

WHO IS EATING WHAT AND WHY?

Characteristics of Market Segments in Seafood Consumption Using Multi-Country, Multi-Species Data

Yuko Onozaka, Arne Sorvig, Ragnar Tveterås
UiS Business School, University of Stavanger



Universitetet
i Stavanger

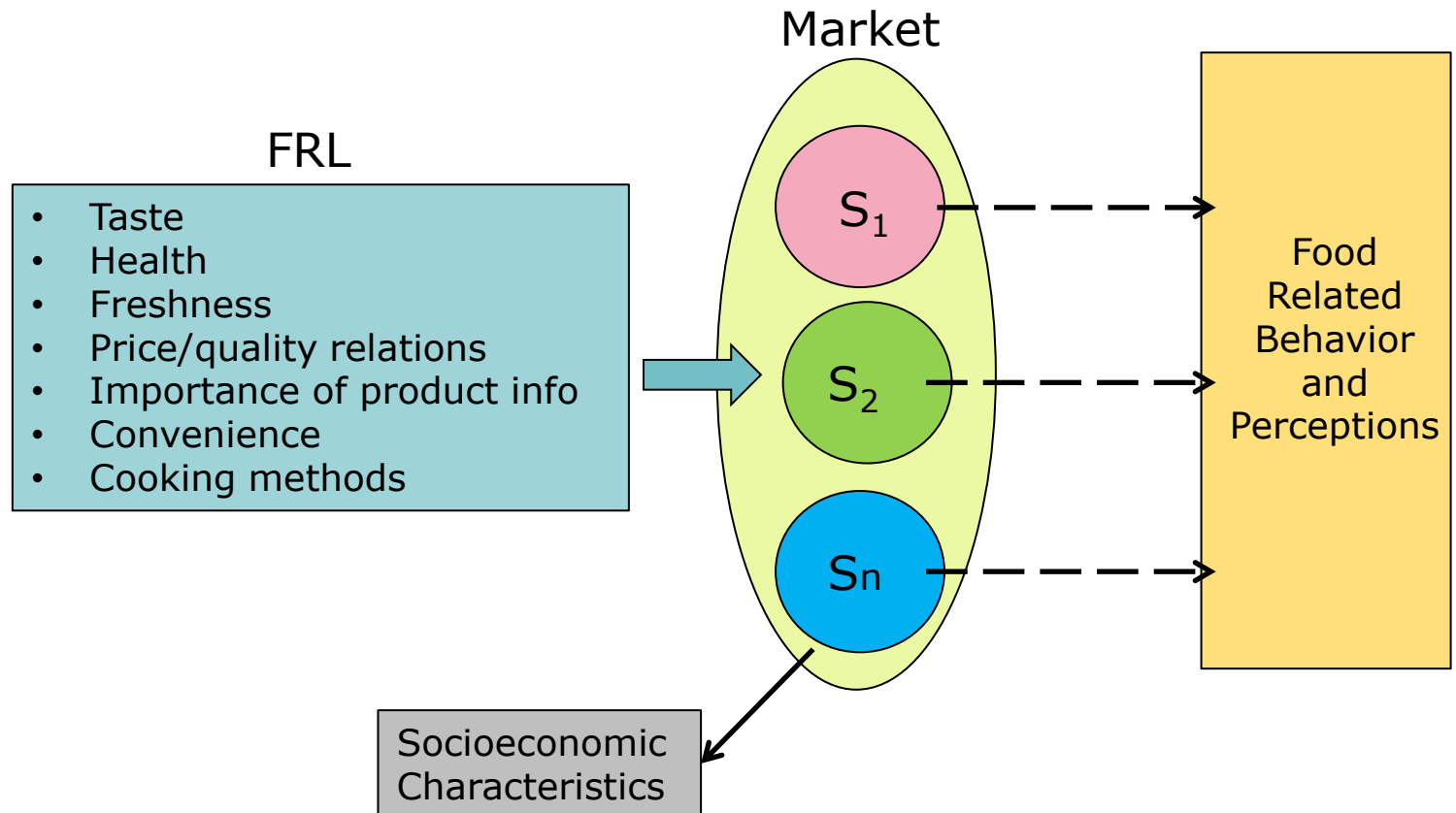


Project Overview

- Analyze the “positioning” of Norwegian seafood
- Obtain insights into consumers’ seafood consumption behavior and choices
- Consumer survey
 - Salmon (UK, Russia, Germany, France, Sweden)
 - Cod (UK, France, Germany, Sweden)
 - Herring (Russia, Germany, Poland, Sweden)
 - Target the general population in each country
 - Sample size is approximately 500 per country per species

