

# Nutritional and environmental information: results from a choice-experiment

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## **EU-project: SUSFANS**

#### Overall aim of SUSFANS

To strengthen sustainable food and nutrition security in Europe, by advising food policy makers regarding healthy and sustainable food production and consumption

#### Aim current research

To gain insight in how to communicate about sustainability and health on fruit and vegetable products with a choice-experiment





## Background

- Product information via labels influences:
  - Product perceptions
  - Repurchasing intentions (Samant & Seo, 2016)
- Which aspects of information influence consumers?
  - Combination health & sustainability (Verain et al., 2016)
  - Specificity (construal level theory; Liberman & Trope, 1998)
  - Number (Grunert & Wills, 2007)
- Trade-off with price
  - An interest in price leads to less label use (Grunert & Wills, 2007)





# Method Choice-experiment

#### 4 products:

- Fresh vegetables & fresh fruit
- Frozen vegetables & frozen fruit

#### Information on the products

- Content of information
  - Health
  - Sustainability
  - Both
- Level of specificity
  - Specific
  - Medium
  - General

- Use and type of number
  - Percentage
  - Grade
  - No number
- Price
  - Low
  - Medium
  - High





# Material Choice-experiment

Fresh Fruit



Fresh Vegetables



Frozen Fruit



Frozen Vegetables







# Claims: Content & specificity

	Sustainable	Health	Combi
General	Sustainable product	Healthy product	Sustainable & healthy product
Medium	Environmentally friendly Ethically responsible Economically responsible	Contains nutrients Contains minerals Contains vitamins	Contains nutrients Contains minerals Contains vitamins & Environmentally friendly Ethically responsible Economically responsible
Specific	Reduced CO2 emissions Ethical working conditions Fair trade	Contains vitamin C Contains potassium Contains fibre	Contains vitamin C Contains potassium Contains fibre & Reduced CO2 emissions Ethical working conditions Fair trade



#### Example of the French claims used in the choiceexperiment







# Number & price

#### Number

- Percentage
  - Meets 80% of the requirements for sustainable / healthy food
- Grade
  - Scores 8 out of 10 on the requirements for sustainable / healthy food
- No number
  - Meets most of the requirements for sustainable / healthy food

#### Price

- Low
- Medium
- High
- à Based on average price of the product and WTP (pilot)
- à Difference between medium and low & high is 2.5%





## Method choice-experiment

- N=1483
  - Netherlands (N=494); Czech Republic (N=493); France (N=496)
- Representative sample in terms of age, gender, education, income and rural living area
- Winter 2017
- The respondents were divided into four groups
  - Frozen fruits, fresh fruits, frozen vegetables, fresh vegetables
- Choice experiment
  - Forced choice
  - Orthogonal design (9 choice sets)





## Example choice set

- 9 sets of choices

- two choice options

"Imagine shopping at a store and looking fo a fresh fruit box, wh of these two options would you choose?"



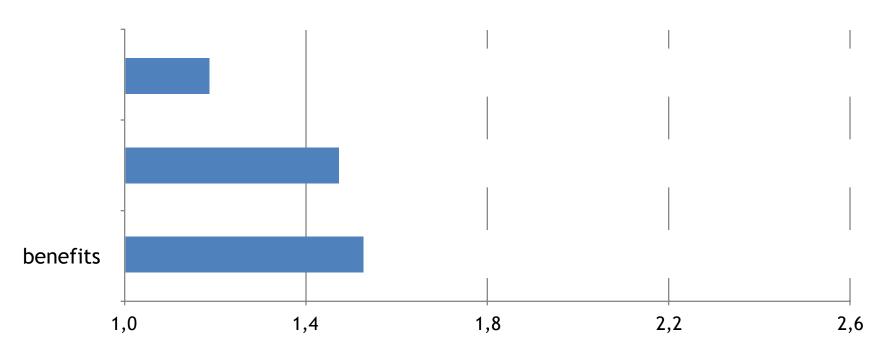








## Results: content of information

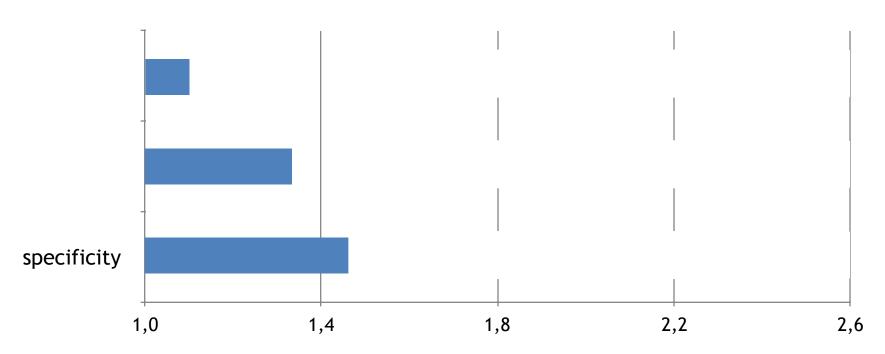


- Consumers prefer health information over sustainable information
- Consumers prefer both over only health or only sustainable





