

Food-borne risks perceived by Hungarian consumers

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Increasing importance of food safety

Salmonella

pszichotróf patogének

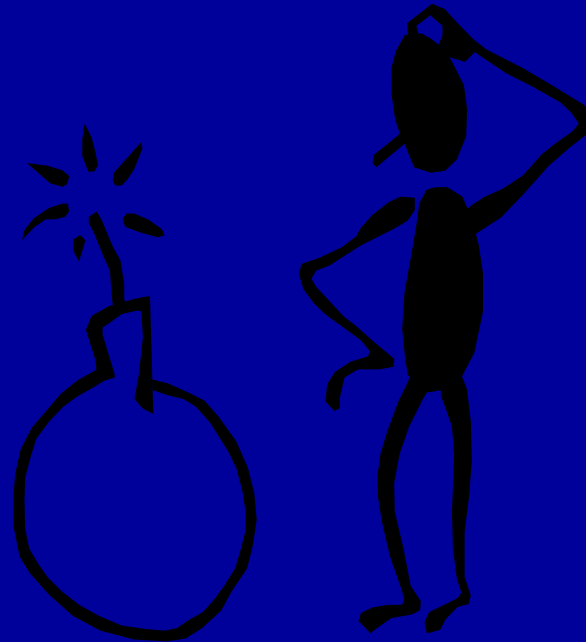
BSE

dioxin

GMO

hormonok

FMD



Specific aspects

- tradition- innovation
- localisation - globalisation
- glocalisation (think globally, eat locally)
- communication
- support - restraint
- risk-based society
- specific risks (smoking, driving)
- take voluntary risks (oysters, steak tartare)

Specific economic aspects - CECs

- privatisation, restructuring of food industry
- freedom of speech - semi-scientific, unreasoned publications
- liberalisation of import - increased choice of imported products
- deregulation of economy - promotion of SMEs (did not meet basic standards)

REAL and PERCIEVED risks

- scientific
- health effects
- legislation
- product specific
- facts
- requirements
- to be controlled
- publicity
- unknown
- health effects ?
- principles, approaches
- general
- symbolic
- emotions
- to be accepted
- proactive media



dr. Diána Bánáti, Brussels BEUC Conf 10-12. July 2002.

Research - main fields:

- Socio–economic influence of requirements on consumer behaviour
- Consumer preferences and perceptions of selected food products
- Food chain approach
- Perception of consumers & professionals
- Risk management & risk communication options

Consumer Surveys I.

“The Food Safety Issue and the Consumer Behaviour in a Transition Economy: a Case Study of Hungary”

Consumer Surveys II.

“Perception of GM foods by Hungarian consumers”

Consumer Surveys III.

Perception of different risk factors by
consumers and professionals ...
(food chain approach)

not published

Consumer Surveys I.

“The Food Safety Issue and the Consumer Behaviour in a Transition Economy: a Case Study of Hungary”

Acta Alimentaria Vol. 31(1) pp. 21-36. (2002)

- Direct question survey (closed questions)
- Focus group interviews numerous statements
- 1-5 interval scale
- One-way analysis of variance
- SPSS & STATISTICA integrated program packages
- Bonfferroni method - significant differences
- Factor analysis
- Ward's hierarchical centroid method - clusters formed

- Decision rule for formation of homogeneous clusters
- Demographic characteristics (sex, age, marital status, occupation, education, income, locality)
- 300 completed questionnaires
- 60 by food industrial specialists

Importance of food safety

- Food safety
 - important: 45.9 %
 - very important: 50.3 %
 - more important for
 - women
 - higher qualification
 - young university students
 - professionals
 - locality: no
 - elderly

Food-borne risk perception

- Collected 31 various risk factors
- Evaluate the effect of factors: 1-5 scale
- 2 groups of factors
- First 3 factors: hygiene related

- Determine the stochastic relations between evaluation of potential risk factors
- 6 factors

6 factors

- Factor 1: microbiological risks of food processing and consumption
- Factor 2: nutritional value related food ingredients
- Factor 3: risk of food contamination from packaging material and additives
- Factor 4: low level of personal hygiene
- Factor 5: risk of processing technologies
- Factor 6: effect of chemical preservatives