Specific Objectives

- Gain insights on market heterogeneity
- Segmenting each market by the criteria of Food Related Lifestyle (FRL) measures



Market Segmentation

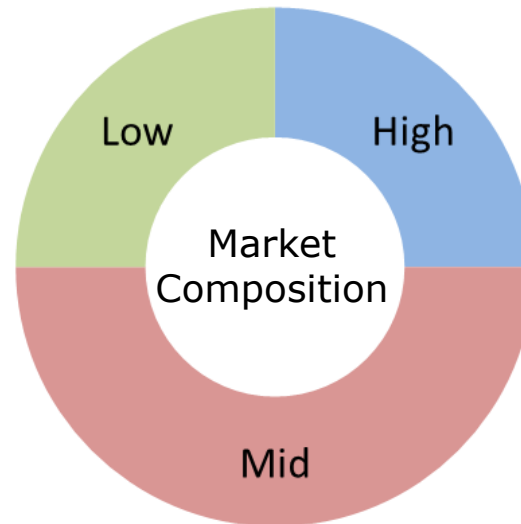
- How to segment the markets?
 - Lifestyle variables are latent (unobserved)
 - Need a reliable way to assign consumers to an appropriate segment
- Latent Class Analysis (LCA)
 - Estimates a probability that an individual belongs to a certain class (segment)
 - Optimized via Maximum Likelihood estimation with multiple starting points
 - Model comparisons based on chi-square statistics, AIC, and BIC
 - Measurement errors are accounted via structural equation modeling within the LCA

Sample size

	Salmon	Cod	Herring	Total
UK	495	509		1004
France	501	523		1024
Germany	476	503	508	1487
Russia*	476		490	966
Poland			509	509
Sweden	500	519	511	1530
Total	2448	2054	2018	6520

Market Segmentation Results

Approximate
segment size
(based on the
estimated
membership)

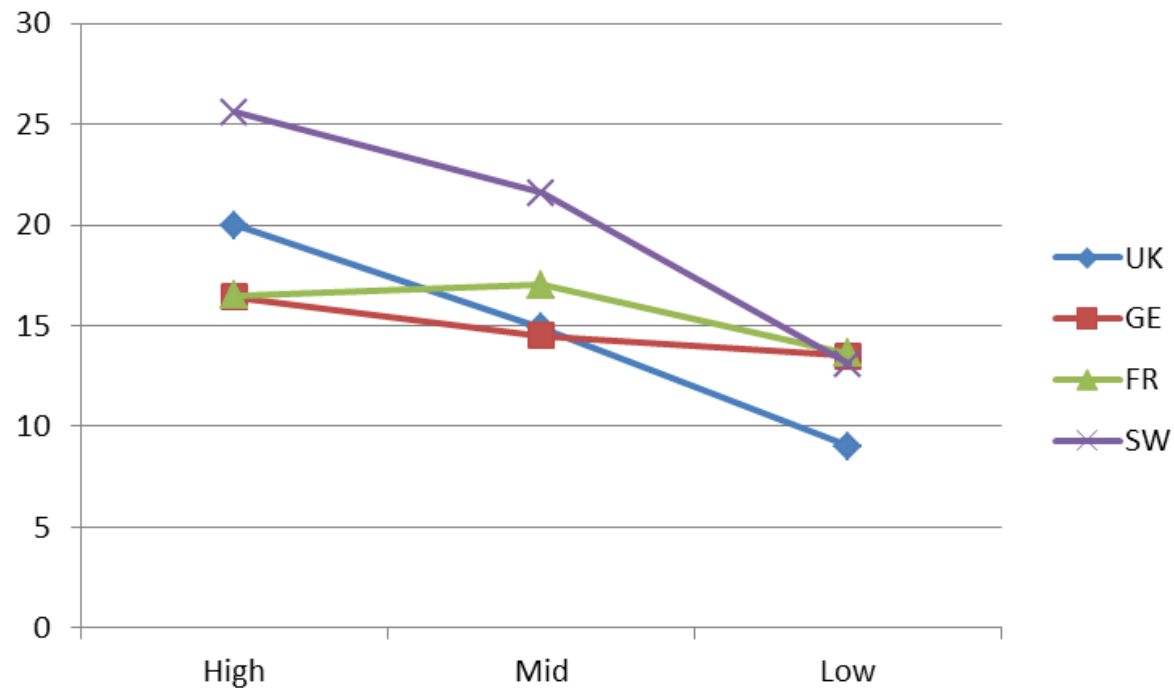


- Taste
- Health
- Freshness
- Price/quality relations
- Importance of product info
- Convenience
- (Not) Cooking



