



MY WASTE, MY LIFE AND ME: CONSUMER SEGMENTS DIFFERING IN FOOD LIFESTYLE AND FOOD WASTE BEHAVIOUR, AND THE INTERACTION BETWEEN SUPERMARKETS AND CONSUMERS



MAPP CENTRE – RESEARCH ON VALUE CREATION
IN THE FOOD SECTOR
DEPARTMENT OF MANAGEMENT
AARHUS UNIVERSITY

JESSICA ASCHEMANN-WITZEL
DR.AGR. / ASSOCIATE PROFESSOR

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OUTLINE

1. European cross-country segmentation survey study
2. Research on supermarkets interaction with consumers in Denmark



European cross-country segmentation survey study



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APPROACH

- ▶ Selection of 54 'food waste-related lifestyle' survey statements
- ▶ Based on original 'food-related lifestyle measure', food waste literature review, and expert interviews

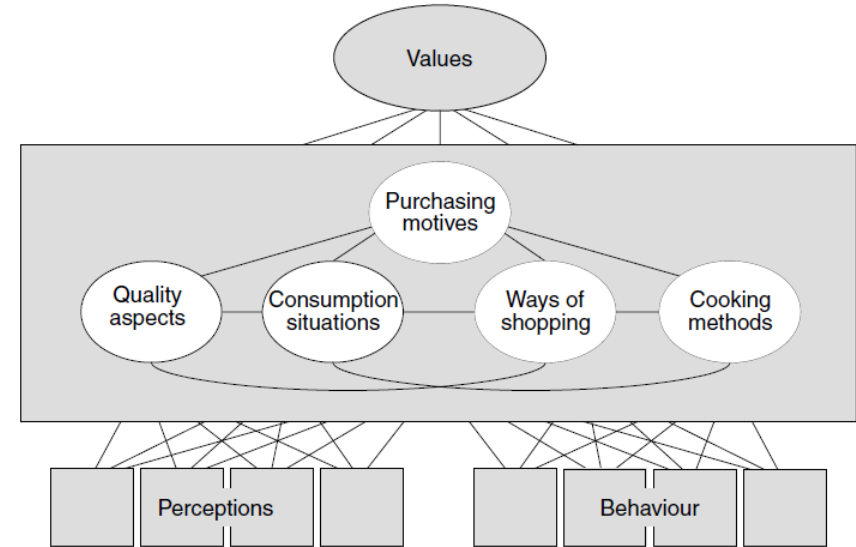


Fig. 1. The food-related lifestyle model.

