

WHO IS THE FISH CONSUMER?



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1. FISH CONSUMPTION BEHAVIOUR

1.1. INTRODUCTION

Consumer behaviour: *"the process whereby individuals decide whether, what, when how and from whom to purchase products and services"* .(Kotler et al., 2008).

Consumer buying behaviour: *"buying behaviour of final consumers; that is, individuals and households who purchase products and services for their personal own consumption"*. Kotler et al. (2008).

- ❑ The consumer behaviour comprises the analysis of how individuals make decisions to spend their scarce available resources –money, time and effort– on consumption-related items. Thus, encompassing all the behaviours displayed by consumers in searching for, purchasing, using, evaluating and disposing of products and services they use to satisfy their needs.
- ❑ In a market driven by consumers' demand a better understanding of consumer purchasing behaviour towards fish products is paramount to develop more effective marketing and policy strategies. Managers and fish processors have a need for information in order to develop value-added products for the markets, and one important part is the profile and characterization of fish consumers.
- ❑ New trends in consumer behaviour in the food industry: <https://youtu.be/XowaDm1GEVk>.



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1. FISH CONSUMPTION BEHAVIOUR

1.1. INTRODUCTION

- ❑ Regarding the factors that influence consumer behaviour of fish and seafood products, Carlucci et al. (2015) differentiate between fish product attributes and factors, being the difference between them the following:
 - Product attributes: They depend on the fish product itself and its characteristics.
 - Influencing factors: They depend on the consumer characteristics and subjective perception.



1. FISH CONSUMPTION BEHAVIOUR

1.2. INFLUENCING ATTRIBUTES

Attributes depend on the fish product itself and its characteristics.



ATTRIBUTES	INFLUENCE ON BEHAVIOUR
PRODUCTION METHOD	It depends if the fish is wild-caught or farm-raised
PRESERVING METHOD	It depends if the fish is fresh or frozen
COUNTRY OF ORIGIN	It depends if the fish is local or imported
PRODUCT DEVELOPMENT	It depends if the fish is innovative or traditional
PACKAGING	It depends if the fish is packaged or not
LABELLING	It depends if the fish has sustainable labelling or eco-labelling



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1. FISH CONSUMPTION BEHAVIOUR

1.2. INFLUENCING ATTRIBUTES

Production method

Preserving method

Country of origin

Product development

Packaging

Labelling



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1.2. INFLUENCING ATTRIBUTES

PRODUCTION METHOD

- ❑ Since the introduction of farmed fish species for sale, fish can also be differentiated in terms of origin. The fish origin is an important attribute for consumer quality perception and influences the perception of the product's environmental sustainability.
- ❑ Farmed and wild caught fish species have different sensory characteristics. Consumers prefer wild-caught fish for its perceived quality, better safety, taste, nutritional value and health aspects.

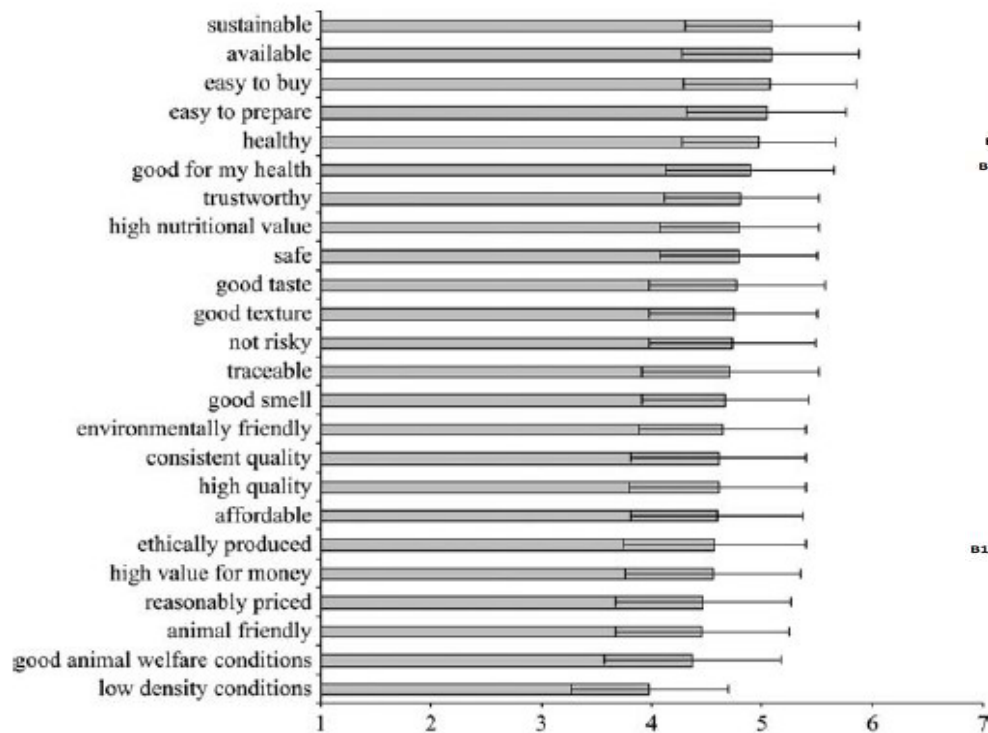


1.2. INFLUENCING ATTRIBUTES

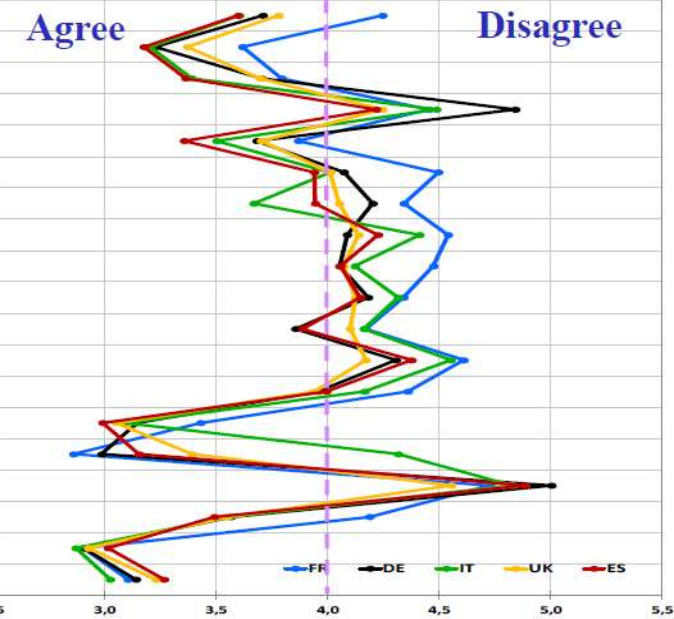
PRODUCTION METHOD

Consumer perception of farm-raised fish

European consumers' perception of farm-raised fish



- B1. Farmed fish is safer than wild fish
- B2. Wild fish is more affected by marine pollution (spillages) than farmed fish
- B3. Wild fish contains more heavy metals than farmed fish
- B4. Wild fish contains more antibiotics than farmed fish
- B5. Wild fish is more affected by parasites (anisakis) than farmed fish
- B6. Farmed fish has a healthier diet than wild fish
- B7. Farmed fish is healthier than wild fish
- B8. Farmed fish is of better quality than wild fish
- B9. Farmed fish is fresher than wild fish
- B10. Farmed fish is more nutritious than wild fish
- B11. Wild fish is more fatty than farmed fish
- B12. Farmed fish tastes better than wild fish
- B13. Farmed fish is firmer than wild fish
- B14. Farmed fish is more controlled than wild fish
- B15. Farmed fish is more handled than wild fish
- B16. Wild fish is more artificial than farmed fish
- B17. Farmed fish provides more guarantees than wild fish
- B18. Farmed fish is easier to find than wild fish
- B19. Farmed fish is cheaper than wild fish



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1.2. INFLUENCING ATTRIBUTES

PRODUCTION METHOD

- ❑ It is scientifically demonstrated that consumers normally distinguish between poultry, pig and beef, but tend to present fish as a single commodity. More precisely, among consumers fish have been often considered and treated as a group of homogeneous products. However, some consumers recognize the different attributes of each species or type of fish for sale (Dey et al., 2008).
- ❑ Fish species and types are unquestionably valuable determinants for consumer choice and purchase behaviour regarding fish consumption. In addition, the differences that consumers perceive in different fish products is of prime importance for marketing strategies (Grunert et al., 1996).
- ❑ Important attributes for consumers' quality perception and evaluation, such as nutritional and sensory characteristics of the product, depend on the fish species.
- ❑ Consumers' differentiation among fish species commonly purchased is based on the influence of the culture, country and consumption patterns such as frequency and product availability. According to these factors, fish species are classified as "common" or "exclusive".