## Results: specificity

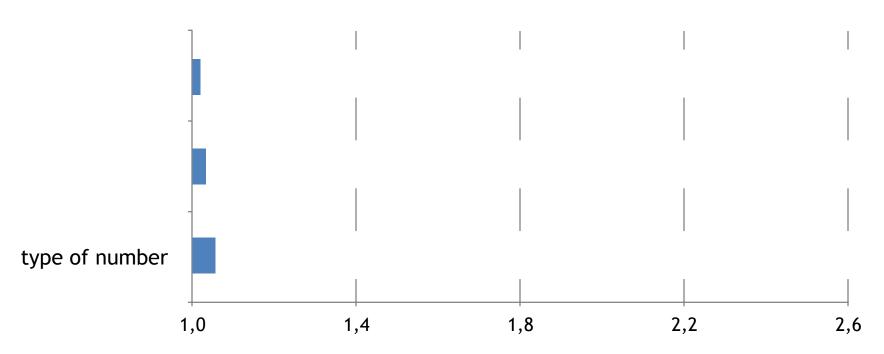


Consumers prefer more specific information





### Results: number

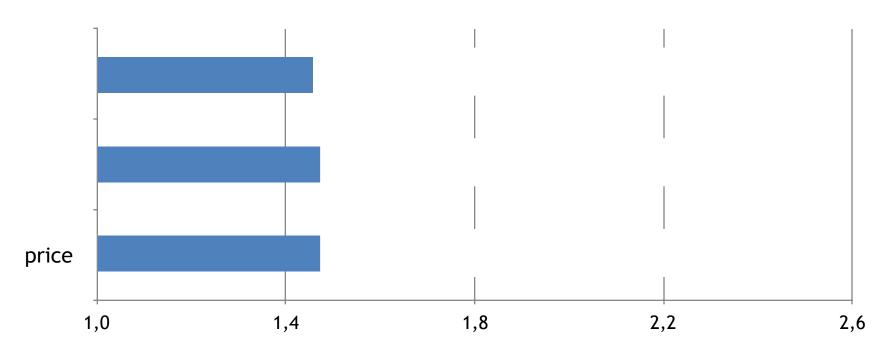


- A grade slightly influenced product choice more than no information
- A grade did not differ from adding a percentage
- Adding a percentage also did not differ from adding no information.





# Results: price



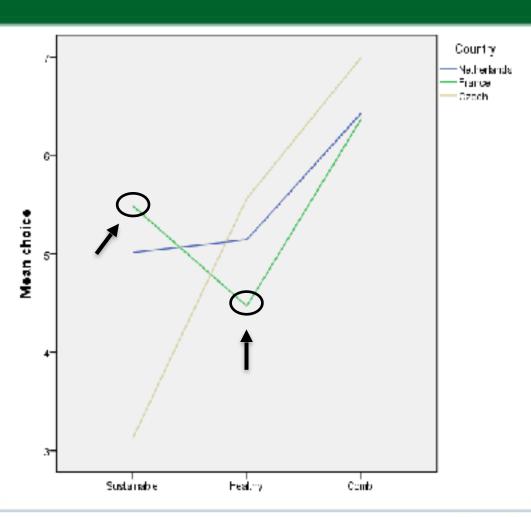
- The lower the price the better
- Price had the largest effect in our design





## Demographics and product differences

- For all countries, for all products, for all people (age, gender, education)
- Exception: For the French sustainable information influences their choice more than health information







## Strengths and limitations

### **Strengths**

- Choice experiment (lower social desirability; Auger & Devinney, 2007)
- Large sample in three different countries
- Materials were piloted

#### Limitations

- Hypothetical choices
- Results depend on trade-offs
- Specific information is also more information





## Take home messages

- Price was the largest indicator of choice
- Product information on <u>both health</u> <u>and sustainability</u> influences choice more than only health or sustainability
- More <u>specific information</u> influences product choice more than general information
- Framing of <u>numbers</u> have little or no effect on product choice







## Thanks for your attention!



