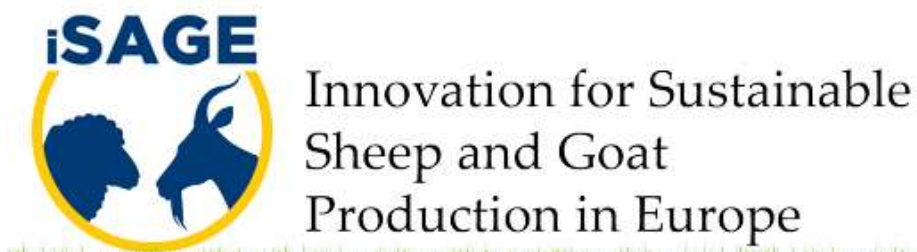


iSAGE Training
10th-11th December 2019 – Zaragoza, Spain

Assessing consumer needs and developing new products

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How do we know what a customer needs?



Marketing Research!

Marketing research process

Step 1: Formulating the problem



Step 2: Developing an Approach to the Problem



Step 3: Formulating a Research Design



Step 4: Data Collection (Field Work)



Step 5: Analyzing Data



Step 6: Reporting the Research

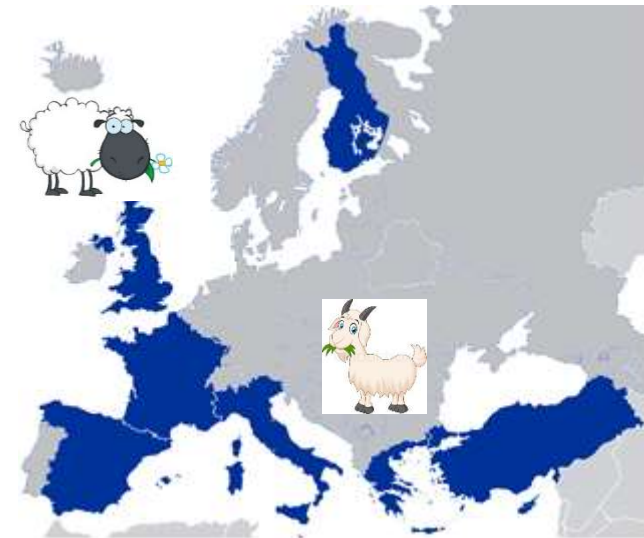
A research problem in cross-cultural settings

Comparability:

- Familiar with Lamb consumption → special occasion (Christmas, Easter).
- Different levels of interest in health

Equivalence:

- Popular cuts vary between countries
- Preference → local, except Finland



ES, FI, FR, GR, IT, TR, UK.

=> Consumer preferences → What are consumer preferences regarding their consumption of lamb meat and goat/ewe cheese?

Research Design

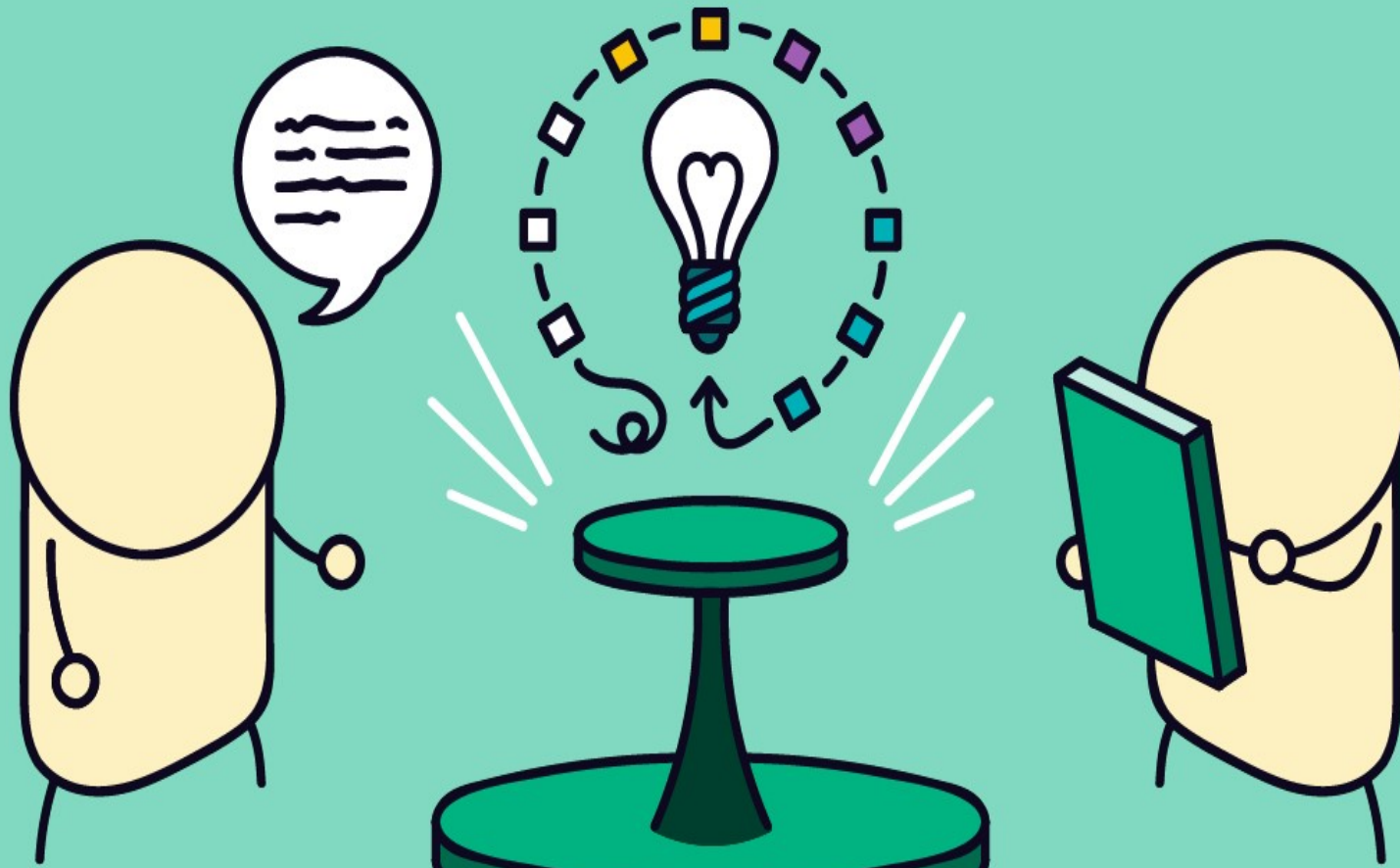
- A **research design** is a framework or blueprint for conducting the marketing research project.
- Affected by the nature of the research problem
 - Quantitative: What?
 - Qualitative: How? Why?
 - Mixed: Enhance the scope and comprehensiveness.



Qualitative vs. quantitative research

	Qualitative Research	Quantitative Research
Objective	To gain a deeper understanding, contextualize a phenomenon, the why and how of things	To quantify the data and generalize the results from the sample to the population
Process	Inductive, subjective, recurrent	Deductive, objective, sequential
Sample	Small number of <u>non-representative</u> cases	Large number of <u>representative</u> cases
Data Analysis	Non-statistical	Statistical
Outcome	Develop an initial understanding, theory development	Recommend a course of action
Examples	In-depth interviews, focus groups case studies	Surveys, Experiments





Qualitative research

What we did?

Literature review: 143 papers on lamb/sheep consumption

Results:

- Gender differences
- Different consumer groups by use, taste
- Origin, cut, nutritional information → really important

Qualitative research

Focus groups

- 7 countries, regular & occasional consumers
- Responsible for food purchasing
- Between 25-65 years old

In-depth interviews (laddering)

- 7 countries, including non-consumers
- Responsible for food purchasing
- Between 25-65 years old

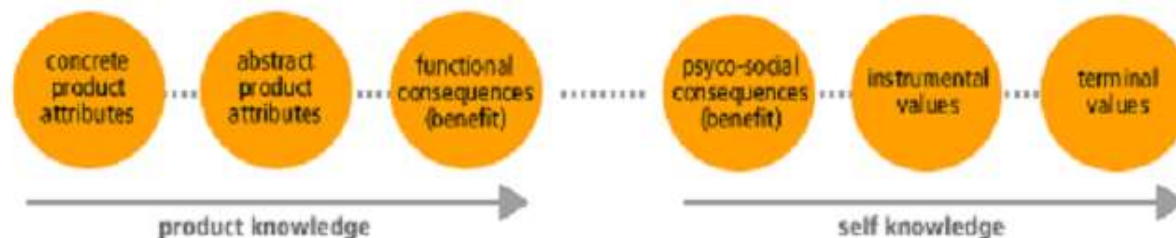
Qualitative results



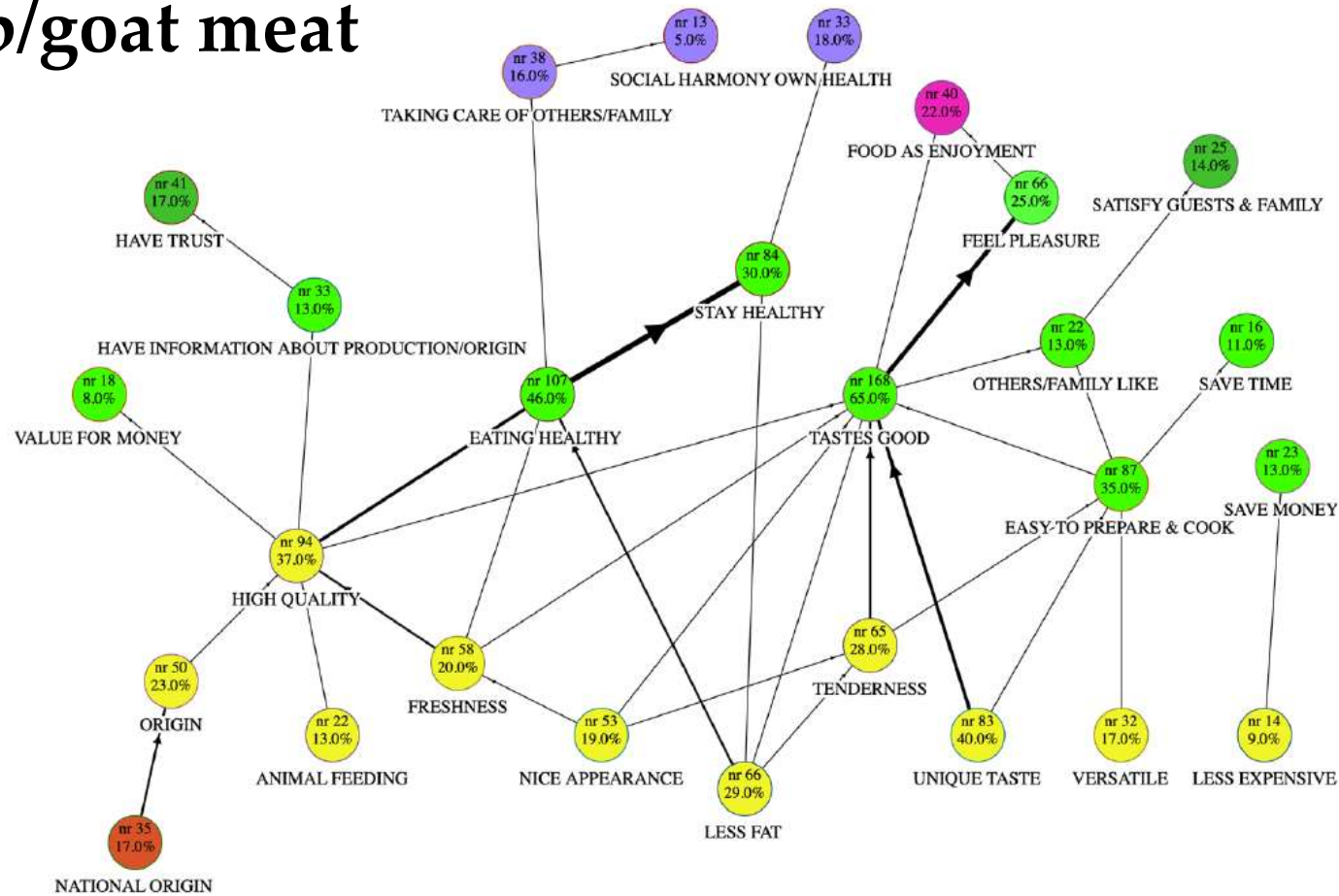
Qualitative research: Laddering and means-end chain analysis

Interviewing technique that attempts to understand and uncover the link between product attributes, personal outcomes (benefits), and values → It is achieved by repeating the following question:

Why is this important for you?