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1.2. INFLUENCING ATTRIBUTES

PRODUCTION METHOD

- ❑ Every process in some way affects the quality perception of fish products. It can be **purchased** fresh or processed:
 - Fresh fish differentiation consists essentially of different levels of cleaning and cutting
 - Processed fish present a wide range of products distinguishable based on preservation and level of convenience.
- ❑ Frozen fish is perceived worse than fresh products. More precisely, regarding to the various preserving methods, most consumers preferred chilled and fresh fish with a progressive decrease of acceptance for frozen, canned fish, smoked and salted fish.



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1.2. INFLUENCING ATTRIBUTES

PRESERVING METHOD

- ❑ Consumers' marked preference for chilled fresh fish was motivated by the negative changes in taste, odour and texture as well as in the perceived loss of quality, safety, healthiness, nutritional value and naturalness of the product caused by handling and processing of the other preserving methods.
- ❑ Fish attributes such as taste, safety, healthiness and naturalness depend on the time elapsed and the management of the supply chain between the catch/harvest and the selling/consumption of the product.
- ❑ In the last years, the increasing demand for convenience has encouraged the introduction of a variety of fish products with different degrees of processing, mostly developed to meet consumer demand for "ready to eat meals" (e.g., fillets, steaks, burgers, bites, pre-prepared fish-based meals, etc).
- ❑ Today, some consumers are substituting traditional fish and seafood with newly available processed seafood products, also, an increasing dominance of aqua-cultured species is observed in the market.

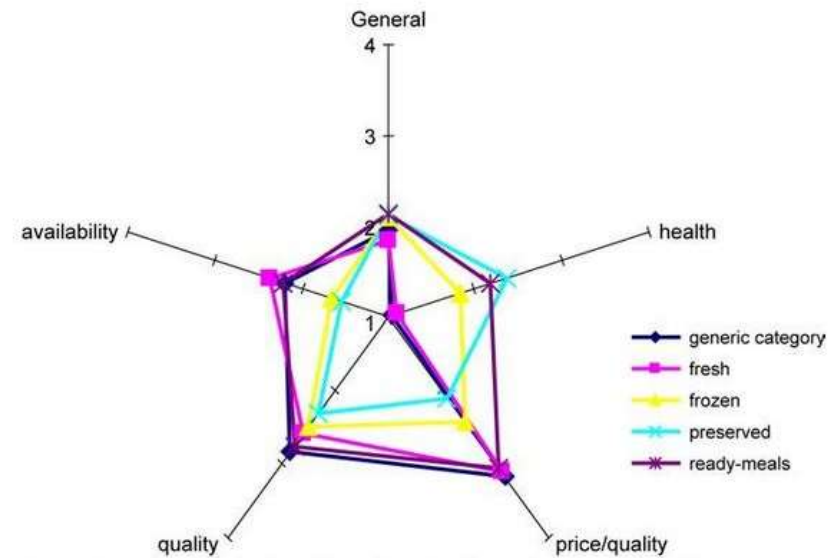
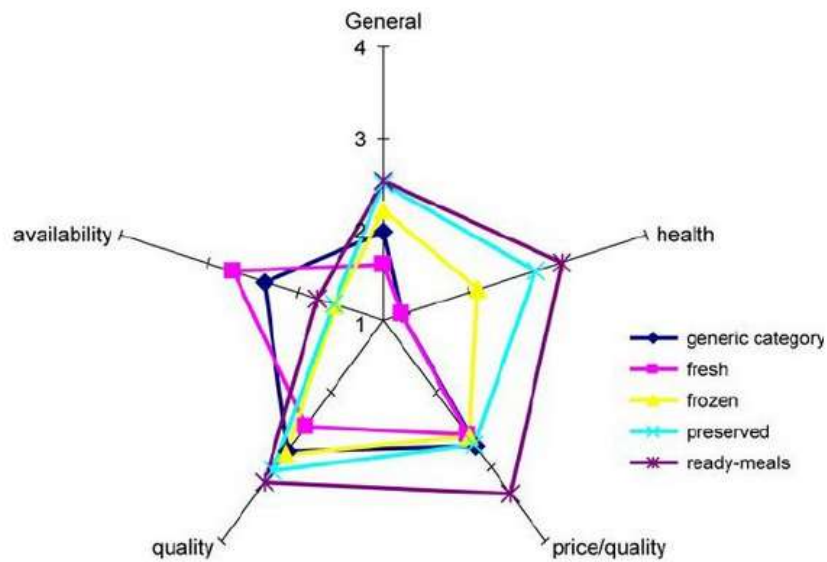


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1.2. INFLUENCING ATTRIBUTES

PRESERVING METHOD

Consumers' perceptions about fish preserving methods in Sweden (left) and Portugal (right), on a 4-point scale.



Source: Vanhonacker et al. (2013)

1.2. INFLUENCING ATTRIBUTES

COUNTRY OF ORIGIN

- ☐ The country of origin of fish products is closely related to the quality perception of the product.
- ☐ There is a clear preference for domestic fish products which are perceived as being superior to imported fish in terms of quality, safety and freshness.
- ☐ Domestic fish products are often considered superior in terms of freshness because since it is a highly perishable product, a reduced distance between the places of production and consumption requires fewer preservation treatments.
- ☐ Consumers can be concerned about the safety of imported fish products, especially when they originate from countries where food regulations are perceived as insufficient.
- ☐ Environmental values can also play an important role because a higher consumption of local fish reduces transportation costs and potential detrimental environmental consequence.

