

Consumer preferences for food safety



by
Tove Christensen, Morten Mørkbak, Sigrid Denver (FOI/KVL)
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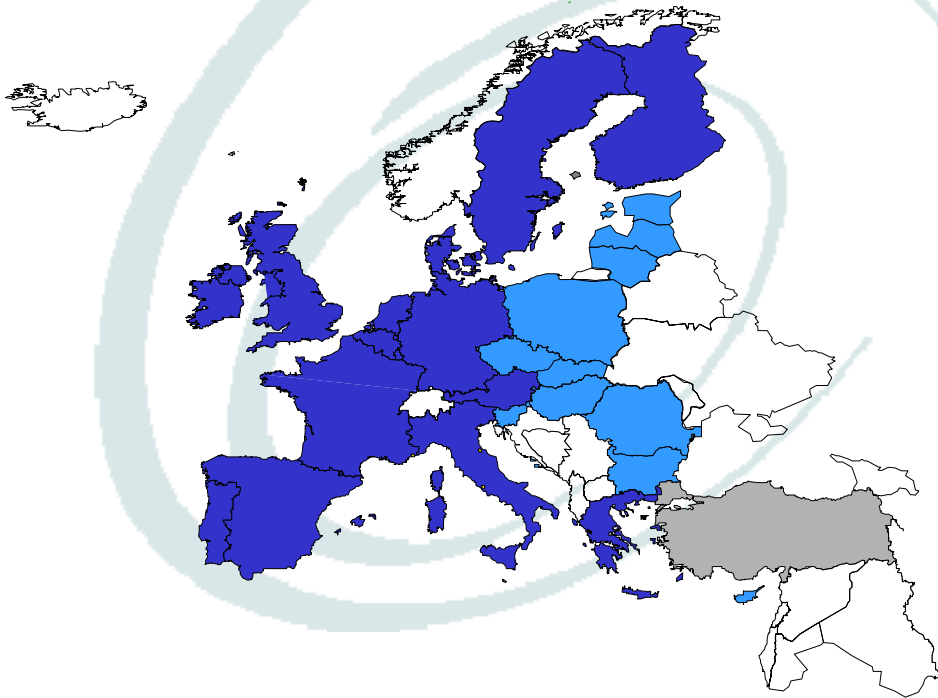
..... and animal welfare



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Consumer preferences for food safety and animal welfare – a choice experiment study comparing organic and conventional consumers



European Commission
Research DG



We have focused on.....

- To what extent the increased interest in food safety among consumers, in the media and politicians result in increased willingness to pay for food safety (*from interest to action*)
- Consumer behaviour in the market in relation to food safety and animal welfare (*what - not why*)

Overview over the presentation

1. Elicit consumers willingness to pay for food safety and animal welfare
2. Reveal whether organic consumers are different from other consumers

Economic valuation of consumer behaviour

Observe market data (revealed preferences)

- this requires well functioning markets, existing attributes

Create hypothetical data (stated preferences)

- this requires good survey design, sufficiently large representative sample
- We use the **choice experiment** method for eliciting preferences

Our data the sample

- 2300 respondents
- ACNielsen's internet panel
- Reasonably representative sample of webDenmark (75% of population)
- Questionnaire (choice experiments, attitudinal and socio-demographic background questions)
- The choice experiment
 - Product
 - Attributes (non organic)
 - Each respondent made 4 choices

