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Ensuring the Integrity of the European food chain

Chinese Consumers' Attitudes to Food Fraud

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Presentation Overview

- Food fraud and authenticity
- Results from Food Integrity: Chinese consumers' consumer attitudes and perceptions of food fraud and authenticity
- Implications for food safety



Food Fraud is:

'A collective term used to encompass the **deliberate and intentional** substitution, addition, tapering, or misrepresentation of food, food ingredients, or packaging; or false or misleading statements made about a product for **economic gain.**'

(Spink and Moyer, 2011)



Consumer Perspective

- Expectation that food is 'of the nature or substance or quality demanded'
- If not, the consumer has been defrauded
 - Financial loss
 - Psychological loss
 - Health loss



How can consumers know if they are being defrauded?

- Problem: **information asymmetry**: producers (or sellers) typically better informed than buyers (or consumers) of food safety attributes



- Consumers look for **authenticity cues**: factors that communicate the product is 'real' or 'genuine' or 'of the nature or substance or quality' demanded.

Authenticity – a consumer perspective

1. **Objective authenticity:**
verified according to external criteria
1. **Constructivist:** staged e.g. by companies
2. **Existential:** identity formation to experience a more authentic sense of self



Food Integrity WP7: Aim

To identify Chinese consumers' perceptions and attitudes towards selected products from Europe (**infant formula milk, olive oil and Scotch whisky**), in particular in relation to attitudes related to authenticity and traceability.



EU Product Focus



Infant Formula Milk:
Implicated in the 2008 melamine scandal, consumer trust in domestically produced formula is reputedly low

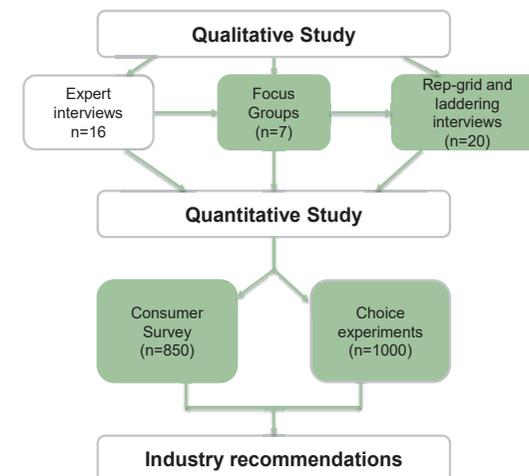


Scotch Whisky:
Significant export product for Europe, exports to China worth £39million, counterfeiting a industry wide problem
SpiritsEUROPE estimate That 1/4 of products sold as imports in China are fake



Olive Oil:
EU is a leading producer of olive oil, companies have been identified to adulterate and pass off lower grade oil as Extra Virgin oil

Research Design



Authenticity examples from rep. grid

Growing	Transport	Product	Packaging	Waste
Contaminated soil/feed	Unsafe transportation methods	Using additives/chemicals	Making false claims	Beyond the sell-by date
Chemicals/hormones used for growing		Adding/substituting cheaper alternatives		Sick animals used in the food chain
GM grown		Mixing with other products/species	GM not labelled	
Taking growing short cuts		Imitation		
		Re-using	Re-using packaging	
		Adding water to increase weight/dilute		



Barriers to Authentic Food

Regulatory Environment (government)	Industry
<ul style="list-style-type: none"> Perceived lack of: <ul style="list-style-type: none"> Regulation Enforcement Manpower to enforce Punishment Transparency Communication 	<ul style="list-style-type: none"> Perceived lack of: <ul style="list-style-type: none"> Product recall Compensation Adequate customer service
<ul style="list-style-type: none"> Bribery/corruption 	<ul style="list-style-type: none"> Highly fragmented food industry
Reactive rather than proactive	<ul style="list-style-type: none"> Profit driven
	<ul style="list-style-type: none"> No incentives to improve standards



Risk Relieving Strategies

Information seeking	Heuristics	Acquisition source	Domestically situated practices
Previous personal experience	Price	Through trusted retailers	Actions taken by consumers at home to ensure the authenticity and safety of food
word of mouth	brand	online retailers	
media reporting	QR codes	friends and family	
	Barcodes	personal travel	
	Country of origin	importing	
	Import stickers		



Consumer Implications

Health	Emotional response	'Face'	Control
Fear of unknown cumulative impacts particularly for infant and child health	Feelings of anger, foolishness, anxiety, humiliation, being cheated and deceived	The loss of 'face' was considered a significant negative consequence	Perceived lack and/or loss of control Underpin the negative consequences of encountering food that is inauthentic
Inextricably linked to health (e.g. nutritional quality, immunity from disease)	Adulterated IMF unacceptable to Chinese consumers	'Gifting' a socially inscribed practice- socially unacceptable to give inauthentic gifts	Inability to judge the authenticity & safety of food
	'Strength of emotions and level of acceptance vary according to purchase and/or consumption situation'	Exceptions: Scotch whisky, where price and bottle aesthetics deemed important in maintenance of 'face'	Lack of confidence in their domestic supply chain, perpetuated by a persistent stream of food safety incidents (including food fraud)
	'Resigned' to the likelihood that they would encounter 'fake' whisky		



Values

Individual	Other	Country	Global
Creativity/ originality	Interconnectedness/ friendship	Strive for perfection as a country	Back to nature
Quality of life/enriched experience	Respect/dignity	Proud to be Chinese	Protect the earth
Seeking the truth	Companionship	Social order	Harmony
Pleasure/ enjoyment/ hedonism	Benevolence		
Self image/ worthiness	Essence of being a family		
Exploration/ stimulation	Family togetherness		
Long life	Engagement with the wider world		