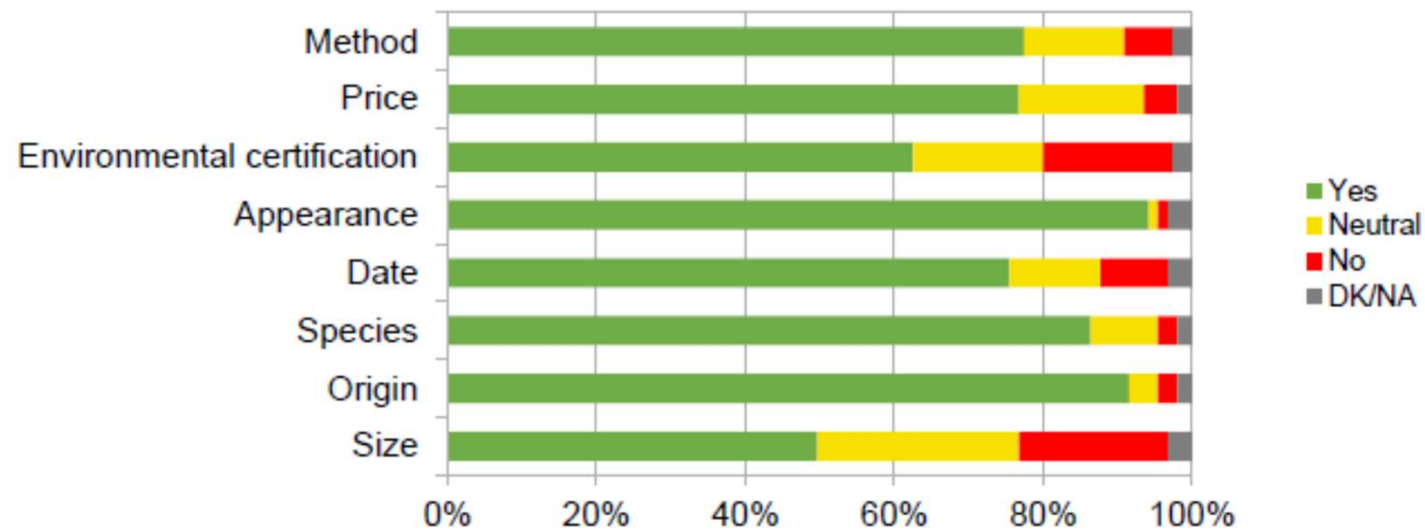


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1.2. INFLUENCING ATTRIBUTES

COUNTRY OF ORIGIN

Consumers' influencing variables when purchasing fresh fish products (in percentage of individuals)



Source: IRTA (Food & Agriculture, Research & Technology)
(2020)



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1.2. INFLUENCING ATTRIBUTES

COUNTRY OF ORIGIN – EXAMPLES

Fish products from Norway and Iran.



Canned fish products from Thailand and dry fish products from India.



Fish products from Thailand and Canada may have different quality perception.



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1.2. INFLUENCING ATTRIBUTES

PRODUCT DEVELOPMENT

- ☐ Consumers seem to appreciate new convenient fish products when the original product characteristics do not undergo significant alterations.
- ☐ When increasing levels of processing occur, consumers seem to perceive the modifications of the original product characteristics as a proportional loss of quality, safety, naturalness, healthiness and nutritional value.
- ☐ The development of new products should consider the negative consumer perception of processed fish.



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1.2. INFLUENCING ATTRIBUTES

PACKAGING

- ❑ The majority of regular fish consumers currently purchase and prefer to purchase unpackaged fish and seafood products, because they consider them to be less expensive and more guaranteed in terms of freshness and local origin.
- ❑ Most fresh fish looks pale and uninteresting and is unimaginatively packaged
- ❑ Other consumers appreciate packaged fish products because of their greater convenience (for example, selection from supermarket shelves without waiting to be served at the delicatessen section) and the possibility of evaluating information such as assurance of freshness (“use by date”), country of origin, assurance of quality (“branding”) and more transparent pricing (price per portion).
- ❑ In packaged fish products, consumers positively appreciate that the content is visible, and that the package extends the product shelf life.

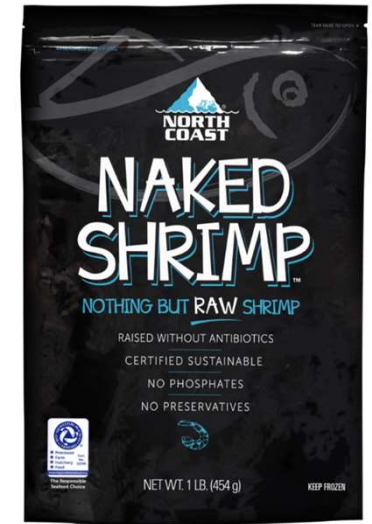


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1.2. INFLUENCING ATTRIBUTES

PACKAGES – EXAMPLES

Types of packages commonly used in the fish industry: vacuum package and fresh fillets in polyurethane tray packaging.



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1.2. INFLUENCING ATTRIBUTES

LABELLING

- ☐ Sustainable labelling or eco-labels are becoming an important attribute of fish choice.
- ☐ The majority of consumers agree that environment-friendly fish caught practices should be differentiated with a specific eco-label and supported by the introduction of a specific eco-labelling policy in the fish sector.
- ☐ Organic aquaculture could be seen as a specific eco-label certification scheme that has a low environmental impact and can also respond to the new requirements of consumers in terms of safety, naturalness and healthiness of fish products.



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1.2. INFLUENCING ATTRIBUTES

LABELLING – EXAMPLES

Labelling in the fish sector certifying that fish products have not been genetically modified (non-GMO).



Labelling in the fish sector certifying that fish products have been farmed in a sustainable way.



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1. FISH CONSUMPTION BEHAVIOUR

1.3. INFLUENCING FACTORS

These factors depend on the consumer characteristics and subjective perception

QUALITY PERCEPTION:

The consumers perceives quality based on intrinsic and extrinsic cues

SENSORY PERCEPTION:

Fish smell, taste and texture influence consumer behaviour

HEALTH BENEFITS:

Fish products entail health benefits and health risks

FISH EATING HABITS:

Consumers who frequently eat fish are more prone to its consumption and to try new fish species, compared to consumers who eat fish less frequently.

CONVENIENCE PERCEPTION:

Differences in convenience are perceived for fresh and processed fish products

PRICE PERCEPTION:

Perceiving fish as expensive could act as a consumption barrier

FISH AVAILABILITY:

The lack of fish availability could act as a consumption barrier

SELF-EFFICACY:

The lack of self-efficacy in fish preparation reduces fish consumption



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1. FISH CONSUMPTION BEHAVIOUR

1.3. INFLUENCING FACTORS

- ❑ According to **Cue Utilization Theory** individuals assess the quality of products in terms of identifying and defining information cues that consumers use as indicators (Olson, 1972).
- ❑ Authors differentiate between intrinsic and extrinsic cues: Intrinsic cues are product attributes inherent to objective nature of the product itself; conversely, extrinsic cues are any product characteristics that can be altered by the company or marketing department without influencing the objective nature of the product or service (Olson & Jacoby, 1972).
- ❑ Product information cues are traditionally classified as:
 - Intrinsic cues: inherent in the product, such as taste, smell or colour.
 - Extrinsic cues: any external features, such as price, brand or packaging.
- ❑ It is unclear which of the two types of cues predominates in consumer choices, since some studies have highlighted the relevance of extrinsic cues while others have concluded that intrinsic cues are paramount.



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1.3. INFLUENCING FACTORS

QUALITY PERCEPTION

- ❑ Extrinsic cues are considered to be of a lower level, because they are not exclusively tied to the product. For example, each fish species will always taste the same, but its price differs from place to place, and its country-of-origin can either be clearly shown or hidden in the package. They seem to be more familiar to consumers.
- ❑ Most consumers are not able to infer the freshness of fish, and they need indications such as price, outlets, branding and labelling (e.g., “best-before-date”, “days-since-catch/harvest”, geographical origin) to help them in reducing the perceived risk of making a wrong choice.
- ❑ Due to the lack of extrinsic cues and/or trust in the information provided on the product, many consumers can shift their choices towards other less risky forms of processed fish, rather than fresh fish.



1.3. INFLUENCING FACTORS

QUALITY PERCEPTION

- ❑ Plain frozen fillets are rejected by some consumers, as they are perceived as grey, lifeless, anonymous and basic; also associated with factories and processing.
- ❑ The highly processed product varieties (battered and crumb coated fish and fish in sauce dishes) are convenient, easy to cook and popular with the family. They are seen as substantial, robust and meaty in character. The coating makes the product more colourful and appetizing increasing their accessibility (The Grocer, 1995).
- ❑ Fish in sauce and coated fish dishes involve disguising the fish and making it easy and ready to cook. The first one, mimic traditional home cooking and are the least fish-like. However, both are negatively perceived given that they are believed to be made from poor quality fish, less healthy due to the cooking techniques associated with them and they lack variety.
- ❑ Canned fish is perceived as an everyday product, as different species are canned and innovations in the areas such as canning fish in various dressings have occurred.



