

Consumer perception of food-borne risks

Focus on microbiological risks

Joachim Scholderer

MAPP

The Aarhus School of Business

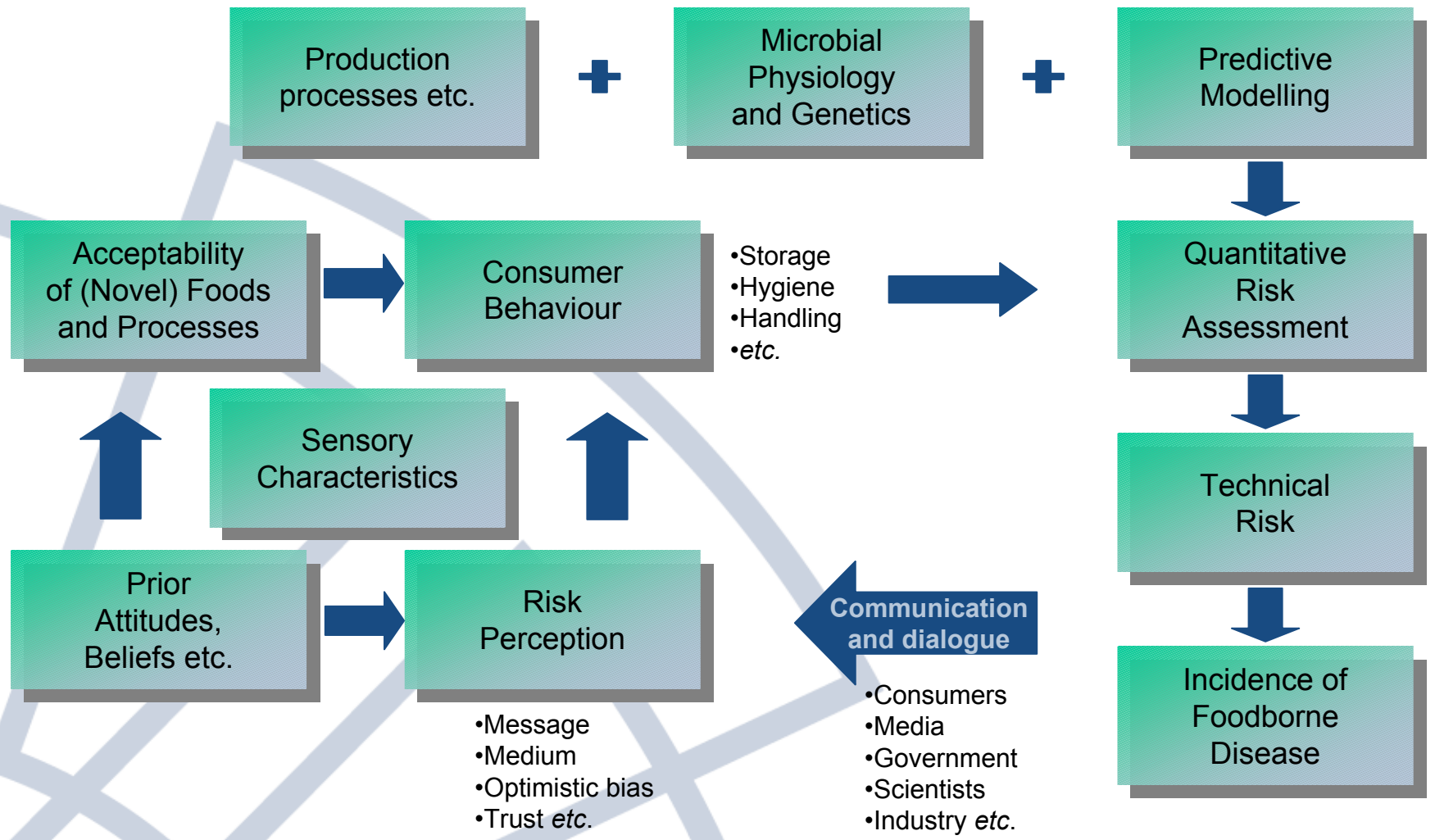
Denmark



I.

Trends and general factors contributing to consumer
risk perception and risk-related behaviour

Overview



UNFAMILIAR

● Genetically Altered

Nitrates

● Hormone Residue

● Pesticide Residue

● Organic Produce

● Colouring

● BSE

NOT DREADED

● Sugar

● Saturated Fats

● *C. botulinum*

● *Salmonella*

DREADED
Likely to cause harm
Worrying
Have no benefits
Risks are serious
Harmful in small quantities