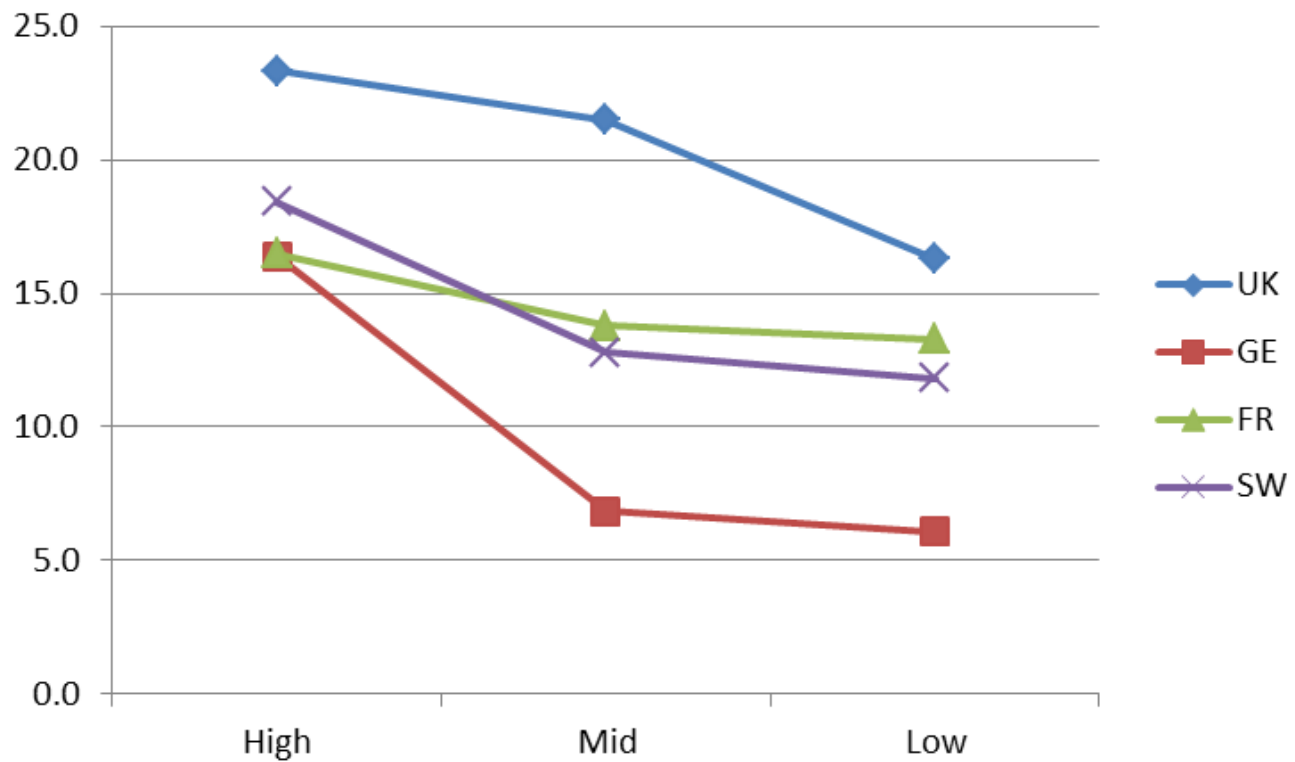
Annual Consumption Frequencies (average occasions/yr)