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1.3. INFLUENCING FACTORS

QUALITY PERCEPTION

INTRINSIC CUES	EXTRINSIC CUES
TASTE	PRICE
SMELL	BRAND
TEXTURE	CONTEXT OF CONSUMPTION
PERCEIVED FRESHNESS	METHOD OF PRODUCTION
COLOUR	CERTIFICATION OF QUALITY
PRESENCE OF BONES	COUNTRY OF ORIGIN
	NUTRITIONAL INFORMATION
	EXPERT/PRESCRIPTOR OPINION
	CONVENIENCE
	PRODUCT AVAILABILITY



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Source: Own elaboration from Olson (1972) and Olson and Jacoby (1972)

1.3. INFLUENCING FACTORS

SENSORY PERCEPTION

- ❑ **Sensory characteristics of fish** -such as taste, smell and texture- are key determinants of fish consumption, and these attributes are also extremely important to evaluate the product freshness.
- ❑ The more positive the consumer's sensory perception of fish, the more likely it is that the consumer eats fish and a higher consumption frequency. Most of the consumers consider eating fish a pleasant experience, but with different levels of intensity: the positive sensory perception is higher for older people, in consumers with higher health involvement and in consumers who are more knowledgeable about fish.
- ❑ For the minority of consumers show a negative sensory perception towards fish, the aspects of fish which drive dislike are mainly related to the unpleasant taste and smell (including while cooking) as well as the presence of bones.



1.3. INFLUENCING FACTORS

HEALTH PERCEPTION

- ❑ Consumers may at the same time perceive both **health benefits and health risks** of eating fish and seafood. These products are widely accepted to be an essential component of a balanced and healthy diet because they have a low-fat content and provide high quality proteins, as well as many micronutrients such as vitamins and minerals. They are the primary dietary source of long chain polyunsaturated fatty acids (LCPUFAs or Omega-3).
- ❑ In general terms consumers are not sufficiently aware of the information necessary to make informed fish purchasing decisions regarding health risks, because they do not know the possible contaminants or which fish species are subject to the highest contamination levels.
- ❑ Most important health risks:
 - Presence of mercury (Hg): it is a highly reactive metal in fish species (Hg is a contaminant of concern because of its strong tendency to bio-accumulate and bio-magnify along the food chain).
 - Larval and parasites survival in fish muscle (many parasite species infect fish muscle, being the most frequently noted the nematode *Anisakis simplex*).
 - Presence of dioxines and polychlorinated biphenyls (PCBs).
 - Presence of microplastics (its toxicity depends on dose, polymer type, size, surface chemistry and hydrophobicity).



1.3. INFLUENCING FACTORS

FISH EATING HABITS

- ❑ **Habits** are represented by behaviours which are regularly repeated and tend to occur subconsciously.
- ❑ Consumer fish choice and fish consumption is strongly affected by habits that emerge and are reinforced from the satisfactory/unsatisfactory past experiences associated with the same behaviour.
- ❑ Accordingly, consumers who eat fish frequently have a more positive evaluation of fish products and are more prone to fish consumption than consumers who eat fish less frequently. So, the habit of consuming fish influences fish consumption and fish choice.
- ❑ Some studies report that only regular fish consumption during childhood leads to the same consumption habit in adulthood. This is because low fish consumption during childhood does not help to gain familiarity with fish.



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1.3. INFLUENCING FACTORS

CONVENIENCE

- ❑ **Convenience** concerns the time and effort required for cooking and dish preparation, which could discourage consumers from purchasing specific fish types and species.
- ❑ Fish availability in food retailing and shops, which can be seen as a facet of convenience, represents a positive and important factor for fish consumption.
- ❑ The difficulty of fish preparation coupled with a busy lifestyle might be particularly detrimental for fresh fish consumption, because of time constraint.
- ❑ Fresh fish is perceived as difficult to prepare and cook, having a strong negative effect on the frequency of consumption; while processed fish products are perceived as a quick and easy meal option.



1.3. INFLUENCING FACTORS

PRICE

- ❑ Fish and seafood include a **variety of products** sold at very different market prices.
- ❑ On one hand, price of fish products cannot be described as a barrier to purchase because in some countries some fish species are cheap. While on the other hand, fish products compared to other sources of proteins seem to be widely perceived as more expensive and considered less “filling”.
- ❑ Different income and price elasticities were found for different fish products, which reveal their heterogeneity. That is, different price elasticities were found for fish products among different species and countries.
- ❑ Consumers with low incomes are more likely to perceive fish prices as high and consider price as a consumption barrier. In addition, the consumer price sensitivity to fish products influences fish consumption behaviour.



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1.3. INFLUENCING FACTORS

PRODUCT AVAILABILITY

Availability: *"situational factors that reduce the effort of buying a particular product".*

- ❑ Countries and regions show important differences in terms of quantity and frequency of fish consumed, reflecting different levels of availability of fish assortment.
- ❑ When preferred fish products are not available, the alternative may appear to be weak substitutes and thus consumers may decide not to buy any.
- ❑ The size of the consideration set has a significant and positive effect on fish consumption frequency. It is the number of fish product alternatives in terms of different species, conservation forms (fresh, frozen, salted, dried, canned, etc.) and ways of preparing (cooked, fried, grilled, etc.) taken in consideration by consumers before purchasing the product.



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1.3. INFLUENCING FACTORS

SELF-EFFICACY

Self-efficacy: refers to how competent a person feels in doing what is necessary to manage a specific situation and thus reduce uncertainty.

- ❑ In the case of fish preparation, it depends on the levels of knowledge, experience, expertise and self-confidence in evaluating the quality of products at the place of purchase and in cooking them at home.
- ❑ It is expected that low levels of self-efficacy in managing the entire fish preparation process may affect fish consumption negatively. Therefore, a high level of knowledge, skills and self-confidence in selecting and preparing fish has a significant and positive effect on fish consumption frequency.
- ❑ Younger consumers are more likely to lack the cooking skills that are necessary to prepare fresh fish dishes.



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1. FISH CONSUMPTION BEHAVIOUR

ATTRIBUTES	
Too many bones	Flavourful
Cheap/affordable/expensive	Good for health
Delicate taste/aroma	Modern
Dietetic	Natural
Difficult to digest	Not liked by everyone
Difficult preparation/cooking / Easy to prepare/ easy to cook	Eaten on special occasions
Fat	Traditional
Flavour of the sea	Trust the brand
Short preparation time/long preparation time	Trust the source
Nutritional	Fishy smell



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Source: Own elaboration from Carlucci et al. (2015)

1. FISH CONSUMPTION BEHAVIOUR

1.4. BARRIERS

❑ These are the **most important barriers** in fish and seafood consumption:

- Fish health concerns: consumers are worried about exposure to toxicants and chemical contaminants often contained in fish, such as methyl-mercury, dioxins and polychlorinated biphenyls which could have severe negative effects on human health.
- Lack of product availability: consumers do not purchase fish when their preferred fish products are not available.
- Sensory disliking of fish: consumers who dislike fish taste, smell or texture are less likely to consume fish products.
- High price perception: consumers perceiving fish as expensive are less prone to fish purchasing and consumption.
- Lack of knowledge in selecting and preparing fish: consumers with poor knowledge and skills in food preparation are less likely to fish consumption.