FAMILIAR

Common

Known by scientists

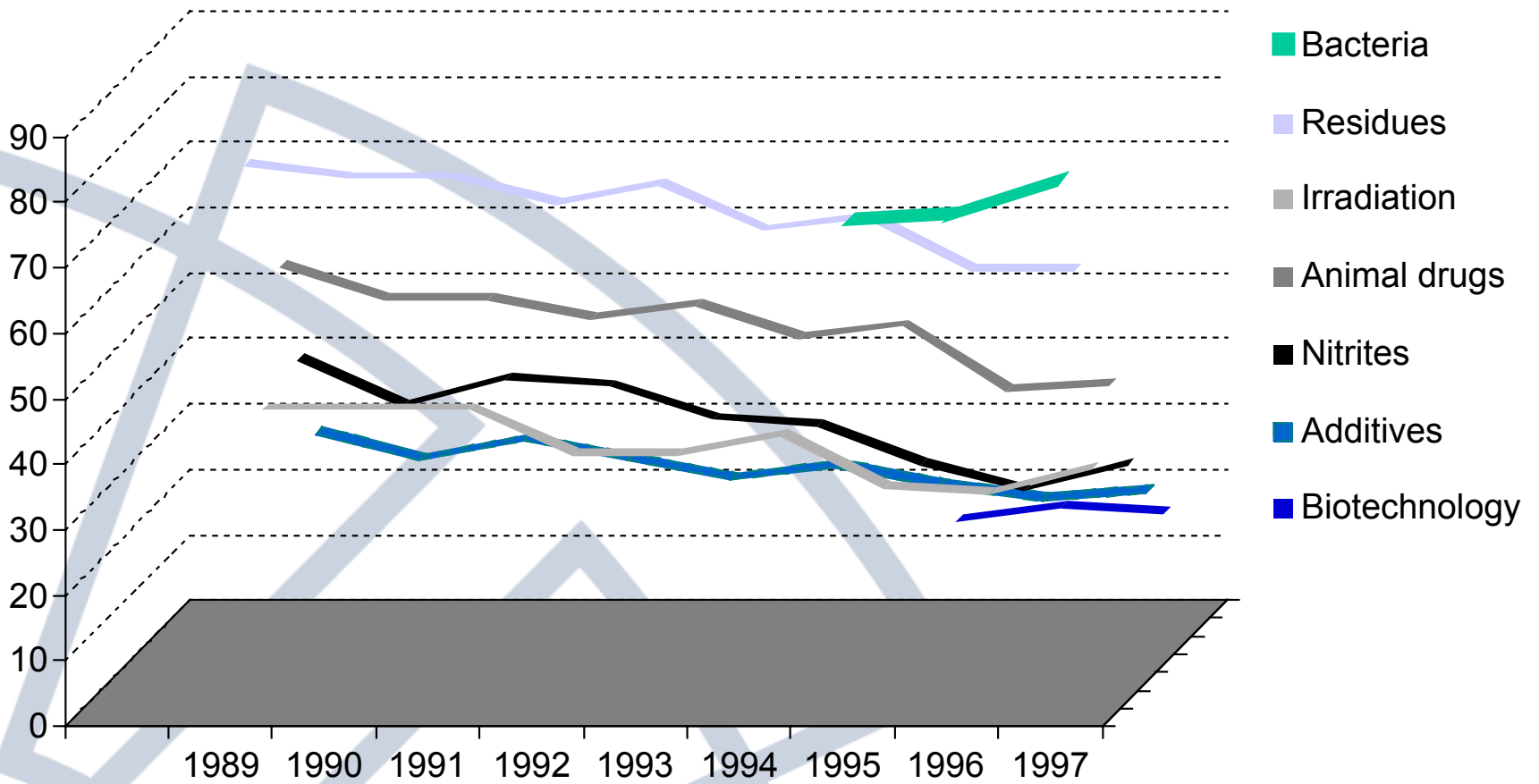
Easy to tell if contained in food

Responsibility of others
to protect from harm

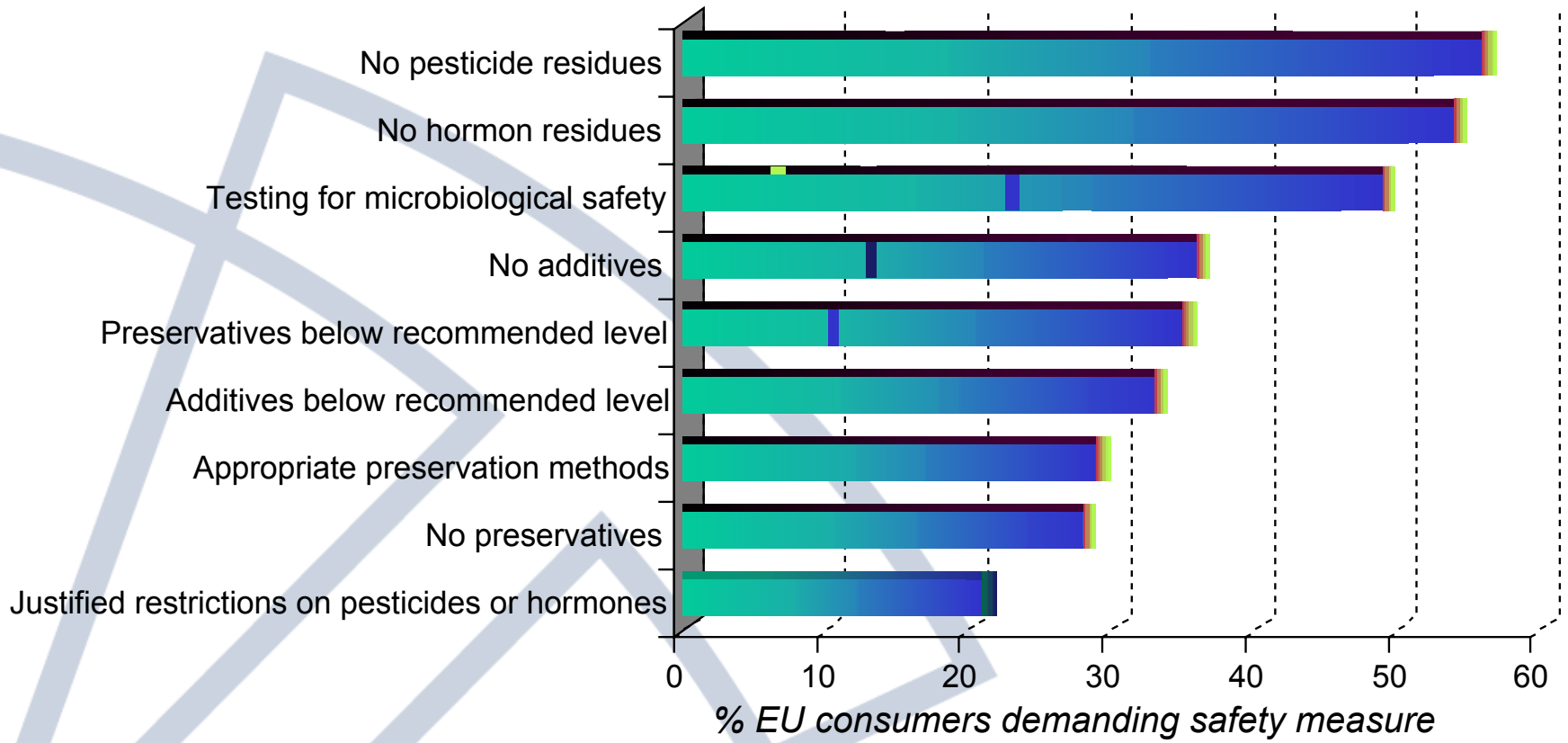
Unnatural

Comparative perception of
food-borne risks
(Fife-Schaw & Rowe, 2000)





Trends in prioritisation of food risks among US consumers
(Data source: FMI, 1989-1998)

