Food Safety Risks and Consumers’ Demand for Credence Characteristics

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Definition of Food Quality

FOOD SAFETY DIMENSION
- heavy metals
- pesticides
- chemical residues
- microbiological safety

SENSORY DIMENSION
- freshness
- taste
- appearance
- tenderness

PROCESS RELATED DIMENSION
- animal welfare
- environment
- quality system
- traceability

NUTRITIONAL DIMENSION
- vitamins
- fat
- fiber, etc.

USE DIMENSION
- package size
- food preservation

PACKING DIMENSION
- material
- information
- degradable
Theoretical framework: Economics of information

Akerlof (1970) model: The markets for "lemons": quality uncertainty and the market mechanism

If information between market actors is asymmetric – seller has information advantage over buyer – this leads to so called adverse selection

If there is a lack of information in the market, and quality cannot be signalled to consumers only lower quality will be available

Darby and Karni (1973): Credence quality - buyers cannot assess quality attributes by them
Method: Contingent valuation

Aim of the study

Are consumers willing to pay for additional information about beef quality and safety?

”The contingent valuation method was applied. In this method consumers are asked *ex ante* their willingness to pay (WTP) in order to obtain a perceived benefit, which is presented in a hypothetical scenario concerning the good in question”

A non-parametric approach based a theorem of Ayer et al. was used to estimate WTP distribution.
Results: The empirical survival function

Mean WTP  2.20 €
Results

- 59 % of consumers are willing to pay more to get information about safety and quality of beef products
- Within this group the mean WTP was 2.20 EUR
- Consumers need for additional information:
  (1) The control of food of animal origin
  (2) GMO in animals
  (3) Country of origin
  (4) Use of hormones
Conclusion

Towards more consumer oriented food chain and higher quality food markets, we need...

... better information of quality attributes of food products, giving special emphasis to credence attributes

... by using electronic databases and other electronic business means of modern information technology
Thank you for your attention!