

Food intake insights in urban China, with a focus on pig meat (SMP17002)

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Background and research question

- SMP 2016: Feasibility of Sino-Dutch meat centre
 - COV start a promotion campaign in several Asian countries: Trusted pork from Europe
 - Research question: How do consumer motives and preferences affect consumer demand in urban China for (European) pig meat products?
- more consumer insights needed that can be implemented in developing campaign materials

Goal and sample



Goals consumer study:

- Insights in **food choice motives** among consumers in urban China and its effects on consumers' preference for pig meat products produced in Europe over pig meat produced in China
- Insights in **importance of different pig meat qualities** and its effects on consumers' preference for pig meat products produced in Europe

Sample:

- Consumer survey conducted in Beijing, Shanghai and Guangzhou (by panel MSI-ACI)
- N = 610 respondents
- Randomly selected



Main themes questionnaire

- **Food choice motives:** health, convenience (to eat and prepare), sensory appeal, body weight, price, familiarity, mood, environmentally-friendly
- **Importance pig meat qualities:** safety, free of residues, track & trace whole production chain, stringent controls production chain, hygiene, sustainability, animal welfare
- **Food involvement** and food **neophobia** (individual differences)
- **Consumers' preference for EU pig meat products** (over Chinese)
- **Information sources:** usage, trust and preference

Food choice motives - descriptives



- Measured on a 1-7 scale (1 = very unimportant; 7 = very important)
- “Everything” is important, but **health and sensory appeal** are the most important food choice motives for consumers in urban China, while price is the least important food choice motive (but still quite important)

Motive	Average <i>(mean + standard deviation)</i>
Health	5.71 (0.82)
Sensory appeal	5.71 (1.01)
Convenience	5.51 (0.81)
Environmentally-friendly	5.47 (0.99)
Mood	5.42 (0.88)
Familiarity	5.34 (0.86)
Weight	5.30 (1.02)
Price	4.84 (1.22)

Importance pig meat qualities - descriptives

- “It is important to me that the pig meat in the products I eat” (1 = very unimportant; 7 = very important)

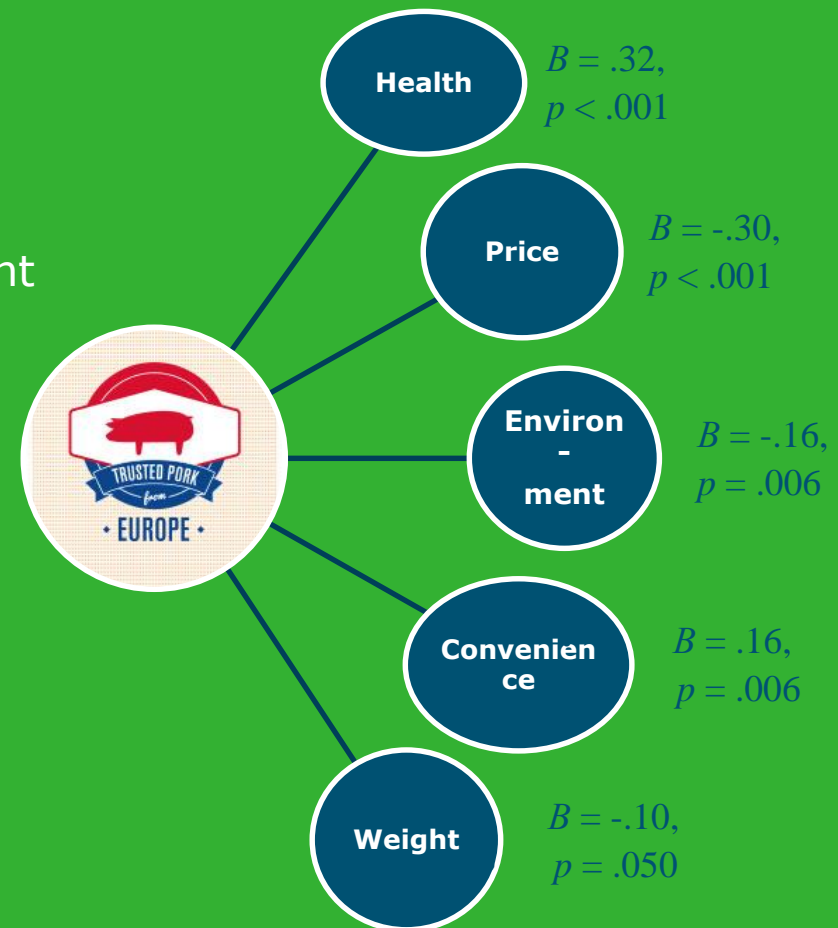
Pig meat quality	Average (mean + SD)
Is highly safe	6.10 (1.06)
Is produced with high standards in terms of <u>hygiene</u>	5.96 (1.03)
Is produced via <u>stringent controls</u> at all stages of the pig meat production chain	5.87 (1.07)
Is <u>free of residues</u>	5.79 (1.06)
Is produced with high standards in terms of <u>sustainability</u>	5.70 (1.05)
Can be <u>tracked and traced</u> through all stages of the production chain	5.64 (1.07)
Is produced in a manner that takes animal welfare into account	5.27 (1.18)

