

### **Deliverable Report**

Deliverable No:	D29.1	Delivery Month: 09							
	Dataset of consumers' perceptions, attitudes, buying intentions, consumption,								
Deliverable Title	willingness to buy and pay, and value perceptions towards the selected species in								
	the five countries in	the five countries investigated.							
WP No:	29	WP Lead beneficiary: P11. AU							
WP Title:	Socioeconomics - C	Consumer value percep	tions and behavioral ch	ange					
Task No:	29.1	Ta	sk Lead beneficiary:	P6. DLO					
Task Title:	Consumer value pe	rceptions and segmenta	ation						
Other beneficiaries:	P3. IRTA	P3. IRTA P11. AU P38. HRH							
Status:	Delivered	·	Expected month:	09					

Lead Scientist preparing the Deliverable: Reinders, M. (DLO)

Other Scientists participating: Krystallis, A. (AU), Guerrero, L. (IRTA)

**Objective:** The general objective of Task 29.1 was to explore consumer attitudes towards aquacultured fish, as well as define consumer value perceptions in the form of trade-offs between perceived gains (*i.e.*, benefits or 'values') and perceived losses (*i.e.*, sacrifices or 'costs') from the consumption of the fish products resulting from the species under study in the focal markets (*i.e.*, UK, Germany, Spain, France and Italy).

**Description:** The Deliverable D29.1 contains the following information: (1) the protocol describing the conceptual model, (2) the questionnaire that was used for the data collection and (3) a description of the data collected. The latter includes an explanation of the sample, frequencies and descriptions of the main variables of interest (*i.e.*, fish consumption, beliefs about aquacultured fish and evaluation of logos), and factor and reliability analyses of the multi-item constructs that constitute the conceptual model.

**Deviations:** The 'cleaned' datasets (n=500 completed in each country) are available for consideration for all partners participating within the DIVERSIFY consortium and the EU Scientific Officer upon request. However, they are made public, as this could constitute a confidentiality breach with the participants in the questionnaire.



# **Table of Contents**

1	Ob	jective	3
2	Th	eoretical background	3
	2.1	The CV model: definition and conceptualization	3
	2.2	Perceived Value	4
	2.3	Perceived Cost	5
	2.4	The CV – RQ link: relational and behavioural outcomes	5
	2.5	Moderators	6
	2.6	Screening criteria	7
3	Me	ethod and research design	8
4	Op	perationalization and questionnaire	8
	4.1	Questionnaire	9
5	De	escription of the data	14
	5.1	Germany	14
	5.2	France	21
	5.3	United Kingdom	28
	5.4	Spain	35
	5.5	Italy	42
6	Re	ferences	49

### 1 Objective

The general objective of this study was to explore consumer attitudes towards (farmed) fish, as well as define consumer value perceptions in the form of trade-offs between perceived gains (i.e., benefits or 'values') and perceived losses (i.e., sacrifices or 'costs') from the consumption of the fish products resulting from the species under study in the focal markets (i.e., UK, Germany, Spain, France and Italy).

#### 2 Theoretical background

## 2.1 The CV model: definition and conceptualization

The conceptual model that is the basis of this survey is the Customer Value model (CV), an inclusive conceptual framework whose individual parts are established well and covered extensively in the marketing literature. Broadly defined, CV is a customers' overall assessment of the value of a product or, put it differently, the overall attitude towards a product, based on perceptual trade-offs about what benefits are expected to be received (*i.e.*, individual types of values) against what it should be given up (*i.e.*, individual types of risks and costs) for the acquisition, purchase or mere use of a product (Zeithaml, 1988). Various scholars have further elaborated on the initially cognitive nature of the values part of CV by adding value components of more affective nature, besides the utility-derived ones suggested by economic theory (*i.e.*, quality-price considerations), such as hedonic and altruistic (or ethical) values (Holbrook, 2006).

In all, the CV approach underlies a 'bottom-up' attitude formation mechanism, where perceptions of (expected or actual) values and costs about a product give birth to more general attitudes towards the product or the methods used in its production; these general attitudes give in their turn birth to a number of (expected or actual) relational (*i.e.*, trust in, satisfaction with, and commitment to the product) and behavioral outcomes (*i.e.*, purchase intention). In the context of the specific project, CV is concerned with the question of whether new fish products derived from the species under consideration will be perceived to have any benefits at all from the consumers' point of view, and if any potential costs or risks perceived with the new products would have a negative impact on the overall consumer value perceptions towards the new fish products.

The CV model was initially proposed by Papista and Krystallis (2012) in the frame of customer adoption of 'green' brands. The model integrates Zeithaml's (1988) view that value and cost perceptions drive purchase decisions. The overall sequence of effects in the model is that perceived Values and Costs formulate an overall CV perception about products (*i.e.*, in the current context: innovative fish products resulting from the new species under consideration), which in turn affects the quality of the relationship (RQ) expected to develop between the product and the consumer. At the same time, perceived Values and Costs might impact directly on RQ, thus direct effects of Values and Costs to RQ should also be considered. The conceptual CV model adapted in the present context can be seen in Figure 1.

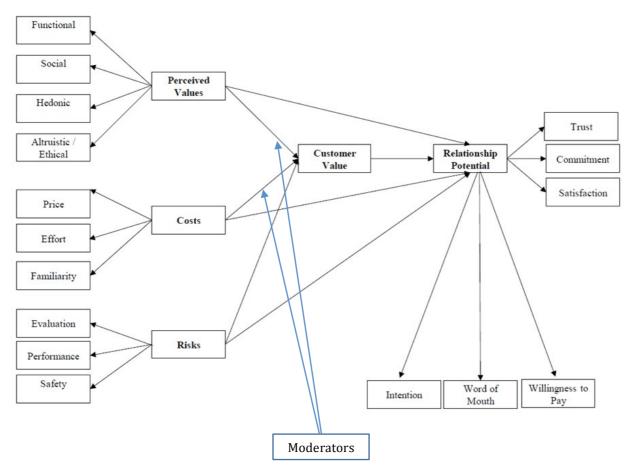


Figure 1: The Customer Value (CV) model

#### 2.2 Perceived Value

In what concerns types of values, the model adopts Holbrook's (2006) conceptualization, which is considered the most extensive in comparison to other conceptualizations (e.g., Sheth et al., 1991; Sweeney and Soutar, 2001). The types of value, as proposed by Holbrook (2006), fall into the broad categories of: a) Functional (or Economic) value: the perceived utility acquired from an alternative product's capacity for functional or physical performance (Sheth et al., 1991), which is also equivalent to product quality perceptions (Dodds et al., 1991; Baker et al., 2002); b) Social value: the perceived utility acquired from an alternative product's image congruence with relevant requirements from a specific social group (Sheth et al., 1991; Sweeney and Soutar, 2001); c) Hedonic (or emotional) value: it arises from consumers' own pleasure derived from consumption experiences appreciated for their own sake as ends in themselves (Mathwick et al., 2001; Sweeney and Soutar, 2001); d) Altruistic value: experienced when associating product purchasing or use with ethically desirable practices in which 'virtue is its own reward' (Holbrook, 2006); and e) Emotional value: in the area of food consumer behaviour, past exploratory research employing the CV model (i.e., Perrea et al, submitted) had also identified an emotional type of value in the context of innovative food products (i.e., food produced through emerging processing technologies). This type of value was found to relate to emotions of excitement, enthusiasm and indeed happiness from the purchase of the study products. All the types of value presented above are considered to formulate a composite Perceived Values component.

#### 2.3 Perceived Cost

On the other hand, in an attempt to be exhaustive regarding various types of costs that have been identified in the literature. Papista and Krystallis (2012) considered the following cost categories as having an expected effect on perceived CV: 1) Price: previous studies consistently suggest an inverse linkage between price and CV (Dodds et al., 1991; Grewal et al., 1998); and 2) Effort: it is required to physically purchase the product (Cronin et al., 1997; Petrick, 2002), typically seen in terms of limited availability of the product in usual outlets (Yoo et al., 2000), and time required to travel and make the purchase (Huber et al., 2001). These two types of cost are the most commonly identified transaction costs perceived by consumers in their encounter with the product; 3) Evaluation: it is associated with the effort to collect the right information in terms of quality and quantity, and understand it in order to evaluate properly the products in question (Burnham et al., 2003); and 4) Performance (or uncertainty cost): perceptions of risk surrounding the product's functional or physical performance (Sweeney et al., 1999; Jones et al., 2002). Moreover, to grasp the peculiarities of the current context and product type, an additional type of cost is considered, namely: 5) Safety risk: seen as the fear of physical health risk or harm that might be inherent in the consumption of farmed fish, especially in cases where there is no factual or experiential knowledge (Cardello, 2003; Mireaux et al., 2007; Ronteltap et al., 2007; Rollin et al., 2011). Evaluation, performance and safety represent types of risks that occur when consumers are in doubt with their selection of a regular product and consider switching to an alternative, innovative choice.

#### 2.4 The CV – RO link: relational and behavioural outcomes

RQ in extant literature is regarded as a higher-order construct composed of several key components reflecting the overall strength of relationships between products and consumers (Dorsch et al, 1998). RQ has been studied in the field of relationship marketing, which proposes satisfaction, trust and commitment as its key interrelated components (Hennig-Thurau et al., 2002; Palmatier et al., 2006). At the same time, borrowing from the human relationships literature, Fournier (1998) suggested a five-dimensional conceptualization of RQ, which captures more aspects of the consumer-product relationship, albeit including trust and commitment. Since previous research (*e.g.*, Ravald and Gronroos, 1996; Oh, 2003) has already provided support for the link of CV to various dimensions of RQ individually, and mostly on satisfaction, trust and commitment that are considered to be central components of RQ, it is reasonable to assume that CV would exert a direct influence on the higher-order construct of RQ, consisting of satisfaction, trust and commitment, also in the context of new fish products.

Regarding the relative effect of CV and RQ on behavioral loyalty, numerous studies have attempted to specify those relationships (*e.g.*, Blackwell et al., 1999; Oh, 1999). However, there is little uniformity concerning which of these two constructs directly affects outcomes (Cronin et al., 2000). According to one direction of research, perceptions of CV can directly impact on willingness/intention to buy (Dodds et al., 1991; Sweeney et al., 1997; Zeithaml, 1988). The direct link between CV and behavioral intentions is also supported by Bolton and Drew (1991) and Grewal et al. (1998).

On the other hand, the Relationship Marketing approach suggests that CV leads directly to relational outcomes (Sirohi et al., 1998). Valenzuela et al. (2010) also modeled CV as a direct antecedent to loyalty. After all, the effect of RQ on loyalty is well supported (e.g., Palmatier et al., 2006). Empirical evidence by Oh (1999) further supports that CV is an immediate antecedent to customer satisfaction and loyalty, and it also affects word-of-mouth directly and indirectly through customer satisfaction. On the other hand, Patterson and Spreng (1997) provide empirical support to the argument that CV is completely mediated via satisfaction and only indirectly influences repurchase behavior. Thus, previous findings on the role of CV on relational outcomes, when compared to RQ, are contradictory. Furthermore, there is no reported investigation of the extent to which these variables directly influence consumer behavior when the effects of both are simultaneously considered.