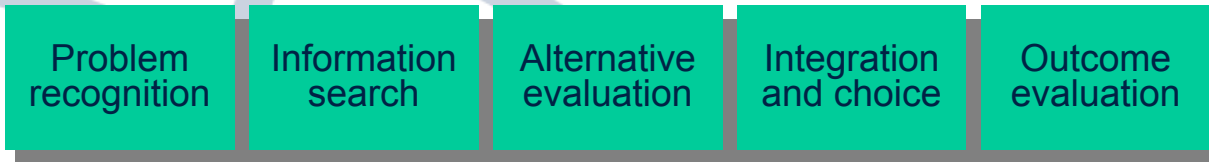


Prioritisation of food safety measures by EU consumers
(Data source: INRA Europe, 1998)

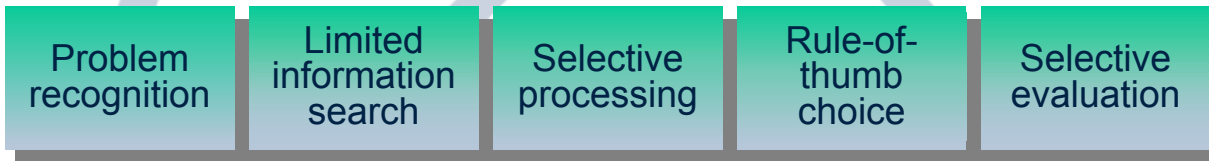


From perception to behaviour

I. Systematic information processing/planning level



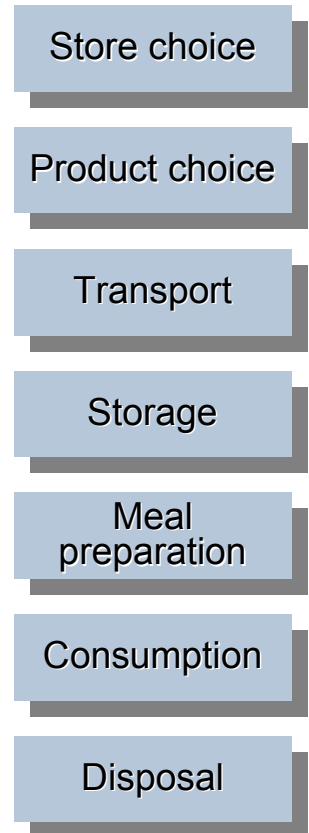
II. Heuristic information processing level



III. Habitual response level



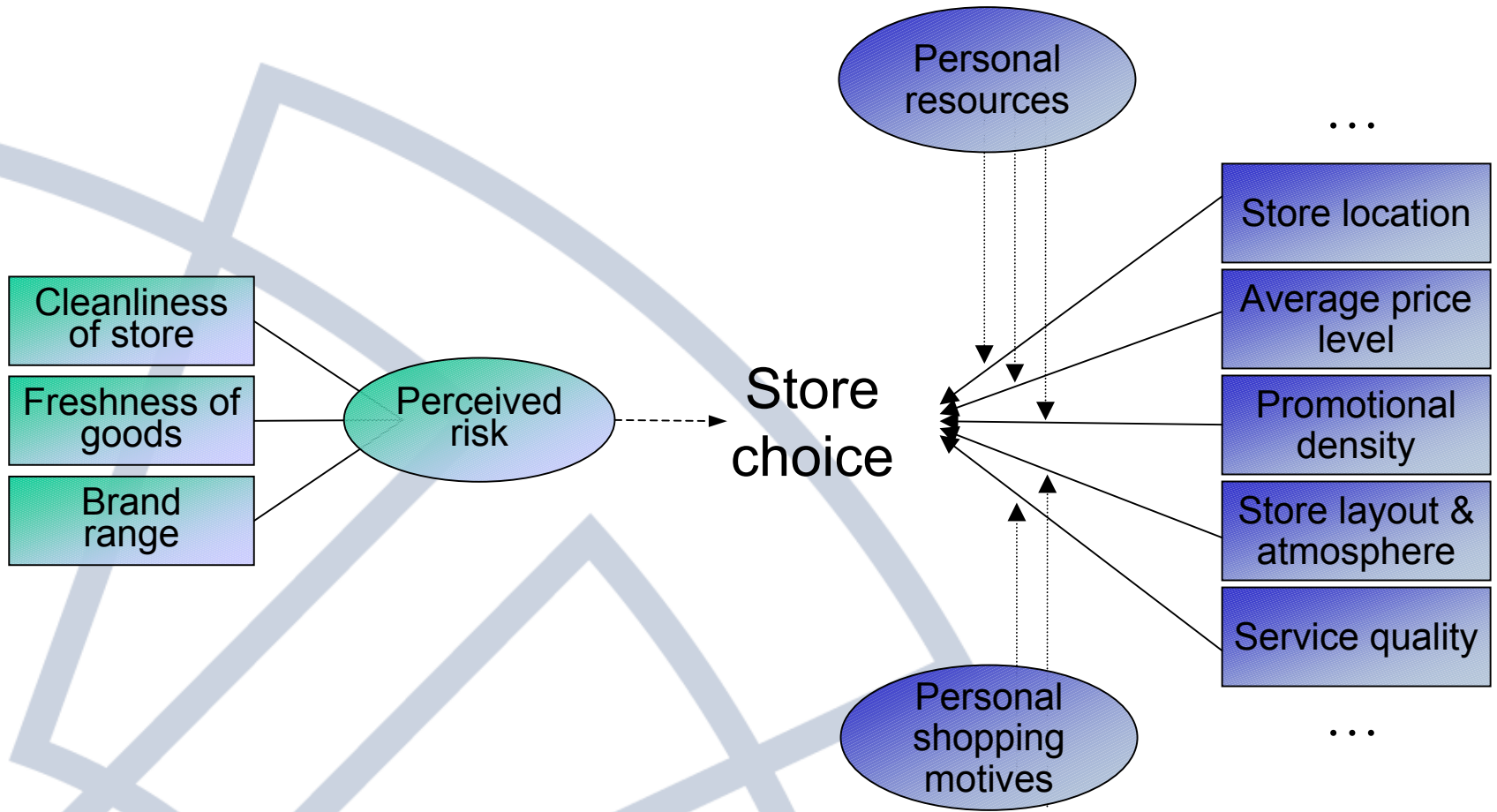
Target behaviour



II.