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1. FISH CONSUMPTION BEHAVIOUR

1.4. BARRIERS

FACTORS	ACTIONS TO OVERCOME BARRIERS
FISH HEALTH CONCERNS	Safety labellings
LACK OF PRODUCT AVAILABILITY	Extend and diversify distribution channels, develop online purchase and delivery
SENSORY DISLIKING	Increase consumer education
HIGH PRICE PERCEPTION	Promotional actions, or increase fish perceived value
LACK OF KNOWLEDG OF FISH SELECTION/PREPARATION	Increase consumer education
DISLIKE OF FISH BY OTHER FAMILY MEMBERS (FAMILY PREFERENCES)	Increase consumer education
LACK OF PRODUCT VARIETY	Diversify fish products' offering



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Source: Own elaboration from Carlucci et al. (2015)

1. FISH CONSUMPTION BEHAVIOUR

1.5. FISH CONSUMPTION AFTER COVID-19

- ❑ Consumers report significant rises in shopping online and bulk buying, as well as net increases in consumption across almost every food category. They also declare consuming more food products in each category, since lockdowns led to spending more time at home and impacted their eating behaviours and food choices. They developed more planned food shopping.
- ❑ In general terms, consumers are more concerned with local production, packaging (tensions regarding hygiene), freshness and searching for value. They are showing a negative attitude towards unpackaged, unlabeled and non-standardized foods.
- ❑ COVID-19 has been found to have affected consumers' preference for fresh and nutrition-rich foods products, increasing the intake of fruits, vegetables and animal-based products.



1. FISH CONSUMPTION BEHAVIOUR

1.5. FISH CONSUMPTION AFTER COVID-19

- ❑ On one hand, some consumers report a decline in buying expensive food products, they always check prices and a shift to less expensive foods products /brands. On the other hand, many consumers are indulging themselves and treating themselves to tasty food products and delicacies.
- ❑ Food generally will have a greater significance for consumers, as a result of the more central role it took in consumers' lives during lockdown. They became more interested in food safety and security concerns.
- ❑ Two trends emerging in consumer behaviour after the Covid-19 and lockdown context is their greater demand for safe fish products and higher convenience.
- ❑ Selling fish directly to the consumer: https://www.youtube.com/watch?v=1Nm0F_tnzdo.

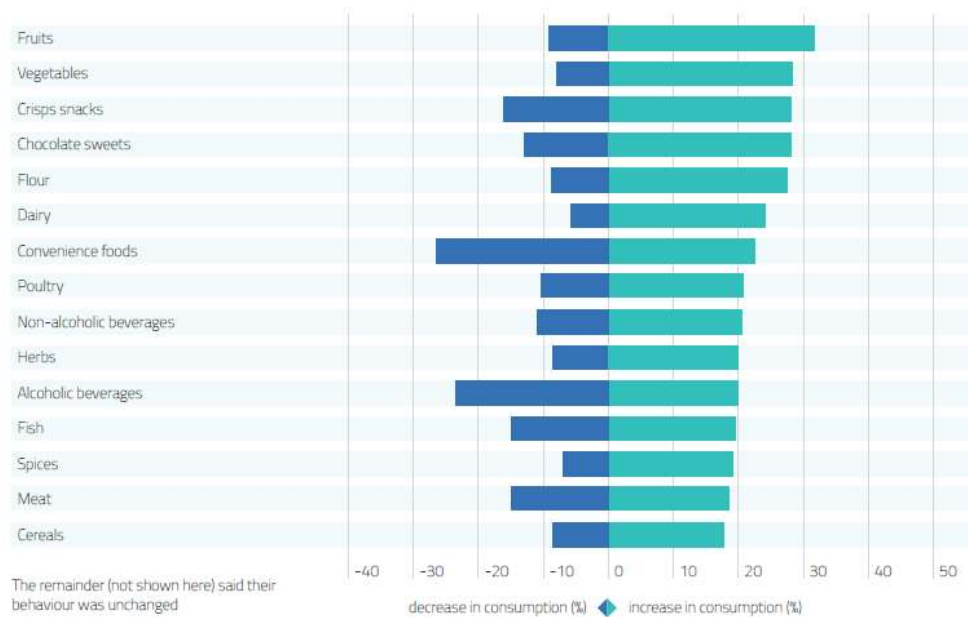


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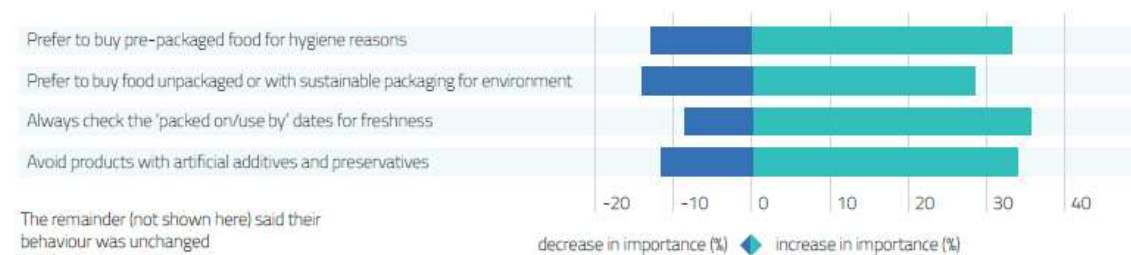
1. FISH CONSUMPTION BEHAVIOUR

