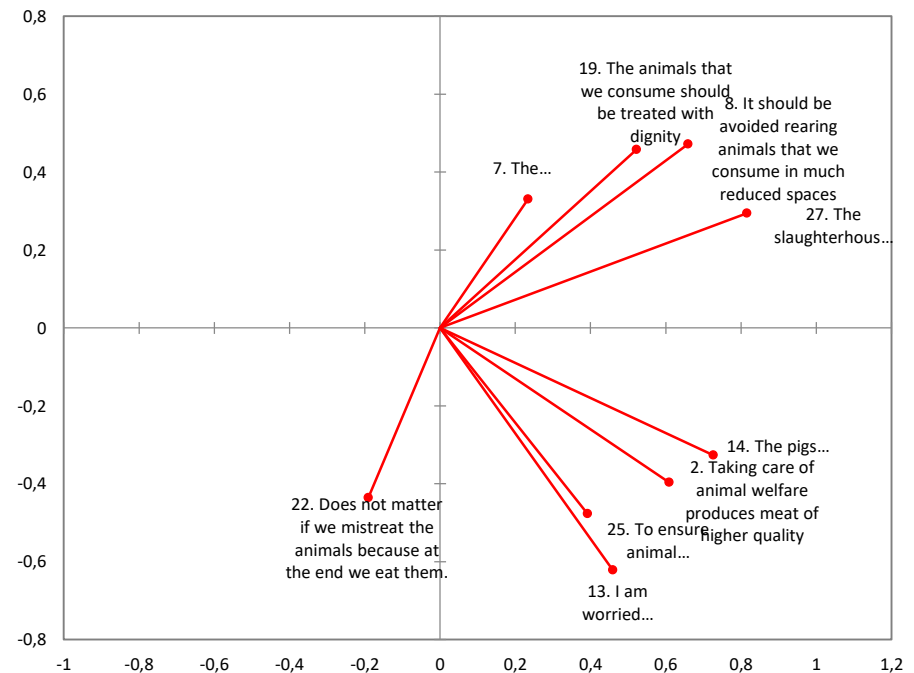
### 3. Results – animal welfare

- 3 clusters identified
  - Cluster 1 – 101 consumers
  - Cluster 2 – 88 consumers
  - Cluster 3 - 112 consumers



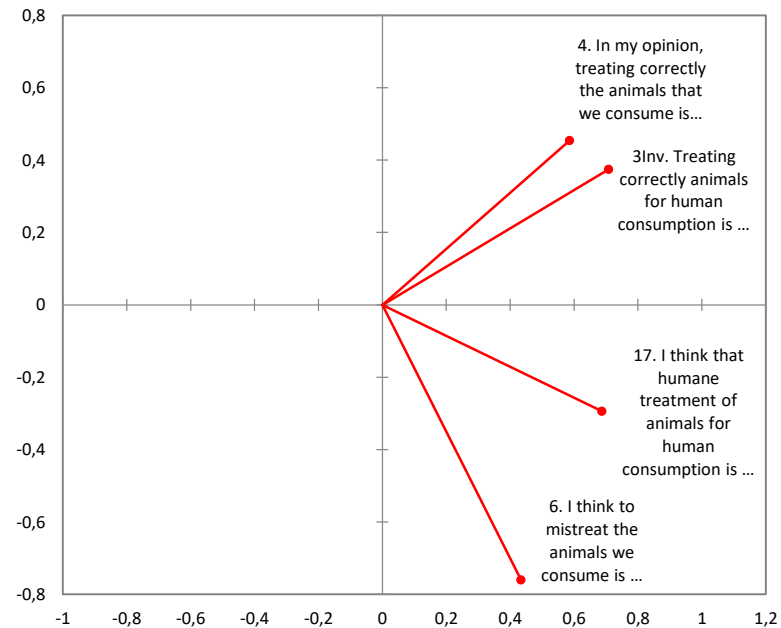
## Cluster 1 – animal welfare

- Believe that animal welfare is very important, not only because the meat from animals raised according to animal welfare legislation is of better quality, but also because animals for human consumption should be treated with dignity.
- Concerned with the transport of animals to slaughterhouses and slaughter systems.
- Are not worried about welfare of meat animals because they think human treatment of the animals is natural.
- Do not believe that raising the animal according to animal welfare legislation produces more expensive meat.



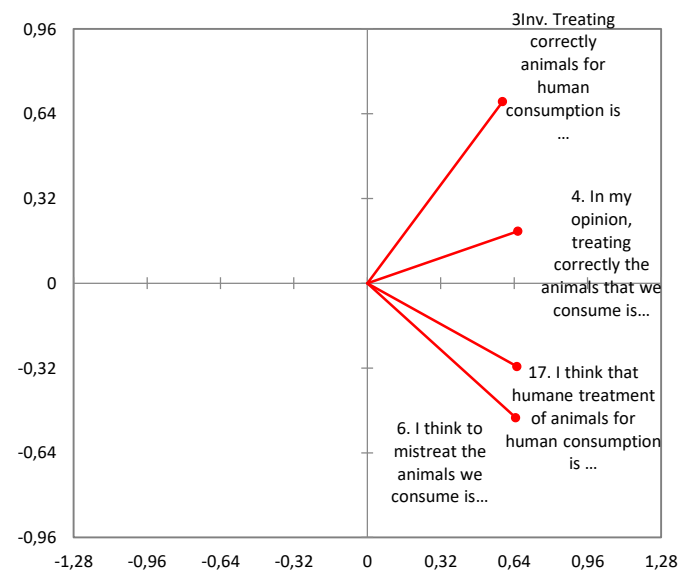
## Cluster 2 – animal welfare

- Agree that animal welfare is very important and that animals for human consumption should be treated with dignity.
- Believe that meat from animals raised according to welfare regulations are more expensive than meat from conventionally reared animals.
- ?! Do not believe that mistreating the animals is harmful.



## Cluster 3 – animal welfare

- Believe that animals raised according to animal welfare legislation produce meat of higher quality.
- Believe that animals are not transported correctly to slaughterhouses.
- Do not believe that meat animals should grow in freedom.
- Do not believe that animals raised according to animal welfare legislation is more expensive than conventionally raised animals.



## Differences between clusters

- Significant differences ( $P < 0.05$ ) - in the frequency of pork consumption and the level of finished studies.
- Cluster 1 - less young people ( $< 35$ ) than in other clusters.
- Cluster 3 - more old people ( $> 55$  years) than in Clusters 1 and 2. As expected, more consumers with no children at home.
- No significant differences observed between clusters in other investigated sociodemographic data (professional activity, economic situation, the classification of places of residence and place of origin).

## Conclusions

- Croatian consumers are concerned about animal welfare and generally believe that animals raised for human consumption should be treated with dignity.
- Some concerned about the transport of animals, as well as the slaughter systems used in Croatian abattoirs.
- Generally, Croatian consumers prefer the meat from castrated pigs, however they accept immunocastration as an alternative to surgical castration.
- Immunocastration is a feasible alternative in Croatia and that abandon of surgical castration should be supported.



COST ACTION CA 15215 „ALTERNATIVES TO SURGICAL CASTRATION OF PIGLETS”

## ACKNOWLEDGMENT

### Short Term Scientific Mission:

**„Attitudes of Eastern European consumers towards meat from entire males, castration of piglets and alternatives to surgical castration”**



Thank you!