Building on the above-described past evidence, it is reasonable to assume that perceived Values and Costs/Risks would possibly have a direct effect on RQ, besides their impact through CV. In addition, a number of behavioral outcomes should be expected from RQ, and mainly purchase intention, though additional outcomes such as Willingness To Pay (WTP) and possibly Word-Of-Mouth (WOM) can also be tested.

#### 2.5 Moderators

It is plausible to expect that certain consumer psychographic characteristics moderate the strength of perceptions about the above-described determinants of value and cost in formulating overall CV of the new fish products. Relevant literature recognizes the role of certain parameters.

Involvement. Highly involved consumers are generally more likely to engage in product relationships (Christy et al., 1996; Gordon et al., 1998; Odekerken-Schroder et al., 2003). For instance, in the case of sustainable ('green') products, Sriram and Forman (1993) show that consumers place less value on the environmental and more on the functional performance of a product in the case of purchasing high involvement products than in the case of frequently purchased products. On the other hand, according to Vermeer and Verbeke (2006), the attitudes-intention gap occurs more frequently when people are not really involved in the purchase process of products. Likewise, one can assume that the level of personal involvement with the product category under consideration here (*i.e.*, new farmed fish) will influence the overall perceived value offering, and, therefore, consumer tendency to develop and retain a relationship with the new fish products that result from the study species (although empirical evidence has to provide insights on the valence of this relationship).

Domain-specific innovativeness. Domain-specific innovativeness captures an individual's predisposition toward a product class and reflects the tendency to learn about and adopt new products within a specific domain of interest (Goldsmith and Hofacker, 1991; Roehrich, 2004). Previous studies in different contexts have shown that domain-specific innovativeness is positively related to consumers' evaluation and adoption of new products (e.g., Bartels and Reinders, 2011; Citrin et al., 2000; Huotilainen et al., 2006; Lu et al., 2008). In a food context, Bartels and Reinders (2010) showed that domain-specific innovativeness was an important predictor of organic food consumption. Similarly, we expect domain-specific innovativeness with respect to products coming from the new fish species to enhance value perceptions and behavioral outcomes (e.g., buying intentions) in relation to the new fish products. In addition, it is worthwhile to investigate whether consumers with different levels of innovativeness make different trade-offs between values and costs in the CV framework. For example, Luthje (2004) suggest that consumers with high levels of innovativeness are less affected by the perceived costs of new products relative to their perceived benefits. Finally, although theoretically less well substantiated, it is interesting to test whether differences in relational outcomes (e.g., trust, commitment and satisfaction) can be related to individual differences in innovativeness.

Subjective knowledge. Consumers rely on their knowledge when learning about new products. A distinction can be made between objective and subjective knowledge: objective knowledge represents what consumers factually know about a product, whereas subjective knowledge is how much consumers think they know about the product (Park et al., 1994). Moorman et al. (2004) found that subjective knowledge influences the choice a consumer makes. As a result, several studies have found that subjective knowledge affects perceptions and purchase behavior with regard to different types of food products (Klerck and Sweeney, 2007; Smith and Paladino, 2010). Furthermore, subjective knowledge plays a role in evaluating information about fish products (Altintzoglou et al., 2014; Pieniak et al., 2007). In addition, previous research has considered subjective knowledge as a moderator of the relationship between attitudes and purchase intentions (Berger et al., 1994; Fu & Elliott, 2013). We therefore expect that subjective knowledge could

play a moderating role in determining consumers' value perceptions and relationship quality with respect to the fish products under consideration in this study.

Social representations of food. The social representation concept, originally developed by Moscovici (2001), can be defined as a system of values, ideas and practices. Social representations are relevant in understanding how consumers deal with novel foods. In order to predict the willingness of consumers to try novel foods, Bäckström et al. (2004) developed five different social representation dimensions: suspicion, adherence to technology, adherence to natural food, eating as an enjoyment, and eating as a necessity. Onwezen and Bartels (2013) developed and validated recently a shortened version of this social representations scale. Previous studies have shown that different types of new foods are predicted by different underlying constructs of social representations (Bäckström et al., 2004, Bartels and Reinders, 2010; Huotilainen et al., 2006). As such, it is worthwhile to explore which aspects of social representations play a role in predicting the value perceptions and uptake of the specific fish species.

Attitude towards and beliefs regarding farmed vs. wild fish. Public receptiveness toward farming activity and its products plays a role in the development of the aquaculture sector (Freeman et al., 2012). We expect that consumers who have a more positive attitude towards farmed fish as compared to wild fish also show a higher overall perceived value and relationship quality with respect to the new fish products of this study. On the other hand, beliefs about the characteristics of a certain product and the way it is produced can have a relevant influence on consumer perception such as in the case of farmed fish (Kole, 2003). Belief formation is a lifelong dynamic process (Castelfranchi, 2004) that can be developed by direct observation, by information and by inference (Finn, 1981; Fishbein & Azjen, 1975; Smith, et al., 2012). This way, beliefs are loosely encompassed by aspects such as experiences or acquired knowledge, and personal characteristics that determine consumer attitudes, buying intention and preferences (Friedler & Bless, 2000; Ivan & Penev, 2011; Tourangeau & Rasinski, 1988). According to Claret et al., (2014), beliefs about fish can be grouped into four categories, namely quality, safety, control and moment of buying. The first three categories are basic requirements for consumers (Aumaitre, 1999; Henson, Loader, & Traill, 1995) playing a key role in consumer confidence and trust in the food they consume, especially in those of animal origin.

Optimistic bias. Optimistic bias is defined as the tendency for overestimation of the probability of having positive events and/or underestimation of the possibility of suffering negative events (Weinstein, 1989). Many food and nutrition issues are associated with risk perception and optimistic bias (Miles & Scaife, 2003). In fact, optimistic bias has proved to be effective in order to explain different food related behaviors (Guerrero et al., 2009). Perceptions of risks associated with fish consumption may have a negative influence on fish consumption (Pieniak et al., 2008) that in turn might be controlled by optimistic bias. People who are optimistic about personal benefits associated with fish consumption may be more motivated to increase their consumption of fish compared to people who are not optimistic about the benefits, because they perceive their personal benefits as being relatively high (van Dijk et al., 2011). In addition, optimistic bias is expected to be related to the safety risk of the CV model, and to the respondents' perceived control about fish selection, preparation and consumption. In general the greater the perceived control over the outcome of an event the greater the optimistic bias for that event (Klein & Helweg-Larsen, 2002).

#### 2.6 Screening criteria

Finally, recruitment of sample participants must rely on a number of concrete outcomes, such as purchasing/consumption behaviour, and consumers' objective knowledge about aquaculture fish. The latter will be measured with five statements: three of them will be false ('More than half of the fish we buy in ... is farmed fish'; 'Fish is a source of dietary fibre'; and 'Cod is a fatty fish'); while two will be true ('Fish is a source of omega-3 fatty acids'; and 'Salmon is a fatty fish'). A 'true/false/do not know' scale is typical in assessing objective knowledge (Brucks, 1985; Park, Mothersbaugh, & Feick, 1994).

#### 3 Method and research design

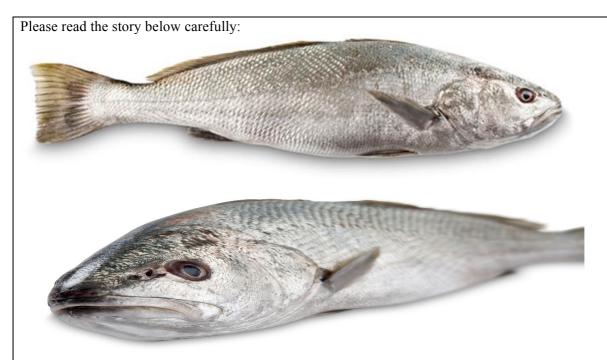
Within the above-described framework, an on-line consumer survey with min N = 500 consumers for each country (nationally representative samples) has been conducted in the five study countries, UK, DK, SP, FR, and IT. A structural model will be developed from the conceptual framework of Figure 1, and a resulting measurement model will be operationalized via a number of items, which will define various CV components (*i.e.*, types of perceived values and costs as postulated in past research, adapted to the context of the current study). In addition, the model will include as dependent variable(s) a certain measurement of behavioral outcomes explicitly (*i.e.*, operationalized through a relevant construct) or implicitly (*i.e.*, measured through the use of other attitudinal constructs like intention to buy, (stated) willingness to pay, or word-of-mouth, as well as (stated) behavior). Finally, the role of psychographic constructs such as 'involvement in the category', consumers' domain-specific innovativeness, subjective knowledge, social representations, and general attitude towards farmed fish will be confirmed in a moderation analysis, and based on this outcome a number of consumer segments in the five countries with varying profile in relation to the selected moderators (*i.e.*, high/low involvement, domain-specific innovativeness, subjective knowledge, social representations, and general attitude towards farmed fish) and resulting CV configuration and resulting outcomes) will be developed.

### 4 Operationalization and questionnaire

The above conceptual model is operationalized as suggested in the following Table 1: seven-point Likert scales will be used for all constructs, with end-points: 1= 'Strongly Disagree' to 7= 'Strongly Agree'. For intention, a 7-point probabilistic scale will be used with end-points: 1= 'Most probable' to 7= 'Least probable'. The questionnaire was identical for all countries, created in English, translated into the different national languages and back-translated as appropriate.

#### 4.1 Questionnaire

The pre-pilot questionnaire as used in this study is depicted below:



In this picture you see a new marine finfish species from the European aquaculture industry that has entered the market recently. The **size of this fish is similar to that of Atlantic Salmon**. This fish can be found in the Mediterranean and Black Sea, and along the eastern Atlantic coast.

This fish is a **high quality meal** choice, has a **lower fat content** than the average farmed fish, **excellent taste** and **firm, yet juice flesh**. Due to these characteristics, this fish is very suitable to be **served at special occasions**. Moreover, this species is very suitable for the **development of value-added products**. As such, compared to other possible choices, this fish has the potential to **gain a popular image**. Finally, the development of this fish will **be more environmentally friendly**, compared to other species, and takes place in a **controlled production system**. This new finfish, therefore, suits the needs of consumers who demand **sustainability** and **low environmental impact**.

As a result of its high quality, this fish might be more expensive than the average farmed fish. In addition, since both its production and market are still small, it is likely that it will not be widely available in the 'usual' retail outlets. Although this fish is praised for its taste, this taste might seem different than usually expected from farmed fish, a taste that not everyone would appreciate. Moreover, due to its different quality, this fish might demand extra skills to cook compared to other farmed or wild species. Overall, despite sufficient experience with its production system, the exact rearing methods for this fish are still not perfected as yet.