APPROACH

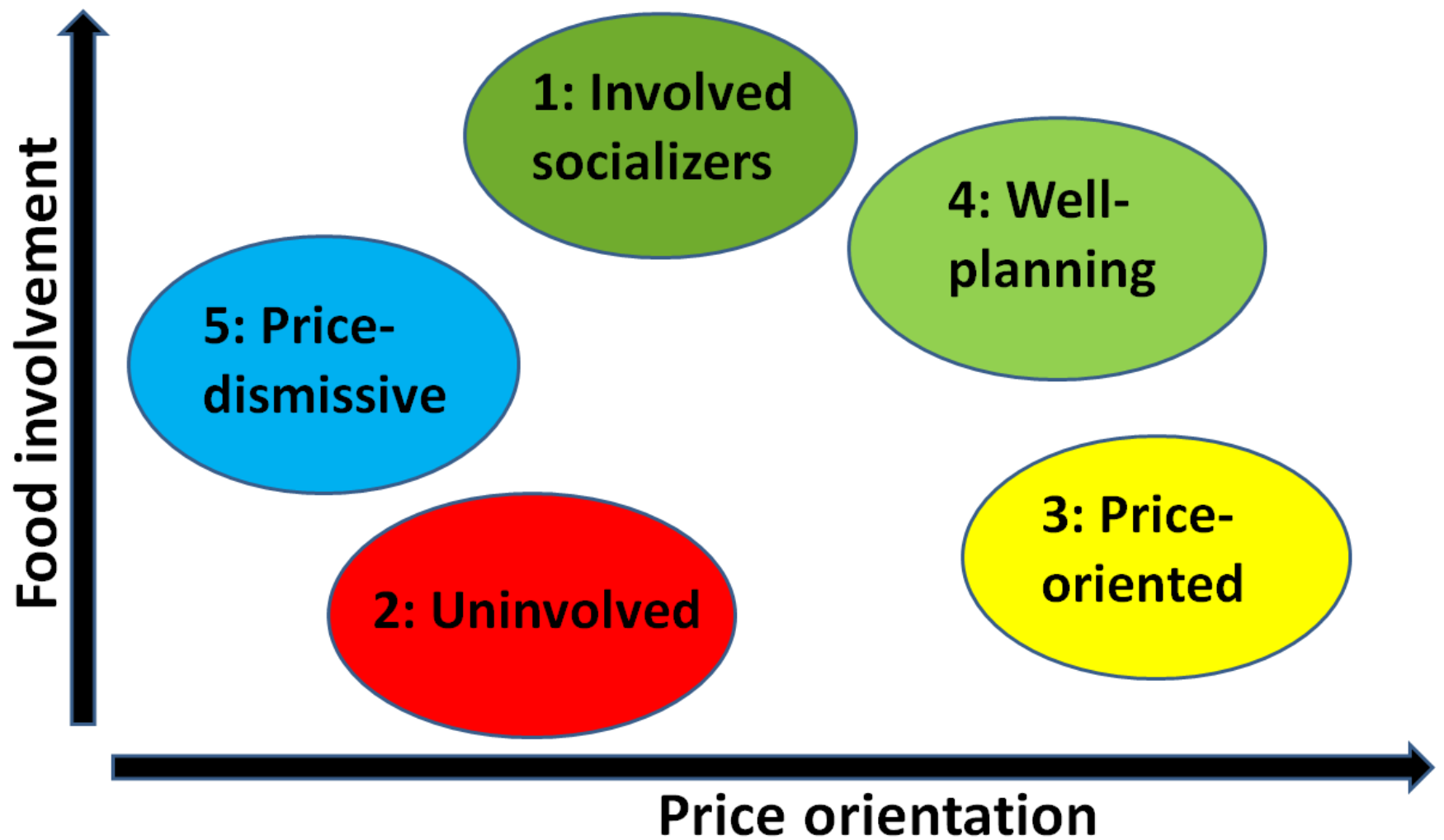
- ▶ 4250 consumers (850 per country): Denmark, Germany, Norway, Sweden, and the Netherlands, representative online panel

Measuring:

- ▶ Food (waste)-related lifestyle
- ▶ **Knowledge** of the extent of food waste
- ▶ Perceived relative **importance** of the food waste issue
- ▶ Frequency of **choosing the 'optimal'** vs. the 'suboptimal' product across six food categories in an experimental hypothetical binary choice test
- ▶ Self-reported estimation of **own food waste** in five food categories

APPROACH

- ▶ **Identifying ‘dimensions’** of ‘food waste-related lifestyle’ with a similar role and relevance across the five countries with factor analysis
- ▶ **Exploring ‘segments’** of consumers with similarities and differences in these dimensions with cluster analysis
- ▶ **Characterizing segments** on food waste related behaviours with analysis of variance



RESULTS AND IMPLICATIONS

1. Involved socializers

Eat out and invite for meals, choose high quality and ethical food

Food waste is an important issue, tend to waste relatively more and tend to choose the optimal food

younger, often German, 17.2%

- ▶ Support peer-to-peer knowledge and experience exchange and citizen interaction (e.g. NGO's, social networks)
- ▶ Sponsor or host events (e.g. 'feed the 5000')
- ▶ Communicate new social norms of sufficiency / 'less is better' instead of abundance in social gatherings involving food

RESULTS AND IMPLICATIONS

4. Well-planning

Plan meals in advance, use price as a criterion in shopping, derive self-fulfillment from cooking
tend to waste relatively little and might use the suboptimal food first
older, female, often Scandinavian, 21.0%

- ▶ Educate on effective household management advice
- ▶ Work towards engaging the segment to share advice e.g. in NGOs or citizen activities such as food sharing and gleaning
- ▶ Communicate renewed social norms on thriftiness and simplicity