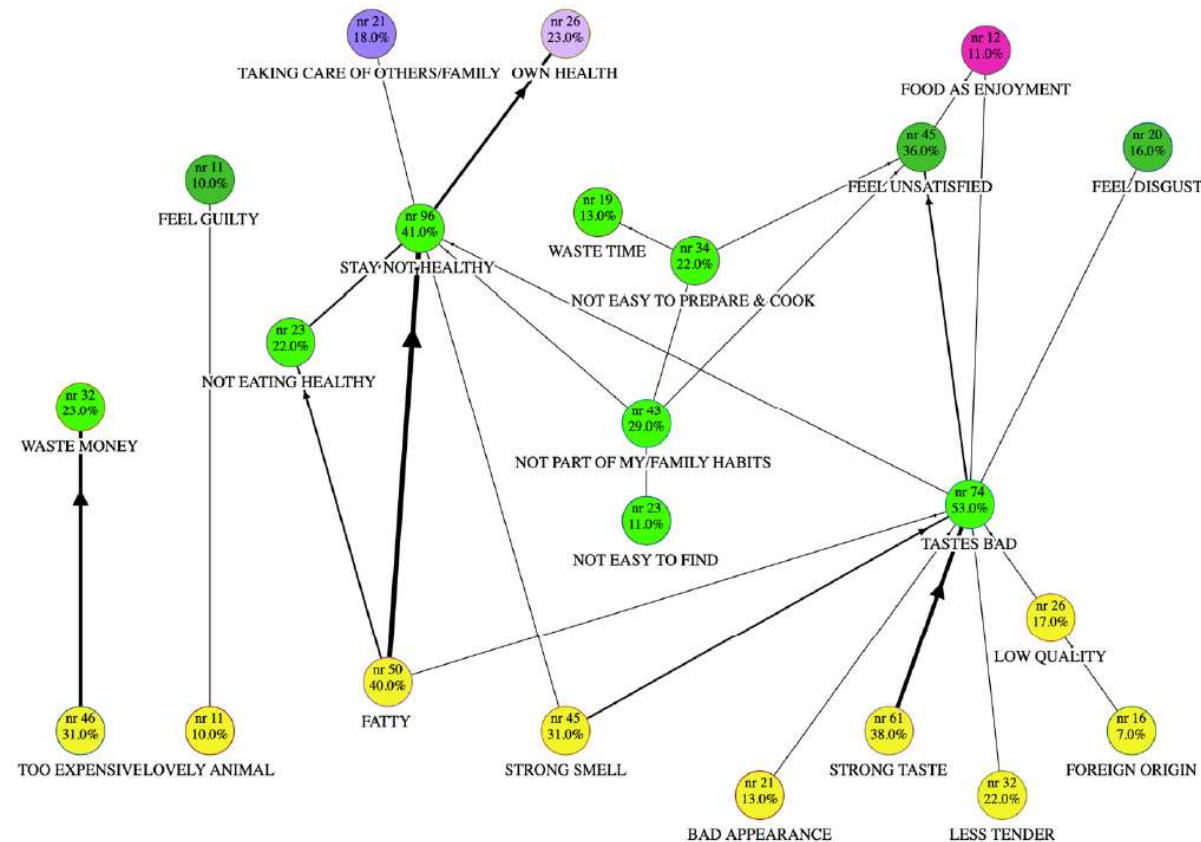
Cognitive structure of motivations to purchase sheep/goat meat



Qualitative results for meat



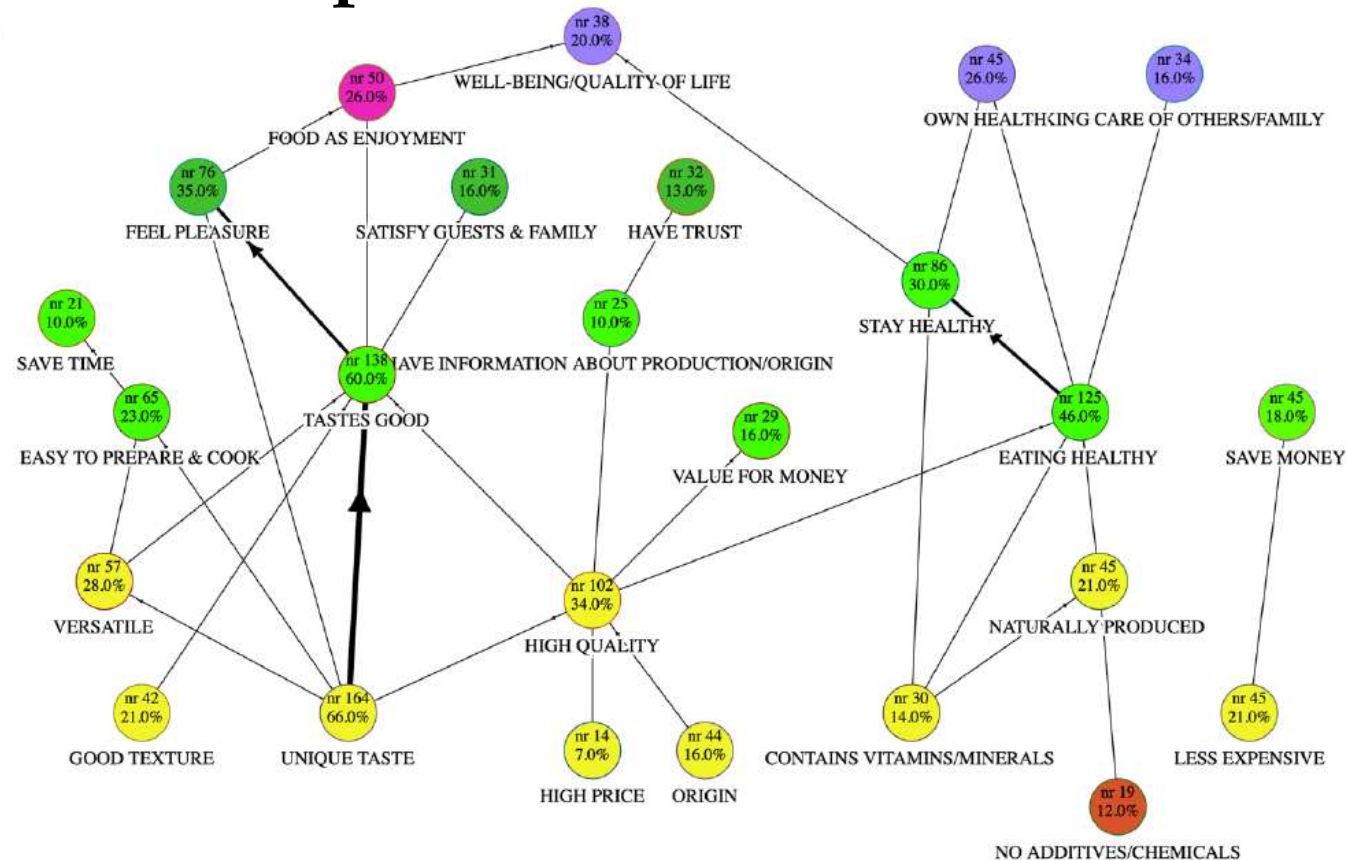
Cognitive structure of barriers linked to the consumption of ewe/goat meat



Qualitative results for cheese



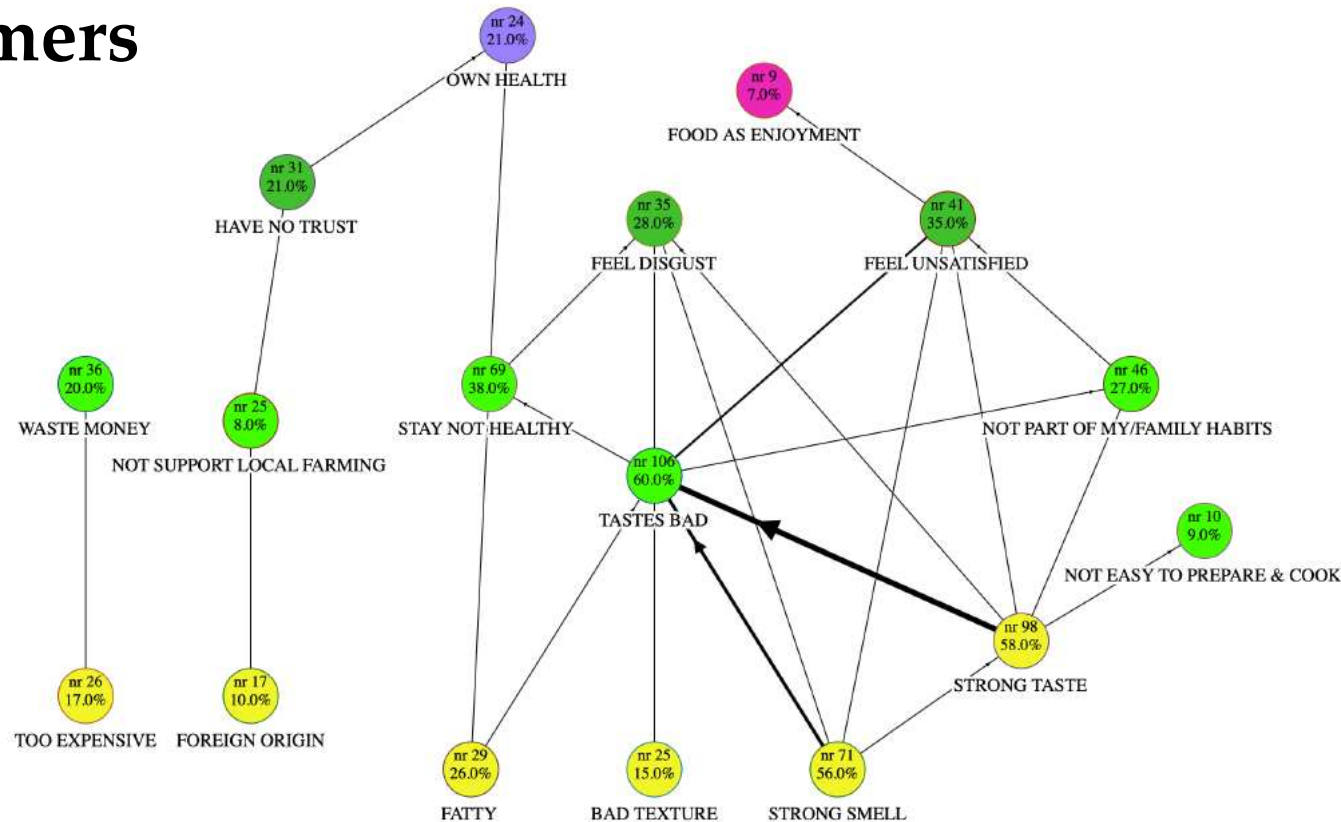
Sheep/goat dairy products – cognitive structure of motivations to purchase