Considering the fish that is described above, please kindly reply to the questions below:

[Likert-type agreement questions with end-points: 1= 'strongly agree' to 7= 'strongly disagree']



VALUES	
Functional	1. This fish would have consistent quality
value	<ul><li>2. This fish would be well produced</li><li>3. This fish would be a tasty dish</li></ul>
Sweeney	4. This fish would be a tasty dish
&Soutar (2001)	5. This fish would be a healthy food choice
Social value	6. This fish would be purchased by many people I know
Sweeney &	7. This fish would improve the way other people perceive me
Soutar (2001); Sanchez-	8. Buying this fish would make a good impression on other people
Fernandez &	9. This fish would give those who buy it social approval
Holbrook	
(2009)	
Hedonic value	10. I would like this fish
Sweeney	11. I would feel relaxed consuming this fish
&Soutar (2001)	12. This fish would make me feel good
Ethical value	13. Buying this fish is coherent with my ethical values
Sanchez-	14. Buying this fish would make good to the environment
Fernandez et	15. Buying this fish would contribute to the survival of the aquaculture industry
al. (2009)	16. Buying this fish would be beneficial to social groups in need ( <i>e.g.</i> , the children)
Emotional	17. Buying this fish makes me feel excited
value	18. Buying this fish makes me enthusiastic
	19. Buying this fish makes me feel happy
	COSTS
Price	20. This fish would not be reasonably priced
Sweeney	21. This fish would not be as good a product as its price indicates
&Soutar (2001)	22. This fish would have higher price than the average of farmed fish
	23. This fish would not be economical
Effort	24. This fish would require too much time to find
Yoo et al.	25. This fish would require too much effort to find
(2000)	26. This fish would be hard to find
Petrick (2002)	
Unfamiliarity	27. I won't be able to understand everything about this fish 28. I won't be able to know all I need about this fish
	29. I won't feel as familiar as I want with this fish
Evaluation	30. It would be difficult to recognize this fish
costs	31. I could not afford the time to get the information to fully evaluate this fish
Burnham et al.	32. Comparing the benefits of my previous preferred fish with this fish would take too much
(2003)	time and effort
,	33. If I would change my previously preferred fish, I would have to search very much to find this fish
Performance	34. There might be a chance that this fish would not taste properly
risk	35. There might be a chance that I lose money, e.g., if the taste of this fish would be too
Sweeney et al.	different from the fish I usually buy
(1999)	36. This fish would come from a production method that I cannot trust 37. This fish would not have any extras to offer
Safety risk	38. This fish would not be safe to consume
·	39. Not enough experience is gained in this fish so as to ensure safety
	40. There might be a risk if the safety of consuming this fish is not warranted



	CUSTOMER VALUE
	COSTOMER VALUE
Customer	41. I would consider this fish to be good value for money
value	42. I would consider this fish to be a good buy
Cronin et al.	43. The value of this fish to me would be high
(1997)	44. Compared to what I would have to give up, the overall ability of this fish to satisfy my
Dodds et al.	needs would be high
(1991)	45. This fish replace old fish products with new valuable products 46. This fish is a promising fish product
	···· ····· ···· ··· ···· ···· ··· ···
	BEHAVIORAL OUTCOMES
Satisfaction	47. It would be a wise choice to buy this fish
Hennig-Thurau	48. Overall, I would be satisfied with this fish
et al. (2002)	49. It would be the right thing to choose this fish
Trust	50. I would trust this fish
Chaudhuri&	51. I would rely on this fish
Holbrook	52. I would consider this fish to be an honest product
(2001)	53. This fish would be safe to buy
Word of	54. I would recommend this fish to my friends and family
Mouth	55. I would talk favorably about this fish
(WOM)	56. I am willing to pay a premium price to buy this fish
(WOM)	30.1 am withing to pay a premium price to our this rish
WTP	
Intention to	57. I intend to purchase this fish next time I buy fish
Buy	58. I intent to replace my current fish with this fish
	MODERATORS
Consumer	59.I am very concerned about what fish products I purchase
Involvement	60.I care a lot about what fish products I consume
Beatty et al,	61. Generally, choosing the right fish products is important to me
1988	,,
Domain	62. In general, I am among the last in my circle of friends to purchase new fish products.
specific	63. Compared to my friends, I do little shopping for new fish products.
innovativeness	64. I would consider buying new fish products, even if I hadn't heard of it yet.
Goldsmith and	65. In general, I am the last in my circle of friends to know the names of the latest new fish
Hofacker,	product trends.
(1991)	66. I know more about new fish products than other people do.
Subjective	67. I consider that I know more about fish than the average person
knowledge	68. I think that I know more about fish than my friends
U	69. I have a lot of knowledge about how to prepare fish
Pieniak et al. (2007)	70. I have a lot of knowledge about how to evaluate the quality of fish
	71. Compared to the average person of my age and sex, the likelihood of me getting health
Optimistic	problems when eating new product from a new farmed fish is [-3/+3: much less/more
bias	likely than the average person
Miles &Scaife	72. The health risks associated with eating a new product from a new farmed fish to me
(2003)	personally are [1=very low to 7=very high]
Van Dijk et al.	73. The health risks associated with eating a new product from a new farmed fish to the
(2011)	average [Spanish / / ] are [1=very low to 7=very high]
Social	74. I value things being in accordance with nature.
	75. I feel good when Leat clean and natural food

75. I feel good when I eat clean and natural food.

representation



s of food Bäckström et al. (2004); Onwezen and Bartels (2013)	<ul> <li>76. I would like to eat only food with no additives.</li> <li>77. Eating is very important to me</li> <li>78. For me, delicious food is an essential part of weekends.</li> <li>79. I treat myself to something really delicious.</li> <li>80. New foods are just a silly trend.</li> <li>81. Consequences of eating new foods are unknown.</li> <li>82. I have some doubts about food novelties.</li> </ul>
Beliefs about	1. Farmed fish is safer than wild fish
farmed fish	2. Wild fish is more affected by marine pollution (spillages) than farmed fish
(Claret et al,	3. Wild fish contains more heavy metals than farmed fish
2014)	4. Wild fish contains more antibiotics than farmed fish
	5. Wild fish is more affected by parasites (Anisakis) than farmed fish
	6. Farmed fish has a healthier diet than wild fish
	7. Farmed fish is healthier than wild fish
	8. Farmed fish is of better quality than wild fish
	9. Farmed fish is fresher than wild fish
	10. Farmed fish is more nutritious than wild fish
	11. Wild fish is more fatty than farmed fish
	12. Farmed fish tastes better than wild fish
	13. Farmed fish is firmer than wild fish
	14. Farmed fish is more controlled than wild fish
	15. Farmed fish is more handled than wild fish
	16. Wild fish is more artificial than farmed fish
	17. Farmed fish provides more guarantees than wild fish
	18. Farmed fish is easier to find than wild fish
	19. Farmed fish is cheaper than wild fish

## Objective knowledge about fish:

Please indicate whether the below statements are in your opinion			
TRUE or FALSE			I don't
	TRUE	FALSE	know
	1	2	3
20. More than half of the fish we buy in [country] is farmed fish			
21. Fish is a source of dietary fibre	Ц	П	Ш
22. Cod is a fatty fish			
23. Fish is a source of omega-3 fatty acids			
24. Salmon is a fatty fish			

# Current fish consumption:

How often did you <b>eat</b> the following fish products in the last month?	Never	once a month or less	2-3 times a month	once a week or more	I don't know
	1	2	3	4	5
25. Farmed fish (aquaculture)					
26. Wild fish					
27. Seafood					
28. Frozen fish					
29. Whole fish					



30. Processed fish (e.g., fish-

# FP7-KBBE-2013-07, DIVERSIFY 603121

fingers)		Ш		Ц		Ц
Please observe the below logos and indicate your ag	reement with th	e relevant st	atements:			
STATE SE		Totally disagre e				Totall y agree
21. Lam awara of this logo		1	2	3 □	4 □	5 □
<ul><li>31. I am aware of this logo</li><li>32. The likely quality of products carryin</li></ul>	g this logo is					
extremely high 33. Products carrying this logo would be	my first		- U			
choice	my mst					
<ul><li>34. I find this logo trustworthy</li><li>35. I value this logo</li></ul>						
33. I value this logo		Ш	Ш	Ш		Ш
RESPONSIBLY  SC CERTIFIED ASC-AQUA.ORG  TM		Totally disagre e				Totall y agree
		1	2	3	4	5
<ul><li>36. I am aware of this logo</li><li>37. The likely quality of products carryin</li></ul>	a this logo is					
extremely high	g uns logo is					
38. Products carrying this logo would be choice	my first					
39. I find this logo trustworthy						
40. I value this logo		Totally disagre	Ц		Ц	Totall y agree
41. Low owers of this loss		1	2 □	3 □	4 □	5 
<ul><li>41. I am aware of this logo</li><li>42. The likely quality of products carryin extremely high</li></ul>	g this logo is					
43. Products carrying this logo would be choice	my first					
44. I find this logo trustworthy 45. I value this logo						

Socio-demographics, including body mass index.

### 5 Description of the data

This chapter describes the data for each of the five countries in which data was collected.

#### 5.1 Germany

#### **Description of sample:**

- N = 506 (without missings);
- 249 male and 257 female
- Age varies between 18 and 64 (mean = 41.75, SD = 13.154)

What is your level of education?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	15	3,0	3,0	3,0
vana	Secondary school	212	41,9	41,9	44,9
	Technical School	121	23,9	23,9	68,8
	University Degree	120	23,7	23,7	92,5
	Post-graduate Degree	38	7,5	7,5	100,0
	Total	506	100,0	100,0	

How would you evaluate your income level?

	y y						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Lower than average	128	25,3	25,3	25,3		
vana	About average	272	53,8	53,8	79,1		
	Higher than average	106	20,9	20,9	100,0		
	Total	506	100,0	100,0			

### Socio-Economic Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social Class A/B	59	11,7	11,7	11,7
v ana	Social Class C1	138	27,3	27,3	38,9
	Social Class C2	229	45,3	45,3	84,2
	Social Class D	80	15,8	15,8	100,0
	Total	506	100,0	100,0	

Who is responsible for doing the grocery shopping in your household?

		0 0		8 1	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am the main decision maker of the household	407	80,4	80,4	80,4
	I am the joint decision maker of the household	99	19,6	19,6	100,0
	Total	506	100,0	100,0	

## Marital status:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	174	34,4	34,4	34,4
Valla	Co-habiting	90	17,8	17,8	52,2
	Married	242	47,8	47,8	100,0
	Total	506	100,0	100,0	

Are there children in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	191	37,7	37,7	37,7
	No	315	62,3	62,3	100,0
	Total	506	100,0	100,0	

Are you the main wage earner of household?