- “Everything is important” regarding eating pig meat products, but **safety** is most important, while animal welfare is least important (but still quite important)

Effect of food choice motives on preference pig meat Europe over China

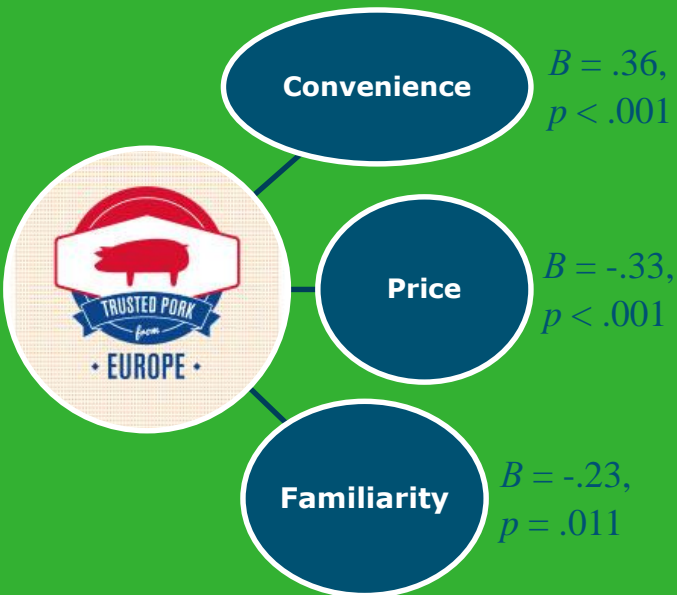
- Stepwise regression analysis
- Food choice motives:
 - The more **health** is important (++)
 - The less **price** is important (--)
 - The less the **environment** is important (-)
 - The more **convenience** is important (+)
 - The less their **weight** is important (-)...for consumers when making food choices,

the stronger their preference is for EU pig meat (over pig meat products from China)

