

## Rye bread in Sweden

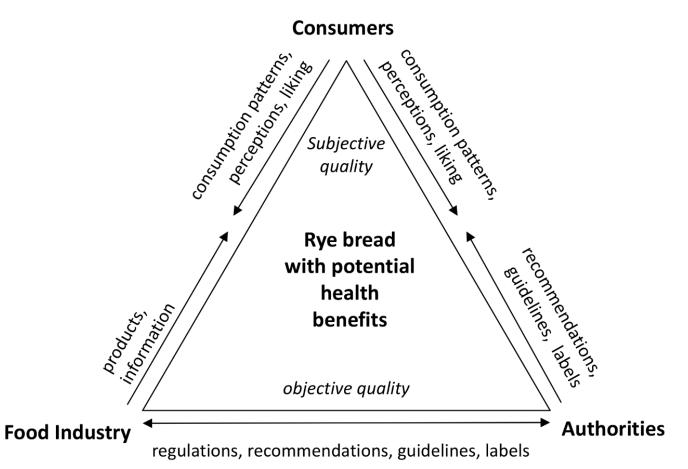
Health-related and sensory qualities, consumer perceptions and consumption patterns

#### Dr. Pernilla Sandvik

Postdoctoral researcher Department of Food, Nutrition and Dietetics Uppsala University pernilla.sandvik@ikv.uu.se 2017-06-07 Power or rye, Mariehamn, Åland



## Factors investigated and discussed



Sandvik, P. (2017). *Rye bread in Sweden: Health-related and sensory qualities, consumer perceptions and consumption patterns* (Doctoral dissertation, Acta Universitatis Upsaliensis).

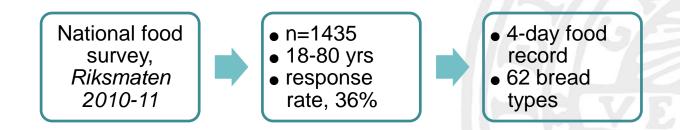


## Investigation of bread consumption patterns in Sweden

Study

### Aim

to compare bread consumption patterns among Swedish adults in relation to selected socio-demographic, geographic, and lifestyle-related factors.....to investigate the intake of whole-grain and rye bread and the context of bread consumption



Sandvik, P., Kihlberg, I., Lindroos, A. K., Marklinder, I., & Nydahl, M. (2014). Bread consumption patterns in a Swedish national dietary survey focusing particularly on whole-grain and rye bread. Food & Nutrition Research, 58:24024





### Selected findings

- "Mainly white bread consumers" associated with e.g.
  - Younger age (18-44 years)
  - Lower educational level
  - Children in the household
- Younger consumers and "mainly white bread consumers" more often ate bread on restaurants and "on the run"

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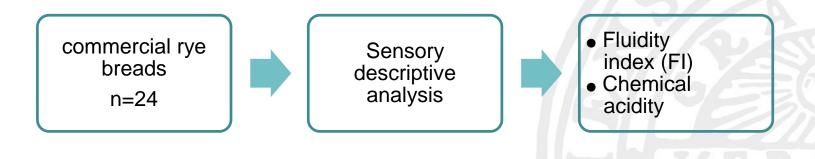


## Characteristics of rye bread on the Swedish market

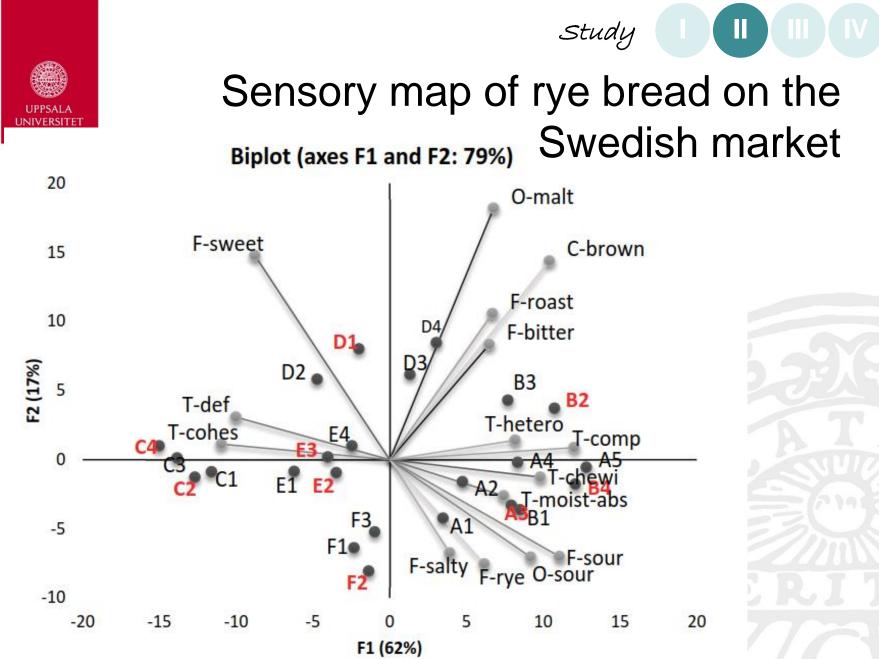
Study

#### Aim

to characterize commercial rye bread on the Swedish market using sensory descriptive analysis, fluidity index, chemical acidity and selected package information



Sandvik, P., Marklinder, I., Nydahl, M., Næs, T., & Kihlberg, I. (2016). Characterization of commercial rye bread based on sensory properties, fluidity index and chemical acidity. *Journal of Sensory Studies, 31*, 283-295.