	<u> </u>						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Yes	346	68,4	68,4	68,4		
	No	160	31,6	31,6	100,0		
	Total	506	100,0	100,0			

What is your current occupation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large farmer (more than 50 stremmas)	3	,6	,6	,6
	Self-employed/ business (without employees)	18	3,6	3,6	4,2
	Self-employed/ business (with 1-2 employees)	12	2,4	2,4	6,5
	Self-employed/business (with 6-10 employees)	1	,2	,2	6,7
	Self-employed/ business (with 11-49 employees)	4	,8	,8	7,5
	Self-employed/ business (with 50+ employees)	1	,2	,2	7,7
	Professionals (Self-employed)	13	2,6	2,6	10,3
	Professionals (Employees)	128	25,3	25,3	35,6
	General Managers (-5 employees)	3	,6	,6	36,2
	General Managers (11+ employees)	11	2,2	2,2	38,3
	Middle Managers (-5 employees)	18	3,6	3,6	41,9
	Middle Managers (6+ employees)	54	10,7	10,7	52,6
	Other Office - Non Manual	43	8,5	8,5	61,1
	Other Non-Office - Non-Manual	21	4,2	4,2	65,2
	Manual-Skilled	26	5,1	5,1	70,4
	Manual-Unskilled	4	,8	,8	71,1
	Housewives	37	7,3	7,3	78,5
	Non-Working (Income holder/renters)	67	13,2	13,2	91,7



Students	42	8,3	8,3	100,0
Total	506	100,0	100,0	

What is the level of education of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	16	3,2	3,2	3,2
	Secondary school	199	39,3	39,3	42,5
	Technical School	130	25,7	25,7	68,2
	University Degree	122	24,1	24,1	92,3
	Post-graduate Degree	39	7,7	7,7	100,0
	Total	506	100,0	100,0	

What is the current occupation of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large farmer (more than 50 stremmas)	3	,6	,6	,6
	Self-employed/ business (without employees)	16	3,2	3,2	3,8
	Self-employed/ business (with 1-2 employees)	10	2,0	2,0	5,7
	Self-employed/business (with 6-10 employees)	2	,4	,4	6,1
	Self-employed/ business (with 11-49 employees)	5	1,0	1,0	7,1
	Self-employed/ business (with 50+ employees)	1	,2	,2	7,3
	Professionals (Self-employed)	12	2,4	2,4	9,7
	Professionals (Employees)	147	29,1	29,1	38,7
	General Managers (-5 employees)	5	1,0	1,0	39,7
	General Managers (6-10 employees)	1	,2	,2	39,9
	General Managers (11+ employees)	13	2,6	2,6	42,5
	Middle Managers (-5 employees)	29	5,7	5,7	48,2
	Middle Managers (6+ employees)	67	13,2	13,2	61,5
	Other Office - Non Manual	41	8,1	8,1	69,6
	Other Non-Office - Non-Manual	19	3,8	3,8	73,3
	Manual-Skilled	39	7,7	7,7	81,0
	Manual-Unskilled	2	,4	,4	81,4
	Housewives	9	1,8	1,8	83,2
	Non-Working (Income holder/renters)	62	12,3	12,3	95,5
	Students	23	4,5	4,5	100,0
	Total	506	100,0	100,0	



## Farmed fish consumption:

# How often did you eat the following fish products in the last month? - Farmed fish

(aquaculture)

		(uquuet			
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Never	62	12,3	12,3	12,3
	Once a month or less	206	40,7	40,7	53,0
	2-3 times a month	128	25,3	25,3	78,3
	Once a week or more	51	10,1	10,1	88,3
	I don't know	59	11,7	11,7	100,0
	Total	506	100,0	100,0	

## Beliefs about farmed fish:

	Mean	Standard deviation
Farmed fish is safer than wild fish	3.71	1.423
Wild fish is more affected by marine pollution (spillages) than farmed fish	3.23	1.436
Wild fish contains more heavy metals than farmed fish	3.70	1.318
Wild fish contains more antibiotics than farmed fish	4.84	1.691
Wild fish is more affected by parasites (anisakis) than farmed fish	3.68	1.367
Farmed fish has a healthier diet than wild fish	4.08	1.495
Farmed fish is healthier than wild fish	4.20	1.452
Farmed fish is of better quality than wild fish	4.09	1.443
Farmed fish is fresher than wild fish	4.06	1.492
Farmed fish is more nutritious than wild fish	4.18	1.386
Wild fish is more fatty than farmed fish	3.86	1.443
Farmed fish tastes better than wild fish	4.31	1.414
Farmed fish is firmer than wild fish	3.96	1.319
Farmed fish is more controlled than wild fish	3.15	1.441
Farmed fish is more handled than wild fish	2.99	1.376
Wild fish is more artificial than farmed fish	5.01	1.672
Farmed fish provides more guarantees than wild fish	3.57	1.385
Farmed fish is easier to find than wild fish	2.91	1.312
Farmed fish is cheaper than wild fish	3.14	1.457



## Objective knowledge:

## Please indicate whether the below statements are in your opinion:

More than half of the fish we buy in Germany is farmed fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	318	62,8	62,8	62,8
	FALSE	78	15,4	15,4	78,3
	I DON'T KNOW	110	21,7	21,7	100,0
	Total	506	100,0	100,0	

Fish is a source of dietary fibre (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	119	23,5	23,5	23,5
	FALSE	289	57,1	57,1	80,6
	I DON'T KNOW	98	19,4	19,4	100,0
	Total	506	100,0	100,0	

Cod is a fatty fish (correct answer: FALSE)

		·	`	ŕ	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	186	36,8	36,8	36,8
	FALSE	198	39,1	39,1	75,9
	I DON'T KNOW	122	24,1	24,1	100,0
	Total	506	100,0	100,0	

Fish is a source of omega-3 fatty acids (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	467	92,3	92,3	92,3
	FALSE	17	3,4	3,4	95,7
	I DON'T KNOW	22	4,3	4,3	100,0
	Total	506	100,0	100,0	

Salmon is a fatty fish (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	333	65,8	65,8	65,8
	FALSE	131	25,9	25,9	91,7
	I DON'T KNOW	42	8,3	8,3	100,0
	Total	506	100,0	100,0	

# **Evaluation of logos:**



	Mean	Standard deviation
I am aware of this logo	3.33	1.306
The likely quality of products carrying this logo is extremely	2.92	.981
high	2.92	.901
Products carrying this logo would be my first choice	2.78	1.041
I find this logo trustworthy	2.88	1.089
I value this logo	2.80	1.085



	Mean	Standard deviation
I am aware of this logo	2.62	1.426
The likely quality of products carrying this logo is extremely	3.14	1.051
high	5.14	1.031
Products carrying this logo would be my first choice	2.96	1.054
I find this logo trustworthy	3.11	1.042
I value this logo	2.98	1.098



	Mean	Standard deviation
I am aware of this logo	2.71	1.467
The likely quality of products carrying this logo is extremely high	3.06	1.038
Products carrying this logo would be my first choice	2.90	1.069
I find this logo trustworthy	3.03	1.096
I value this logo	2.93	1.114

# Results of factorial analysis for multi-item constructs:

Construct	# items	Cronbach's alpha	Relevant dimensions	Comments
Functional value	5	.906	1	
Social value	4	.878	1	_
Hedonic value	3	.889	1	<u> </u>
Ethical value	4	.794	1	-
Emotional value	3	.884	1	<u> </u>
Price	3	.740	1	Item A21 was dropped in the
riice	3	.740	1	analyses
Effort	3	.873	1	allaryses
	3	.873 .766	1	-
Unfamiliarity			1	<del>-</del>
Evaluation costs	4	.827	1	-
Performance risk	4	.813	l	-
Safety risk	3	.781	<u>l</u>	-
Customer value	6	.895	1	-
Satisfaction	3	.939	1	-
Trust	4	.942	1	-
WOM	2	.898	1	-
Intention to Buy	2	.857	1	-
C. involvement	3	.878	1	
D.S. innovativeness	3	.884	1	(reversed) items A64 and A66
				were dropped in the analyses
Subj. Knowledge	4	.927	1	
Optimistic bias	3	.808	1	
Social representation	3	.731	1	Items A74-79 were dropped
ī				from the analysis. Only Items
				A80-82 ('novel food'
				dimension) were kept.
Beliefs	19	Not necessary		· · · / · · · · · · · · · · · · · · · ·



## 5.2 France

## **Description of sample:**

- N = 500 (without missings);
- 243 male and 257 female
- Age varies between 18 and 64 (mean = 41.72, SD = 12.548)

What is your level of education?

William 15 your 10 your 10 to the control of the co					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	2	,4	,4	,4
Valid	Primary school	6	1,2	1,2	1,6
	Secondary school	125	25,0	25,0	26,6
	Technical School	99	19,8	19,8	46,4
	University Degree	150	30,0	30,0	76,4
	Post-graduate Degree	118	23,6	23,6	100,0
	Total	500	100,0	100,0	

How would you evaluate your income level?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lower than average	125	25,0	25,0	25,0
, and	About average	307	61,4	61,4	86,4
	Higher than average	68	13,6	13,6	100,0
	Total	500	100,0	100,0	

**Socio-Economic Class** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social Class A/B	95	19,0	19,0	19,0
Vulla	Social Class C1	158	31,6	31,6	50,6
	Social Class C2	182	36,4	36,4	87,0
	Social Class D	65	13,0	13,0	100,0
	Total	500	100,0	100,0	

Who is responsible for doing the grocery shopping in your household?

	•	0 0	_ , , , ,	C t	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am the main decision maker of the household	390	78,0	78,0	78,0
	I am the joint decision maker of the household	110	22,0	22,0	100,0
	Total	500	100,0	100,0	

### Marital status:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	162	32,4	32,4	32,4
, and	Co-habiting	46	9,2	9,2	41,6
	Married	292	58,4	58,4	100,0
	Total	500	100,0	100,0	

Are there children in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	276	55,2	55,2	55,2
Valla	No	224	44,8	44,8	100,0
	Total	500	100,0	100,0	

Are you the main wage earner of household?