RESULTS AND IMPLICATIONS

3. Price-oriented

Use price as a criterion in shopping, agree to normative statements to a greater extent than segment 2, do not plan meals

older, low income, often Norwegian, 19.6%

- ▶ Financially incentivize households to avoid wasting food via their waste bin
- ▶ Communicate the personal economic benefit of avoiding waste, or of 'thriftiness' behavior
- ▶ Educate or disseminate knowledge on simple advice for storage and food handling

RESULTS AND IMPLICATIONS

5. Price-dismissive

Moderately food involved, do not use price as a criterion in shopping, do not plan meals
older, high income, often Scandinavian, 21.9%

- ▶ Support development of logos or certificates on contribution to food waste avoidance
- ▶ Communicate new social norms of sufficiency / 'less is better' instead of abundance
- ▶ Offer food services of planning meals and avoiding food waste

RESULTS AND IMPLICATIONS

2. Un-involved

Indifferent towards norms, little importance of social relations tied to food or meals

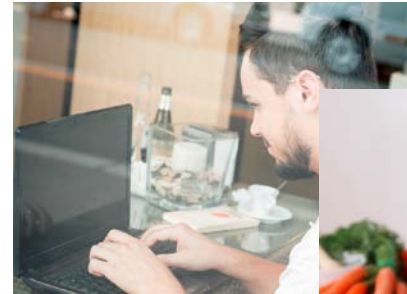
think food waste is not an especially important issue, tend to waste relatively more and tend to choose the optimal

younger, male, often Dutch, 20.3%

- ▶ Support supply chain stakeholders collaboration in reducing food wastage in the operations and in store
- ▶ Fund research on technology and processes for innovation in the supply chain
- ▶ Revise food-related laws which affect food waste
- ▶ Choice editing: Smarter packaging, longer shelf-life, reduce assortment, change standards

CONCLUSIONS

- ▶ 5 segments, distinct on food involvement x price orientation
- ▶ distinct 'food waste-related lifestyle' and food waste-related attitudes/behaviours
- ▶ => recommendations for targeted actions and policies for each





Research on supermarkets interaction with consumers in Denmark



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WHY EXPLORING THE SUPERMARKET- CONSUMER INTERACTION?

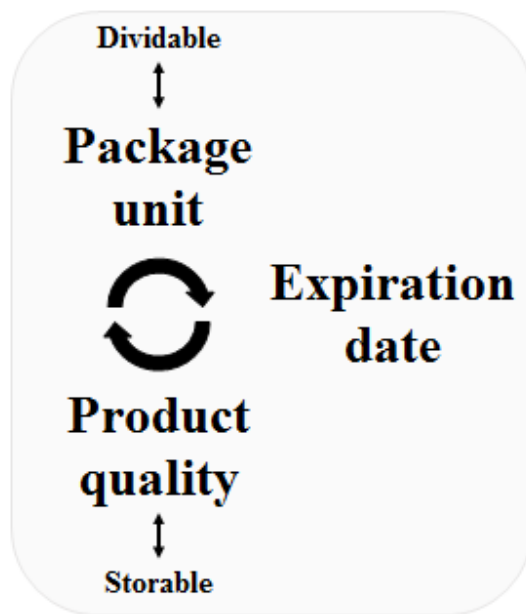
- ▶ Link between the supply chain and consumers
- ▶ Define standards and choose supply
- ▶ Influence consumer perception and choice
- ▶ Provide information and support
- ▶ Few powerful players to talk to for policy makers

APPROACH 1.

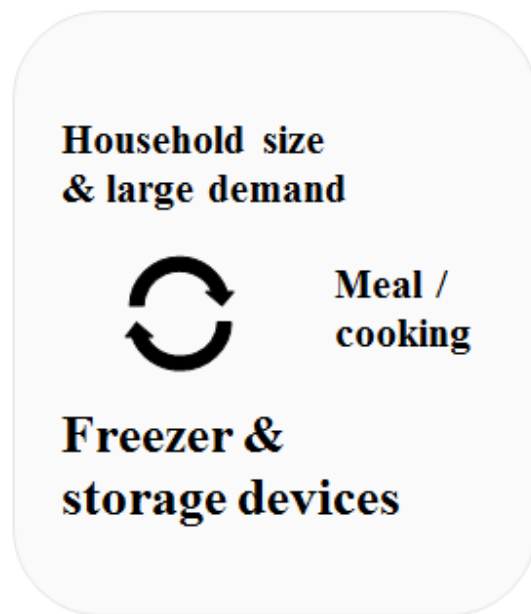
- ▶ Qualitative in-store accompanied shopping interviews with the ‘think aloud’ method of interviewing
- ▶ 16 consumers of different profile
- ▶ 1 supermarket in Aarhus with many price-reduced suboptimal foods offered
- ▶ Items added to the shopping list
- ▶ 2 interviewers – one observing