5 clusters

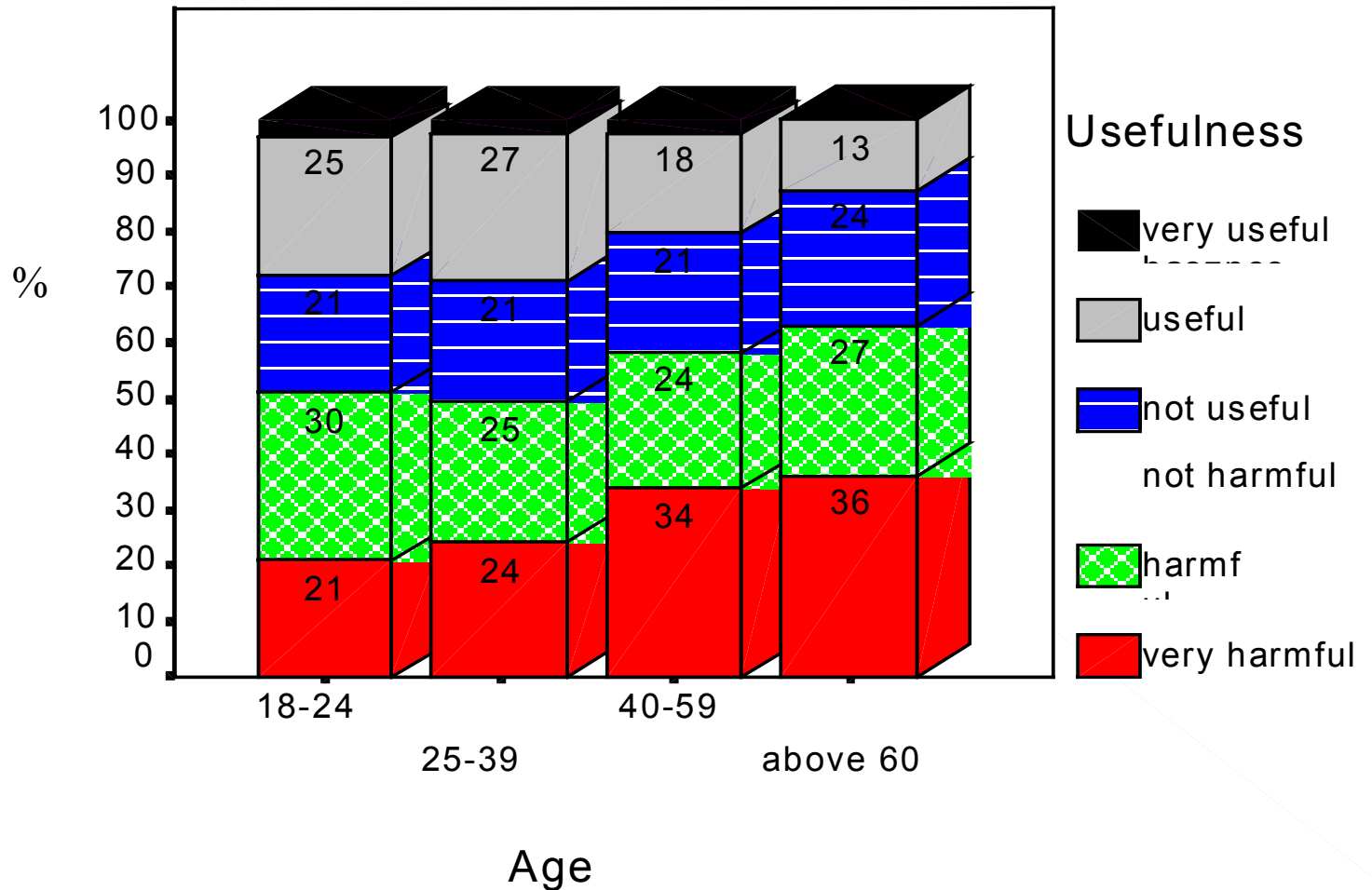
- Cluster 1: underestimation of food-borne risks, low level of personal hygiene
- Cluster 2: microbial hazards in foods
- Cluster 3: hygiene most important
- Cluster 4: rigorous food control
- Cluster 5: food preservatives, residues, chemicals, antibiotics

Consumer Surveys II.