Qualitative results for cheese

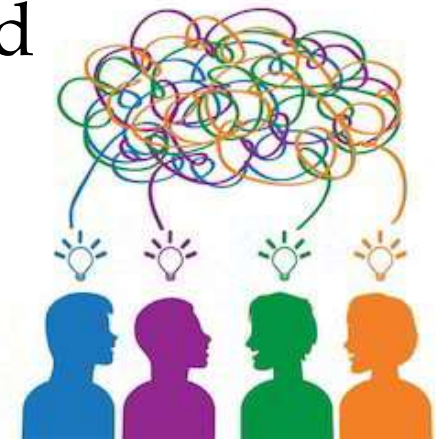


Cognitive structure of barriers linked to the consumption of sheep/goat dairy products for non-consumers



Qualitative research: focus groups

- Pre-screened, homogeneous group (per country)
- Requires a moderator, assistant, video/voice recorder, comfortable place and refreshments
- Participants are encouraged to talk openly about their opinions and respond to other members
- Audiovisual assistance might be used
- Everybody gets a chance to talk
- Focus on a specific topic



Focus groups results for meat



"I prefer 'arrosticini' when I'm with my friends, but for me and my family I usually cook the lamb in the oven"

Situation

Safety

"Meat from young animals is purer and has less hormones, so I trust to consume more of it"

"I must admit I don't cook much, just easy things, so regarding lamb, I usually buy chops that are very easy to cook"

Convenience

"I reduced the purchase of meat in general...I usually purchase beef meat because it is less fatty but I know that lamb meat is better in terms of genuineness"

Health

"I would never consider buying sheep/goat meat from a supermarket or from a butcher whom I don't know personally"

Purchasing place



Focus groups results for dairy



"Ewe-milk yoghurt is a traditional product but I stopped consuming it the last few years because it is not very common in supermarkets"

Availability

Knowledge

"I didn't know any goat cheeses whatsoever, until a few years ago"

"I like the idea of buying directly from the farm. I think that more farms should be open to visitors : then I will go buy the products I want and also make a small excursion"

Purchasing place

"In my view, pecorino cheese is a treat and linked to transgression & enjoyment ... by contrast cow-milk cheese is for regular and daily consumption"

Situation

"When I buy cheese I usually buy goat cheese, I have the feeling that it is healthier"

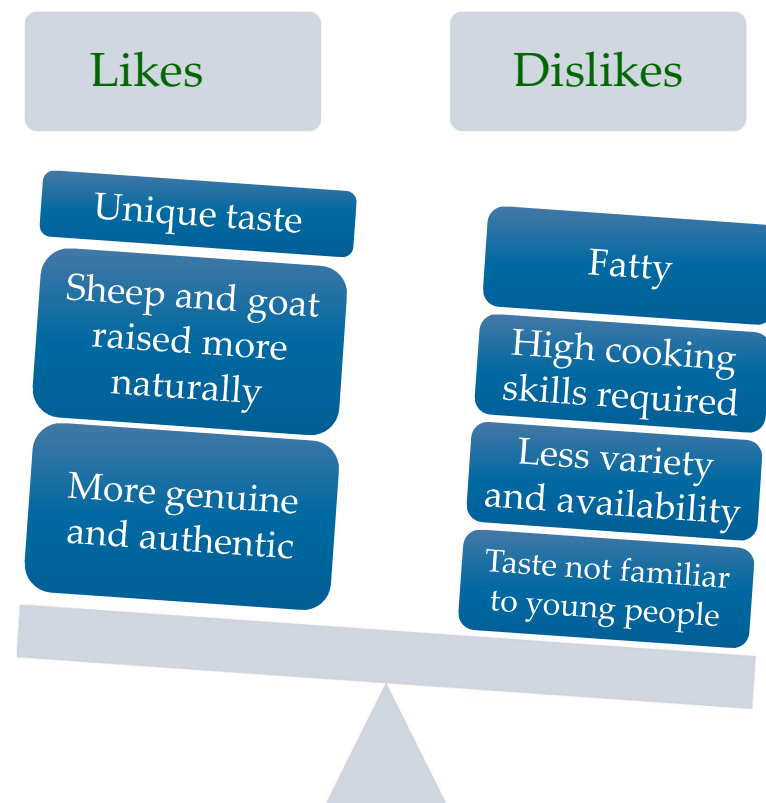
Health

Certification

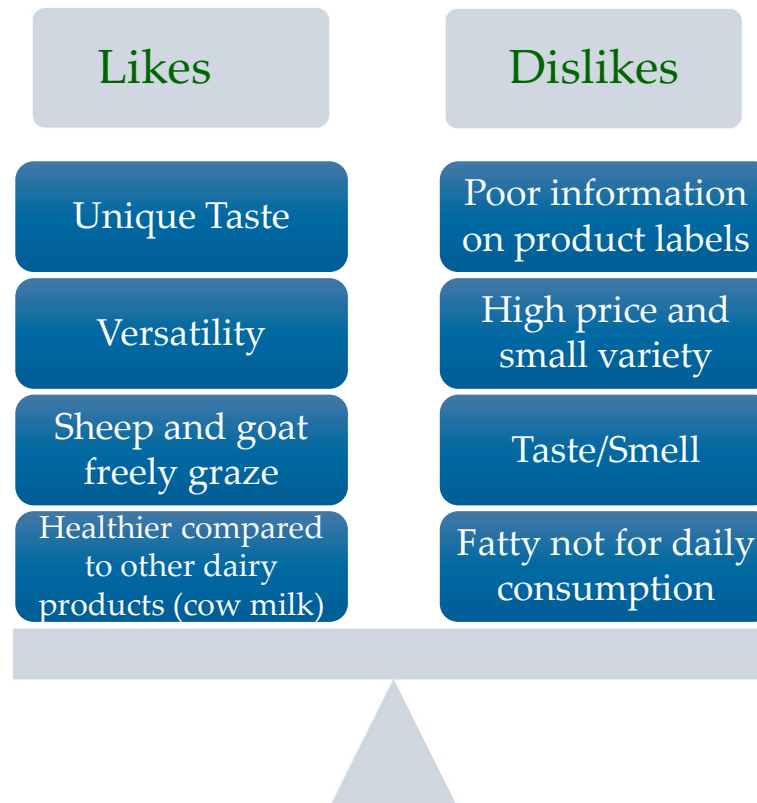
"I love Pienza cheese [a PDO variety of Pecorino] because I'm exigent when I decide to buy this kind of product..."



