

# Consumer attitudes on the use of TTI for monitoring fresh meat

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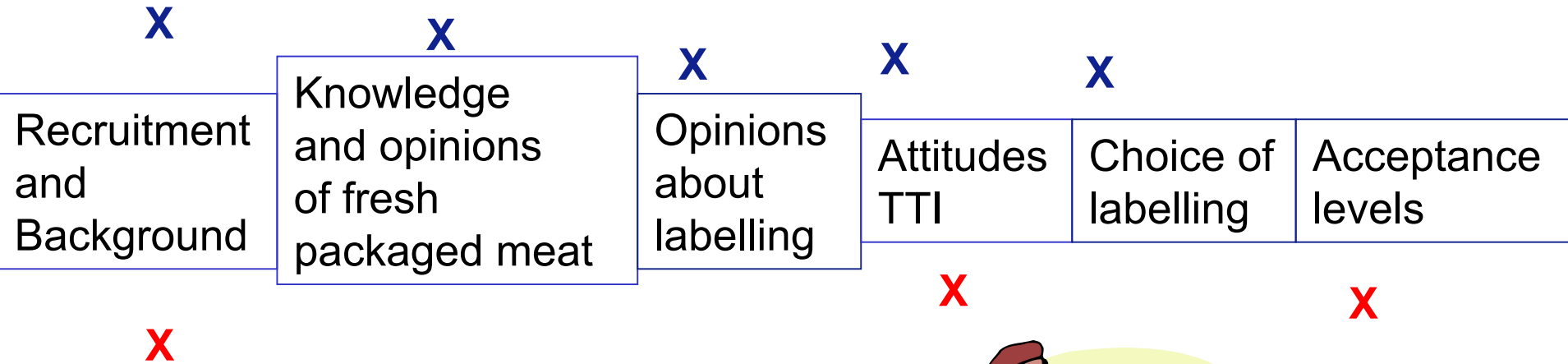
# Two studies were performed

- **Consumer attitudes towards the TTI indicator as label on fresh meat**
  - 2004
  - Greece, Ireland, Netherlands and Sweden
  - 200 consumers in each country
  - TTI ranging from green to yellow
  
- **Acceptance levels of TTI and packaged meat quality**
  - 2005
  - Greece, Netherlands and Sweden
  - 150 consumers in each country
  - TTI ranging from green -yellow - red



# Consumer surveys

## Consumer attitudes



## Acceptance level



# The respondent

- Should not be working with food
- Be the main grocery shopper of the household
- Buy packaged fresh meat once a month or more often



# Presentation of the consumers



- Almost all consumers bought food more than once a week
- The main part of the consumers were 50 years or younger
  - ranging from 18 to 70 years
- The respondents were mainly women
  - 60% to 88% women in the different countries
- Almost 50% of the respondents had no children living in the household.
- Almost 50% had 1 or 2 children in the household
- Two adults in most households
- High education levels.
  - Most respondents were educated at high school or university

# Knowledge and opinion about packaged meat

Strongly disagree

Strongly agree

		1	2	3	4	5	6	7	8	9	10
	I always find the information I need on a meat package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	I always look at the use-by (or best-before) date label	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	I want to be able to visually check the visual freshness of the meat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Six more statements										



# Knowledge and opinion about fresh packaged meat and labelling

- The consumers
  - find the information they need on the package
  - always look at the date label
  - want to be able to visually check the freshness
  - always store the meat cold and know that fresh meat left out of the refrigerator will lose freshness
- It is more common in Greece, Sweden and Ireland to smell the meat to assess freshness before use, than it is in the Netherlands
- The Greek consumers do not trust the chill chain as much as they do in the other countries. The consumers in Netherlands are most confident