Perception of GM foods by Hungarian consumers

- 90 % : to be labelled
- 7 % : not necessarily
- 3 % : no need for labelling

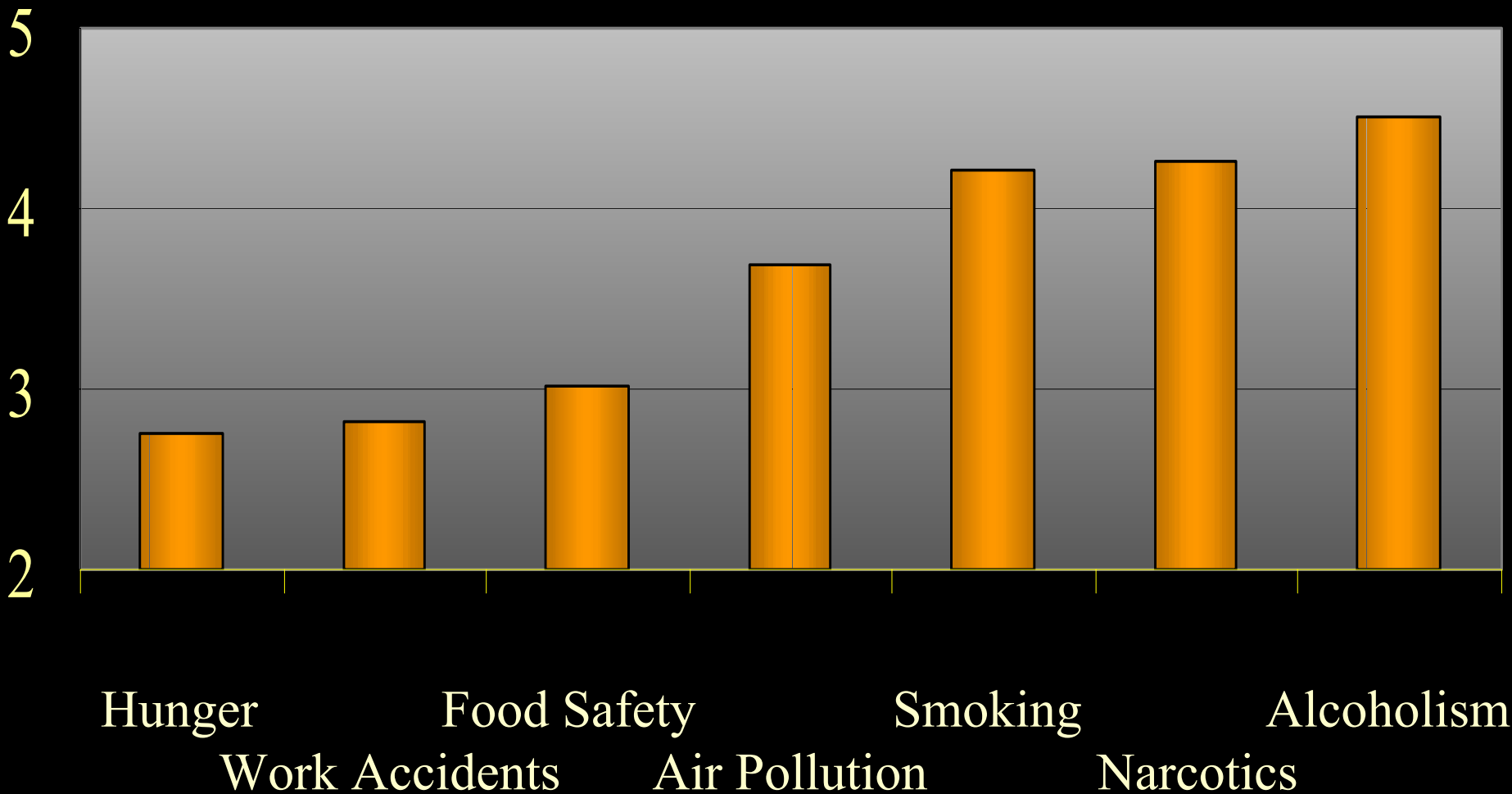
Perception of GM foods by age groups



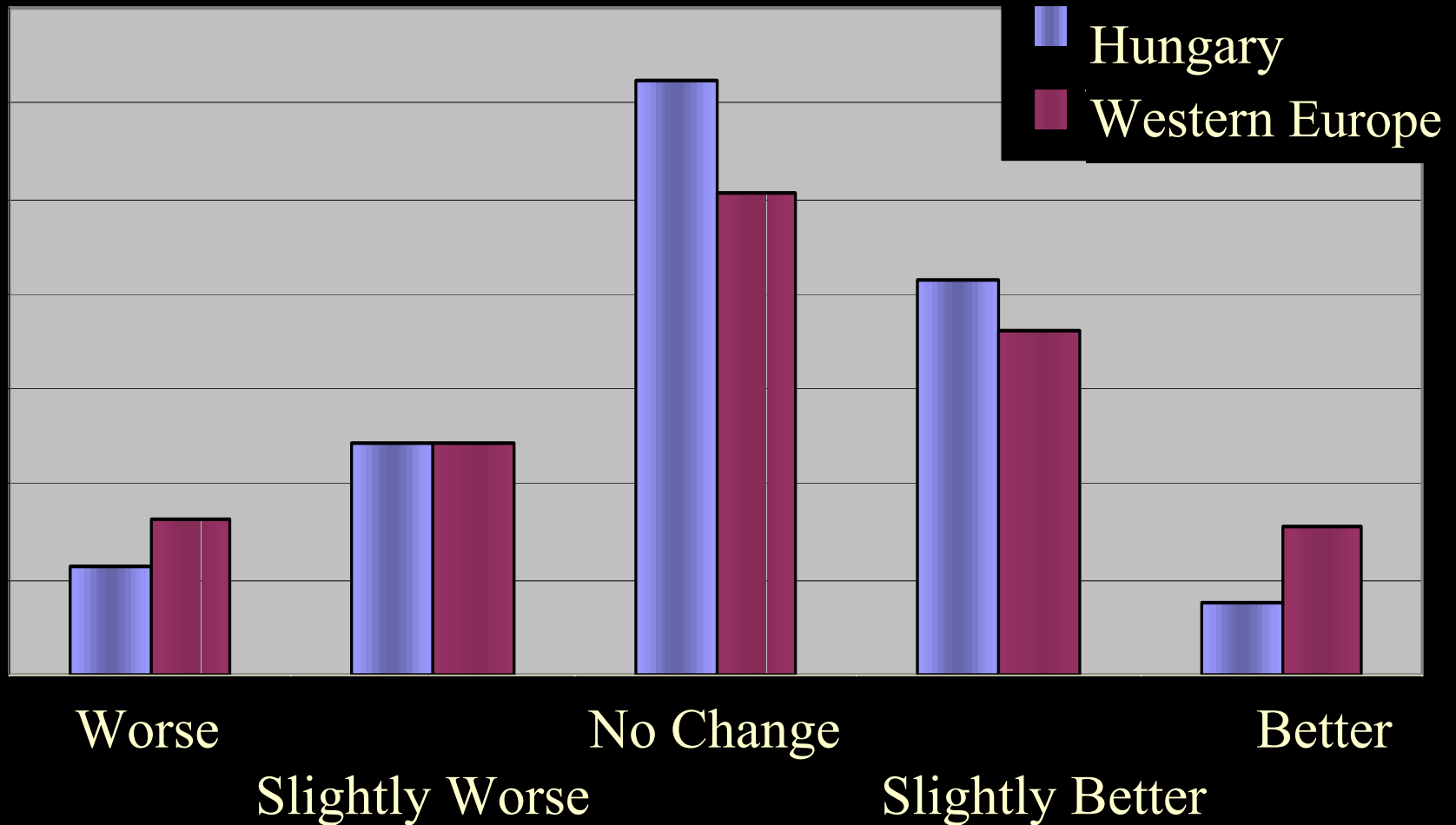
Consumer Surveys III.