Qualitative results summary- MEAT



Qualitative results summary - Dairy



Quantitative research

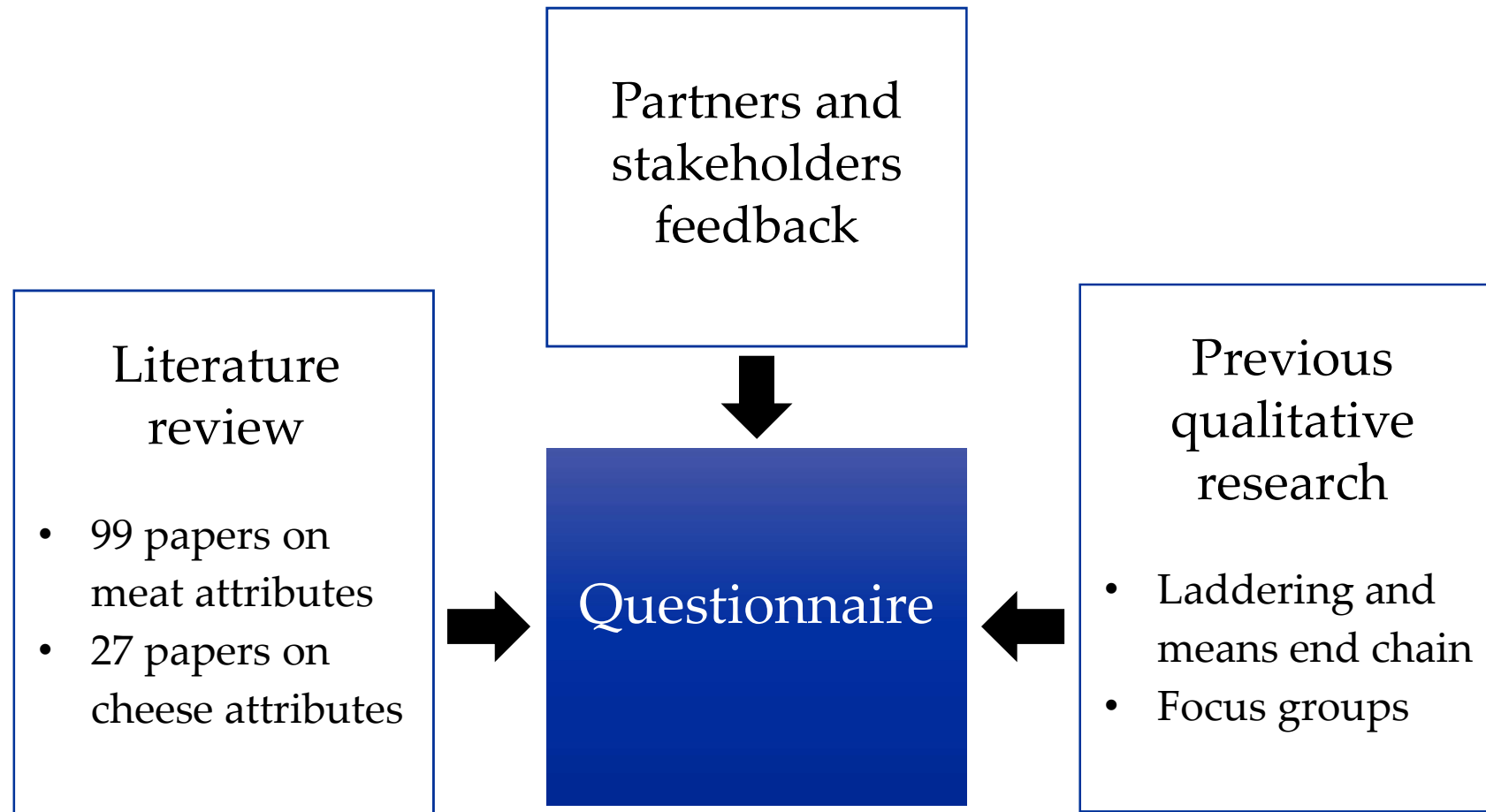


Our objective

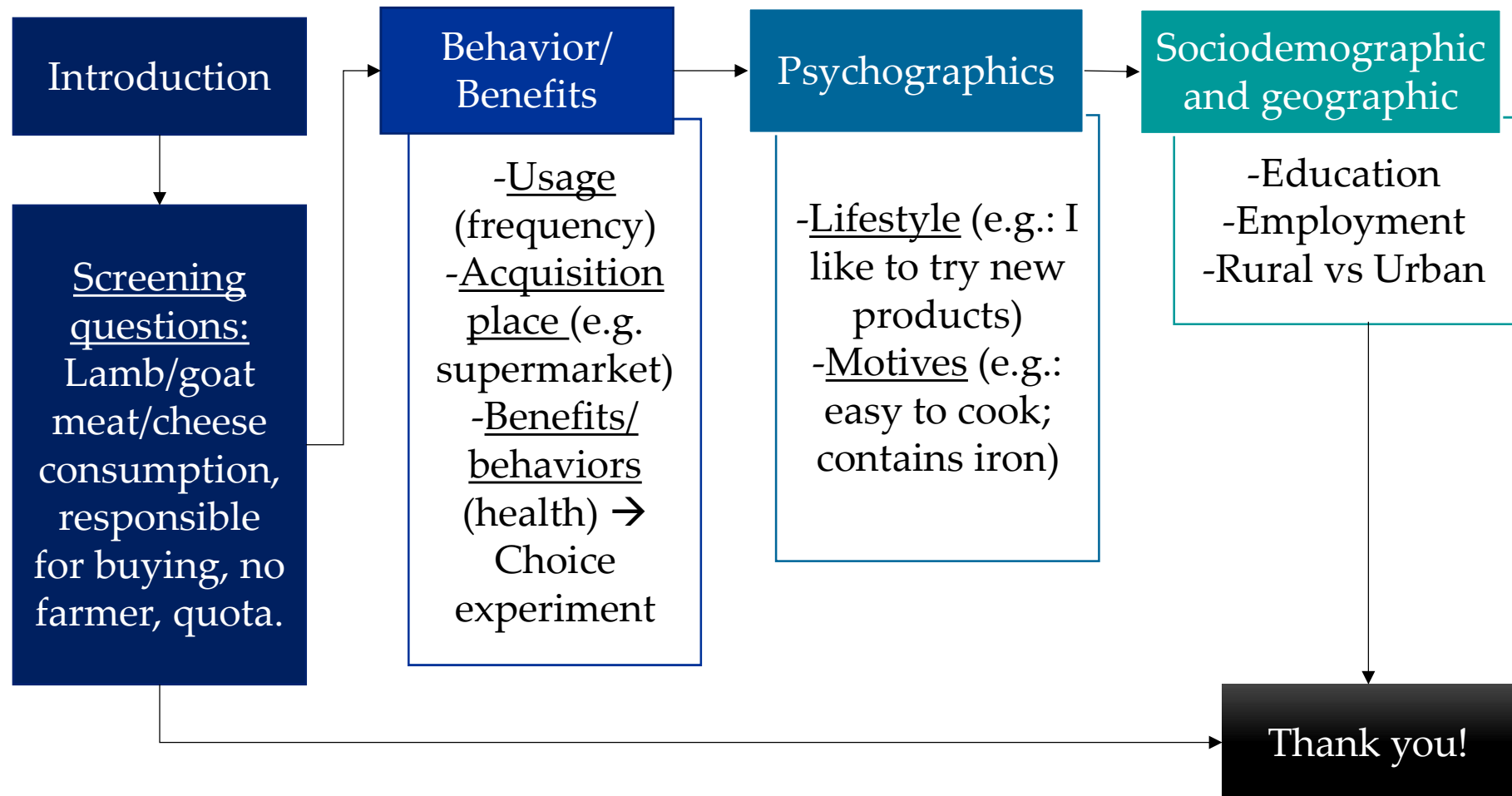
- To investigate consumer preferences on goat and sheep meat and dairy products by means of a quantitative survey.



Developing a cross-cultural questionnaire



Questionnaire structure

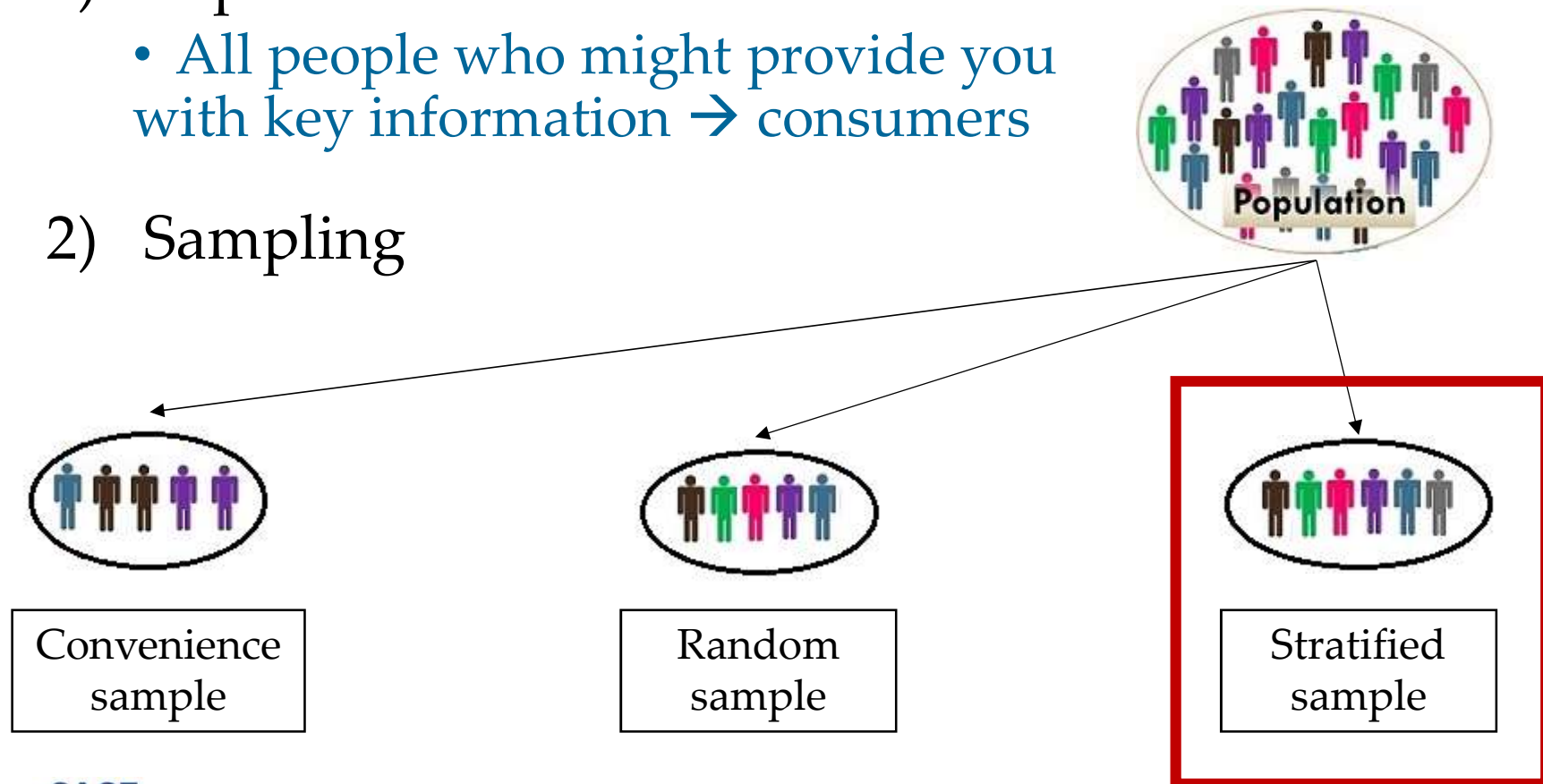


Sampling

1) Population

- All people who might provide you with key information → consumers

2) Sampling



Our stratified sample

- Based on Eurostat 2016/2017
- 7 countries
 - Finland, France, Greece, Italy, Spain, Turkey and UK
- Gender/occupation
 - Female, Male
 - Employeed, Unemployed, Retired/Student (inactive population)
- Age
 - 18-24, 25-34, 35-44, 45-54, 55-64 years old

Additional filters

- ✓ Responsible or partially responsible for household grocery shopping
- ✓ Not related to the food industry
- ✓ Specific filters:
 - For meat → Lamb/goat meat consumers
 - For cheese → goat/ewe or mix cheese consumers





Choice experiment



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Discrete Choice method

- Respondents are asked to choose their favorite alternative among several hypothetical alternatives (characterized with a certain numbers of attributes) in a sequence of experimentally designed choice tasks.
- Based on Lancaster's theory of demand →
"The total utility gained from a product is the sum of the individual utilities provided by the attributes of that good" (Lancaster, 1966).
- WTP → ration of the marginal utility of attributes and that of price

Alternatives



o



Utilities



Let's start with sheep and goat meat!



Literature review

- Most meat choice experiments have been done in Spain and United States
- Studies tend to focus on beef, only a few specialize on Lamb meat
 - Most studied attributes: Price, origin, animal welfare (not one unique label), fat content, Organic.
 - Results show that **cooking method, origin, safety, fat content, animal welfare and color** are the most important attributes for consumers.



















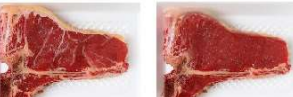












Methods: choice experiment structure - MEAT

- Introductory talk included
- 4 types of labels tested
 - Halal, Organic, Carbon footprint, PGI/PDO
- Choice experiment
 - 12 choice sets, 9 attributes
 - Labeled: 4 alternatives
 - Lamb leg, lamb chops, goat chops, Beef T-bone
 - A no-choice alternative



Choice experiment design for meat



Attributes	Lamb leg	Lamb chops	Goat chops	Beef T-bone
Price	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30%
Origin	<ul style="list-style-type: none"> •National •EU •Out of EU 	<ul style="list-style-type: none"> •National •EU •Out of EU 	<ul style="list-style-type: none"> •National •EU •Out of EU 	<ul style="list-style-type: none"> •National •EU •Out of EU
PGI/PDO	 	 	 	 
Low carbon footprint				
Organic				
Fat content			-	
Protein content				
Halal				
Format				

Choice experiment attributes



Labels per country

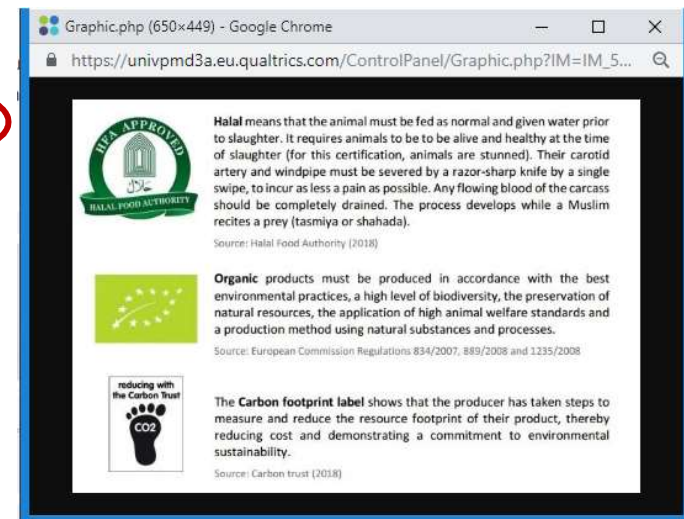
Labels/ Country	Spain	Finland	France	Greece	Italy	UK	Turkey
Halal							
PDO/PGI		-					-
Organic							
Carbon footprint							

Choice experiment instructions

Imagine that it is a regular weekday and you decided that you want to eat a dish based on some sort of meat for the next meal with your family. You go to the usual place in which you buy meat and the following alternatives are presented to you. If you want to see the image in more detail, you can zoom on it by clicking on top of it.

Please click "BUY" on the image with the meat that you would like to buy the most. Then write below how many **trays of 500gr** you would like to buy. If you think you would not buy any of the options, then you can select the option "None".

If you need to refresh the meaning of the labels [click here](#)



Choice experiment for meat

Choice set

The choice set consists of four meat products and a 'NONE' option. Each product is displayed with an image, a label, and a 'BUY' button. The labels provide details about the product, including its name, origin, price, and a barcode. The 'NONE' option is represented by a large white box with the word 'NONE' in bold black letters.