Pre-purchase risk perception and risk-related behaviour

Store choice and product choice



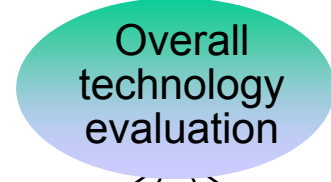
Consumer information



Risk/benefit trade-off



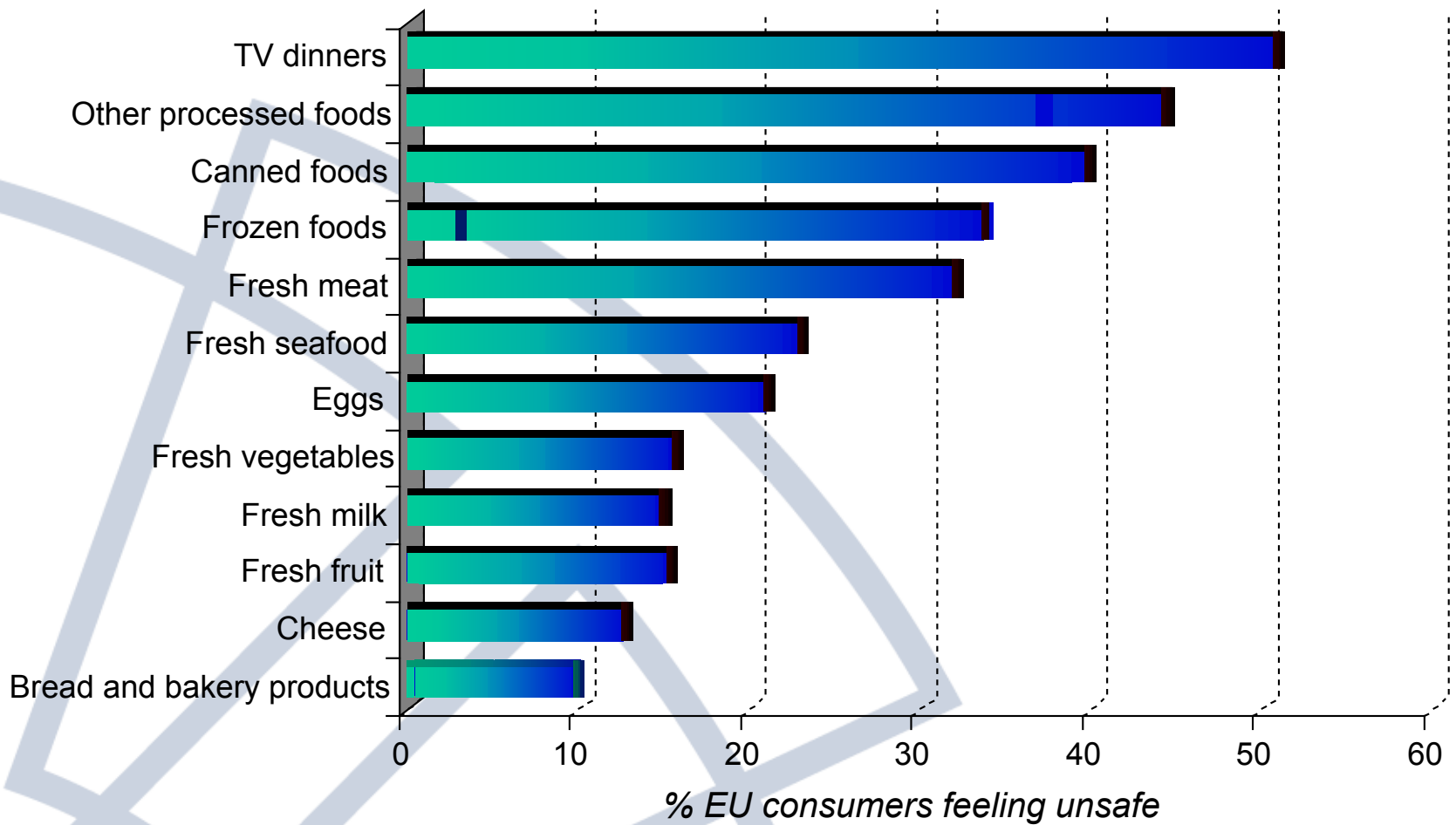
Direct product experience



Attitudinal inference



Risk perception and emerging food technologies
(Scholderer, Bredahl & Frewer, 2000)



The "degree of processing" heuristic:
 Perceived risk in different product categories
 (Data source: INRA Europe, 1998)

III.

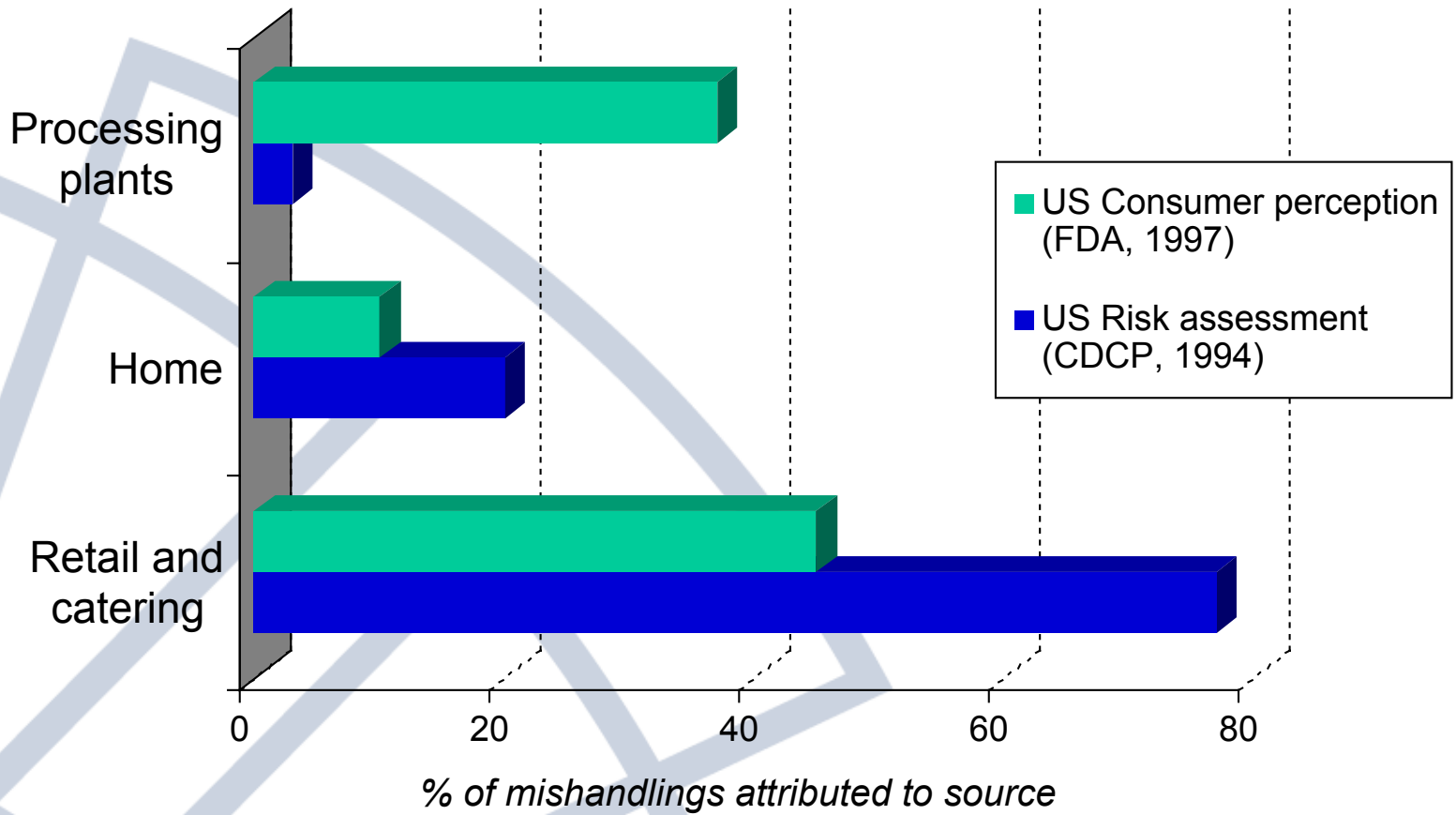
Post-purchase risk perception and risk-related
behaviour