- Consumer survey by questionnaires
- Conjoint analysis on GMOs
- Survey of the special “sensitive” consumer segments (specialized questionnaires)
- Focus groups and interviews for qualitative analysis and content analysis

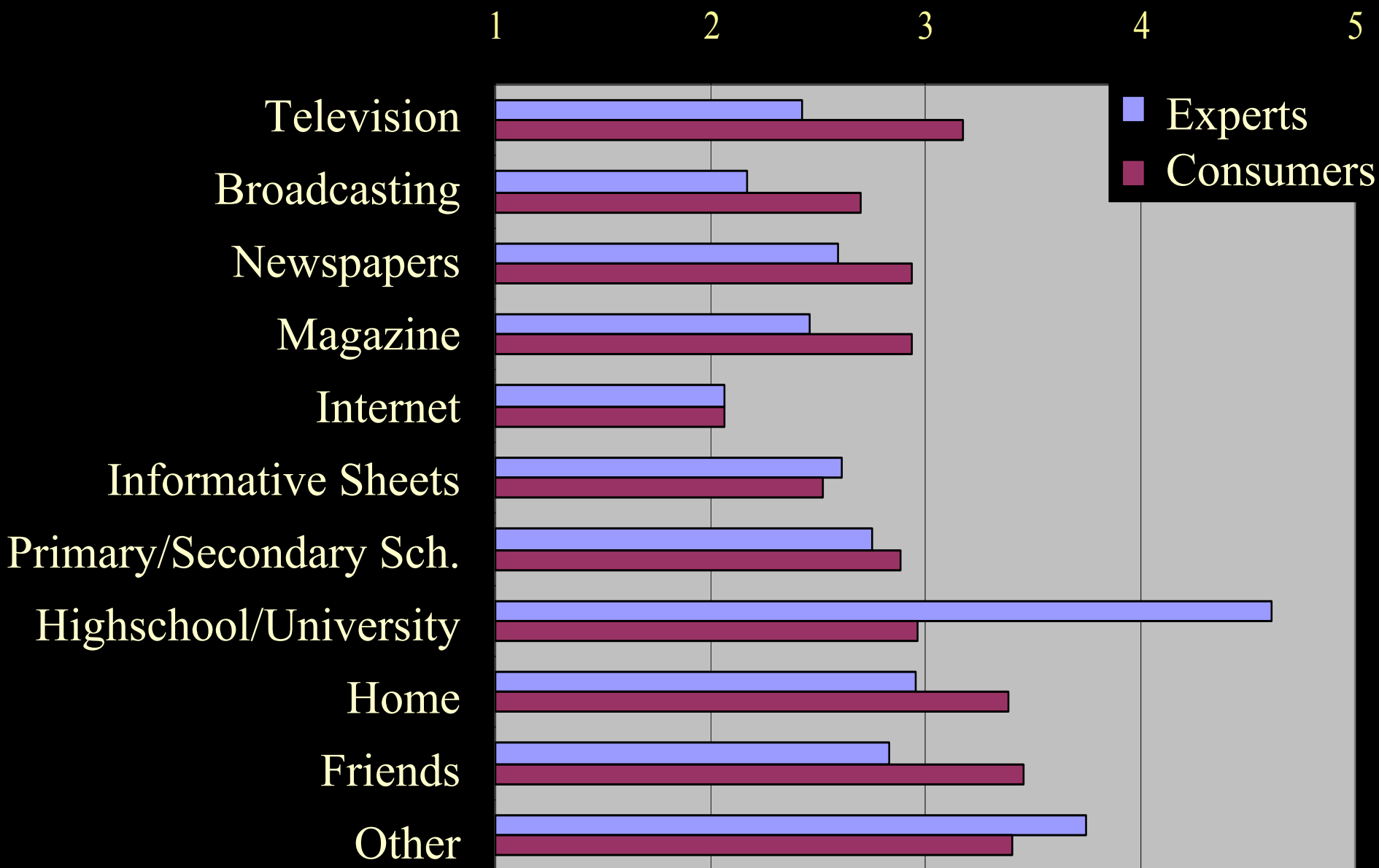