- Salmon



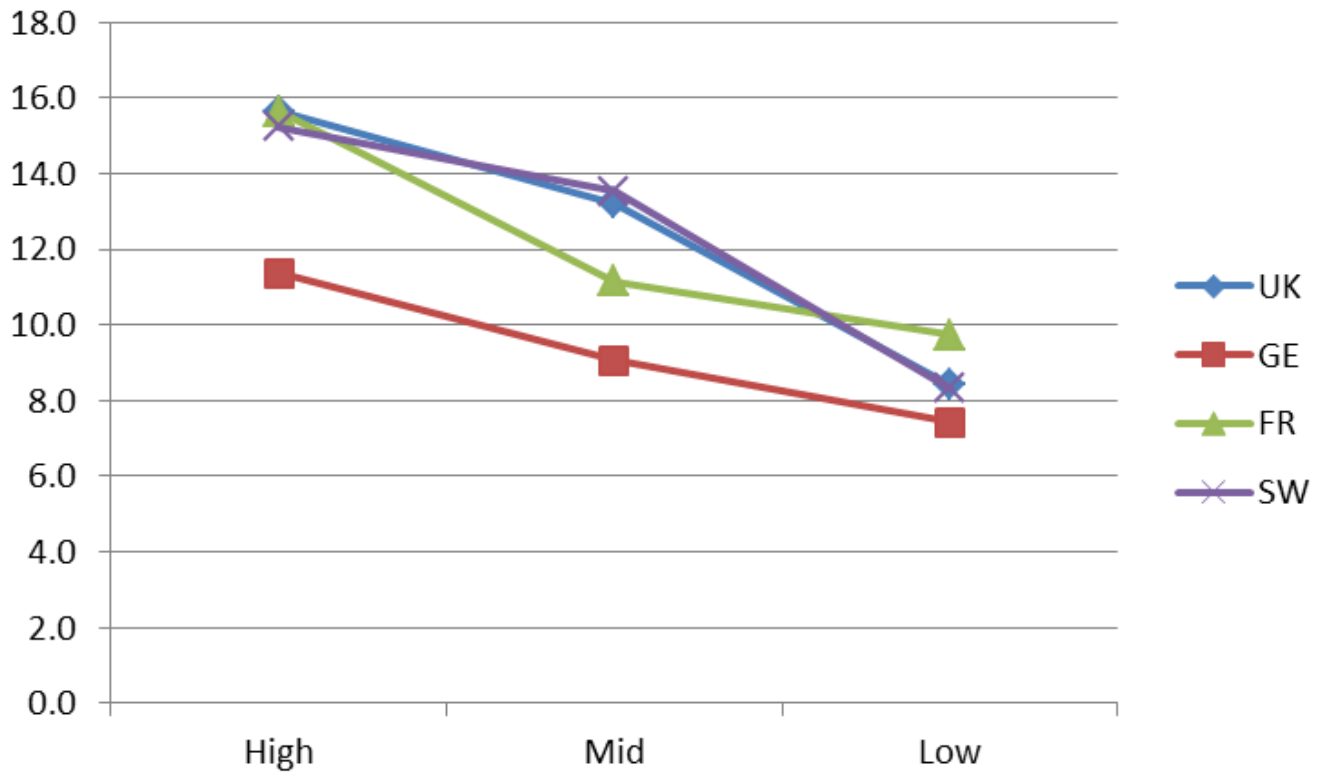
Annual Consumption Frequencies

- Cod