Product	Image	Label	Price	Origin	BUY
LAMB LEG		LAMB LEG	£ 4.28 (£ 8.56/kg)	New Zealand	BUY
GOAT CHOPS		GOAT CHOPS	£ 7.80 (£ 15.60/kg)	UK	BUY
LAMB CHOPS		LAMB CHOPS	£ 8.39 (£ 16.78/kg)	UK	BUY
BEEF T-BONE		BEEF T-BONE	£ 8.32 (£ 16.64/kg)	EU	BUY
NONE		NONE			

Choice experiment for meat



Data collection for the meat survey





- Data collected from Mid-March to mid-May, 2019

Country	Respondents by May 14 th , 2019	Valid responses
Finland	417	413
France	416	414
Greece	403	400
Italy	419	417
Spain	420	417
Turkey	405	391
UK	420	414



Results: meat cuts and type

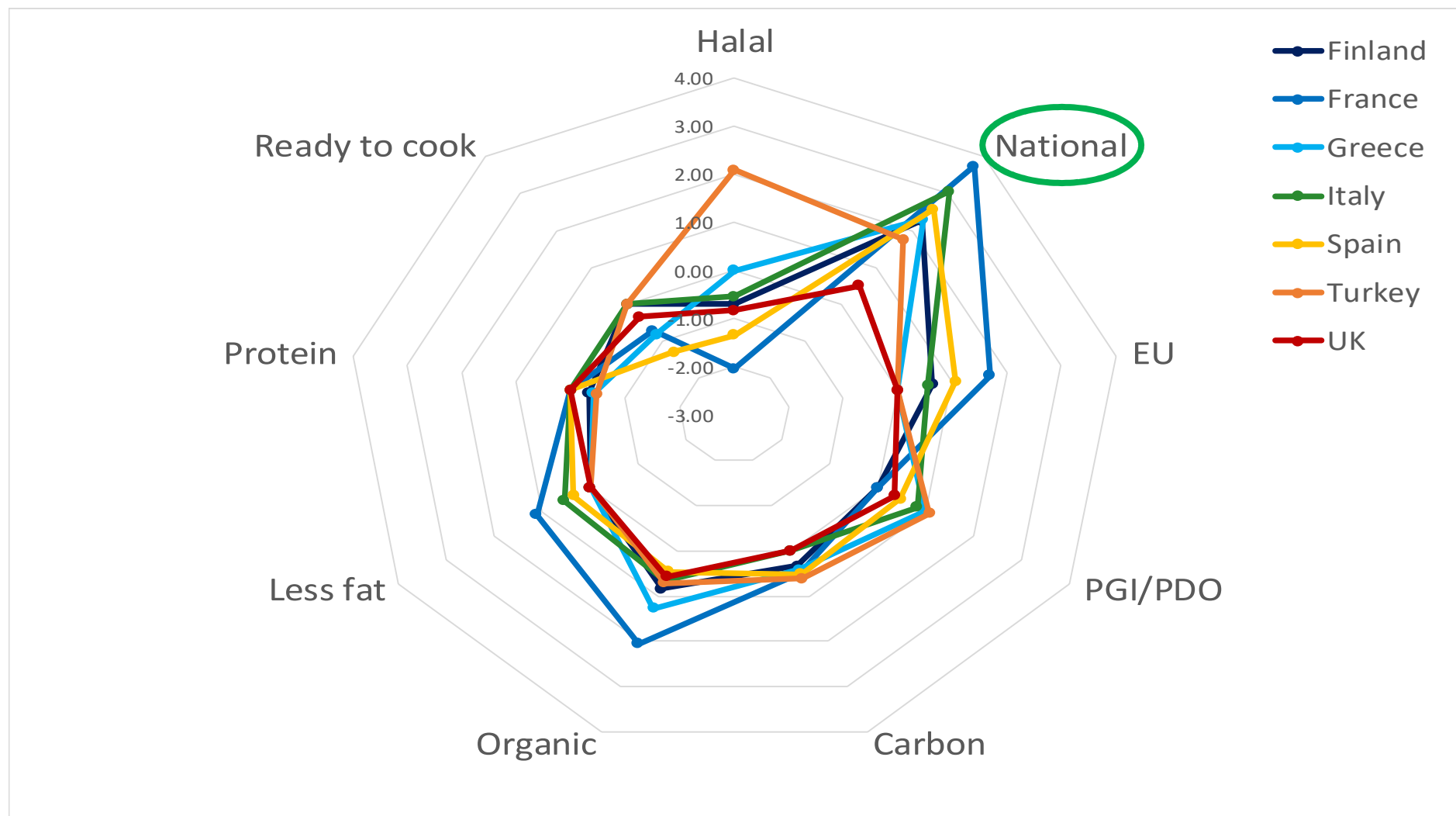
*Beef is the reference category

Meat	Finland	France	Greece	Italy	Spain	Turkey	UK
 Beef T-bone	-	-	-	-	-	-	-
 Lamb leg	↓	↓	↓↓	↓	↓	↓	↓
 Lamb chops	↓	↓	↓	-	↑	↑	-
 Goat chops	↓	↓↓	↓	↓	-	↓	↓
None	↓↓	↓	↓	↓↓	↓↓	↓↓	↓↓

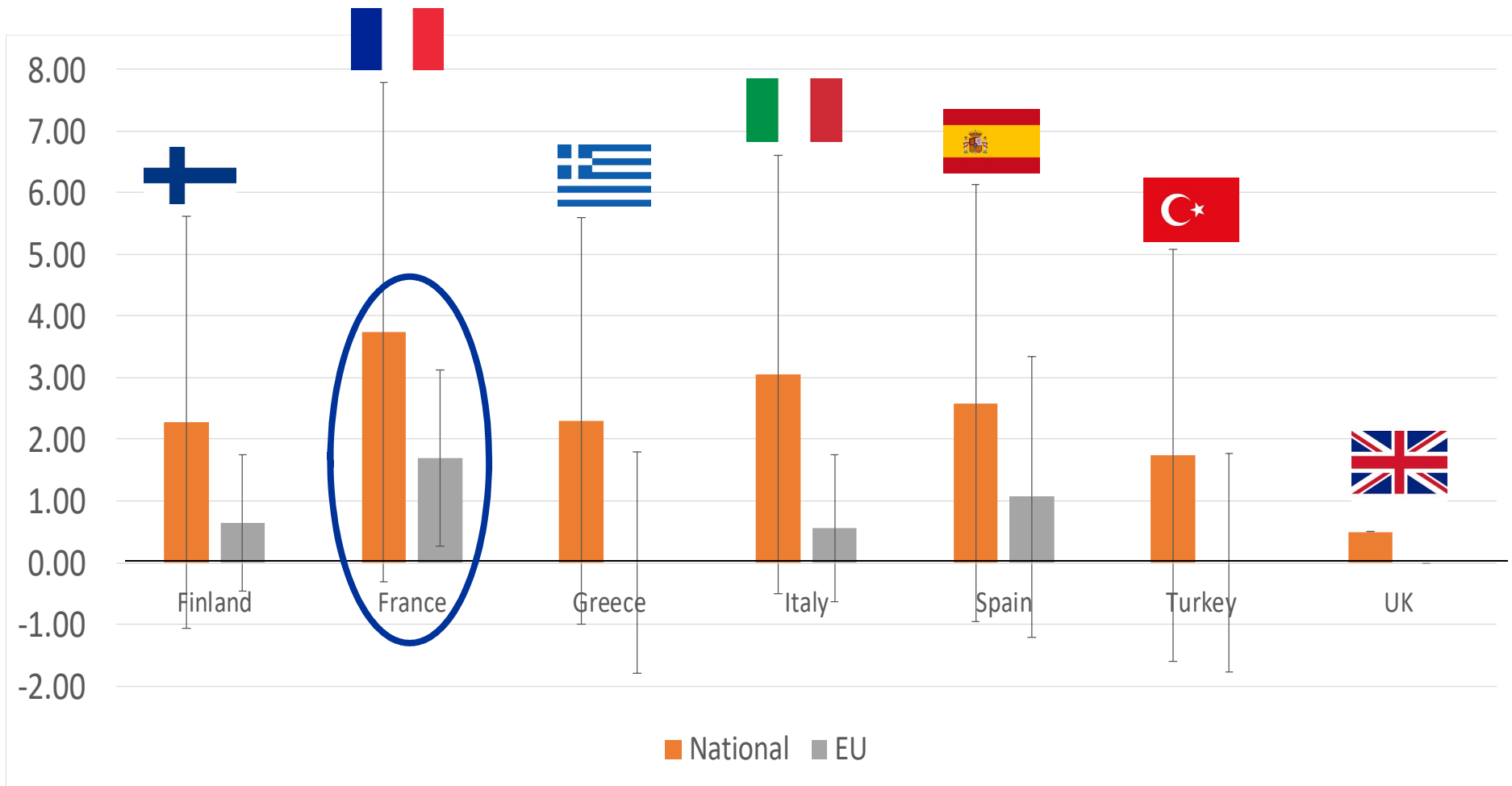
5% significance level



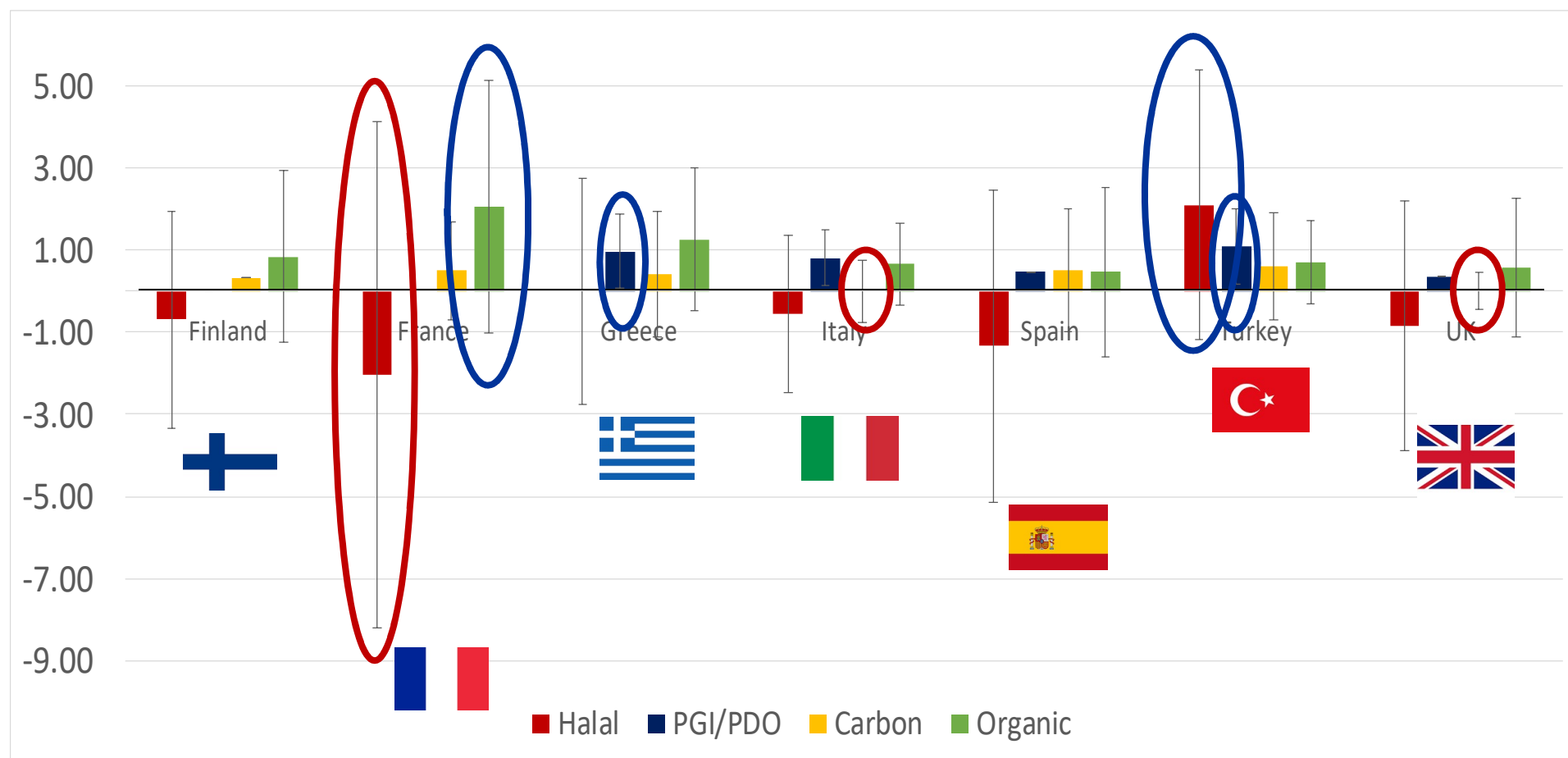
WTP for meat attributes (€)