Importance of Food Safety in Hungary



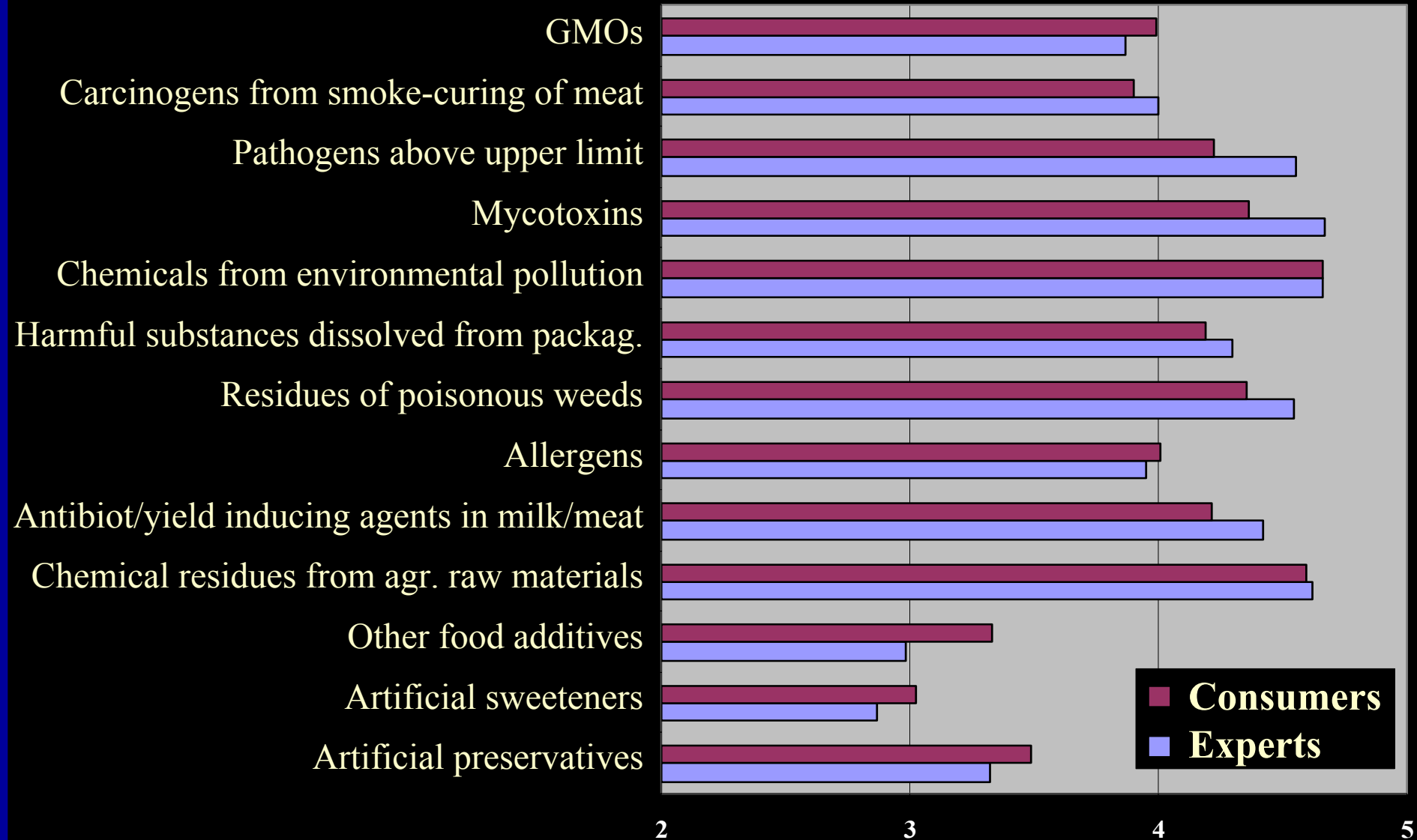
The changing of the state of food safety in Hungary and in Western Europe



Information sources of the consumers and food experts in the field of food safety