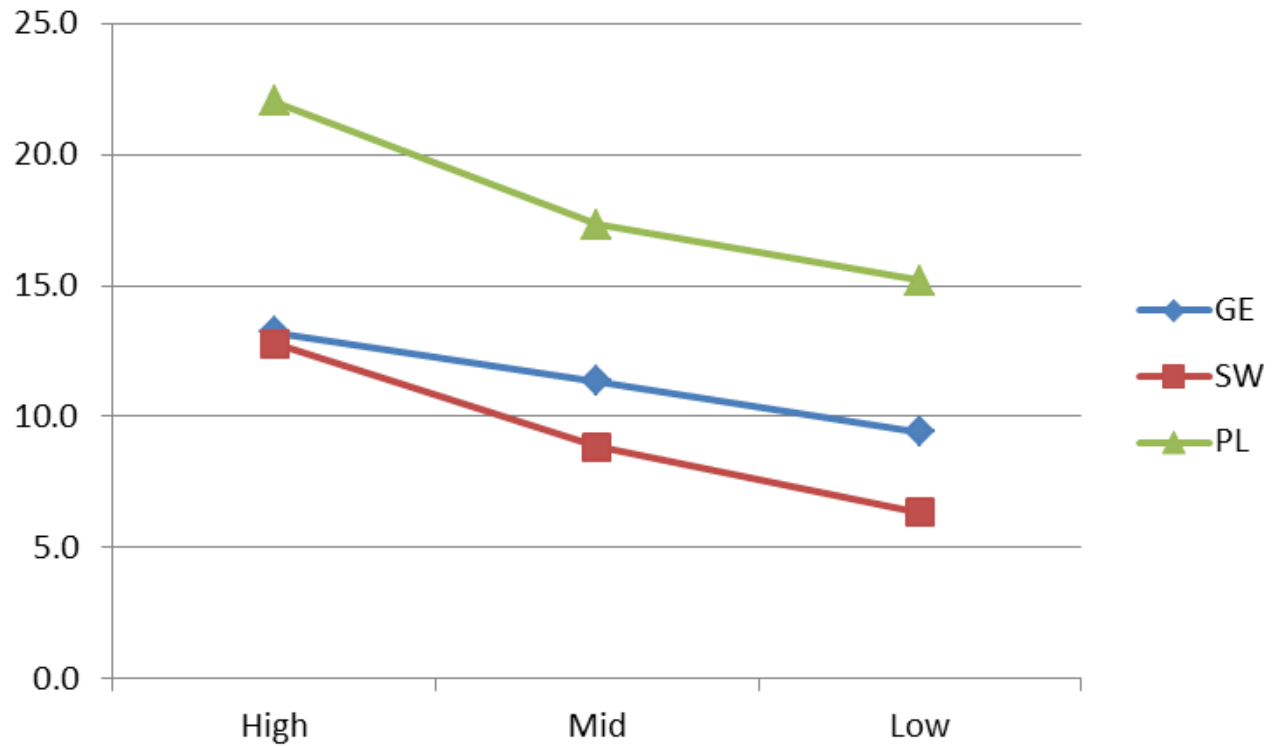
Annual Consumption Frequencies

- Other fin fish (excluding salmon)