1.5. FISH CONSUMPTION AFTER COVID-19

Changes in food consumption during Covid-19 pandemic

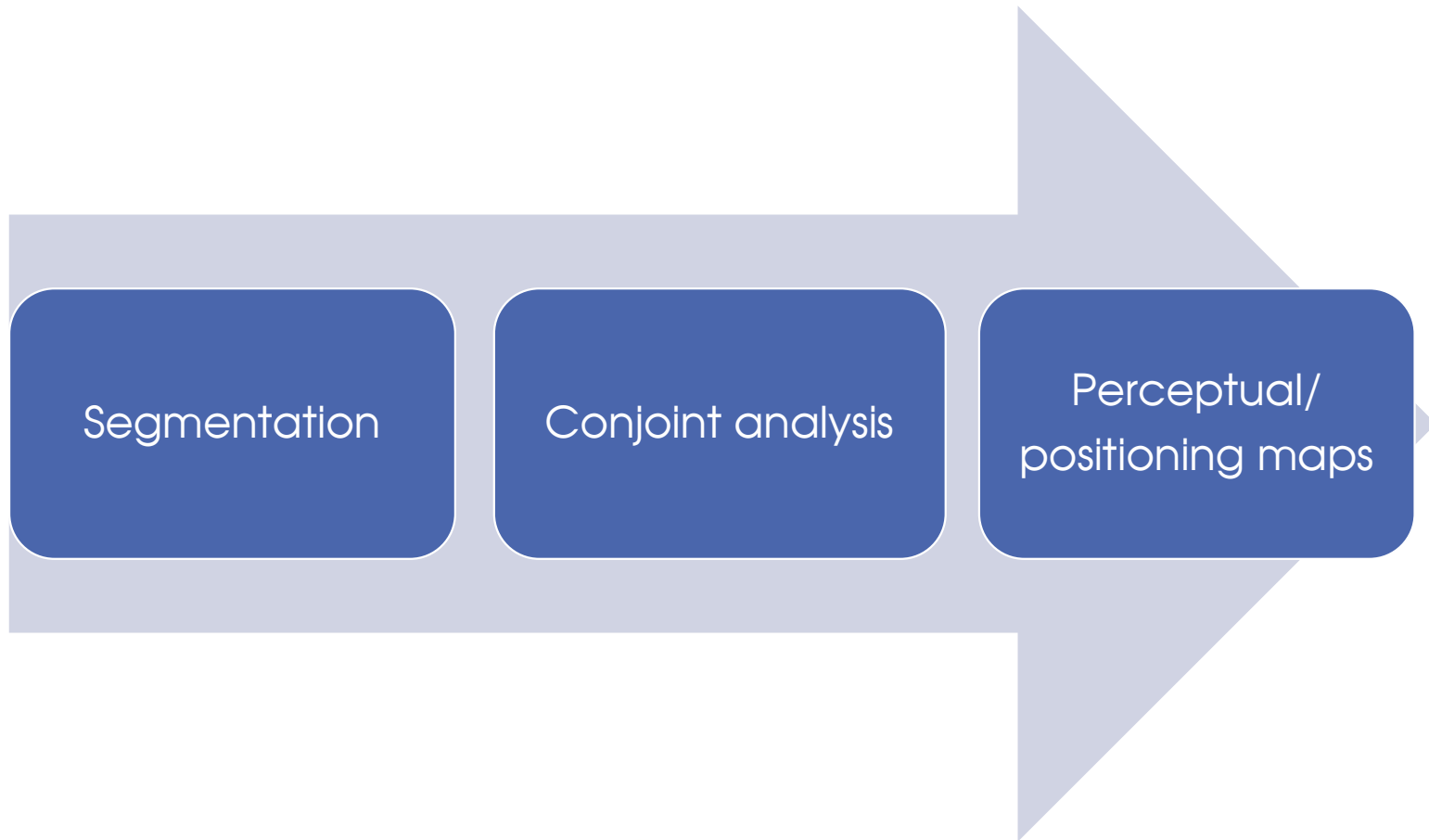


Changes in food packaging purchase behaviour during Covid-19 pandemic



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2. TECHNIQUES TO IDENTIFY AND PROFILE FISH CONSUMERS



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2. TECHNIQUES TO IDENTIFY AND PROFILE FISH CONSUMERS

2.1. SEGMENTATION

Market segmentation: *"the process of identifying and analyzing subgroups of consumers in a market with similar response characteristics".*

- ❑ Therefore, market segmentation is an identification process aimed at finding subgroups of consumers within a global market. Recognizing and identifying those market segments is an important source of competitive advantage for companies. The logic of segmentation emerges from a better understanding of market segments, their needs and the capabilities required to serve them.
- ❑ In most markets, consumers vary in their use of products, needs, preferences and consumption patterns; these differences create segments. Each consumer segment displays similar responsiveness to the positioning strategy.



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2.1. SEGMENTATION

MAIN BASES

These are the main segmentation basis used in all sectors

GEOGRAPHIC	DEMOGRAPHIC	BEHAVIOURAL	PSYCHOGRAPHIC
Example: Customers located in Spain or in Galicia	Example: Women with university studies	Example: Customers who want value-for-money and purchase impulsively	Examples: Customers who prefer to purchase organic food products
Customer location	Gender	Rate of product use	Personality
Country	Age	Benefits sought in the product	Lifestyle
Region	Occupation	Loyalty status	Attitudes
Urban/Rural habitat	Level of income	Readiness to purchase	Motivations
	Level of studies	Level of involvement with the product	
	Family type		



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Source: Own elaboration from Kotler et al. (2008)

2.1. SEGMENTATION

FINE SEGMENTATION

There are three approaches for finer segmentation

Micro segmentation

- Seeks to identify narrowly defined segments and results in a large number of very small segments.
- Each segment receives a marketing-mix designed to meet its requirements.

Mass customization

- Provides products at prices not higher than mass-produced items.
- This is possible through flexible manufacturing and supply systems.

Variety-seeking strategy

- The company aims to offer consumers opportunities to vary their choices.
- Consumers who are offered numerous alternatives may increase their total purchase.



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2.1. SEGMENTATION

ONE-TO-ONE MARKETING

- ❑ Today **market fragmentation** characterizes a growing number of markets.
- ❑ Many consumer markets turn into micro segmentation driven by diverse product preferences, media usage and consumers demanding “right for me” products. An important segmentation issue is to decide how small segments should be.
- ❑ The most specific form of market segmentation is to consider each consumer as a market, known as one-to-one marketing. This fine-tuned segmentation is possible for a great number of products due to mass customization techniques.
- ❑ Custom-designed products satisfy consumer needs at prices comparable to mass-produced products.



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2.1. SEGMENTATION

LIFESTYLE AS A SEGMENTATION CRITERIA

Food companies use “lifestyle” as a key segmentation criteria, instead of other socio-demographic variables (age, gender, level of income...). According to the consumer lifestyle three segments could be considered in fish consumption: young individuals/students, old/retired people and high socio-professional individuals.

FISH CONSUMPTION PARAMETERS	YOUNG PEOPLE/STUDENTS	OLD PEOPLE/RETIRED	HIGH SOCIO-PROF. INDIVIDUALS
CONSUMPTION FREQUENCY	Low	High	High
PREFERENCE WILD OR FARMED FISH	Farmed	Wild caught	Wild caught
TYPE OF PRESERVING PREFERRED	Processed fish	Fresh fish	Fresh fish
TYPE OF PRESENTATION PREFERRED	Pre-packed	Loose	All
PROPENSITY FOR INNOVATION	High	Low	High
PERSONAL FACTORS	Convenience	Health and wellness	Hedonism
PRODUCT FACTORS	Price	Apperance and country origin	Country of origin
SOURCES OF INFORMATION ABOUT FISH PRODUCTS AND FISH PREPARATION	Internet, friends and family	Store employees and television	Internet




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2.1. SEGMENTATION

EXAMPLE

Best Matching Customer Profile:

Convenience brand loyal Membership probability: 50.39 % 	Segment size 23%	Segment trend Increasing	General fish consumption Medium	Average monthly expenditure €67	Purchase location Supermarket
	Information source Fish seller, Supermarket, Label	Gender Female/Male	Age Over 54	Education Medium-high	Family members 2
Children eating fish No children below 12 y.o.	Geographical area Countryside (87%)	Area type Urban (48%)			
Class description <p>The convenience- brand loyal consumer (23%/growing), looks for value for money. Brands provide the benefits she asks for: nutrients, sustainability certification, traceability, label. Ready-to-eat is emphasized which together with fresh formats may satisfied her want for creativity. Predominantly relatively young female living in a two-person-household in cities in the countryside with lower fish expenditure and medium fish consumption represent this cluster best. The members of this segment shop in supermarkets where they get information in-store, from the seller or from the label.</p>					



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Source: [PrimeFish DSS - Home \(cetmar.org\)](https://cetmar.org/)

2. TECHNIQUES TO IDENTIFY AND PROFILE FISH CONSUMERS

2.2. COJOINT ANALYSIS

- ❑ A novel multivariate measurement technique that analyses multidimensional choices and preferences. It determines the combination of features/attributes most dominant on consumers' choice or decision making.
- ❑ By asking consumers to choose the most preferred set of attributes related to a product, their choices will reveal their preferences clearly. They choose the product attribute/stimulus that maximize their utility.
- ❑ This technique provides valuable insights regarding the most preferred and the least preferred combination of attributes from the consumer viewpoint.
- ❑ The most common use of conjoint analysis is testing consumer acceptance of new products.



2.2. COJOINT ANALYSIS

VISUAL PRESENTATION OF A CHOICE SET - EXAMPLES



If you wanted to purchase follow-on milk formula and these were the only alternatives available, which would you choose?