	· ·	- 0			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	355	71,0	71,0	71,0
, and	No	145	29,0	29,0	100,0
	Total	500	100,0	100,0	

What is your current occupation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large farmer (more than 50 stremmas)	3	,6	,6	,6
	Self-employed/ business (without employees)	16	3,2	3,2	3,8
	Self-employed/ business (with 1-2 employees)	1	,2	,2	4,0
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	5,0
	Self-employed/business (with 6-10 employees)	1	,2	,2	5,2
	Self-employed/ business (with 11-49 employees)	3	,6	,6	5,8
	Self-employed/ business (with 50+ employees)	2	,4	,4	6,2
	Professionals (Self-employed)	4	,8	,8	7,0
	Professionals (Employees)	113	22,6	22,6	29,6
	General Managers (-5 employees)	2	,4	,4	30,0
	General Managers (11+ employees)	9	1,8	1,8	31,8
	Middle Managers (-5 employees)	35	7,0	7,0	38,8
	Middle Managers (6+ employees)	51	10,2	10,2	49,0
	Other Office - Non Manual	53	10,6	10,6	59,6
	Other Non-Office - Non-Manual	7	1,4	1,4	61,0
	Manual-Skilled	45	9,0	9,0	70,0
	Manual-Unskilled	17	3,4	3,4	73,4
	Housewives	38	7,6	7,6	81,0
	Non-Working (Income holder/ renters)	72	14,4	14,4	95,4



Students	23	4,6	4,6	100,0
Total	500	100,0	100,0	

What is the level of education of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	1	,2	,2	,2
v ana	Primary school	10	2,0	2,0	2,2
	Secondary school	124	24,8	24,8	27,0
	Technical School	109	21,8	21,8	48,8
	University Degree	129	25,8	25,8	74,6
	Post-graduate Degree	127	25,4	25,4	100,0
	Total	500	100,0	100,0	

What is the current occupation of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large farmer (more than 50 stremmas)	4	,8	,8	,8
	Self-employed/ business (without employees)	20	4,0	4,0	4,8
	Self-employed/ business (with 1-2 employees)	1	,2	,2	5,0
	Self-employed/ business (with 3-5 employees)	4	,8	,8	5,8
	Self-employed/business (with 6-10 employees)	2	,4	,4	6,2
	Self-employed/ business (with 11-49 employees)	4	,8	,8	7,0
	Self-employed/ business (with 50+ employees)	5	1,0	1,0	8,0
	Professionals (Self-employed)	6	1,2	1,2	9,2
	Professionals (Employees)	108	21,6	21,6	30,8
	General Managers (-5 employees)	3	,6	,6	31,4
	General Managers (6-10 employees)	1	,2	,2	31,6
	General Managers (11+ employees)	9	1,8	1,8	33,4
	Middle Managers (-5 employees)	40	8,0	8,0	41,4
	Middle Managers (6+ employees)	79	15,8	15,8	57,2
	Other Office - Non Manual	44	8,8	8,8	66,0
	Other Non-Office - Non-Manual	8	1,6	1,6	67,6
	Manual-Skilled	74	14,8	14,8	82,4
	Manual-Unskilled	13	2,6	2,6	85,0
	Housewives	9	1,8	1,8	86,8
	Non-Working (Income holder/renters)	57	11,4	11,4	98,2
	Students	9	1,8	1,8	100,0
	Total	500	100,0	100,0	



## Farmed fish consumption:

How often did you eat the following fish products in the last month? - Farmed fish (aquaculture)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	43	8,6	8,6	8,6
	Once a month or less	194	38,8	38,8	47,4
	2-3 times a month	154	30,8	30,8	78,2
	Once a week or more	85	17,0	17,0	95,2
	I don't know	24	4,8	4,8	100,0
	Total	500	100,0	100,0	

### Beliefs about farmed fish:

	Mean	Standard deviation
Farmed fish is safer than wild fish	4.25	1.504
Wild fish is more affected by marine pollution (spillages) than farmed fish	3.62	1.517
Wild fish contains more heavy metals than farmed fish	3.80	1.411
Wild fish contains more antibiotics than farmed fish	4.46	1.762
Wild fish is more affected by parasites (anisakis) than farmed fish	3.87	1.422
Farmed fish has a healthier diet than wild fish	4.50	1.605
Farmed fish is healthier than wild fish	4.34	1.533
Farmed fish is of better quality than wild fish	4.54	1.600
Farmed fish is fresher than wild fish	4.48	1.570
Farmed fish is more nutritious than wild fish	4.34	1.547
Wild fish is more fatty than farmed fish	4.17	1.614
Farmed fish tastes better than wild fish	4.61	1.603
Farmed fish is firmer than wild fish	4.36	1.515
Farmed fish is more controlled than wild fish	3.43	1.492
Farmed fish is more handled than wild fish	2.86	1.539
Wild fish is more artificial than farmed fish	4.73	1.752
Farmed fish provides more guarantees than wild fish	4.19	1.516
Farmed fish is easier to find than wild fish	2.91	1.524
Farmed fish is cheaper than wild fish	3.11	1.546



## Objective knowledge:

## Please indicate whether the below statements are in your opinion

More than half of the fish we buy in France is farmed fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	324	64,8	64,8	64,8
	FALSE	58	11,6	11,6	76,4
	I DON'T KNOW	118	23,6	23,6	100,0
	Total	500	100,0	100,0	

Fish is a source of dietary fibre (correct answer: FALSE)

					<i></i>
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	241	48,2	48,2	48,2
	FALSE	158	31,6	31,6	79,8
	I DON'T KNOW	101	20,2	20,2	100,0
	Total	500	100,0	100,0	

Cod is a fatty fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	149	29,8	29,8	29,8
	FALSE	228	45,6	45,6	75,4
	I DON'T KNOW	123	24,6	24,6	100,0
	Total	500	100,0	100,0	

Fish is a source of omega-3 fatty acids (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	425	85,0	85,0	85,0
, 6116	FALSE	29	5,8	5,8	90,8
	I DON'T KNOW	46	9,2	9,2	100,0
	Total	500	100,0	100,0	

Salmon is a fatty fish (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	382	76,4	76,4	76,4
,	FALSE	76	15,2	15,2	91,6
	I DON'T KNOW	42	8,4	8,4	100,0
	Total	500	100,0	100,0	

# **Evaluation of logos:**



	Mean	Standard deviation	
I am aware of this logo	2.32	1.318	
The likely quality of products carrying this logo is extremely	2.00	1.010	
high	2.90	1.019	
Products carrying this logo would be my first choice	2.78	1.047	
I find this logo trustworthy	2.91	1.039	
I value this logo	2.75	1.114	



	Mean	Standard deviation
I am aware of this logo	2.15	1.265
The likely quality of products carrying this logo is extremely	2.95	1.058
high	2.93	1.036
Products carrying this logo would be my first choice	2.75	1.096
I find this logo trustworthy	2.95	1.042
I value this logo	2.76	1.137



	Mean	Standard deviation
I am aware of this logo	2.58	1.390
The likely quality of products carrying this logo is extremely	2.95	1.055
high		
Products carrying this logo would be my first choice	2.80	1.101
I find this logo trustworthy	3.00	1.080
I value this logo	2.78	1.160

# Results of factorial analysis for multi-item constructs:

Construct	# items	Cronbach's alpha	Relevant	Comments
			dimensions	
Functional value	5	.949	1	-
Social value	4	.888	1	-
Hedonic value	3	.910	1	-
Ethical value	4	.898	1	-
Emotional value	3	.922	1	-
Price	3	.799	1	Item A21 was dropped in the
				analyses
Effort	3	.839	1	-
Unfamiliarity	3	.788	1	-
Evaluation costs	4	.729	1	-
Performance risk	4	.812	1	-
Safety risk	3	.707	1	-
Customer value	6	.862	1	-
Satisfaction	3	.944	1	-
Trust	4	.941	1	-
WOM	2	.912	1	-
Intention to Buy	2	.861	1	-
C. involvement	3	.942	1	
D.S. innovativeness	3	.860	1	(reversed) items A64 and A66
				were dropped in the analyses
Subj. Knowledge	4	.946	1	
Optimistic bias	3	.895	1	
Social representation	3	.739	1	Items A74-79 were dropped
<u>^</u>				from the analysis. Only Items
				A80-82 ('novel food'
				dimension) were kept.
Beliefs	19	Not necessary		



## 5.3 United Kingdom

## **Description of sample:**

- N = 505 (without missings);
- 258 male and 247 female
- Age varies between 18 and 64 (mean = 42.29, SD = 13.462)

What is your level of education?

$\mathcal{L}$							
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	No formal education	1	,2	,2	,2		
	Secondary school	137	27,1	27,1	27,3		
	Technical School	129	25,5	25,5	52,9		
	University Degree	171	33,9	33,9	86,7		
	Post-graduate Degree	67	13,3	13,3	100,0		
	Total	505	100,0	100,0			

How would you evaluate your income level?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lower than average	141	27,9	27,9	27,9
vanu	About average	280	55,4	55,4	83,4
	Higher than average	84	16,6	16,6	100,0
	Total	505	100,0	100,0	

### Socio-Economic Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social Class A/B	63	12,5	12,5	12,5
	Social Class C1	196	38,8	38,8	51,3
	Social Class C2	165	32,7	32,7	84,0
	Social Class D	80	15,8	15,8	99,8
	Social Class E	1	,2	,2	100,0
	Total	505	100,0	100,0	

Who is responsible for doing the grocery shopping in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am the main decision maker of the household	361	71,5	71,5	71,5
	I am the joint decision maker of the household	144	28,5	28,5	100,0
	Total	505	100,0	100,0	

## Marital status:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	178	35,2	35,2	35,2
	Co-habiting	102	20,2	20,2	55,4
	Married	225	44,6	44,6	100,0
	Total	505	100,0	100,0	

Are there children in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	204	40,4	40,4	40,4
	No	301	59,6	59,6	100,0
	Total	505	100,0	100,0	

Are you the main wage earner of household?

	· ·				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	363	71,9	71,9	71,9
v una	No	142	28,1	28,1	100,0
	Total	505	100,0	100,0	

What is your current occupation?

		Frequenc			Cumulative
		у	Percent	Valid Percent	Percent
Valid	Large farmer (more than 50 stremmas)	1	,2	,2	,2
	Self-employed/ business (without employees)	25	5,0	5,0	5,1
	Self-employed/ business (with 1-2 employees)	6	1,2	1,2	6,3
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	7,3
	Self-employed/business (with 6-10 employees)	2	,4	,4	7,7
	Self-employed/ business (with 11-49 employees)	3	,6	,6	8,3
	Self-employed/ business (with 50+ employees)	4	,8	,8	9,1
	Professionals (Self-employed)	11	2,2	2,2	11,3
	Professionals (Employees)	87	17,2	17,2	28,5
	General Managers (-5 employees)	8	1,6	1,6	30,1
	General Managers (6-10 employees)	8	1,6	1,6	31,7
	General Managers (11+ employees)	9	1,8	1,8	33,5
	Middle Managers (-5 employees)	21	4,2	4,2	37,6
	Middle Managers (6+ employees)	39	7,7	7,7	45,3
	Other Office - Non Manual	65	12,9	12,9	58,2
	Other Non-Office - Non-Manual	4	,8	,8	59,0

Manual-Skilled	53	10,5	10,5	69,5
Manual-Unskilled	31	6,1	6,1	75,6
Housewives	41	8,1	8,1	83,8
Non-Working (Income holder/ renters)	60	11,9	11,9	95,6
Students	22	4,4	4,4	100,0
Total	505	100,0	100,0	

What is the level of education of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	1	,2	,2	,2
	Primary school	1	,2	,2	,4
	Secondary school	148	29,3	29,3	29,7
	Technical School	119	23,6	23,6	53,3
	University Degree	167	33,1	33,1	86,3
	Post-graduate Degree	69	13,7	13,7	100,0
	Total	505	100,0	100,0	

What is the current occupation of the main wage earner of household?