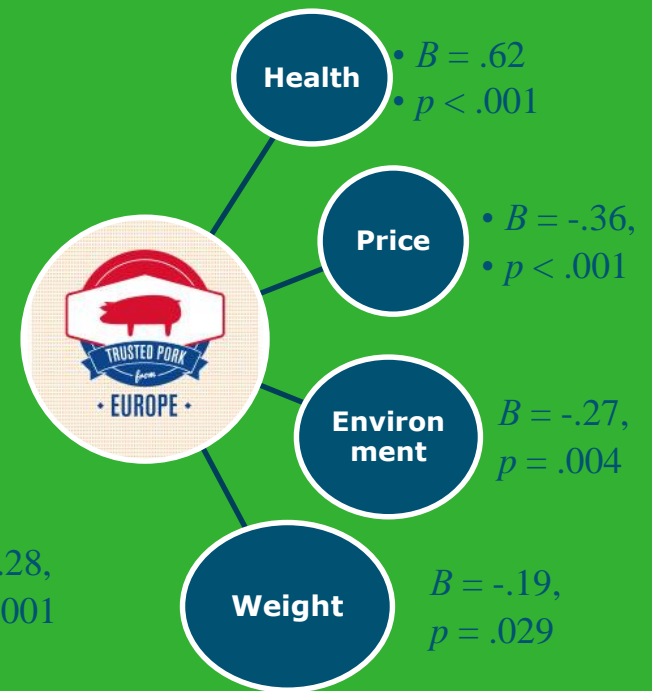


Differences in role of food choice motives between cities

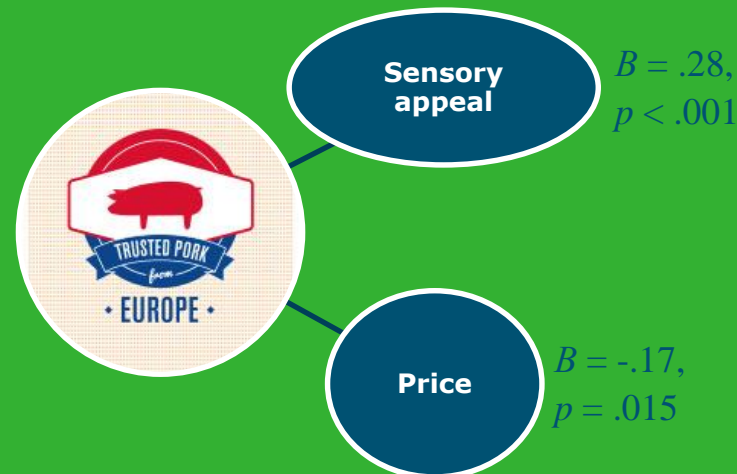
Beijing:



Guangzhou:



Shanghai:



Effect of importance pig meat qualities on preference pig meat Europe over China

■ Pig meat qualities:

1. The more **safety** of pig meat is important (+)
2. The more **hygiene** of pig meat is important (+)

...for consumers, the higher their preference is for EU pig meat over Chinese pig meat



Usage information sources

- “To what extent do you use the following information sources when looking for information about food products?” (1 = not at all; 7 = very much)

Source	Average (mean + SD)
Family and friends	5.53 (1.03)
Companies that sell food (e.g. supermarkets)	5.31 (1.12)
Food manufacturers	5.02 (1.25)
Government	4.71 (1.30)
Food conventions	4.56 (1.40)

- **Family and friends** are most often used as an information source
- Government and food conventions are used the least

Trust information sources

- “To what extent would you trust information about food products that you get via the following information sources?” (1 = not at all; 7 = very much)

Source	Average (mean + SD)
Family and friends	5.61 (0.99)
Government	5.13 (1.23)
Companies that sell food (e.g. supermarkets)	5.07 (1.16)
Food manufacturers	4.88 (1.23)
Food conventions	4.70 (1.30)

- Family and friends** are most trusted (and most often) used as an information source

Conclusions

- Overall, from the perspective of consumers' **food choice motives**, campaigns stressing the **health benefits** of EU pig meat products can potentially boost consumers' preference for EU pig meat products.
- The importance of **price** as a food choice motive has a strong negative effect on consumers' preference for pig meat products from Europe (over China). Therefore, it appears to be important to target consumers in urban China who are not price-conscious. E.g., campaigns can be implemented in more up-scale outlets selling pig meat products.
- Overall, from the perspective of the **importance of pig meat qualities**, campaigns stressing the **safety** and **hygiene** benefits of EU pig meat products can potentially boost consumers' preference for EU pig meat products.
- Overall, consumers in urban China mainly look for information on food products via **family and friends**, which is also the type of information source in which they have the highest trust → try to use social media as information source and try to create word-of-mouth in the campaign

Evaluation results with partners

- Results of the consumer study have been discussed with COV in a final project meeting.
- Overall, the results confirm the current campaign objectives, activities and content to promote EU pig meat in China (e.g. importance safety and health guarantees of EU pig meat products)

Background PPS project to be developed

For the Dutch meat sector, export of by-products to China is crucial, since there are hardly any other customers for these by-products. These by-products are mainly bought by importers on price. Also muscle meat export is relevant for the carcass valorisation, esp. of added value products.

However, because of an increase in attention in China to eat more low(er)-fat meat products (due to obesity problems), demand in China is shifting.

COV has signed a collaboration agreement with the Chinese Meat Association (CMA) to support with the implementation of a quality system (e.g. IKB) in China, for veal, pork and beef. The goal is that not only price, but especially quality plays an important role when importing by-products and muscle meat.

Goal and research themes PPS Proposal

Project goal PPS:

Development and implementation of a Sino-Dutch Red meat Quality System.

Research questions:

- How can CMA develop and implement a Red meat quality system like IKB in the Netherlands?
- How can the supply of edible offals and muscle meat to China be remained without harming the health of Chinese consumers?
- How can we educate Chinese industrial buyers to develop the market further from price-oriented to quality-oriented?

Research themes

- Hygiene
 - Traceability
 - Control in all production stages
 - Logistics
 - HACCP
 - Chain development
 - Possibly also meat selection.
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- Meeting in January planned for discussion with industry representatives