 <p>Dumex Mamil Gold</p> <p>1.8 kg Price:\$85.00</p>	 <p>Nestle Lactogen 2 Stage</p> <p>1.8 kg Price:\$60.00</p>
 <p>Enfamil A+</p> <p>1.8 kg Price:\$85.00</p>	 <p>Nestle Nan H.A.</p> <p>1.8 kg Price:\$97.00</p>
 <p>Friso Gold Step 2</p> <p>1.8 kg Price:\$60.00</p>	 <p>Similac Stage 2</p> <p>1.8 kg Price:\$97.00</p>

None of the above



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2.2. COJOINT ANALYSIS

VISUAL PRESENTATION OF A CHOICE SET - EXAMPLE

- ❑ 40% of the respondents increased fish consumption in the past 3 years, 16% decreased fish consumption in the same period, and 44% maintained the same level.
- ❑ The level of involvement is high in all countries both for fish purchasing (83% are completely or fairly involved) and for fish preparing and cooking (79%).
- ❑ Value for money, price and general appearance are the most important attributes in every country.
- ❑ The preference for ready-to-cook fish products because of saving time is lower than the risk of alter the original fish characteristics.

Identifying fish consumer (Prime fish 4.7.)

Please, check the option that you would be most likely to purchase for a normal lunch or dinner.

 Trout Farm-raised fish - Product with Sustainability Certification - Product with Nutritional and Health Claim 14.86€/kg	 Salmon Wild-caught fish 14.27€/kg	 Sea bream Farm-raised fish - Product with Sustainability Certification - Product with Nutritional and Health Claim 13.39€/kg	 Pangasius Farm-raised fish - Product with Nutritional and Health Claim 6.42€/kg
 Herring Wild-caught fish - Product with Sustainability Certification - Product with Nutritional and Health Claim 6.03€/kg	 Sea bass Wild-caught fish - Product with Sustainability Certification - Product with Nutritional and Health Claim 14.64€/kg	 Cod Farm-raised fish - Product with Sustainability Certification 9.86€/kg	<input type="radio"/> None of these products

What quantity would you purchase of the above product (gr.)?

Figure 1: Example of choice set.

2. TECHNIQUES TO IDENTIFY AND PROFILE FISH CONSUMERS

2.3. POSITIONING/ PERCEPTUAL MAPS

Market positioning: *"arrangement of a marketing offer to occupy a clear, distinctive and desirable place in the minds of the target consumers, compared to other competing products or brands"* (Kotler et al., 2008).

- ❑ In other words, it is the image of the product or brand in the minds of the targeted consumers.
- ❑ The theoretical foundation is based on the fact that consumers organize products and brands into categories and position them in their minds. It is the result of a complex set of perceptions, impressions, associations and feelings that consumers have for the product, compared to competitors. This positioning gives rise to preference orders and is intended to deliver value for each market targeted by the company.
- ❑ The positioning strategy is the combination of the marketing variables used to achieve the positioning desired by the company. It includes the supporting services, distribution channels, pricing and promotion actions developed by the company. While the positioning objective is to make each targeted consumer to perceive the brand or product distinctly from other competing brands/products.



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2.3. POSITIONING/ PERCEPTUAL MAPS

CONCEPT

The **positioning concept** may be based on the functions provided by the product, the experience it offers or the symbol it conveys.

Functional positioning

- It applies to products/brands that solve consumption-related problems for externally generated consumption needs.

Symbolic positioning

- It relates to the consumer's internally generated need for self-enhancement, role position, group membership or ego-identification.

Experiential positioning

- It concerns the sensory pleasure, variety or cognitive stimulation provided by the product.



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2.3. POSITIONING/ PERCEPTUAL MAPS

CONCEPT

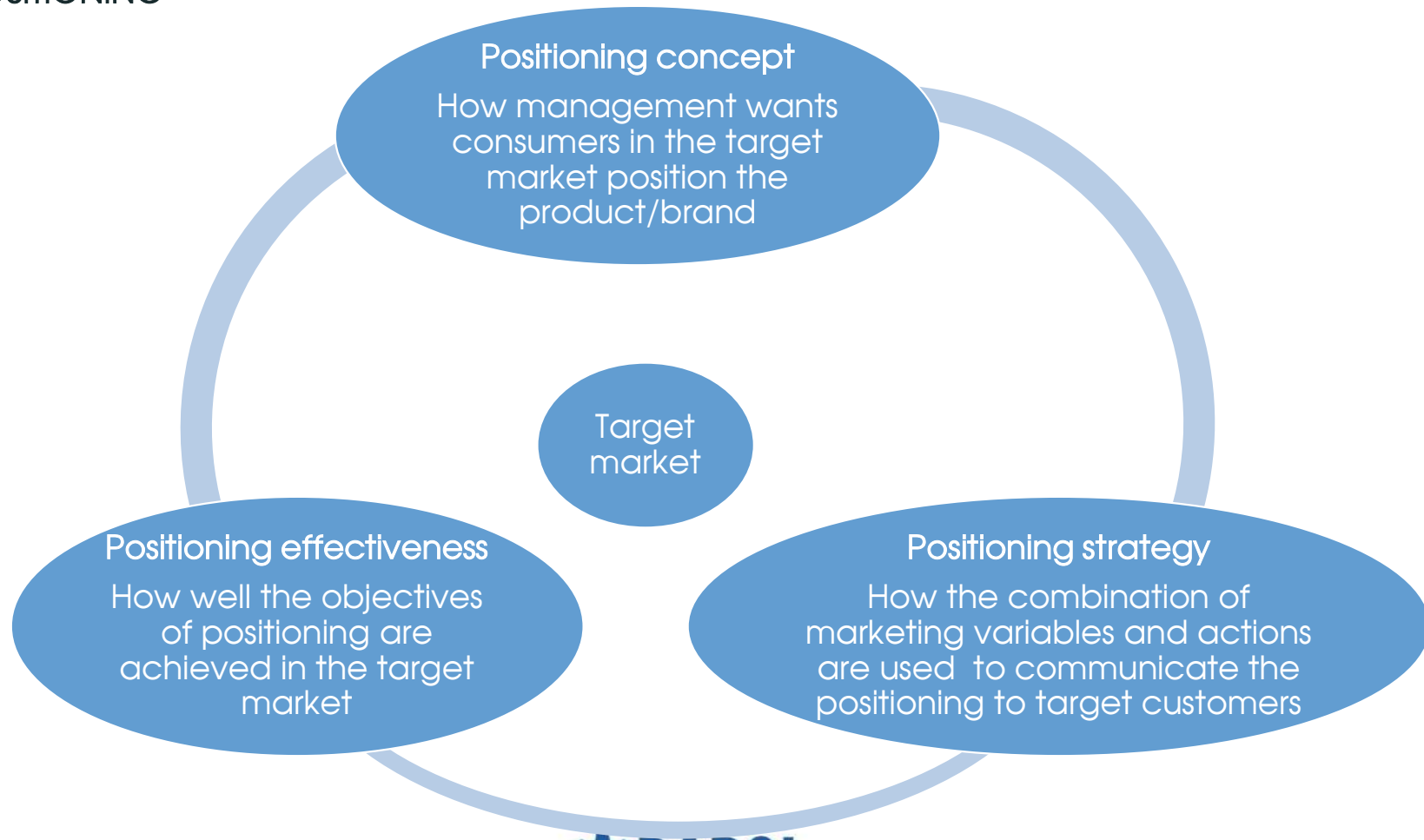
- ❑ The **positioning map** is a marketing perceptual tool that shows consumers' perception of products and brands, compared to competing alternatives. Each position in the map shows the product/brand positioning related to two attributes (two dimensions) located in the axis of the map.
- ❑ The map indicates the needs and wants not covered by any product in the marketplace. In addition, it helps to identify customers' ideal positioning, considering the product attributes that are relevant to existing and potential consumers. The following steps illustrate the analysis through perceptual maps:
 - 1) Select the product or market to be segmented
 - 2) Decide which brands compete in the market
 - 3) Select two relevant attributes of the product
 - 4) Collect consumers' perceptions about the attributes for the available brands.
 - 5) Prepare a two-dimensional map (X and Y grid) of attributes to position consumer perceptions of competing brands
 - 6) Plot consumers with similar preferences and examine what subgroups will form.
 - 7) Evaluate how well the perceptual solution corresponds to the data analysed.