Sandvik, P., Marklinder, I., Nydahl, M., Næs, T., & Kihlberg, I. (2016). Characterization of commercial rye bread based on sensory properties, fluidity index and chemical acidity. *Journal of Sensory Studies, 31*, 283-295.

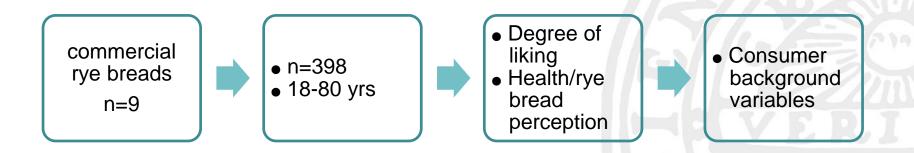


### Rye bread liking and perception

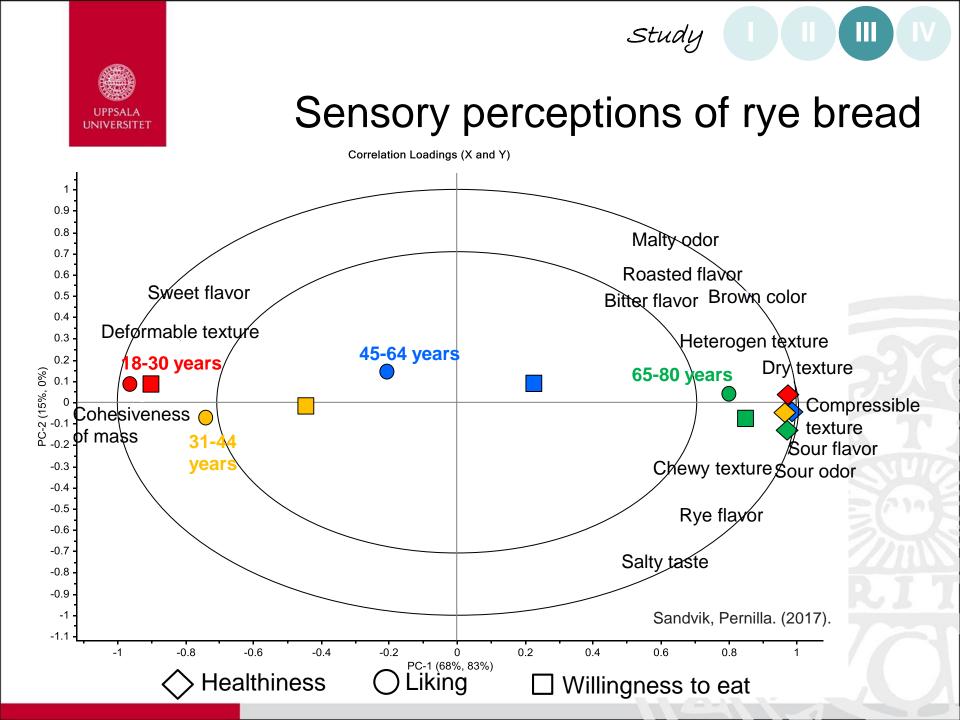
Studi

#### Aim

to compare liking for commercial rye bread among younger and older Swedish consumers in relation to socio-demographics, childhood bread-eating habits and food choice motives. Further, to describe consumers' sensory perceptions of a "rye bread" and healthiness in bread



Sandvik, P., Nydahl, M., Marklinder, I., Næs, T., & Kihlberg, I. (2017) Different liking but similar healthiness perceptions of rye bread among younger and older consumers in Sweden. Food Quality & Preference, 61

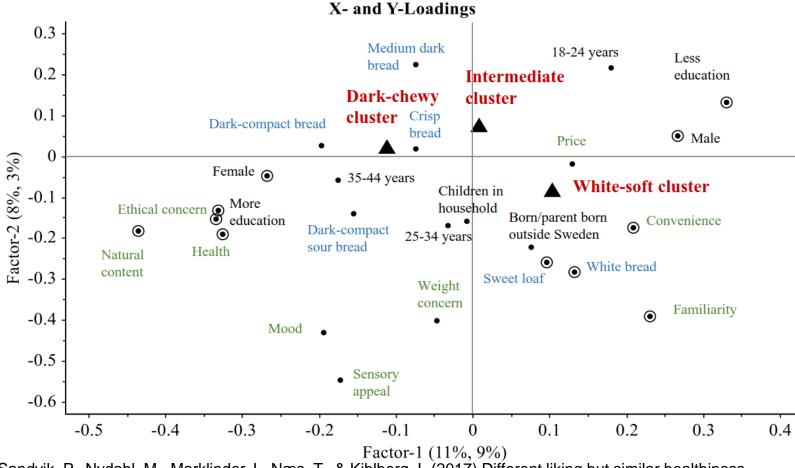


UPPSALA UNIVERSITET

a) 18-44 years

## Consumer background variables associated with rve bread liking

Study



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### Health-related bread perceptions

Studi

#### Aim

to describe consumers' health-related perceptions of bread by exploring which health-related quality attributes consumers associate with bread and whether consumer perceptions differ as a function of age and educational level



Sandvik, P., Nydahl, M., Kihlberg, I., & Marklinder, I. Consumers' health-related perceptions of bread . Implications for labeling and dietary counceling. Submitted.



# Some conclusions and implications

"Target consumers"	Younger adults, families with children, lower education, less familiar with rye bread, convenience and familiarity more important in food choice
Liking	Different liking patterns for rye bread among younger and older adults. Aline sensory quality of bread rich in rye with consumer liking.
Health-related perceptions	Challenge for consumers to identify healthier bread. Based on sensory perceptions consumers were able to identify healthy alternatives

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### Thank you!

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