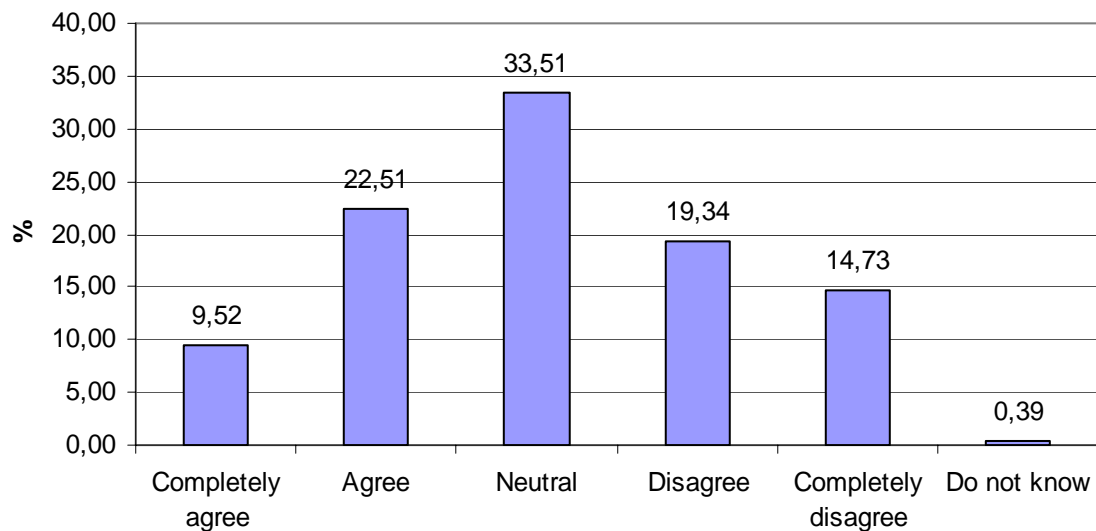
Our data

an example of a choice experiment

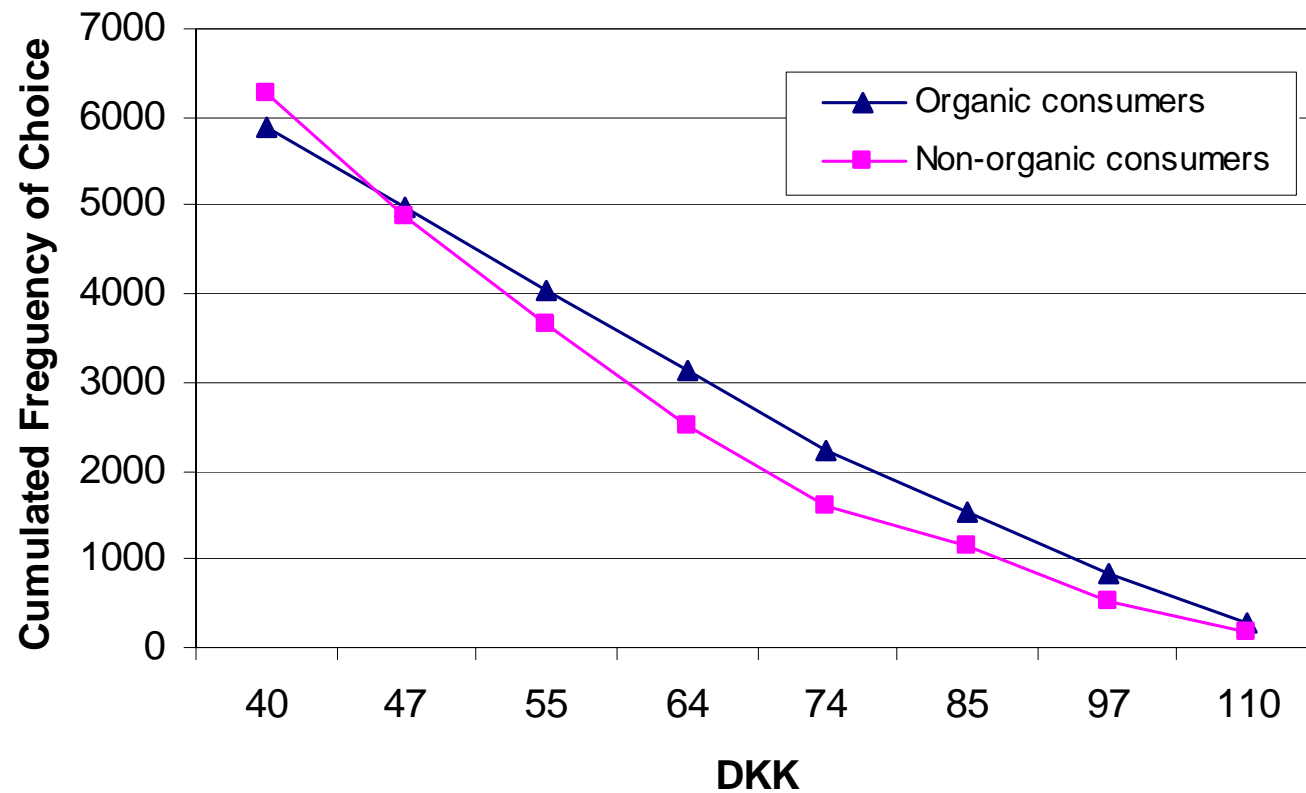
	Product A	Product B	None of these
Animal welfare	Outdoors	Indoors	
Food safety	Not controlled for campylobacter	Campylobacter free	
Price	52 DKK (7 Euro)	75 DKK (10 Euro)	
I choose			

Our data

'it is important that the product is organic'



Relation between price and frequency of choice of chicken



From choice experiment to willingness to pay

- We have to assume a behavioral model:
 - The choice of a given product depends on characteristics of the product and of the respondent – and an error term ([random utility model](#))
 - Probability of choosing product = $A \cdot \text{animal welfare} + B \cdot \text{food safety} + C \cdot \text{price} + \text{error}$
- We use the choices to estimate the probability of choosing a product given it's characteristics
- The weights by which different characteristics enter the description of the choice probability provide information about how important the characteristic is – relative weights provide information about trade offs.
- Using the price as one of the characteristics provides [willingness to pay](#) estimates – how much is an average consumer willing to pay for one unit of that characteristic.

Willingness to pay price premiums in DKK

	Organic consumers	Non organic consumers
Animal welfare	40	5
Food safety	30	15
Animal welfare and food safety	80	20

Results

- Willingness to pay exists under 'right' circumstances
- Organic consumers are different from others
- A product is not just a sum of characteristics

Robustness of results

- We presented average numbers
- We focused on only a few attributes (food safety, animal welfare, and price)
- What you say and what you do (stated versus revealed preferences)
- Generalisation of results – with care
- Relative versus absolute numbers



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