# Opinions about labelling of fresh packaged meat



- **The consumers**

- know well how to read the date label
- regard the date label as a guide
- are strongly affected by the date label when purchasing
- strongly need information of freshness on the package of fresh meat
- trust the date label
  - NL, IRE: median 10
  - SE, GR: median 8
- use both date label and smell the meat before cooking
  - GR: median 10
  - SE: median 8
  - NL, IRE: median 6
- would use the meat after the date has expired if the meat looks and smells fresh
  - SE: median 7
  - GR: median 1

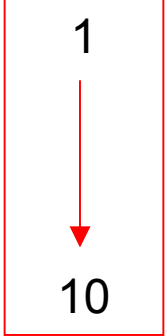
1 strongly disagree



10 strongly agree



# Consumers attitudes towards TTI



- The TTI concept is not known
  - GR: higher score 2005 (4) then in 2004 (1.5)
- The consumers found it easy to understand the TTI information
- The TTI gave more information than if only the date label was used
- The presence of the TTI gave more confidence in the product freshness
- The consumers prefer to buy a product with a known state of freshness
- Only few consumers thought that the information given by the TTI was confusing when used together with the date label.
  - mainly in Greece and hardly at all in Sweden

# Consumers attitudes towards TTI

- The willingness of paying a premium for the TTI differed between the countries.
  - In Greece the willingness was high, but not in the other countries. In the Netherlands the willingness was very low.
- The consumers did not prefer to purchase products only labelled with date