Validation: Consumer Survey

Socio-demographic profile	Total Sample	Beijing	Guangzhou	Chengdu
	n = 850	n = 284	n = 283	n = 283
Gender				
% Male	50	50	49.8	50.2
% Female	50	50	50.2	49.8
Age (classes)				
% 18-35	50	50	50.2	49.8
% 35-55	50	50	49.8	50.2
Income				
% RMB 8000-9999	15.2	0	0	45.6
% RMB 10000-14999	46	47.9	48.1	42
% RMB 15000 - 19999	25.6	36.3	32.2	8.1
% RMB 20000 and above	13.2	15.8	19.4	4.2
Purchasers				
% Formula	22	25	41	34
Scotch whisky	21	26.1	43.9	30
Olive oil	8	46.7	20	33.3
Two or more purchases	20	52.3	18.4	29.3
Intenders to purchase	29	26.6	33.5	37.9



Hypotheses

1: Increased consumer concern about food hazards results in feelings that:

1. Adulterated food and drink poses a risk to the food supply chain
2. Demonstrating authenticity improves trust in the food system
3. Cues of authenticity are important in making food choices

H2: The more concerned a person is about various food hazards the more positive his/her attitude and intention to purchase authenticated food products.

H3: The more a person feels that adulterated food and drink poses a risk to the food supply chain (specifically, safety, health, trust) the more positive attitude s and intention to authenticated food and drink.

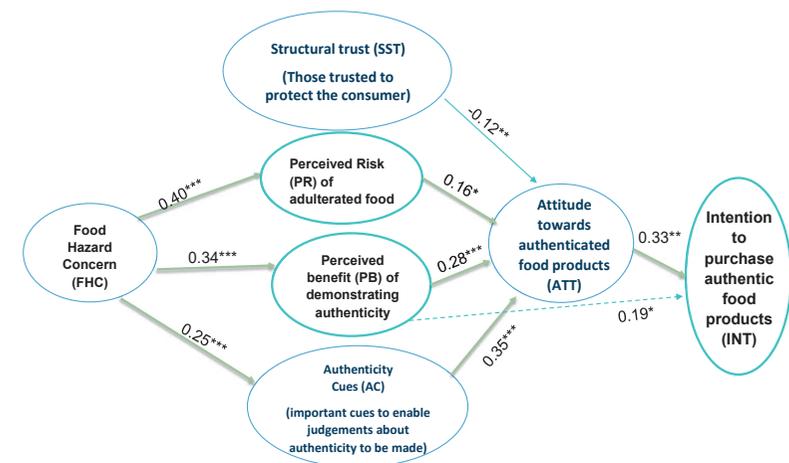
H4: The more a person feels that demonstrating authenticity improves trust in the food system, the more positive attitude sand intention to authenticated food and drink.

H5: The more importance a person attaches to cues of authenticity when making judgements about food and drink products the more positive attitude sand intention to authenticated food and drink

H6: The lower the level of structural trust the higher the purchase intention towards authenticated food and drink.



Structural Equation Model



The survey findings indicated:

- **A high level of concern in relation to numerous food hazards** including adulterated foods, counterfeit foods and misdescription.
- **Food Hazard Concern** was associated with a stronger perception of **risk from adulterated food and drinks** and, therefore, a stronger attitude and intention to purchase authenticated food and drink
- The risk posed by adulterated food and drink was perceived to be high particularly relating **to food safety and health.**
- **There is a general lack of consumer trust in the Chinese food supply chain**, particularly in food manufactures and food retailers.



Continued...

- **Weaker levels of Structural Trust** are associated with a stronger attitude towards purchasing authenticated food and drinks
- **Demonstrating the authenticity of food and drink products had a positive effect on both attitude and intention** to purchase authenticated food and drink products.
- **Authenticity cues had a positive effect on people's attitudes** towards purchasing authenticated food and drinks and an indirect effect through attitude on intention to purchase.



Authenticity Cues in Choice Experiments

Authenticity cue	Description
	A hologram sticker
	Security packaging
	The QR code
	Protected Designation of Origin - PDO
	Chinese National Organic Product Standard



Findings

- Consumers who had previously bought a counterfeit product were significantly more worried about food quality.
- Consumer trust is greatest in advice from friends and family also consumer organizations and medical doctors. Trust in government, and media is low.
- Consumer indifference country of origin, but some countries (e.g. Germany) have a high reputation independently of the product presented
- Consumer willingness to pay for safe and authentic food, although differences found between segments (i.e. income) and regions
- Security packaging and quick response codes were more trusted than hologram stickers, but the importance of different authenticity signs for the buying decision was product dependant.



Summary

Consumers perceive food fraud and adulteration to be **inextricably linked to food safety** and have to have unknown implications for health

Chinese consumers have **confidence in supply chains where regulation is perceived to be more rigorous** (in some cases this is foreign food chains)

In lieu of structural trust Chinese consumers have **high levels of kinship trust** and seek reassurance from kinship networks prior to purchase

Consumers are **heavily reliant on 'indexical cues'** to establish the authenticity of food products, but require additional reassurance from physical branded stores

Consumption occasion and perceived impact can dictate consumer response and level of consumer 'outrage'



Thank you!



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