		Frequenc			Cumulative
		у	Percent	Valid Percent	Percent
Valid	Small farmer (up to 50 stremmas)	1	,2	,2	,2
	Self-employed/ business (without employees)	27	5,3	5,3	5,5
	Self-employed/ business (with 1-2 employees)	6	1,2	1,2	6,7
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	7,7
	Self-employed/business (with 6-10 employees)	1	,2	,2	7,9
	Self-employed/ business (with 11-49 employees)	2	,4	,4	8,3
	Self-employed/ business (with 50+ employees)	4	,8	,8	9,1
	Professionals (Self-employed)	12	2,4	2,4	11,5
	Professionals (Employees)	97	19,2	19,2	30,7
	General Managers (-5 employees)	10	2,0	2,0	32,7
	General Managers (6-10 employees)	9	1,8	1,8	34,5
	General Managers (11+ employees)	17	3,4	3,4	37,8
	Middle Managers (-5 employees)	28	5,5	5,5	43,4
	Middle Managers (6+ employees)	47	9,3	9,3	52,7
	Other Office - Non Manual	63	12,5	12,5	65,1
	Other Non-Office - Non-Manual	3	,6	,6	65,7
	Manual-Skilled	75	14,9	14,9	80,6

Manual-Unskilled	32	6,3	6,3	86,9
Housewives	11	2,2	2,2	89,1
Non-Working (Income holder/ renters)	47	9,3	9,3	98,4
Students	8	1,6	1,6	100,0
Total	505	100,0	100,0	

## Farmed fish consumption:

How often did you eat the following fish products in the last month? - 25. Farmed fish (aquaculture)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	28	5,5	5,5	5,5
	Once a month or less	164	32,5	32,5	38,0
	2-3 times a month	153	30,3	30,3	68,3
	Once a week or more	117	23,2	23,2	91,5
	I don't know	43	8,5	8,5	100,0
	Total	505	100,0	100,0	

### Beliefs about farmed fish:

	Mean	Standard deviation
Farmed fish is safer than wild fish	3.78	1.238
Wild fish is more affected by marine pollution (spillages) than farmed fish	3.37	1.371
Wild fish contains more heavy metals than farmed fish	3.70	1.177
Wild fish contains more antibiotics than farmed fish	4.25	1.473
Wild fish is more affected by parasites (anisakis) than farmed fish	3.70	1.307
Farmed fish has a healthier diet than wild fish	4.01	1.272
Farmed fish is healthier than wild fish	4.05	1.317
Farmed fish is of better quality than wild fish	4.14	1.333
Farmed fish is fresher than wild fish	4.07	1.302
Farmed fish is more nutritious than wild fish	4.13	1.327
Wild fish is more fatty than farmed fish	4.10	1.366
Farmed fish tastes better than wild fish	4.17	1.345
Farmed fish is firmer than wild fish	3.94	1.238
Farmed fish is more controlled than wild fish	3.05	1.292
Farmed fish is more handled than wild fish	3.39	1.252
Wild fish is more artificial than farmed fish	4.56	1.616
Farmed fish provides more guarantees than wild fish	3.55	1.293
Farmed fish is easier to find than wild fish	2.93	1.333
Farmed fish is cheaper than wild fish	3.23	1.344



## Objective knowledge:

## Please indicate whether the below statements are in your opinion

More than half of the fish we buy in England is farmed fish (correct answer: FALSE)

					,
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	284	56,2	56,2	56,2
	FALSE	83	16,4	16,4	72,7
	I DON'T KNOW	138	27,3	27,3	100,0
	Total	505	100,0	100,0	

Fish is a source of dietary fibre (correct answer: FALSE)

					,
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	260	51,5	51,5	51,5
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	FALSE	147	29,1	29,1	80,6
	I DON'T KNOW	98	19,4	19,4	100,0
	Total	505	100,0	100,0	

Cod is a fatty fish (correct answer: FALSE)

Cours a facty fish (correct answer: 171252)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	97	19,2	19,2	19,2
	FALSE	332	65,7	65,7	85,0
	I DON'T KNOW	76	15,0	15,0	100,0
	Total	505	100,0	100,0	

Fish is a source of omega-3 fatty acids (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	463	91,7	91,7	91,7
, 6116	FALSE	22	4,4	4,4	96,0
	I DON'T KNOW	20	4,0	4,0	100,0
	Total	505	100,0	100,0	

Salmon is a fatty fish (correct answer: TRUE)

	S 4411		. (	· · · · · · · · · · · · · · · · · · ·	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	220	43,6	43,6	43,6
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	FALSE	216	42,8	42,8	86,3
	I DON'T KNOW	69	13,7	13,7	100,0
	Total	505	100,0	100,0	

# **Evaluation of logos:**



	Mean	Standard deviation	
I am aware of this logo	2.46	1.370	
The likely quality of products carrying this logo is extremely	3.17	1.043	
high	3.17	1.043	
Products carrying this logo would be my first choice	2.99	1.062	
I find this logo trustworthy	3.15	1.072	
I value this logo	3.08	1.095	



	Mean	Standard deviation
I am aware of this logo	2.82	1.372
The likely quality of products carrying this logo is extremely	3.28	1.002
high		
Products carrying this logo would be my first choice	3.13	1.071
I find this logo trustworthy	3.35	1.045
I value this logo	3.23	1.053



	Mean	Standard deviation
I am aware of this logo	2.34	1.303
The likely quality of products carrying this logo is extremely high	2.90	1.039
Products carrying this logo would be my first choice	2.76	1.051
I find this logo trustworthy	2.90	1.091
I value this logo	2.82	1.036

# Results of factorial analysis for multi-item constructs:

Construct	# items	Cronbach's alpha	Relevant dimensions	Comments
Functional value	5	.952	1	
Social value	4	.894	1	_
Hedonic value	3	.904	1	_
Ethical value	4	.891	1	_
Emotional value	3	.929	1	-
Price	3	.797	1	Item A21 was dropped in the
				analyses
Effort	3	.886	1	-
Unfamiliarity	3	.840	1	-
Evaluation costs	4	.835	1	-
Performance risk	4	.838	1	-
Safety risk	3	.841	1	-
Customer value	6	.918	1	-
Satisfaction	3	.938	1	-
Trust	4	.913	1	-
WOM	2	.910	1	-
Intention to Buy	2	.878	1	-
C. involvement	3	.941	1	
D.S. innovativeness	3	.899	1	(reversed) items A64 and A66
				were dropped in the analyses
Subj. Knowledge	4	.944	1	
Optimistic bias	3	.882	1	
Social representation	3	.756	1	Items A74-79 were dropped
				from the analysis. Only Items
				A80-82 ('novel food'
				dimension) were kept.
Beliefs	19	Not necessary		



### 5.4 Spain

## **Description of sample:**

- N = 500 (without missings);
- 252 male and 248 female
- Age varies between 18 and 64 (mean = 41.11, SD = 12.315)

What is your level of education?

What is your level of education.							
		Frequency	Percent	Valid Percent	Cumulative Percent		
	Primary school	7	1,4	1,4	1,4		
	Secondary school	90	18,0	18,0	19,4		
	Technical School	143	28,6	28,6	48,0		
Valid	University Degree	233	46,6	46,6	94,6		
	Post-graduate Degree	27	5,4	5,4	100,0		
	Total	500	100,0	100,0			

How would you evaluate your income level?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Lower than average	132	26,4	26,4	26,4
	About average	311	62,2	62,2	88,6
Valid	Higher than average	57	11,4	11,4	100,0
	Total	500	100,0	100,0	

## Socio-Economic Class

		Frequency	Percent	Valid Percent	Cumulative Percent
	Social Class A/B	59	11,8	11,8	11,8
	Social Class C1	172	34,4	34,4	46,2
	Social Class C2	194	38,8	38,8	85,0
Valid	Social Class D	74	14,8	14,8	99,8
	Social Class E	1	,2	,2	100,0
	Total	500	100,0	100,0	

Who is responsible for doing the grocery shopping in your household?

	•			-	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am the main decision maker of the household	313	62,6	62,6	62,6
	I am the joint decision maker of the household	187	37,4	37,4	100,0
	Total	500	100,0	100,0	

## Marital status:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	166	33,2	33,2	33,2
	Co-habiting	90	18,0	18,0	51,2
	Married	244	48,8	48,8	100,0
	Total	500	100,0	100,0	

Are there children in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	248	49,6	49,6	49,6
, 6116	No	252	50,4	50,4	100,0
	Total	500	100,0	100,0	

Are you the main wage earner of household?

	The you the main wage carner or household.							
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Yes	298	59,6	59,6	59,6			
	No	202	40,4	40,4	100,0			
	Total	500	100,0	100,0				

What is your current occupation?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Small farmer (up to 50 stremmas)	4	,8	,8	,8
	Self-employed/ business (without employees)	20	4,0	4,0	4,8
	Self-employed/ business (with 1-2 employees)	6	1,2	1,2	6,0
	Self-employed/ business (with 3-5 employees)	3	,6	,6	6,6
	Self-employed/business (with 6-10 employees)	2	,4	,4	7,0
	Self-employed/ business (with 50+ employees)	1	,2	,2	7,2
	Professionals (Self-employed)	33	6,6	6,6	13,8
	Professionals (Employees)	91	18,2	18,2	32,0
	General Managers (-5 employees)	1	,2	,2	32,2
	General Managers (6-10 employees)	3	,6	,6	32,8
	General Managers (11+ employees)	7	1,4	1,4	34,2
	Middle Managers (-5 employees)	13	2,6	2,6	36,8
	Middle Managers (6+ employees)	20	4,0	4,0	40,8
	Other Office - Non Manual	55	11,0	11,0	51,8
	Other Non-Office - Non-Manual	6	1,2	1,2	53,0
	Manual-Skilled	45	9,0	9,0	62,0

Manual-Unskilled	17	3,4	3,4	65,4
Housewives	35	7,0	7,0	72,4
Non-Working (Income holder/ renters)	100	20,0	20,0	92,4
Students	38	7,6	7,6	100,0
Total	500	100,0	100,0	

