

Careful, Gentle, Minimal -What are the principles of organic processing?

Consumer perspectives

Katrin Zander, Ronja Hüppe, Karlotta Koch, Claudia Meier, Hanna Stolz, Lisa Borghoff







Background

- Consumers are an important stakeholder group
 - \rightarrow to be included in the process of developing a Code of Practice
- Knowledge on consumers' expectations of organic food processing is low

Objective

Analyse consumer expectations and acceptance of (organic) food processing technologies

Research Questions

- What do consumers know about (organic) food processing?
- What is careful/organic processing in the eyes of consumers?
- Which milk processing methods do consumers prefer?





Methods

Focus group discussions

9 focus groups in Germany and in Switzerland

Online Survey in Germany and Switzerland (N=1287)

600 in Germany and 687 in Switzerland





Associations with processed food

- Preservation / deep-freezing & pasteurization
- Additives, salt, sugar, plastic packaging



time-savers, convenient, easy to portion, non-seasonal







General uncertainty \rightarrow e.g. ingredients, packaging, CO₂ footprint





THE AUTHOR(S)/EDITOR(S) ACKNOWLEDGE THE FINANCIAL SUPPORT FOR THIS PROJECT PROVIDED BY TRANSNATIONAL FUNDING BODIES, BEING PARTNERS OF THE H2020 ERA-NET PROJECT, CORE ORGANIC COFUND & THE COFUND FROM THE EUROPEAN COMMISSION

Expectations of organic processed food

- Organic ingredients
- Transparent and sustainable value chains



BLE / T. Stephan

BLE / D. Menzler

FiBL : THÜNEN

→ Organic processing technologies not part of consumers' 'organic concept'



BLE / T. Stephan





BLE / T. Stephan



Trade-offs



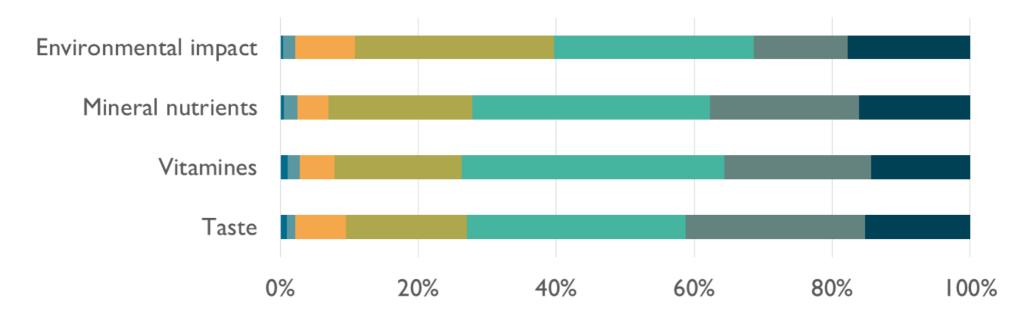








Careful processing - Acceptance of loss in quality aspects



- Complete/very large modification/loss/impact Large modification/loss/impact
- Moderate modification/loss/impact
- Very minor modification/loss/impact
- Others (not relevant/l don't know)

- Minor modification/loss/impact
- No modification/Loss/Impact

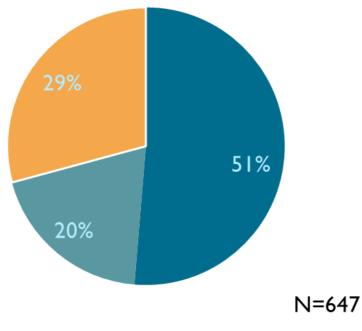
Question: How well should a processed food product at least perform in the following four categories to be still considered as carefully processed?





Consumer preferences for milk processing method

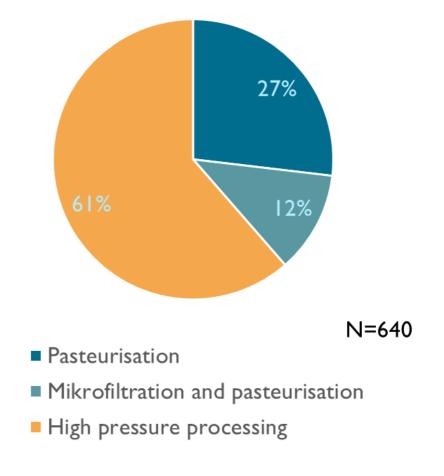
Without information treatment



Pasteurisation

- Mikrofiltration and pasteurisation
- High pressure processing

With information treatment



FiBL

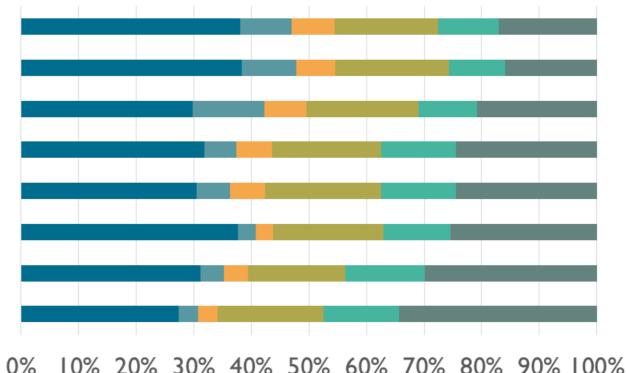
THÜNEN

Question: What would be your favorite milk processing method?



Suitability of various methods for organic processing

Pulsed electric fields Hot extrusion Ultra high temperature processing Microfiltration and Pasteurisation Homogenization Cold extrusion High pressure processing Pasteurisation



- 0 = I don't know
- 2 = I rather disagree
- 4 = I rather agree

- I = I completely/almost disagree
- 3 = I neither agree nor disagree
- 5 = I completely/almost agree

N=647

Question: Which of the following processing methods would you consider to be suitable for 'organic'? (Without information)





Consumers perception of 'careful processing'

- Few processing levels, few modifications of food, retain originality
- Healthy, maintenance of ingredients, vitamins and micro elements
- Maintenance of taste, good taste
- "Environmental friendly" only mentioned by few respondents
- Relatively large share of answer "no idea"

keep taste and nutrients

Question: Please describe what careful processing means to you!





Conclusions

Milk processing

 high pressure processing as innovative milk processing method might be an interesting alternative for milk preservation

Careful processing

- Consumer focus is on maintenance of vitamins and (micro-) nutrients and taste
- Low acceptance of modification/loss/impact through processing
- Retain original products as much as possible \rightarrow naturalness

Future consumer research in ProOrg

- What is the consumers' understanding of processing quality?
- Do the understandings of processing quality of processors and consumers match?
- Do consumers understand what processors want to say about food processing quality?







Preliminary consequences for the Code of Practice

- Consumers' with low knowledge of (and interest in ?) organic food processing
- High variation in consumer preferences
- Processing technologies are not part of consumers' concept of organic
- Careful \rightarrow keep taste and nutrients, minimal modifications, natural, healthy
- Organic values \rightarrow Principle of Care
- Anticipation of consumers' preferences
- Transparency
- Well-targeted communication







THANK YOU FOR YOUR ATTENTION