Subjective evaluation of food safety risk factors by consumers and food experts



Evaluation of risk factors

Medium

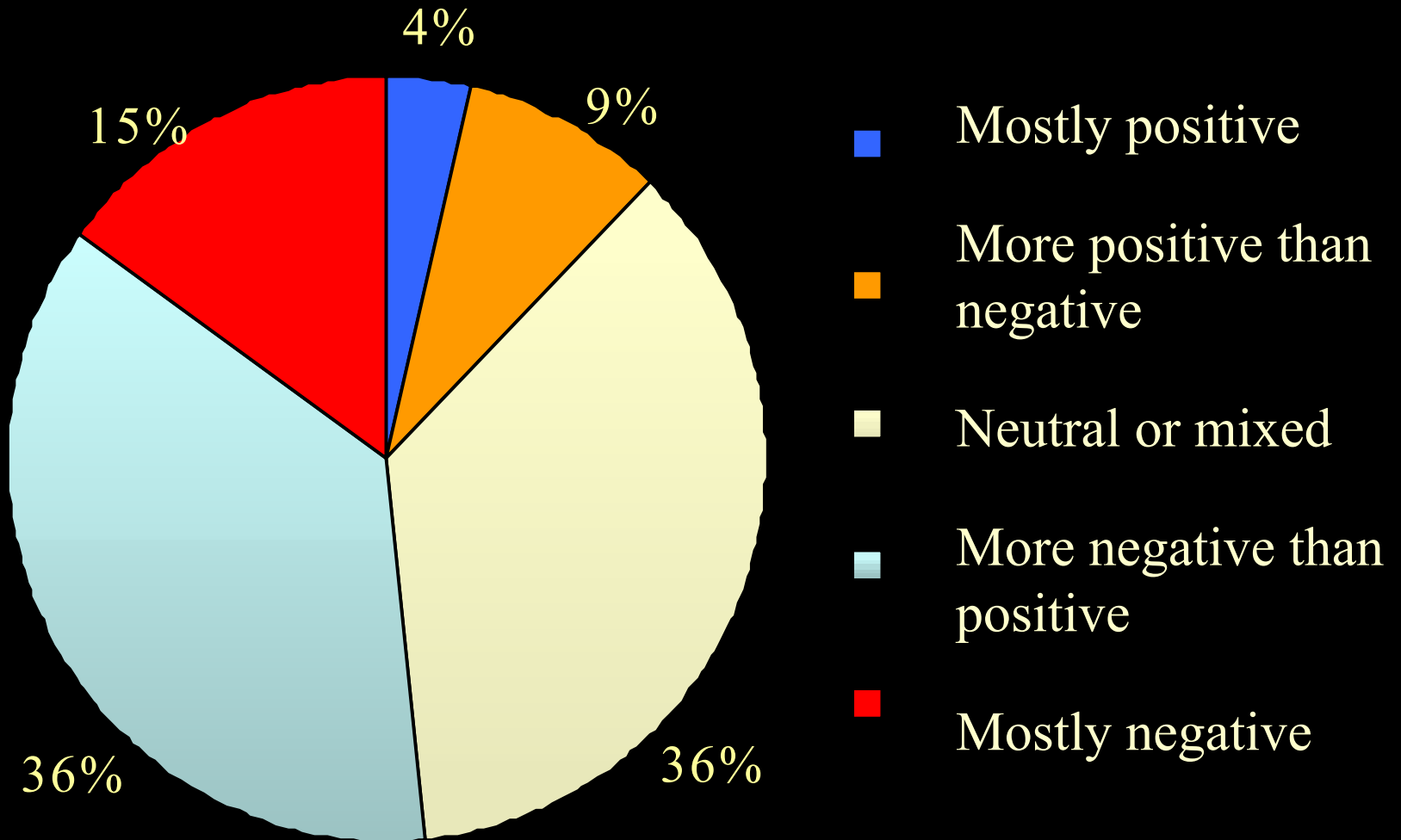
- Carcinogens from smoke-curing of meat (3,93)
- Genetically modified compounds (3,95)
- Allergens in raw materials (3,99)

Evaluation of risk factors

Strong

- Harmful substances dissolved from packaging (4,22)
- Antibiotics/yield inducing agents in milk/meat (4,28)
- Pathogens above upper limit (4,33)
- Residues of poisonous weeds (4,41)
- Mycotoxins (4,46)
- Chemical residues from agr. raw materials (4,60)
- Chemicals from environmental pollution (4,65)

What kind of information do you have about GM foods ?



Perceived risks

- Safe OR not safe !?
- Level of food safety
- Qualitative - quantitative evaluation
- Cost benefit - risk benefit
- Training (professionals, food chain)
- Understanding (consumers)
- Different perception of different risks

Communication

- What we know
- What we do not know
- Why we do not know
- Level of risk
- What do we do to reduce risk
- How to deal with crisis
- Individually taken risks - to be considered

Consumer requests

- Reliable, transparent food chain (accountability)
- Acceptable level of food safety
- Understand scientific and technical achievements
- Labelling
- Informed decisions
- Other factors in decision-making (perceived risks)

Risk communication model

- Consumer perceptions related to the various risk factors
- What kind of differences can be detected in the risk perception of different consumer segments
- The information basis for the consumers attitude to the food safety issues
- Strategies used by the different consumer groups

Risk Perception