Transport, storage and meal preparation

Pre preparation

Occurrence (%)

Transport	Transported food to the table	4.5
Storage	Chilling of ready-to-eat food	5.8
Preparation	Hand washing before preparation	6.6
Cooking	All ingredients cut on boards	6.0
	Hand washing during animal ingredient	5.8
	Some / raw vegetables washed	4.1
	Raw poultry washed	3.3
	Failure to use recommended cooking time	2.5
	Meat / poultry ground before preparation	1.8
	Product not cooked properly	1.5
Post cooking	Cooked product held for more than 90 minutes	3.5
	Cooked product stored at room temperature	1.7
	Product reheated in microwave of at least 74°C	1.1
	Cooked food held	0.9
	Cooked food cooked at incorrect temperature	0.8
	Product reheated than within 2 hours of cooking	0.6
	Product reheated	



The "fundamental attribution error": Perceived and actual sources of microbiological contamination
 (Data sources: FDA, 1997; CDCP, 1994)

IV.

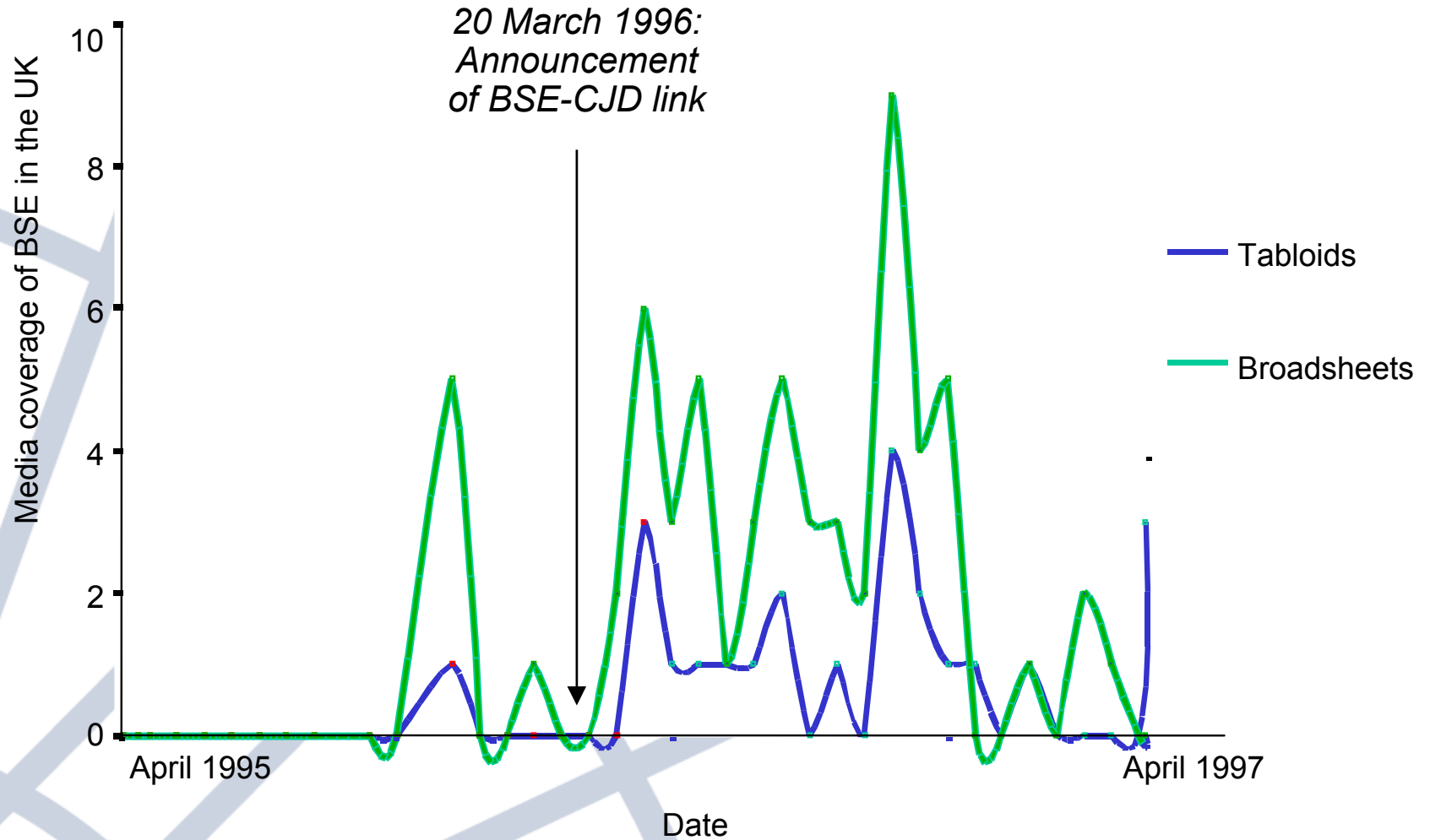
Change under crisis conditions

Food scares

Looking back...

