Transparency: The way to enhance effective risk communication

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Food Safety and Consumer Behaviour

Consumer perceptions of risk, benefit, uncertainty and cost
Contextualizing consumer attitudes towards food safety issues

Emerging societal issues in the Agri-food sector

- Consumer Health
- Food Safety
- Food Quality
- Sustainability

The key questions that need to be asked

- What is driving consumer perceptions of risk and benefit?
- Who trusts whom to inform and regulate?
- How do other consumer attitudes (ethics, wider value systems) relate to perceptions of risk and benefit?
- How do the public react to information about risk/benefit variability across different population groups?

What does this mean for consumer decision-making about health, wellbeing, and choice?

Consumer risk perception

- The psychology of risk perception drives public risk attitudes
  - An involuntary risk over which people have no control is more threatening than one people choose to take
    - Dioxin contamination of the food chain
  - Potentially catastrophic risks concern people most
    - Major food poisoning outbreak
  - Unnatural (technological) risks are more threatening than natural ones
    - Gene technology, nanotechnology, convergent technologies versus Organic production, ecological foods

Consumer risk perception

- Ethical representations, values and concerns are emerging as an important determinant of societal and consumer decision making
  - Animal welfare
  - Environmental impact
  - Sustainability

- Perceptions that the “truth” is being hidden increases both risk perception and distrust in regulators and communicators
  - Increased transparency in risk management
Risk Analysis Framework; improving trust through increased transparency?

Risk Assessment: Which hazards? When are they assessed and with which method? What consequences are judged important, and with what level of uncertainty? Who is affected?

Risk Management: How do values influence the selection and implementation of policy alternatives? Interactive exchange of information and opinions.


Increased transparency raises more communication needs?

Risk Assessment: Which hazards? When are they assessed and with which method? What consequences are judged important, and with what level of uncertainty? Who is affected?

Risk Management: How do values influence the selection and implementation of policy alternatives? Interactive exchange of information and opinions.


A Risk-benefit Analysis Framework: improving trust through increased transparency?

Risk-benefit Assessment: Health, Environment, Social effects, Economic effects, Ethical issues.

Risk-benefit Management: How to reach consensus opinions in stakeholder groups. What is acceptable in terms of decision-making?


Trust in regulatory institutions and risk-benefit governance

- People may not always have a view regarding different Agri-food technology applications or food safety issues.
- Trust in regulatory institutions is important, particularly in the area of potentially controversial applications or food safety issues.
- People may react emotionally in response to specific issues (particularly if they do not want to think about relevant issues in depth).

What determines good food risk management?

The constructs (derived from lay-expert focus groups)

- Proactive consumer protection
- Opaque and reactive risk management
- Scepticism regarding risk assessment and risk communication practices
- Trust in expertise of food risk managers
- Trust in honesty of food risk managers

Building societal trust in food risk management:

What needs to be communicated?
**Structural model – FRM quality**

- Proactive
- Opaque
- Sceptical
- Trust in honesty
- Trust in expertise

\[ \chi^2(2420) = 8429, \quad p < 0.01; \text{RMSEA} = 0.07 \]

Van Kleef et al., submitted, risk analysis

**Country differences**

- Proactive
- Opaque
- Sceptical
- Trust in honesty
- Trust in expertise

- Factors of universal importance
  - Pro-active consumer protection
  - Opaque and reactive risk management
  - Trust in the expertise of food risk managers (except Greece)

- Factors of local importance related to food risk management quality evaluations:
  - Scepticism in risk assessment and communication practices

**Quantitative results**

- No country differences

\[ (-0.11^*) \]

\[ (p < 0.05) \]

- Factors of universal importance

\[ (0.01) \]

- Factors of local importance related to food risk management quality evaluations:

- Communication example; GM potato with nutrition benefits

- Uncertainty \times \text{Proactive management communication}

High uncertainty about the risks associated with the food, people prefer proactive FRM activities.

Low uncertainty about the risks associated with the VAP, people are less concerned about proactive FRM activities.

\[ F(1,2) = 9.85, \quad p = 0.002 \]


**Explaining individual differences**

Psychological factors determine consumer attitudes, decision-making and impact on self-protective behaviors and food choices.
Mental models of food–related behaviour.

Results of a hierarchical factor analysis

(Fischer and Frewer submitted)

What psychological factors influence food choice and technology acceptance?

- Habitual behaviour

- Perceived Risk versus perceived benefit

- Role of affect or emotion

- Implicit memory

- Attitude activation

- Interactions between these...
Thank you!

Any Questions?