What is the level of education of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	2	,4	,4	,4
, шта	Primary school	34	6,8	6,8	7,2
	Secondary school	89	17,8	17,8	25,0
	Technical School	153	30,6	30,6	55,6
	University Degree	190	38,0	38,0	93,6
	Post-graduate Degree	32	6,4	6,4	100,0
	Total	500	100,0	100,0	

What is the current occupation of the main wage earner of household?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Small farmer (up to 50 stremmas)	4	,8	,8	,8
	Self-employed/ business (without employees)	23	4,6	4,6	5,4
	Self-employed/ business (with 1-2 employees)	10	2,0	2,0	7,4
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	8,4
	Self-employed/business (with 6-10 employees)	2	,4	,4	8,8
	Self-employed/ business (with 11-49 employees)	1	,2	,2	9,0
	Self-employed/ business (with 50+ employees)	2	,4	,4	9,4
	Professionals (Self-employed)	36	7,2	7,2	16,6
	Professionals (Employees)	117	23,4	23,4	40,0
	General Managers (-5 employees)	2	,4	,4	40,4
	General Managers (6-10 employees)	4	,8	,8	41,2
	General Managers (11+ employees)	11	2,2	2,2	43,4
	Middle Managers (-5 employees)	21	4,2	4,2	47,6
	Middle Managers (6+ employees)	31	6,2	6,2	53,8
	Other Office - Non Manual	61	12,2	12,2	66,0
	Other Non-Office - Non-Manual	13	2,6	2,6	68,6
	Manual-Skilled	65	13,0	13,0	81,6
	Manual-Unskilled	21	4,2	4,2	85,8
	Housewives	10	2,0	2,0	87,8
	Non-Working (Income holder/ renters)	52	10,4	10,4	98,2

Students	9	1,8	1,8	100,0
Total	500	100,0	100,0	

### Farmed fish consumption:

How often did you eat the following fish products in the last month? - Farmed fish (aquaculture)

		Frequency	Percent	Valid Percent	Cumulative Percent
	Never	24	4,8	4,8	4,8
	Once a month or less	154	30,8	30,8	35,6
	2-3 times a month	148	29,6	29,6	65,2
Valid	Once a week or more	149	29,8	29,8	95,0
	I don't know	25	5,0	5,0	100,0
	Total	500	100,0	100,0	

#### Beliefs about farmed fish:

	Mean	Standard deviation
Farmed fish is safer than wild fish	3.60	1.420
Wild fish is more affected by marine pollution (spillages) than farmed fish	3.18	1.500
Wild fish contains more heavy metals than farmed fish	3.36	1.375
Wild fish contains more antibiotics than farmed fish	4.22	1.460
Wild fish is more affected by parasites (anisakis) than farmed fish	3.36	1.446
Farmed fish has a healthier diet than wild fish	3.94	1.467
Farmed fish is healthier than wild fish	3.95	1.404
Farmed fish is of better quality than wild fish	4.23	1.444
Farmed fish is fresher than wild fish	4.06	1.390
Farmed fish is more nutritious than wild fish	4.15	1.416
Wild fish is more fatty than farmed fish	3.89	1.389
Farmed fish tastes better than wild fish	4.38	1.516
Farmed fish is firmer than wild fish	4.00	1.377
Farmed fish is more controlled than wild fish	2.99	1.368
Farmed fish is more handled than wild fish	3.16	1.393
Wild fish is more artificial than farmed fish	4.89	1.640
Farmed fish provides more guarantees than wild fish	3.49	1.366
Farmed fish is easier to find than wild fish	3.02	1.429
Farmed fish is cheaper than wild fish	3.27	1.458



### Objective knowledge:

### Please indicate whether the below statements are in your opinion

More than half of the fish we buy in Spain is farmed fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	253	50,6	50,6	50,6
	FALSE	129	25,8	25,8	76,4
	I DON'T KNOW	118	23,6	23,6	100,0
	Total	500	100,0	100,0	

Fish is a source of dietary fibre (correct answer: FALSE)

					<i></i>
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	277	55,4	55,4	55,4
,	FALSE	114	22,8	22,8	78,2
	I DON'T KNOW	109	21,8	21,8	100,0
	Total	500	100,0	100,0	

Cod is a fatty fish (correct answer: FALSE)

cours a facty fish (correct answer: 171252)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	107	21,4	21,4	21,4
	FALSE	289	57,8	57,8	79,2
	I DON'T KNOW	104	20,8	20,8	100,0
	Total	500	100,0	100,0	

Fish is a source of omega-3 fatty acids (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	466	93,2	93,2	93,2
, arra	FALSE	17	3,4	3,4	96,6
	I DON'T KNOW	17	3,4	3,4	100,0
	Total	500	100,0	100,0	

Salmon is a fatty fish (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	351	70,2	70,2	70,2
,	FALSE	102	20,4	20,4	90,6
	I DON'T KNOW	47	9,4	9,4	100,0
	Total	500	100,0	100,0	

### **Evaluation of logos:**



	Mean	Standard deviation	
I am aware of this logo	2.51	1.309	
The likely quality of products carrying this logo is extremely	2.14	051	
high	3.14	.951	
Products carrying this logo would be my first choice	3.01	.992	
I find this logo trustworthy	3.16	.966	
I value this logo	3.09	1.021	



	Mean	Standard deviation	
I am aware of this logo	2.60	1.297	
The likely quality of products carrying this logo is extremely	3.20	1.047	
high	3.20	1.04/	
Products carrying this logo would be my first choice	3.04	1.058	
I find this logo trustworthy	3.26	1.080	
I value this logo	3.17	1.090	



	Mean	Standard deviation
I am aware of this logo	2.56	1.318
The likely quality of products carrying this logo is extremely high	3.10	1.000
Products carrying this logo would be my first choice	2.99	1.037
I find this logo trustworthy	3.10	1.019
I value this logo	3.04	1.045

### Results of factorial analysis for multi-item constructs:

Construct	# items	Cronbach's alpha	Relevant dimensions	Comments
Functional value	5	.961	1	
Social value	4	.869	1	_
Hedonic value	3	.879	1	_
Ethical value	4	.911	1	<del>-</del>
Emotional value	3	.922	1	<del>-</del>
Price	3	.820	1	Item A21 was dropped in the
				analyses
Effort	3	.880	1	<u>-</u>
Unfamiliarity	3	.789	1	-
Evaluation costs	4	.825	1	-
Performance risk	4	.790	1	-
Safety risk	3	.746	1	-
Customer value	6	.911	1	-
Satisfaction	3	.931	1	-
Trust	4	.948	1	-
WOM	2	.857	1	-
Intention to Buy	2	.821	1	-
C. involvement	3	.950	1	
D.S. innovativeness	3	.860	1	(reversed) items A64 and A66
				were dropped in the analyses
Subj. Knowledge	4	.926	1	
Optimistic bias	3	.856	1	
Social representation	3	.741	1	Items A74-79 were dropped
				from the analysis. Only Items
				A80-82 ('novel food'
- · · ·				dimension) were kept.
Beliefs	19	Not necessary	3	

#### 5.5 Italy

### **Description of sample:**

- N = 500 (without missings);
- 234 male and 266 female
- Age varies between 18 and 64 (mean = 40.28, SD = 12.073)

What is your level of education?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Primary school	2	,4	,4	,4
	Secondary school	119	23,8	23,8	24,2
	Technical School	143	28,6	28,6	52,8
Valid	University Degree	172	34,4	34,4	87,2
	Post-graduate Degree	64	12,8	12,8	100,0
	Total	500	100,0	100,0	

How would you evaluate your income level?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Lower than average	153	30,6	30,6	30,6
	About average	320	64,0	64,0	94,6
Valid	Higher than average	27	5,4	5,4	100,0
	Total	500	100,0	100,0	

#### **Socio-Economic Class**

		Frequency	Percent	Valid Percent	Cumulative Percent
	Social Class A/B	100	20,0	20,0	20,0
	Social Class C1	125	25,0	25,0	45,0
Valid	Social Class C2	206	41,2	41,2	86,2
	Social Class D	69	13,8	13,8	100,0
	Total	500	100,0	100,0	

Who is responsible for doing the grocery shopping in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am the main decision maker of the household	368	73,6	73,6	73,6
	I am the joint decision maker of the household	132	26,4	26,4	100,0
	Total	500	100,0	100,0	

#### **Marital status:**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Single	179	35,8	35,8	35,8



Co-habiting	81	16,2	16,2	52,0
Married	240	48,0	48,0	100,0
Total	500	100,0	100,0	

Are there children in your household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	226	45,2	45,2	45,2
	No	274	54,8	54,8	100,0
	Total	500	100,0	100,0	

Are you the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	255	51,0	51,0	51,0
	No	245	49,0	49,0	100,0
	Total	500	100,0	100,0	

What is your current occupation?

		Frequenc	Percen	Valid	Cumulative
		у	t	Percent	Percent
Valid	Small farmer (up to 50 stremmas)	2	,4	,4	,4
	Self-employed/ business (without employees)	21	4,2	4,2	4,6
	Self-employed/ business (with 1-2 employees)	11	2,2	2,2	6,8
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	7,8
	Self-employed/business (with 6-10 employees)	5	1,0	1,0	8,8
	Self-employed/ business (with 11-49 employees)	4	,8	,8	9,6
	Self-employed/ business (with 50+ employees)	13	2,6	2,6	12,2
	Professionals (Self-employed)	47	9,4	9,4	21,6
	Professionals (Employees)	45	9,0	9,0	30,6
	General Managers (-5 employees)	1	,2	,2	30,8
	General Managers (6-10 employees)	3	,6	,6	31,4
	General Managers (11+ employees)	8	1,6	1,6	33,0
	Middle Managers (-5 employees)	18	3,6	3,6	36,6
	Middle Managers (6+ employees)	18	3,6	3,6	40,2
	Other Office - Non Manual	92	18,4	18,4	58,6
	Other Non-Office - Non-Manual	15	3,0	3,0	61,6
	Manual-Skilled	26	5,2	5,2	66,8
	Manual-Unskilled	11	2,2	2,2	69,0
	Housewives	57	11,4	11,4	80,4
	Non-Working (Income holder/ renters)	49	9,8	9,8	90,2



Students	49	9,8	9,8	100,0
Total	500	100,0	100,0	

What is the level of education of the main wage earner of household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	18	3,6	3,6	3,6
. 57.2.52	Secondary school	121	24,2	24,2	27,8
	Technical School	173	34,6	34,6	62,4
	University Degree	125	25,0	25,0	87,4
	Post-graduate Degree	63	12,6	12,6	100,0
	Total	500	100,0	100,0	

What is the current occupation of the main wage earner of household?