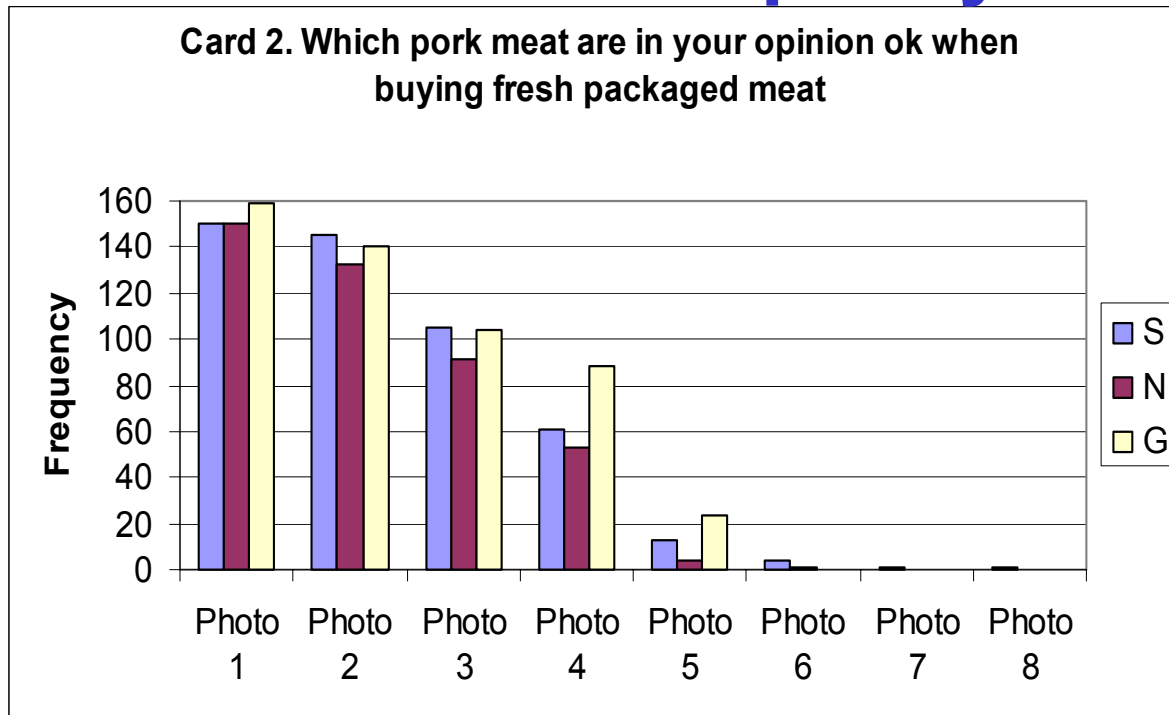


# Preference

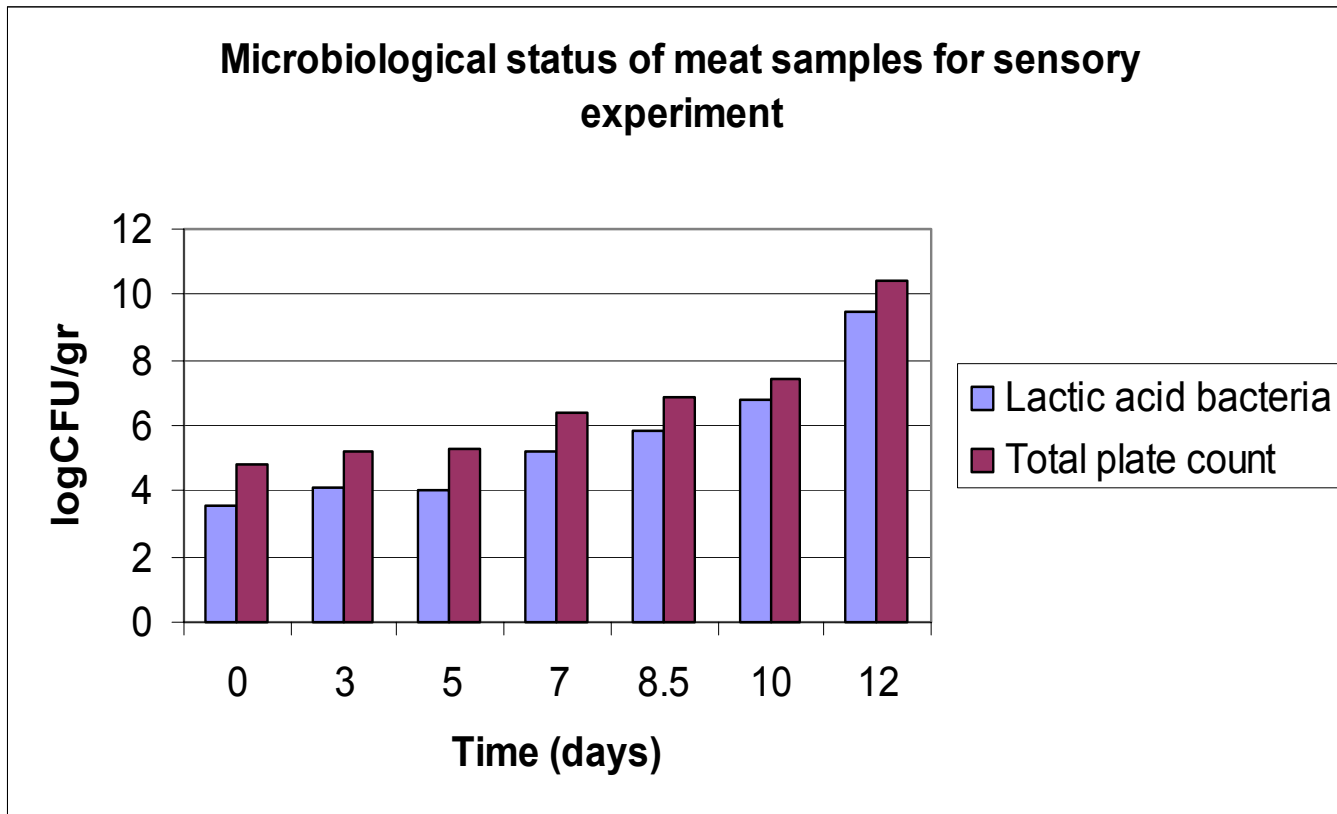
- The consumers prefer to buy the product with the TTI label
  - GR mean 9.0-9,4
  - SE mean 7,9-8.1
  - NL mean 5,9-7.2
  - IRE mean 8,3
- Willing to pay a premium?
  - Yes: GR (median 8)
  - No: NL (median 1)