WTP for Origin (€)



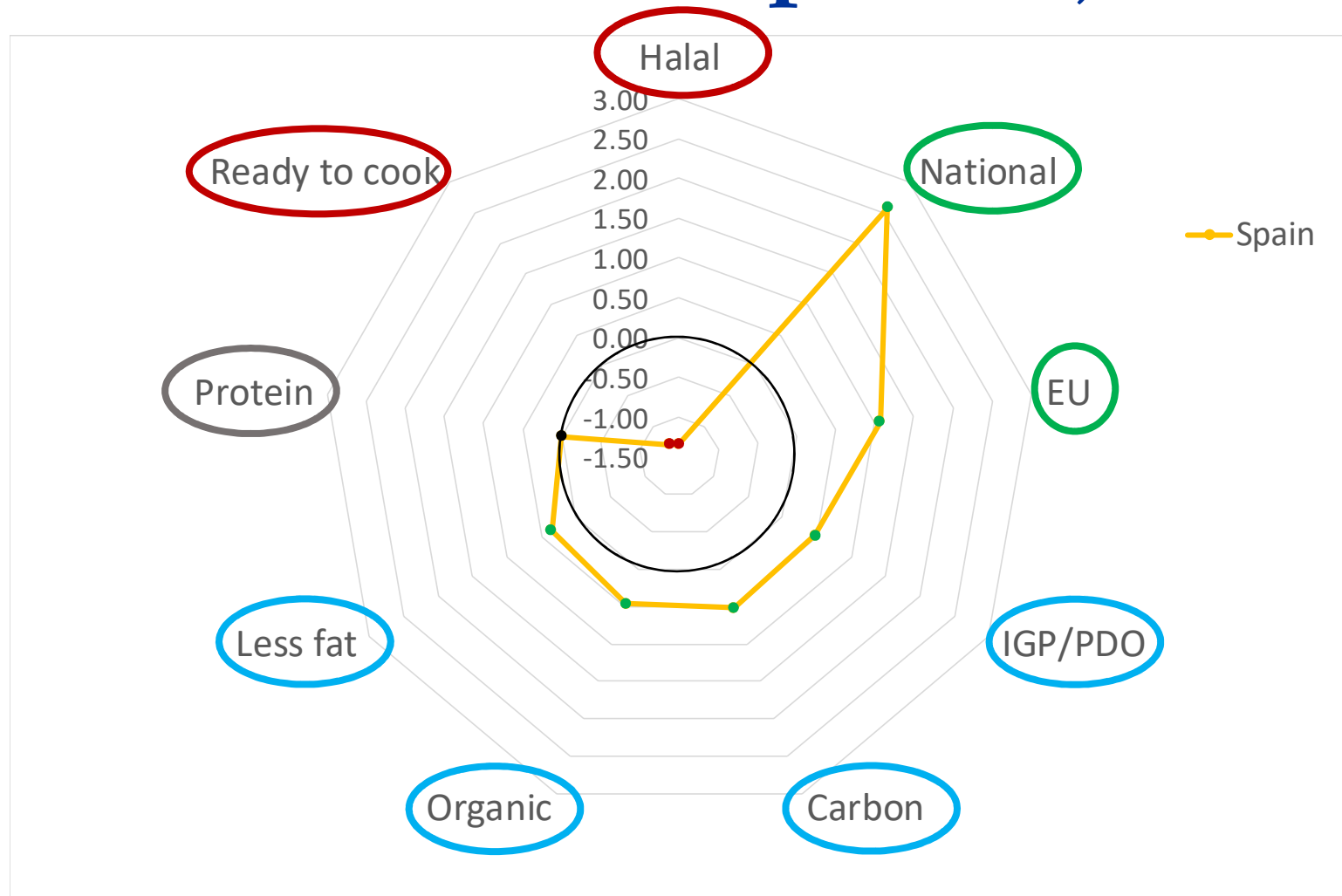
WTP for Halal, PGI/PDO, Carbon footprint and Organic label (€)



WTP for health related labels (€)



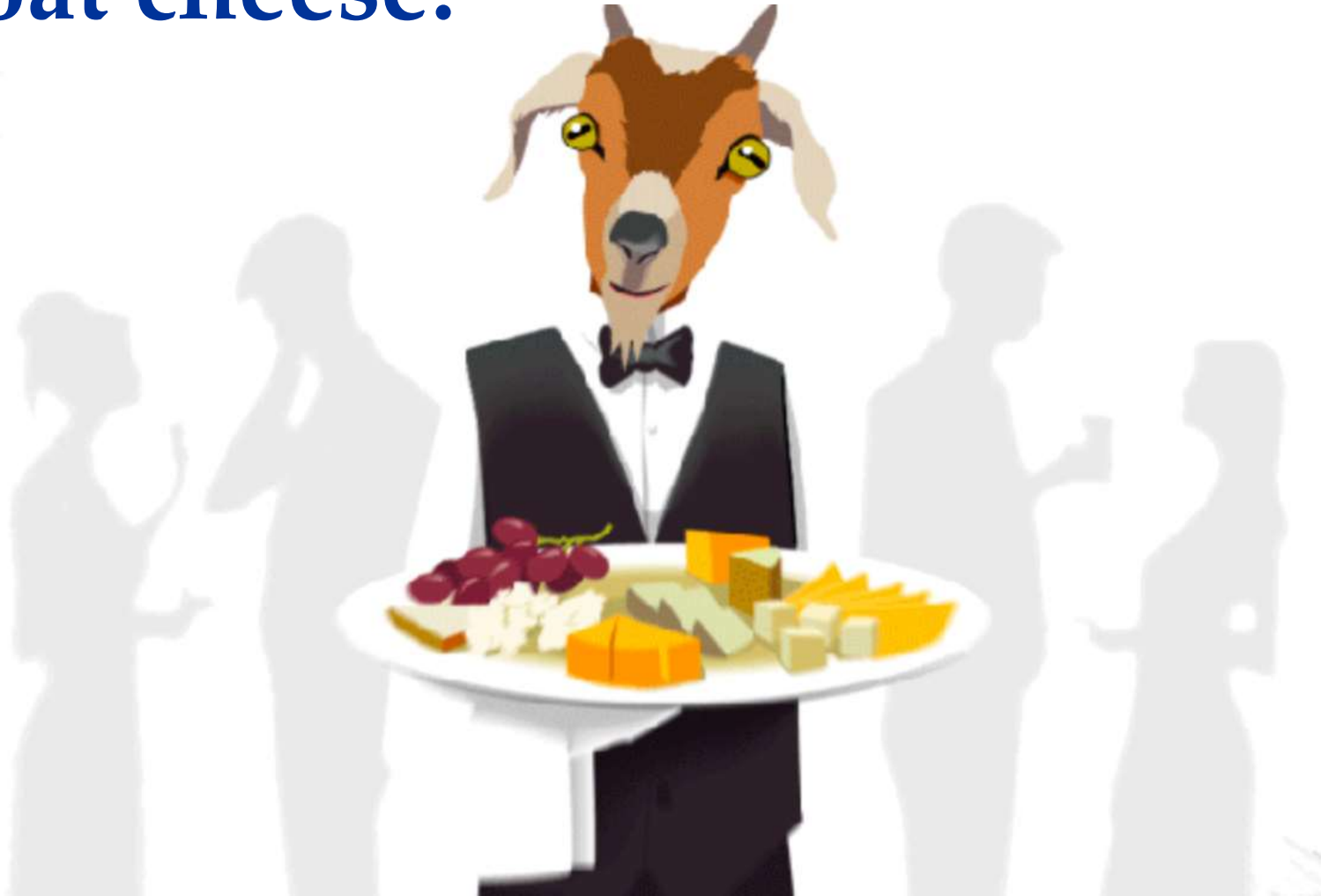
WTP for meat in Spain (€)



Sheep/goat meat summary findings

- Countries have heterogeneous preferences between and within them.
- Most important attributes are origin (National is preferred over EU or abroad), Organic, and IGP/PDO label
- Preferences on attributes as Halal label, Ready to cook format, High protein and fat content depends on the country.

Let's continue with ewe and goat cheese!



Consumer perception & preference goat & ewe cheese









- Very little English-language literature exists
 - 27 papers on cheese choice experiments/conjoint analysis
- Lahne et al. (2013) show that consumer liking is affected by cheese type, information, familiarity (neophobia) and consumer's level of food involvement.
- Consumer attributes (profile) and context affect liking more than product attributes.

Methods: choice experiment structure –CHEESE





- Introduction
 - Important to avoid hypothetical bias
- Labels and key concepts definitions
 - Pasteurisation, Rennet, Organic, PDO
- Choice experiment
 - Regular day consumption
 - 18 choice sets, 2 blocks, 8 attributes
 - 2 Labels, 4 alternatives
 - Aged cheese A, Aged cheese B, Fresh cheese A, Fresh cheese B
 - A no-choice alternative



Choice experiment design for cheese

Attributes	Aged cheese A	Aged cheese B	Fresh cheese A	Fresh cheese B
Milk source	<ul style="list-style-type: none"> •Ewe •Goat •Cow •Mixed 	<ul style="list-style-type: none"> •Ewe •Goat •Cow •Mixed 	<ul style="list-style-type: none"> •Ewe •Goat •Cow •Mixed 	<ul style="list-style-type: none"> •Ewe •Goat •Cow •Mixed
Pasteurised	<ul style="list-style-type: none"> •Pasteurised •Raw 	<ul style="list-style-type: none"> •Pasteurised •Raw 	<ul style="list-style-type: none"> •Pasteurised •Raw 	<ul style="list-style-type: none"> •Pasteurised •Raw
Rennet	<ul style="list-style-type: none"> •Animal rennet •Non animal rennet 	<ul style="list-style-type: none"> •Animal rennet •Non animal rennet 	<ul style="list-style-type: none"> •Animal rennet •Non animal rennet 	<ul style="list-style-type: none"> •Animal rennet •Non animal rennet
Salt content	<ul style="list-style-type: none"> •Low salt •None 	<ul style="list-style-type: none"> •Low salt •None 	<ul style="list-style-type: none"> •Low salt •None 	<ul style="list-style-type: none"> •Low salt •None
Organic				
Origin	<ul style="list-style-type: none"> •National •EU 	<ul style="list-style-type: none"> •National •EU 	<ul style="list-style-type: none"> •National •EU 	<ul style="list-style-type: none"> •National •EU
PDO/PGI				
Price	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30% 	<ul style="list-style-type: none"> •Average price •-30% •+30%

Choice experiment for cheese

Fresh cheese A	Aged cheese A	Fresh cheese B	Aged cheese B	None
Milk source: Ewe milk	Milk source: Ewe milk	Milk source: Mixed goat and cow milk	Milk source: Mixed goat and cow milk	
Raw milk	Pasteurized	Raw milk	Pasteurized	
Animal rennet	Non-animal rennet	Animal rennet	Non-animal rennet	
-	Low salt	-	Low salt	
-			-	
Origin: EU	Origin: UK	Origin: UK	Origin: UK	
	-	-		
Price: 5.57 euro	Price: 4.28 euro	Price: 3 euro	Price: 7.95 euro	