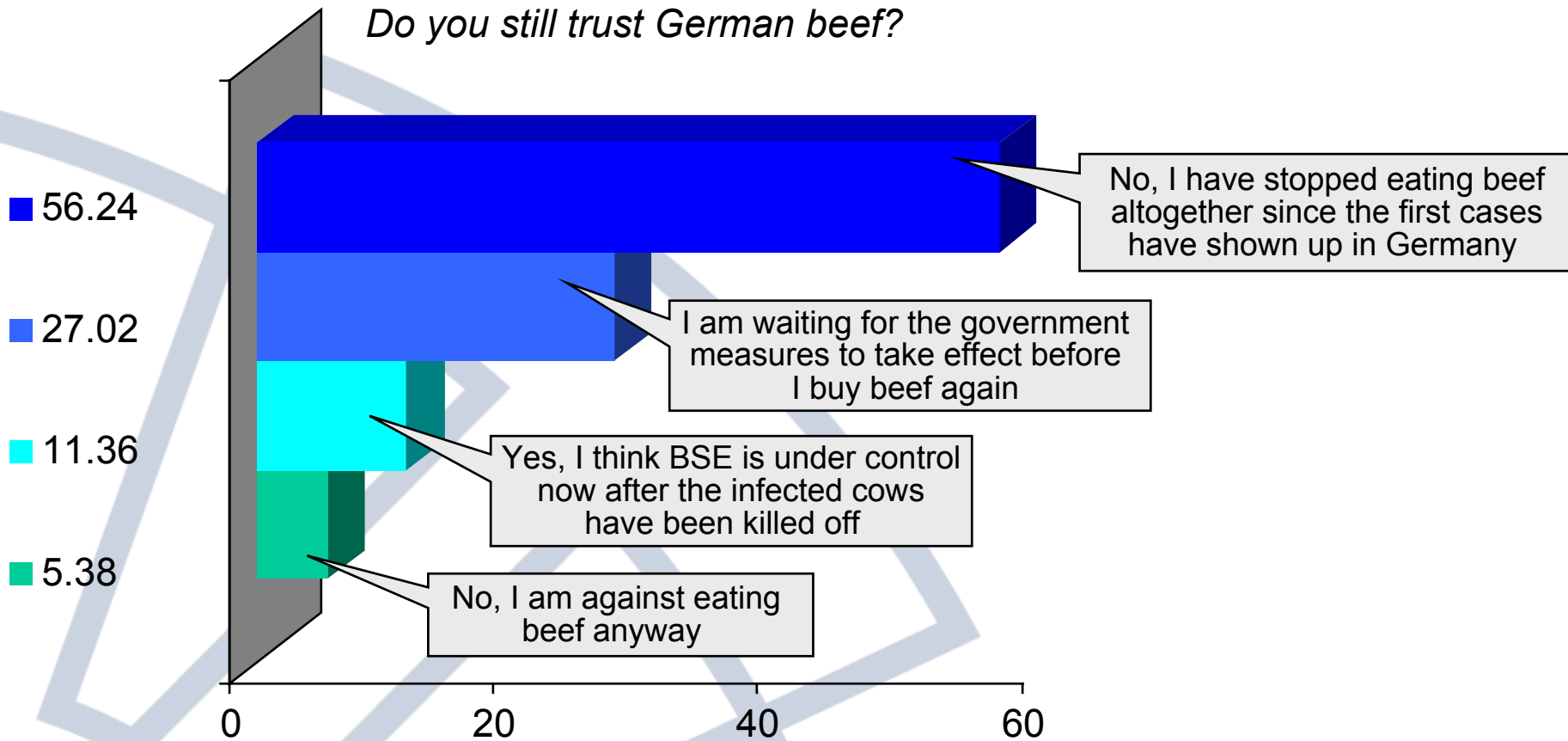


*John Gummer, UK Minister of Agriculture,
Fisheries and Food, 1989*

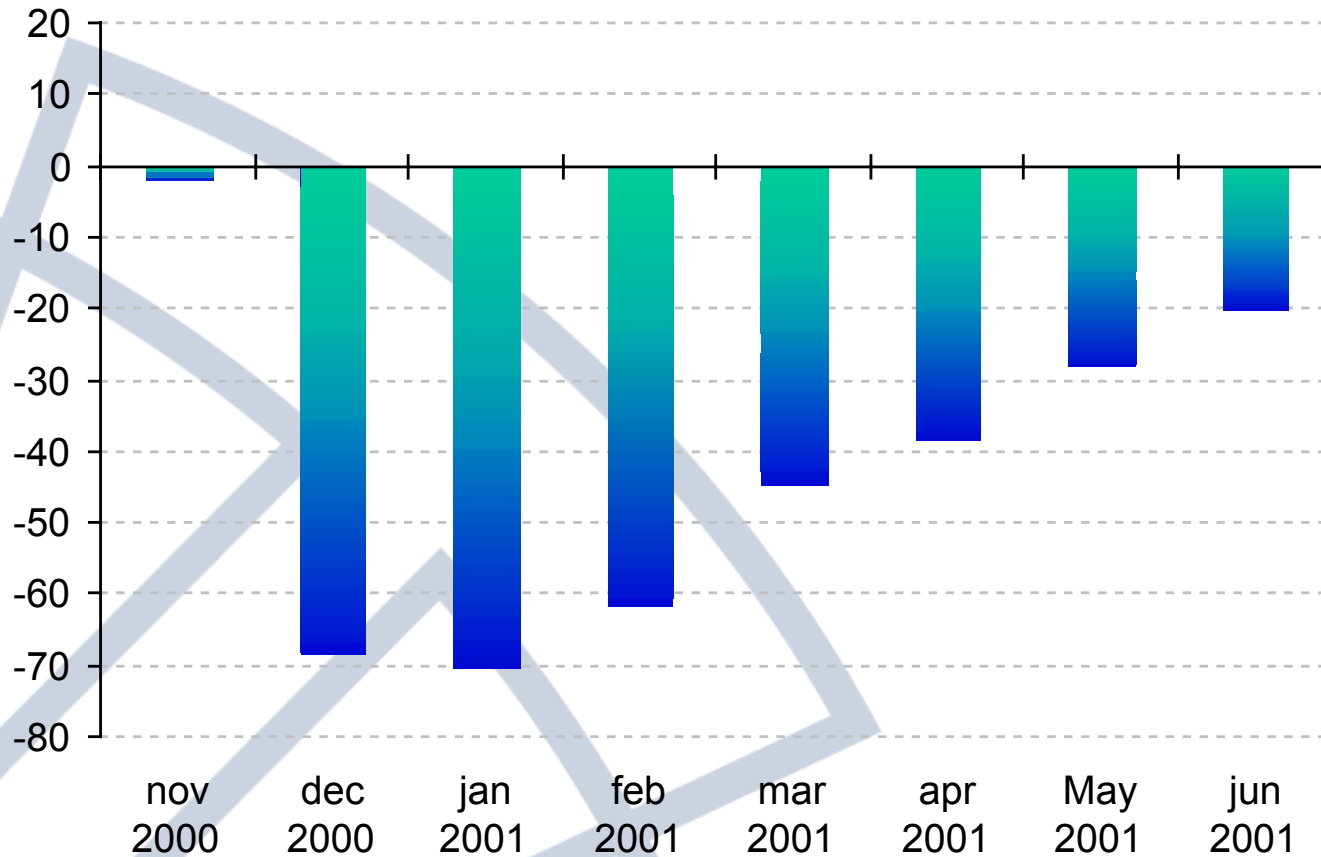


How BSE flared up in the press