		Frequenc	Percen	Valid	Cumulative
		у	t	Percent	Percent
Valid	Small farmer (up to 50 stremmas)	1	,2	,2	,2
	Large farmer (more than 50 stremmas)	3	,6	,6	,8
	Self-employed/ business (without employees)	25	5,0	5,0	5,8
	Self-employed/ business (with 1-2 employees)	12	2,4	2,4	8,2
	Self-employed/ business (with 3-5 employees)	5	1,0	1,0	9,2
	Self-employed/business (with 6-10 employees)	7	1,4	1,4	10,6
	Self-employed/ business (with 11-49 employees)	5	1,0	1,0	11,6
	Self-employed/ business (with 50+ employees)	17	3,4	3,4	15,0
	Professionals (Self-employed)	60	12,0	12,0	27,0
	Professionals (Employees)	50	10,0	10,0	37,0
	General Managers (-5 employees)	2	,4	,4	37,4
	General Managers (6-10 employees)	4	,8	,8	38,2
	General Managers (11+ employees)	13	2,6	2,6	40,8
	Middle Managers (-5 employees)	21	4,2	4,2	45,0
	Middle Managers (6+ employees)	27	5,4	5,4	50,4
	Other Office - Non Manual	106	21,2	21,2	71,6
	Other Non-Office - Non-Manual	21	4,2	4,2	75,8
	Manual-Skilled	53	10,6	10,6	86,4
	Manual-Unskilled	15	3,0	3,0	89,4
	Housewives	14	2,8	2,8	92,2
	Non-Working (Income holder/ renters)	35	7,0	7,0	99,2
	Students	4	,8	,8	100,0
	Total	500	100,0	100,0	



### Farmed fish consumption:

# How often did you eat the following fish products in the last month? - Farmed fish (aquaculture)

(aquaculture)								
		Frequency	Percent	Valid Percent	Cumulative			
					Percent			
	Never	50	10,0	10,0	10,0			
	Once a month or less	153	30,6	30,6	40,6			
	2-3 times a month	165	33,0	33,0	73,6			
Valid	Once a week or more	119	23,8	23,8	97,4			
	I don't know	13	2,6	2,6	100,0			
	Total	500	100,0	100,0				

#### Beliefs about farmed fish:

	Mean	Standard deviation
Farmed fish is safer than wild fish	3.61	1.490
Wild fish is more affected by marine pollution (spillages) than farmed fish	3.20	1.504
Wild fish contains more heavy metals than farmed fish	3.39	1.498
Wild fish contains more antibiotics than farmed fish	4.49	1.634
Wild fish is more affected by parasites (anisakis) than farmed fish	3.50	1.479
Farmed fish has a healthier diet than wild fish	4.01	1.588
Farmed fish is healthier than wild fish	3.67	1.518
Farmed fish is of better quality than wild fish	4.41	1.633
Farmed fish is fresher than wild fish	4.12	1.590
Farmed fish is more nutritious than wild fish	4.32	1.534
Wild fish is more fatty than farmed fish	4.16	1.637
Farmed fish tastes better than wild fish	4.55	1.594
Farmed fish is firmer than wild fish	4.17	1.525
Farmed fish is more controlled than wild fish	3.09	1.449
Farmed fish is more handled than wild fish	4.32	1.589
Wild fish is more artificial than farmed fish	4.83	1.768
Farmed fish provides more guarantees than wild fish	3.56	1.488
Farmed fish is easier to find than wild fish	2.87	1.468
Farmed fish is cheaper than wild fish	3.03	1.522



### Objective knowledge:

### Please indicate whether the below statements are in your opinion

More than half of the fish we buy in Italy is farmed fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	315	63,0	63,0	63,0
	FALSE	78	15,6	15,6	78,6
	I DON'T KNOW	107	21,4	21,4	100,0
	Total	500	100,0	100,0	

Fish is a source of dietary fibre (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	184	36,8	36,8	36,8
	FALSE	229	45,8	45,8	82,6
	I DON'T KNOW	87	17,4	17,4	100,0
	Total	500	100,0	100,0	

Cod is a fatty fish (correct answer: FALSE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	88	17,6	17,6	17,6
	FALSE	353	70,6	70,6	88,2
	I DON'T KNOW	59	11,8	11,8	100,0
	Total	500	100,0	100,0	

Fish is a source of omega-3 fatty acids (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	459	91,8	91,8	91,8
, шта	FALSE	25	5,0	5,0	96,8
	I DON'T KNOW	16	3,2	3,2	100,0
	Total	500	100,0	100,0	

Salmon is a fatty fish (correct answer: TRUE)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TRUE	344	68,8	68,8	68,8
	FALSE	118	23,6	23,6	92,4
	I DON'T KNOW	38	7,6	7,6	100,0
	Total	500	100,0	100,0	

### **Evaluation of logos:**



	Mean	Standard deviation
I am aware of this logo	2.49	1.341
The likely quality of products carrying this logo is extremely	3.00	1.019
high	3.00	1.019
Products carrying this logo would be my first choice	2.90	1.010
I find this logo trustworthy	3.06	1.046
I value this logo	3.06	1.113



	Mean	Standard deviation
I am aware of this logo	2.46	1.295
The likely quality of products carrying this logo is extremely high	3.11	1.021
Products carrying this logo would be my first choice	3.01	1.025
I find this logo trustworthy	3.13	1.003
I value this logo	3.08	1.026



	Mean	Standard deviation
I am aware of this logo	2.66	1.378
The likely quality of products carrying this logo is extremely high	3.10	1.033
Products carrying this logo would be my first choice	2.07	1.033
I find this logo trustworthy	3.10	1.082
I value this logo	3.05	1.089

### Results of factorial analysis for multi-item constructs:

Construct	# items	Cronbach's alpha	Relevant dimensions	Comments
Functional value	5	.957	1	-
Social value	4	.883	1	<u>-</u>
Hedonic value	3	.900	1	<u>-</u>
Ethical value	4	.903	1	<del>-</del>
Emotional value	3	.907	1	-
Price	3	.862	1	Item A21 was dropped in the
				analyses
Effort	3	.868	1	<u>-</u>
Unfamiliarity	3	.811	1	<u>-</u>
Evaluation costs	4	.796	1	-
Performance risk	4	.840	1	<u>-</u>
Safety risk	3	.833	1	<del>-</del>
Customer value	6	.898	1	-
Satisfaction	3	.938	1	-
Trust	4	.943	1	<u>-</u>
WOM	2	.918	1	<u>-</u>
Intention to Buy	2	.817	1	<del>-</del>
C. involvement	3	.959	1	
D.S. innovativeness	3	.858	1	(reversed) items A64 and A66
				were dropped in the analyses
Subj. Knowledge	4	.939	1	
Optimistic bias	3	.845	1	
Social representation	3	.789	1	Items A74-79 were dropped
				from the analysis. Only Items
				A80-82 ('novel food'
				dimension) were kept.
Beliefs	19	Not necessary	3	

#### 6 References

Altintzoglou, T., Heide, M., & Carlehög, M. (2014). French consumer profiles' reactions to information on cod fillet products. *British Food Journal*, 116(3), pp. 374-89.

Bäckström, A., Pirttilä-Backman, A.-M., & Tuorila, H. (2004). Willingness to try new foods as predicted by social representations and attitude and trait scales. *Appetite*, 43, pp. 75–83.

Bartels, J. & Reinders, M.J. (2010). Social identification, social representations, and consumer innovativeness in an organic food context: A cross-national comparison. *Food Quality and Preference*, 21, pp. 347-52.

Bartels, J. & Reinders, M.J. (2011). Consumer innovativeness and its correlates: A propositional inventory for future research. *Journal of Business Research*, 64(6), pp. 601-09.

Berger, I.E., Ratchford, B.T., & Haines Jr., G.H. (1994). Subjective product knowledge as a moderator of the relationship between attitudes and purchase intentions for a durable product. *Journal of Economic Psychology*, 15(2), pp. 301-14

Citrin, A.V., Sprott, D.E., Silverman, S.N., & Stem Jr., D.E. (2000). Adoption of Internet shopping: the role of consumer innovativeness. *Industrial Management and Data Systems*, 100(7), pp. 294-300.

Freeman, S., Vigoda-Gadot, E., Sterr, H., Schultz, M., Korchenkov, I., Krost, P., & Angel, D. (2012). Public attitudes towards marine aquaculture: A comparative analysis of Germany and Israel. *Environmental Science & Policy*, 22, 60-72.

Fu, F. & Elliott, M. (2013). The moderating effect of perceived product innovativeness and product knowledge on new product adoption: An integrated model. *Journal of Marketing Theory and Practice*, 21(3),pp. 257-72.

Goldsmith, R.E. & Hofacker, C.F. (1991). Measuring consumer innovativeness. *Journal of the Academy of Marketing Science*, 19, pp. 209–21.

Hirunyawipada, T. & Paswan, A.K. (2006). Consumer innovativeness and perceived risk: implications for high technology product adoption. *Journal of Consumer Marketing*, 23(4), pp.182-98.

Huotilainen, A., Pirttilä-Backman, A.M., & Tuorila, H. (2006). How innovativeness relates to social representation of new foods and to the willingness to try and use such foods. *Food Quality and Preference*, 17(5), pp. 353–61.

Klerck, D. & Sweeney, J.C. (2007). The effect of knowledge types on consumer-perceived risk and adoption of genetically modified foods. *Psychology & Marketing*, 24(2), pp. 171-93.

Lu, J., Liu, C., Yu, C.S., & Wang, K. (2008). Determinants of accepting wireless mobile data services in China. *Information and Management*, 45(1), pp. 52-64.

Luthje, C. (2004). Characteristics of innovating users in a consumer goods field: An empirical study of sport-related product consumers. *Technovation*, 24 (9), pp. 683–95.



Moorman, C., Diehl, K., Brinberg, D., & Kidwell, B. (2004). Subjective knowledge, search locations, and consumer choice. *Journal of Consumer Research*, 31, 673–680.

Moscovici, S. (2001). Why a theory of social representations? In K. Deaux & G. Philogéne (Eds.), *Representations of the social: Bridging theoretical traditions* (pp. 8–35). Oxford: Blackwell.

Onwezen, M.C., & Bartels, J. (2013). Development and cross-cultural validation of a shortened social representations scale of new foods. *Food Quality and Preference*, 28, pp. 226-234.

Park, C.W., Mothersbaugh, D.L., & Feick, L. (1994). Consumer knowledge assessment. *Journal of Consumer Research*, 21(1), pp. 71–82.

Pieniak, Z., Verbeke, W., Scholderer, J., Brunsø, K., & Olsen, S.O. (2007). European consumers' use of and trust in information sources about fish. *Food Quality & Preference*, 18(8), pp. 1050-63.

Pieniak, Z., Aertsens, J., & Verbeke, W. (2010). Subjective and objective knowledge as determinants of organic vegetables consumption. *Food Quality and Preference*, 21(6), pp. 581-88.

Roehrich, G. (2004). Consumer innovativeness concepts and measurements. *Journal of Business Research*, 57, pp. 671–7.

Smith, S. & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18(2), pp. 93-104.