Data collection for the cheese survey

- Data collected from Mid-July to mid-September, 2019

Country	Complete responses	Valid responses
Finland	410	410
France	410	410
Greece	410	407
Italy	410	410
Spain	410	406
Turkey	410	410
UK	410	409



Results for cheese type

*None is the reference category

Meat	Finland	France	Greece	Italy	Spain	Turkey	UK
None	—	—	—	—	—	—	—
Aged cheese	↑↑	↑↑	↑	↑	↑↑	↑↑	↑
Fresh cheese	↑	↑	↑↑	↑	↑	↑	↑

5% significance level

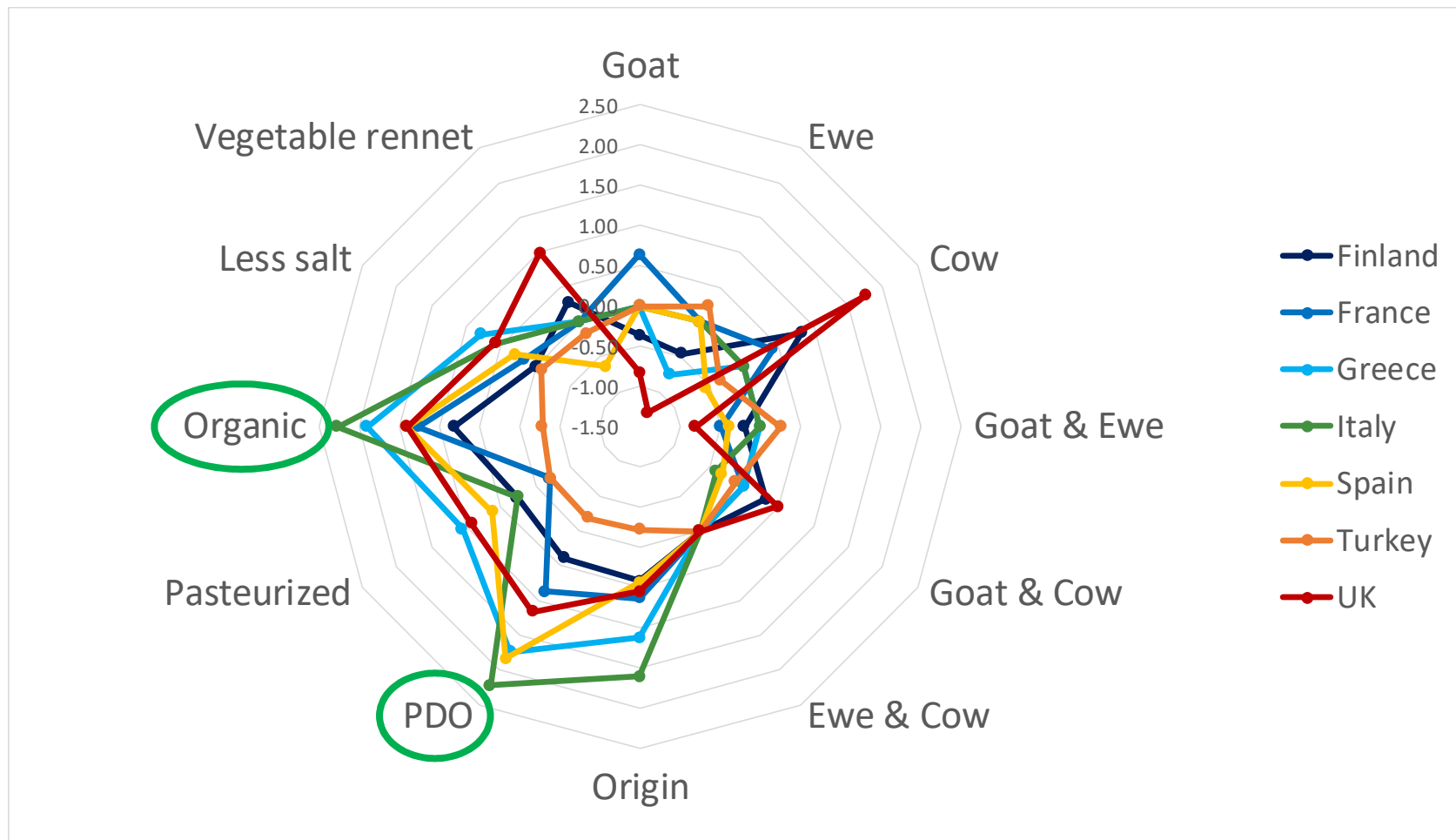


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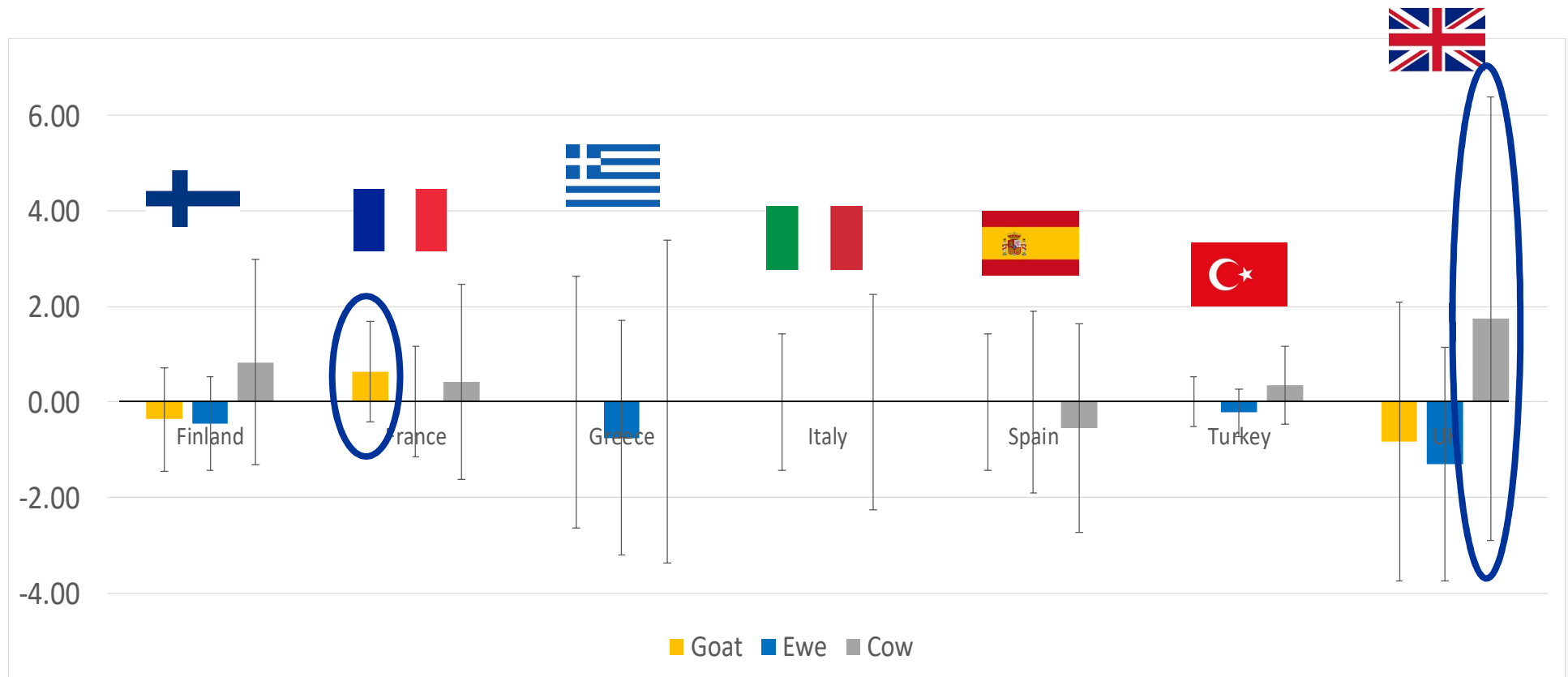


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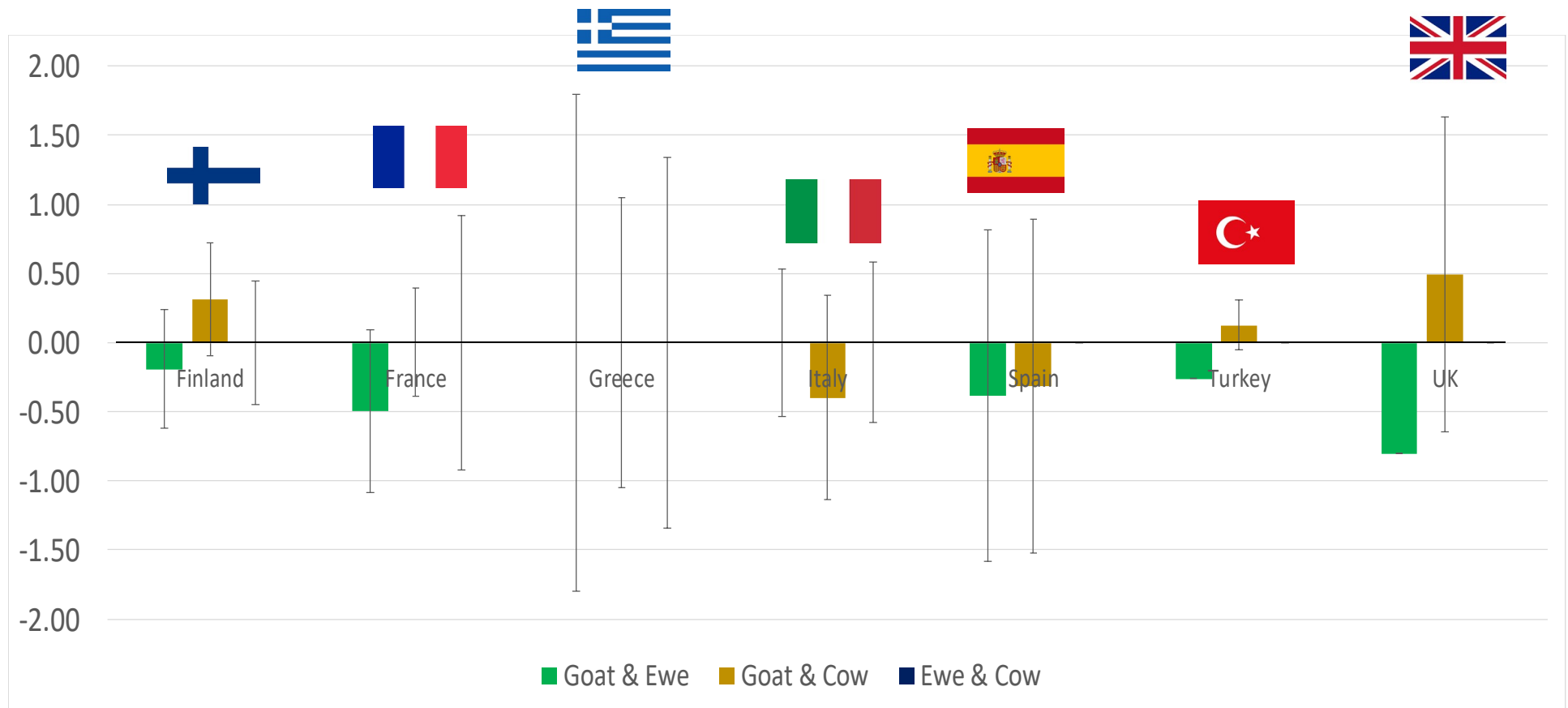
WTP for cheese attributes (€)