Product-related



Household-related



“

I would just look for the best price. And when I see this here, and it says it is reduced, I would want to see how long it's still **good**, how ripe they are, and if it is still worth paying for.





Well, it is cheap and you can always simply throw it into the **freezer**. Then it stays fine, right.

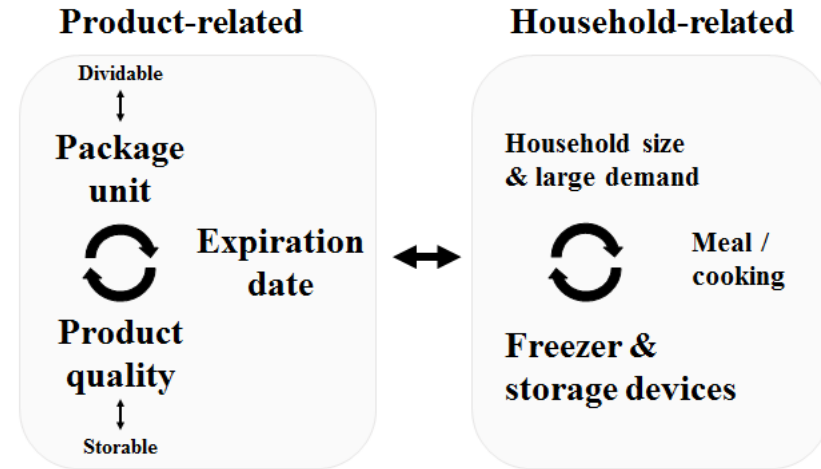
“

I look for price reductions, because we will cook it today. Yes, then it is okay if I buy this one on offer, the one which has the **date** of today. ... In that case I could come up with the idea of eating it for dinner, **cook** it together with potatoes.



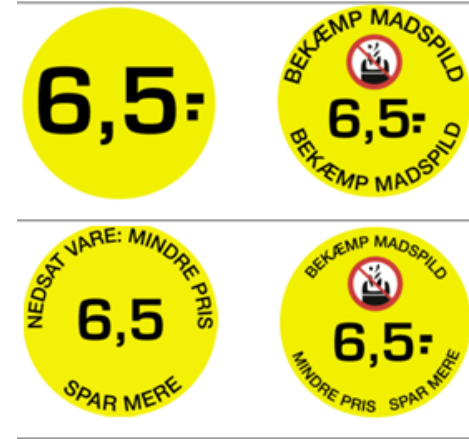
CONCLUSIONS

- ▶ Consumer engage in considering 3 in-store and 3 household-factors
- ▶ Supermarkets can support their consideration in favour of the suboptimal food:
e.g. provide information on freezing, cooking, educate on quality level and indicators of quality, improve dividability and storability



APPROACH 2.

- ▶ Quantative experimental online survey
- ▶ Between-subjects design with stickers varying communication and layout – mimicking Danish retailers
- ▶ 826 Danish consumers
- ▶ Survey questionnaire on attitudes / behaviours explaining likely choice of the price-reduced suboptimal food



RESULTS

- ▶ Different stickers / communication do not affect choice
- ▶ Gender effect

Choice explained by:

- ▶ **Familiarity** with retail action, **trust** in retailer
- ▶ Perceived **quality**
- ▶ Likelihood of **consuming** the entire food

CONCLUSIONS

- ▶ Rather than the communication or layout, it is the consistency of offering price-reduced suboptimal food which 'counts':
- ▶ increasing familiarity and trust, likely leading to incorporation of checking for price-reduced food into food purchase routines
- ▶ Support of good quality perception and of likely use in consumer households important