(Braxton, Wunderer, Campion & Frewer, 1997)

Do you still trust German beef?

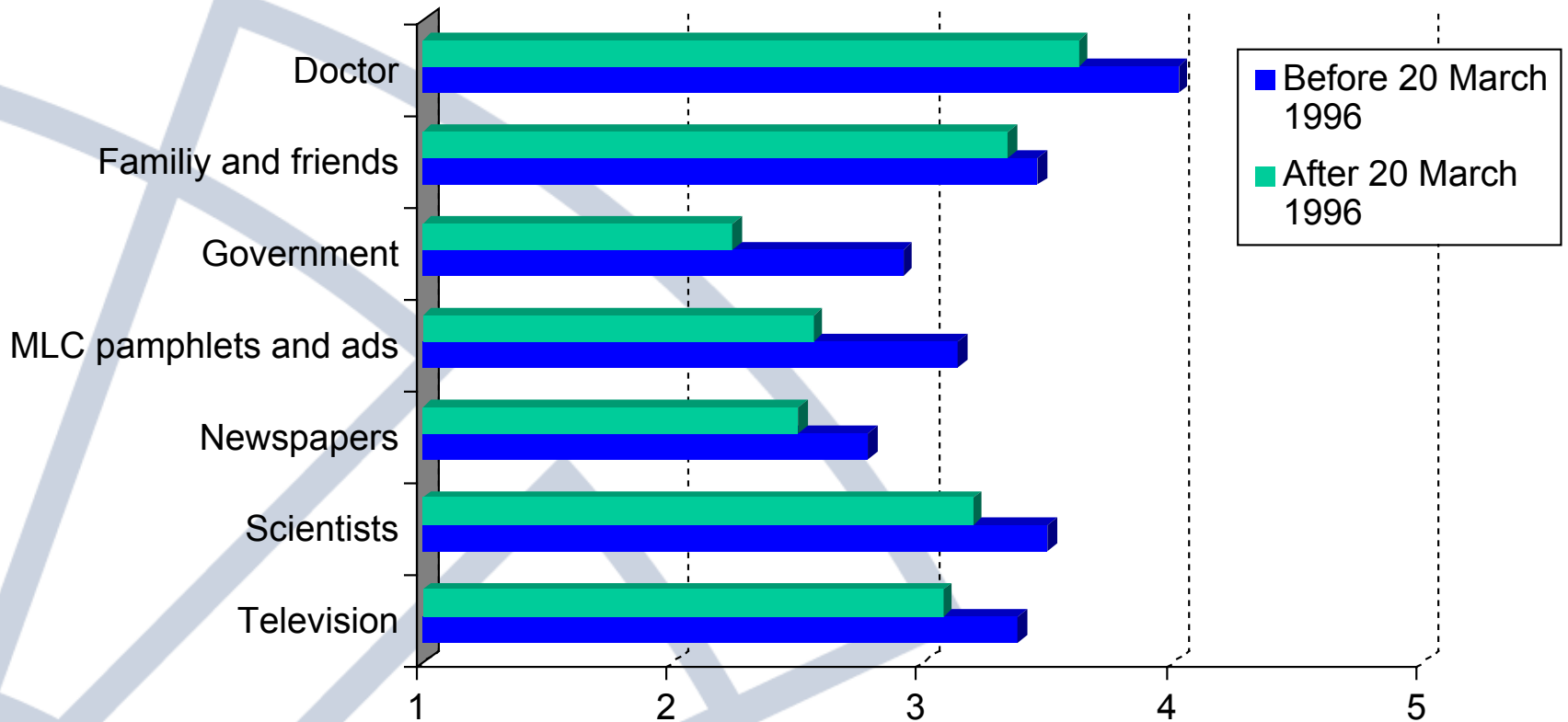


Private demand for beef (% change as compared to previous year)