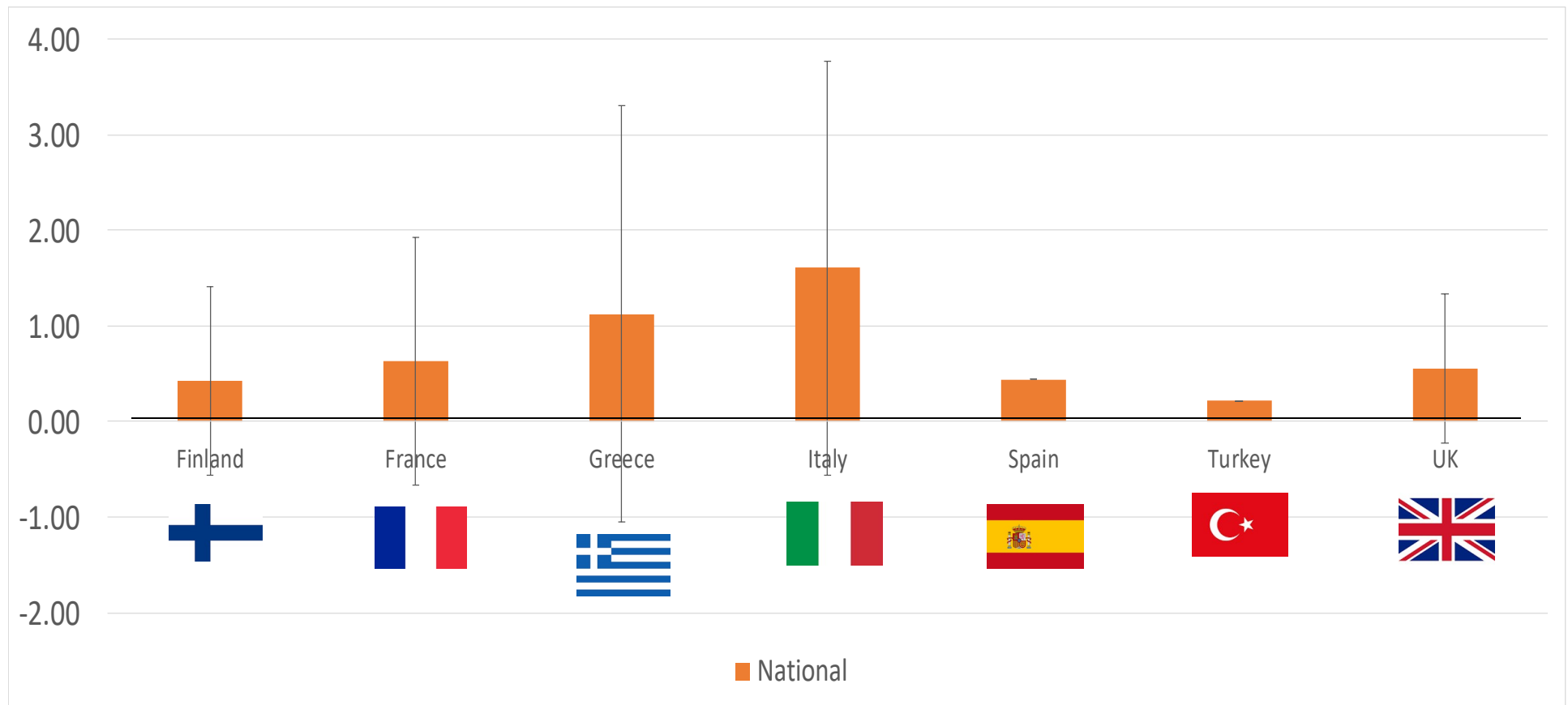
WTP for one milk type cheese (€)



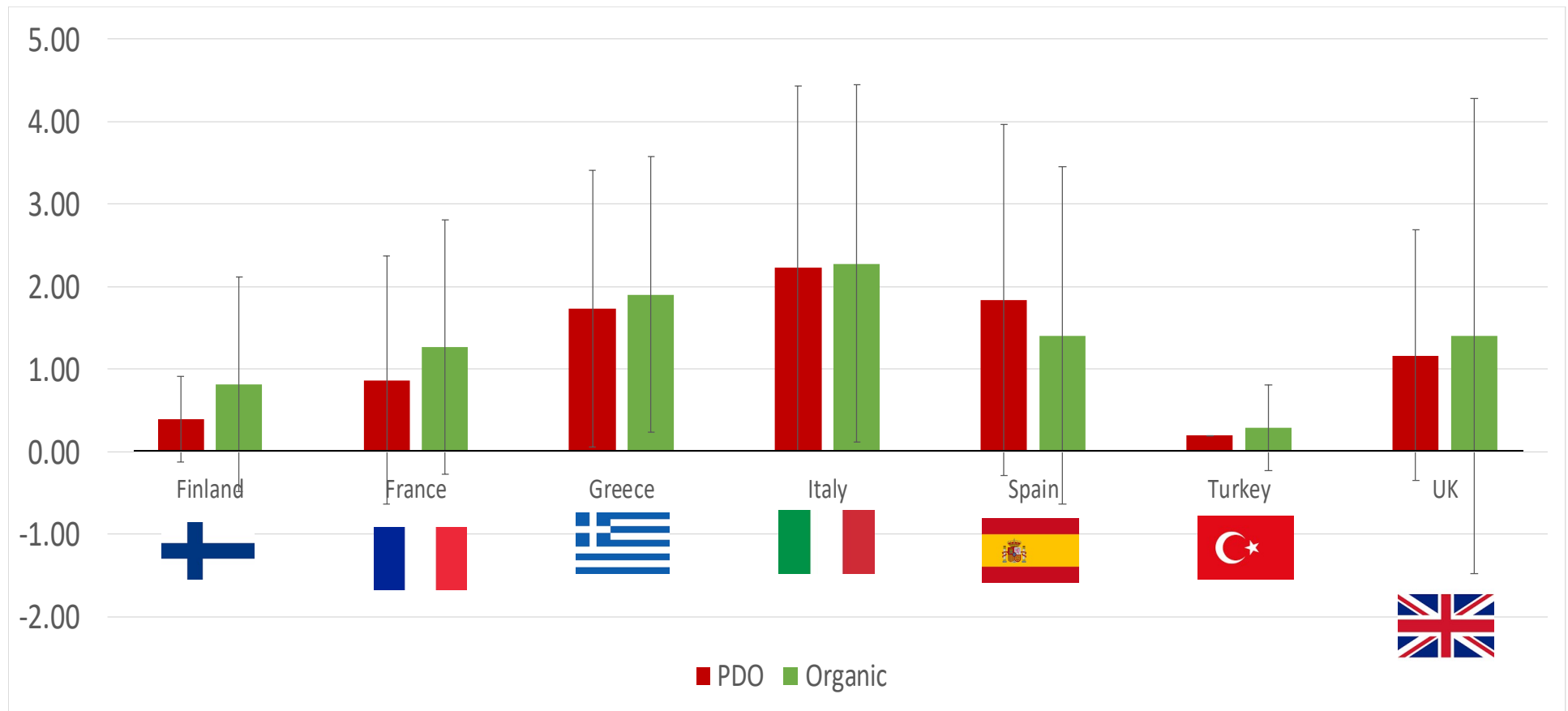
WTP for mixed cheese (€)



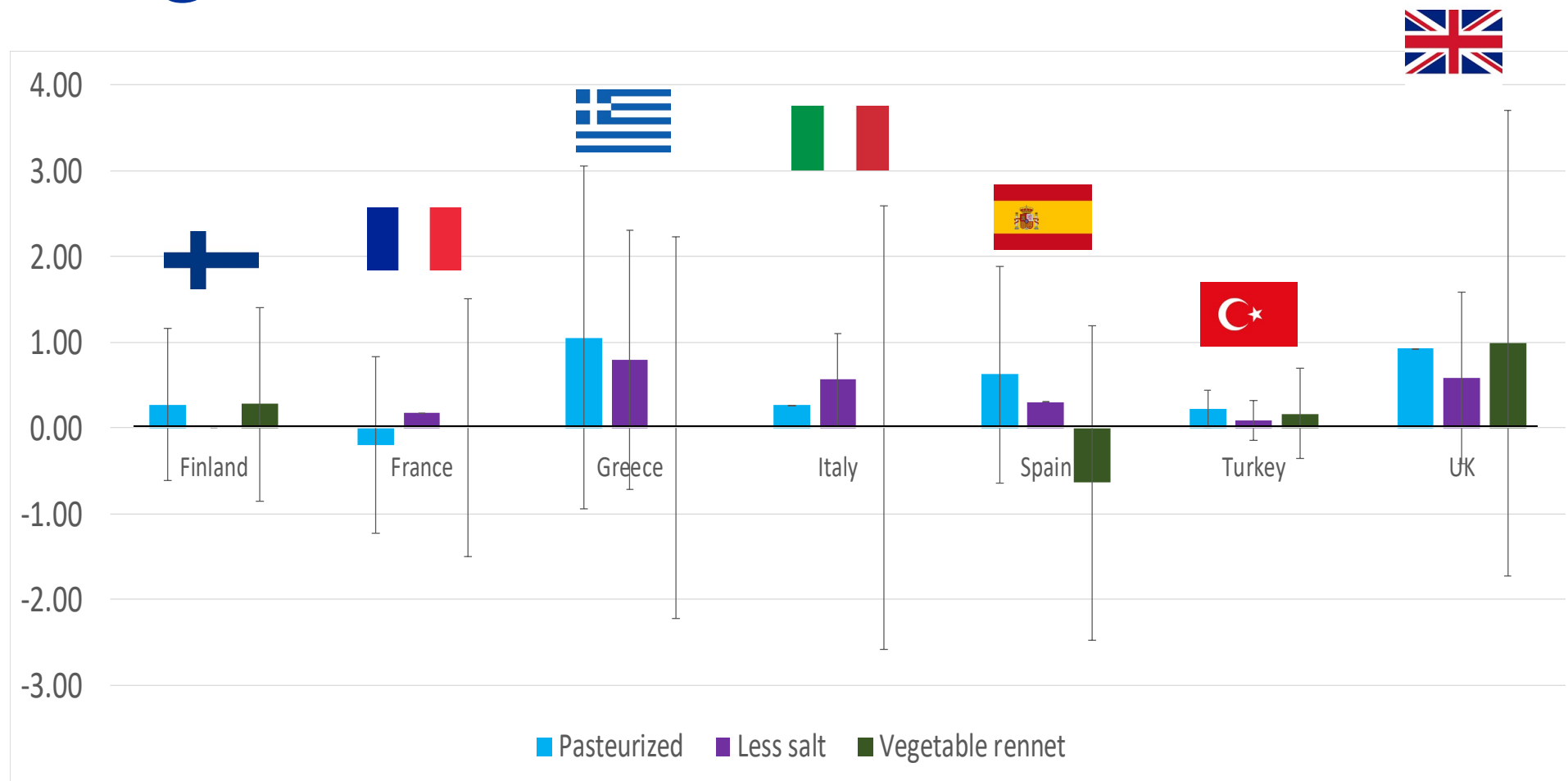
WTP for cheese national origin (€)



WTP for PDO and organic label (€)



WTP for pasteurization, less salt & vegetable rennet (€)



The radar chart displays the performance of Spain across ten categories. The scale ranges from -1.00 to 2.00. Spain's performance is highlighted in yellow, showing negative values for most categories except PDO and Organic.

Category	Spain Performance
Goat	-0.20
Ewe	-0.10
Cow	-0.80
Goat & Ewe	-0.90
Goat & Cow	-1.00
Ewe & Cow	-0.80
Origin	-0.50
PDO	1.00
Pasteurized	0.80
Organic	0.80

Sheep/goat cheese findings

- Most important attributes are PDO and organic.
- Cow milk cheese is often preferred over goat/ewe milk cheese
- Countries have heterogeneous preferences between and within them.
 - France → not pasteurized milk and goat milk is preferred.
 - Spain → Animal rennet is preferred.
- For cheese → consumers rely more on labels (PDO, Organic) than for meat, where they rely mainly on origin





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