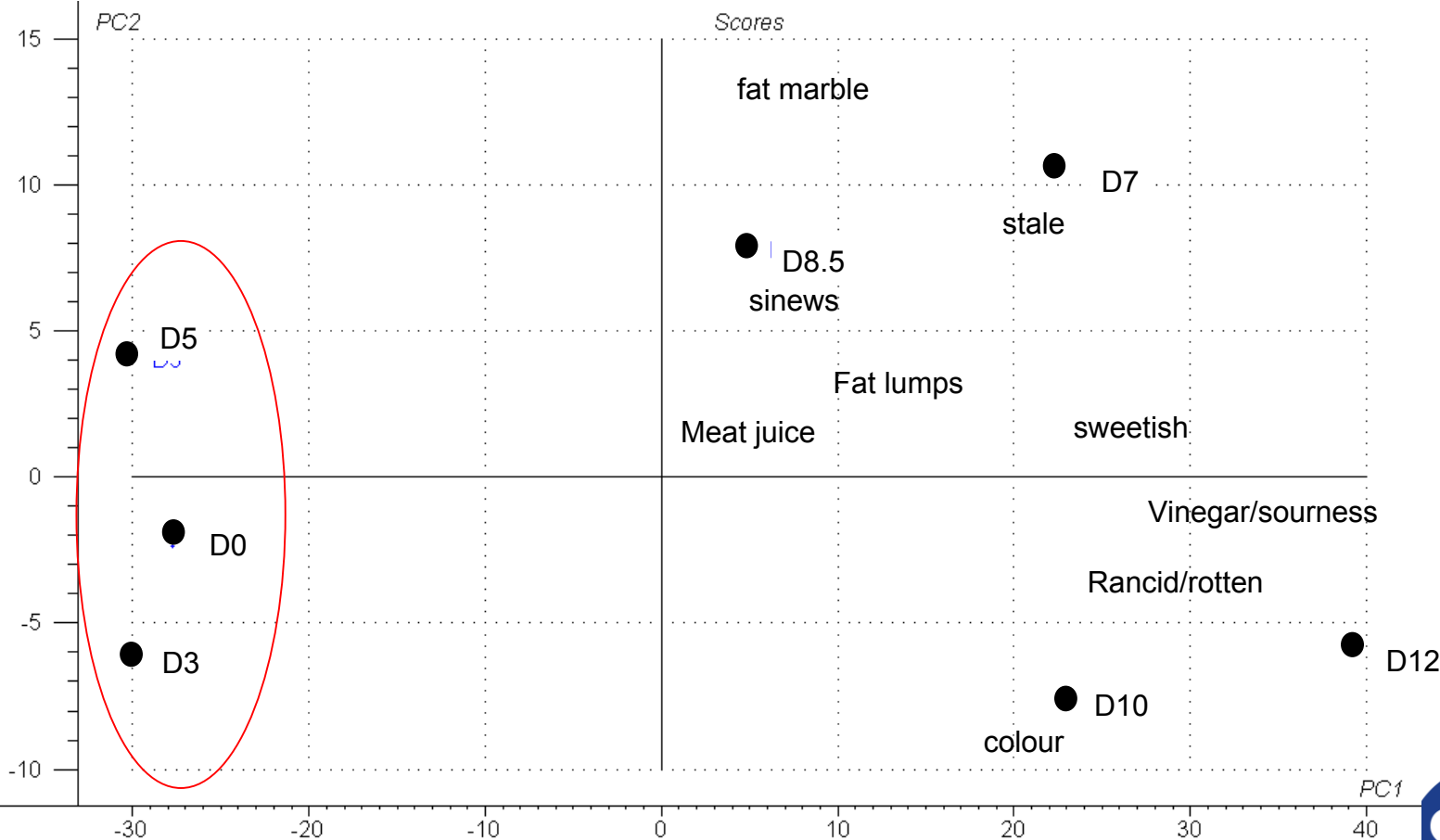
# Consumer acceptance levels of meat quality