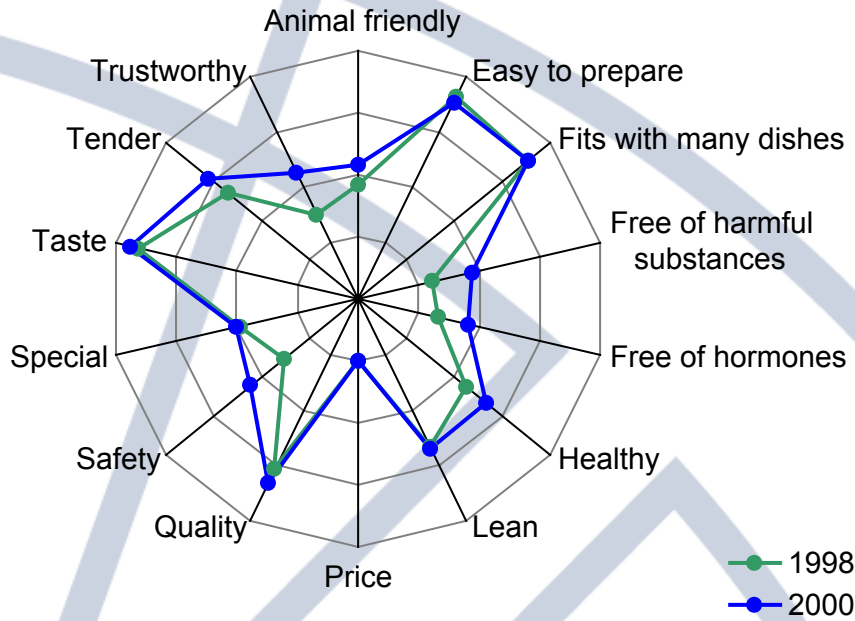


Duration of a food scare: the German beef market in the wake of the November 2000 BSE cases
(ZMP, 2001)

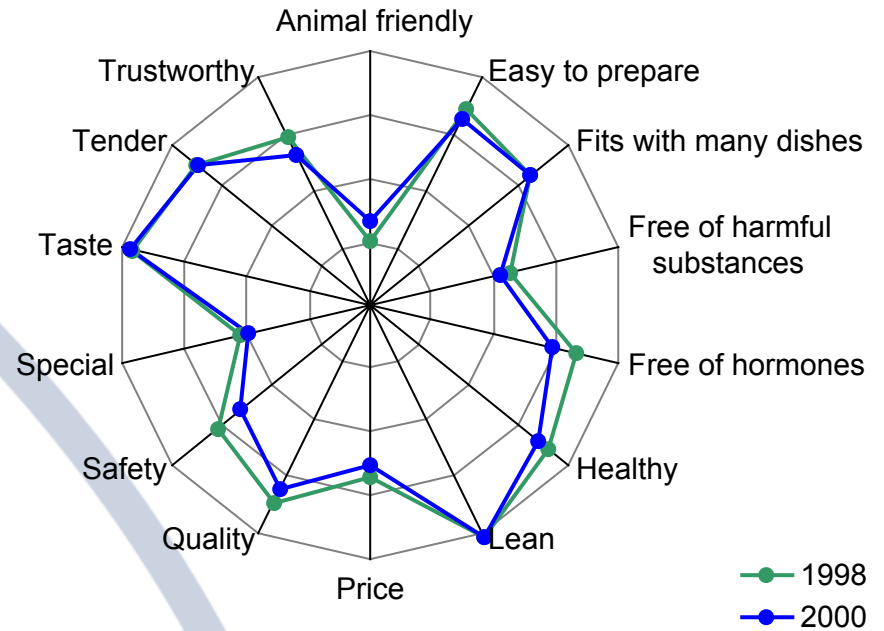
"I trust the following sources of information in terms of the advice they give about the safety of meat/BSE":



Beef up



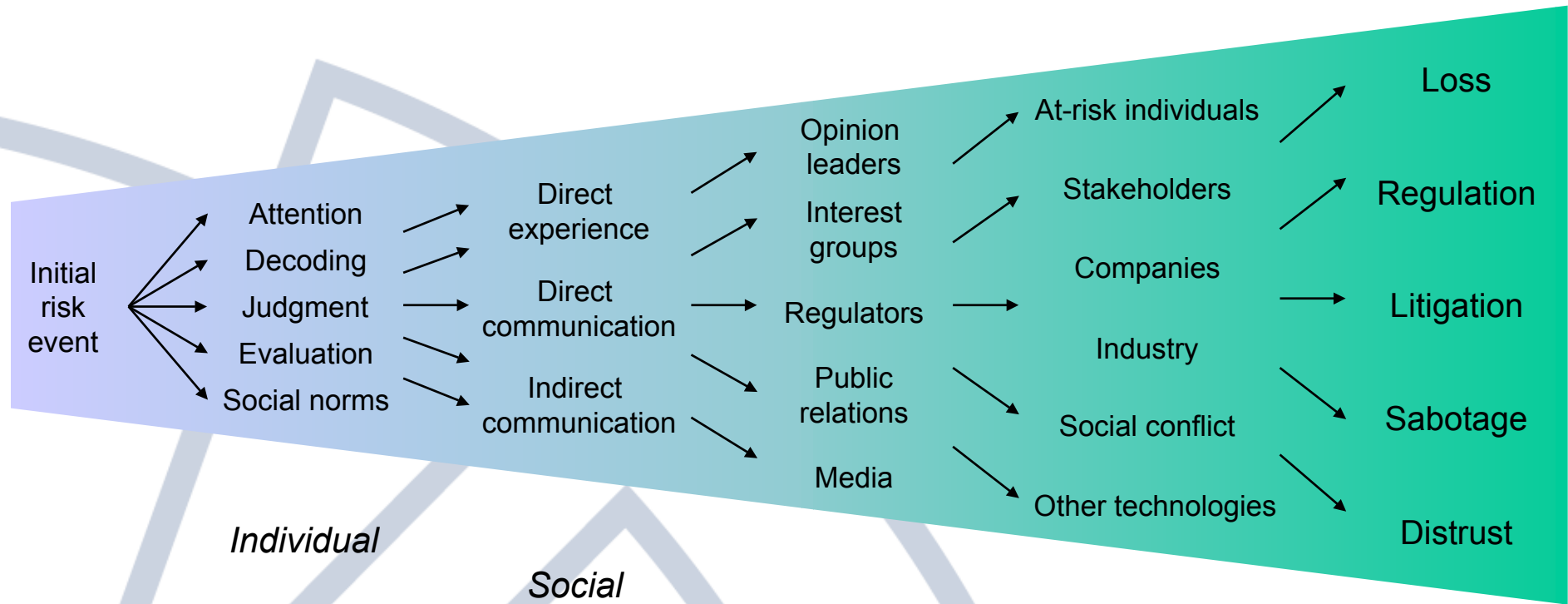
Poultry down



V.

What we need to know

Dynamics of risk perception and behaviour



Individual

Social networks

Multiplicators

Ripple effects



The social amplification of risk: A heuristic framework
(Kasperson et al., 1988)