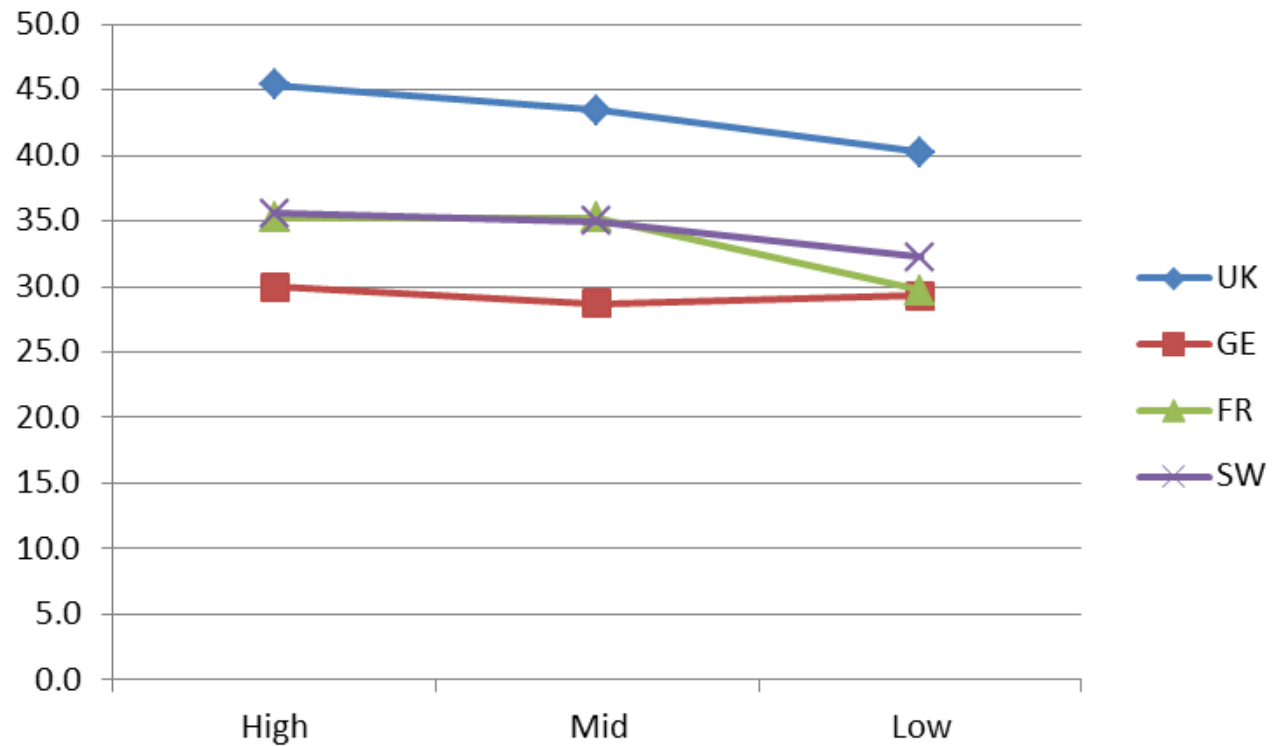
Annual Consumption Frequencies

- Herring



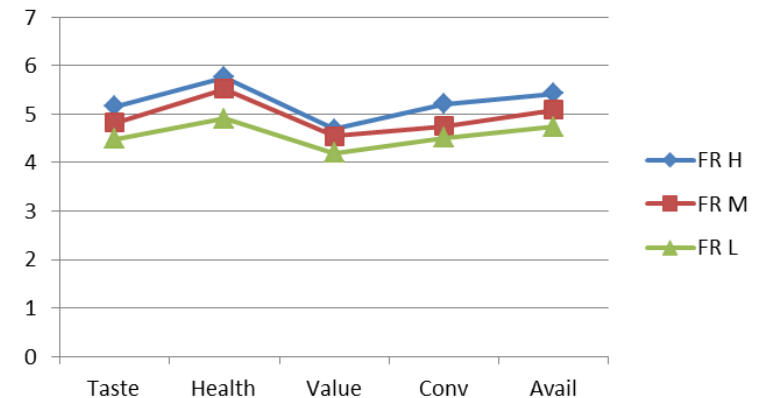
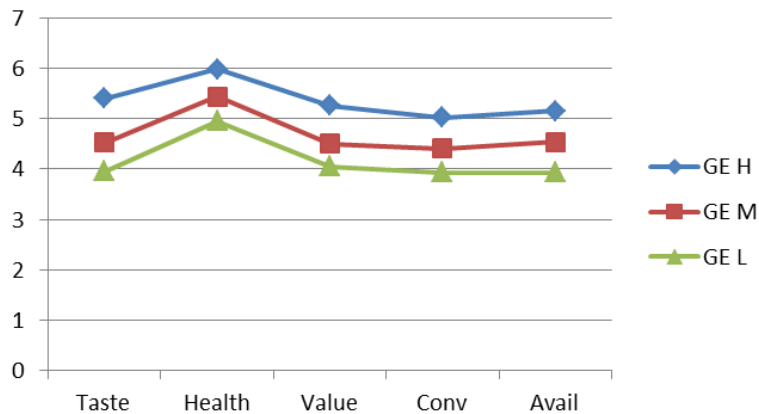
Annual Consumption Frequencies

- Chicken



Quality Perceptions

- In general, HIGH group tend to have higher average ratings for quality perceptions about seafood
- Opposite for LOW group



Example: Cod in Germany and France

Consumption pattern by products

- Not many obvious differences in consumption patterns
- Some differences:
 - Fresh/frozen salmon for warm meal consumed more by HIGH consumers in UK
 - Fillet consumed more by HIGH consumers in SW
 - Ready meal cod consumed more by LOW consumers in SW
 - Fin fish had several significant differences in UK, FR, and SW

Segments and demographic characteristics

- Very small explanatory power of demographic variables for segment assignment

Older, female → High and Mid

Younger, male → Low



Summary

- Market segmented by Food Related Lifestyle seem to capture the market heterogeneity, at least to some degree
- Lifestyle does affect the seafood consumption behavior
- It also affect the valuations of seafood
- HIGH FRL consumers
 - Higher consumption of seafood
 - Higher valuation of seafood
- Opposite for LOW FRL consumers

Implications

- Both marketing and policy challenges
- Identification of the segment
 - May not based on demographic variables
 - Seek related behaviors to identify the segment
 - E.g., seek HIGH and MID consumers through food magazine readership
 - Challenge may be to reach the segment who are not so interested in food