# Status of the meat samples



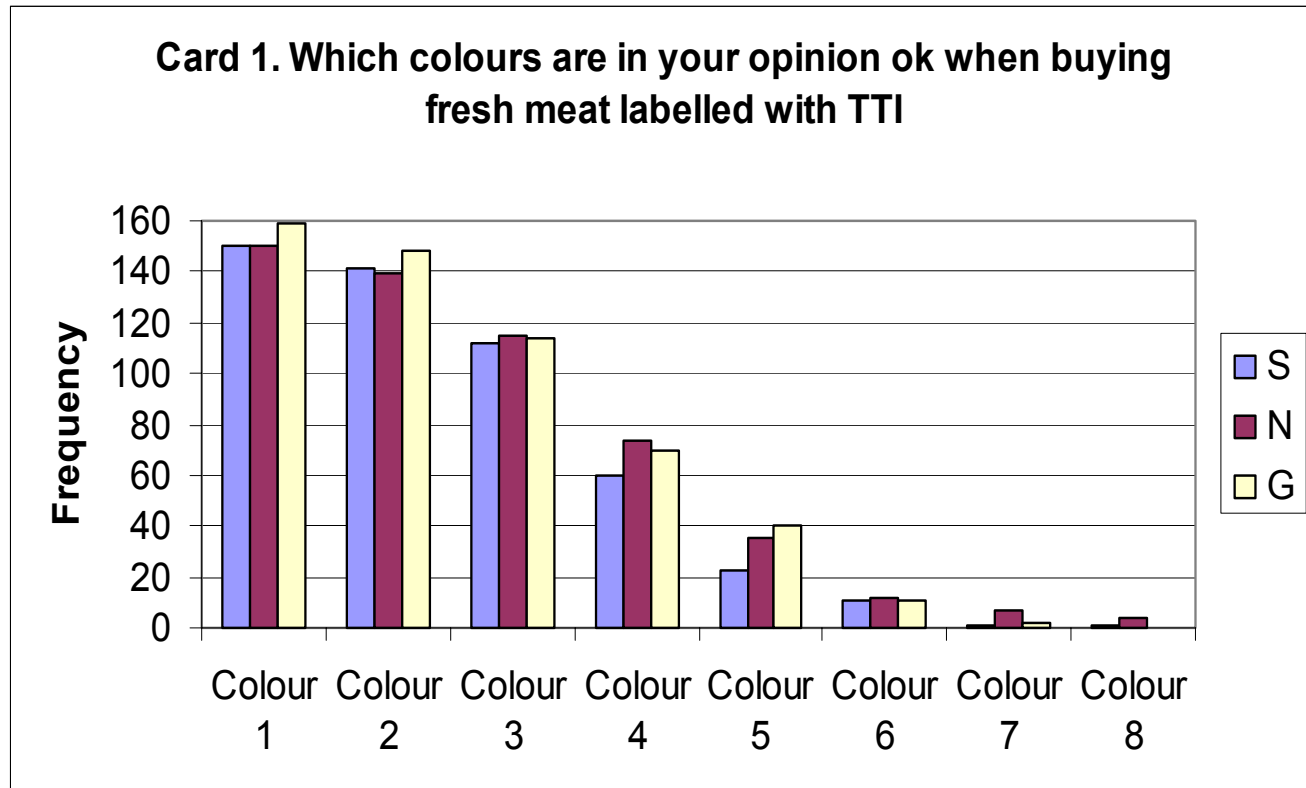
# Quality assessed by sensory panel



SMASsesnPCA, X-expl: 88%,6%



# Acceptance levels of TTI



# Conclusions



- The consumers in Greece, Sweden, Ireland and Netherlands are well aware of the freshness of fresh packaged meat
- Information of freshness is needed and wanted
- A majority of the consumers are positive to TTI labelling
- Most consumers are not willing to pay extra for the TTI labelling
- The acceptance levels of TTI colour and freshness of packaged meat are connected