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2.3. POSITIONING/ PERCEPTUAL MAPS

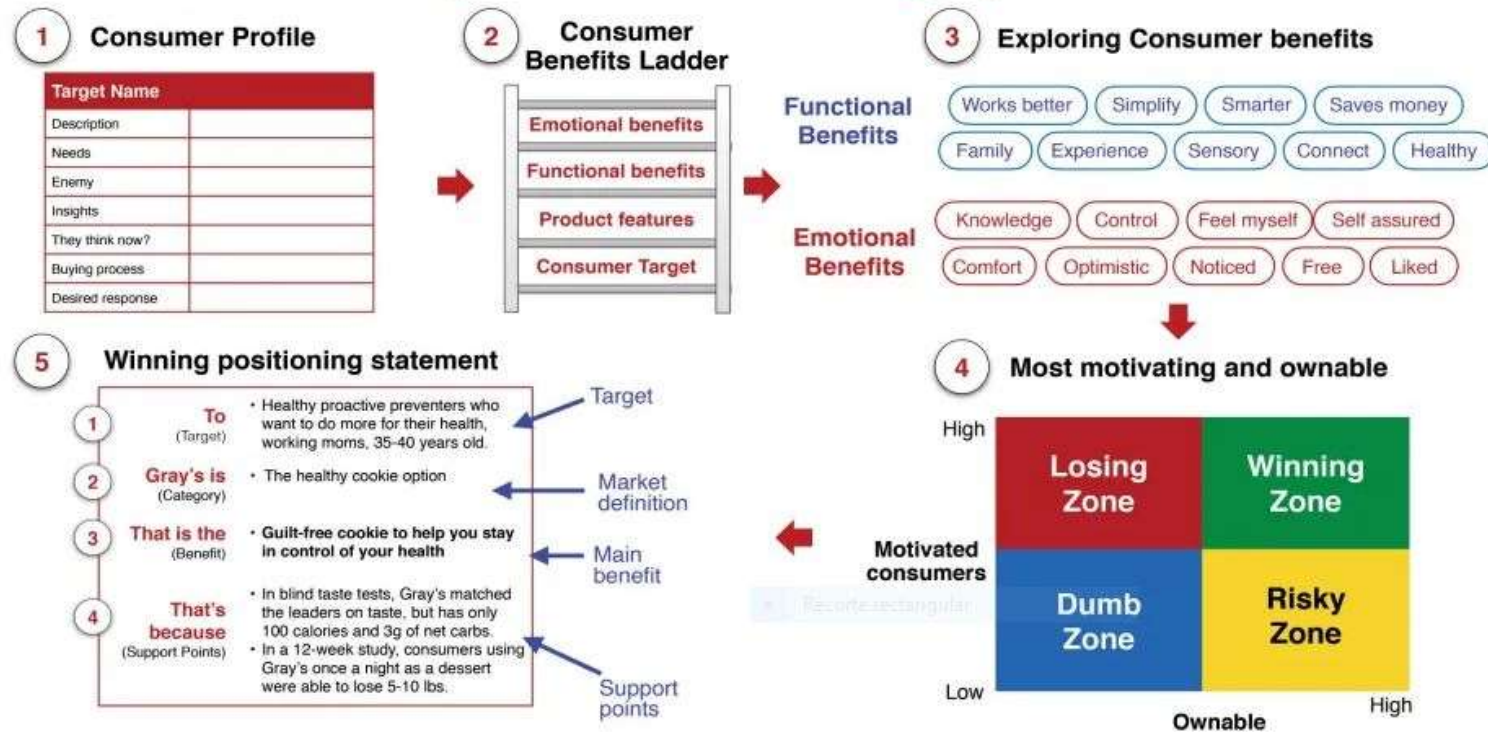
PRODUCT POSITIONING



2.3. POSITIONING/ PERCEPTUAL MAPS

BRAND POSITIONING

Brand positioning process



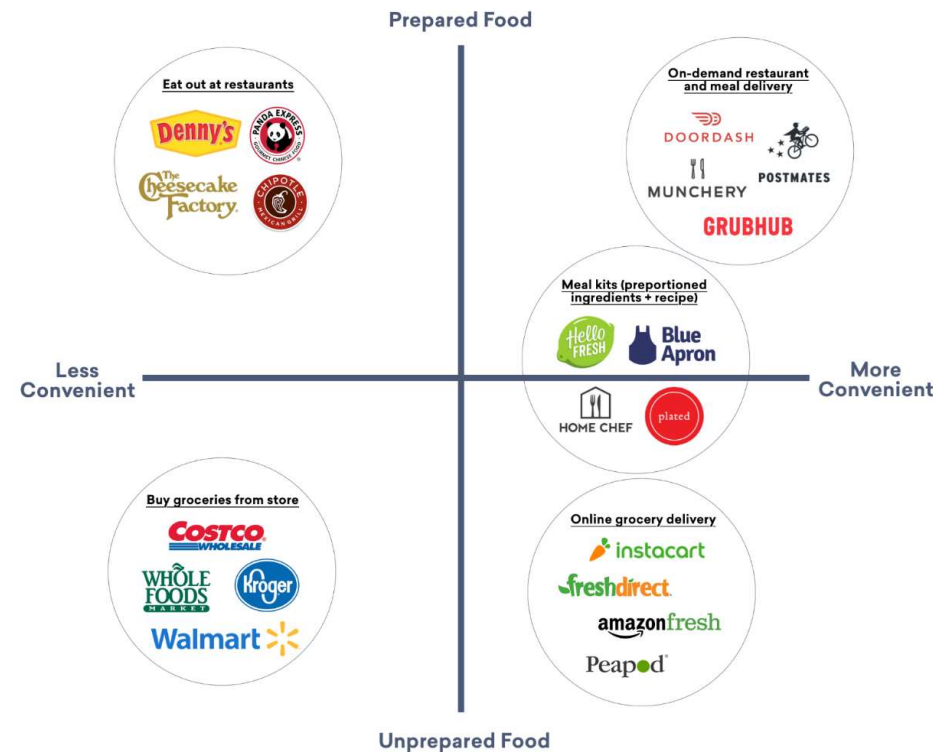
2.3. POSITIONING/ PERCEPTUAL MAPS

EXAMPLES

A positioning map for beer brands considering the attributes of price (economic vs premium priced) and flavour (strong vs light)



A positioning map for food retailers and food restaurants considering the attributes of level of food processing (prepared vs unprepared food) and convenience (less convenient vs more convenient)



2.3. POSITIONING/ PERCEPTUAL MAPS

EXAMPLES

A positioning map for ice-cream brands considering the attributes of organic vs nonorganic and the level of innovativeness (classical vs innovative)



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Source: Alexandre Anne,
<https://brandauditicecream.wordpress.com/2-customer-insight/>

3. FOOD CLAIMS

- ❑ Messages or food “**claims**” shown on the labelling of food products helps consumers to identify the specific health benefits provided by the consumption of these products, and they encourage consumers to make adequate food choices.
- ❑ A comprehensive and specific regulation should be applied to health-related claims displayed in any food package and food communications (labeling, presentation, advertising and promotions); however, there is a lack of a harmonized regulatory framework for these claims.
- ❑ The type of healthy claims that exist on certain food products can be completely uncorrelated with actual nutritional quality. However, food claims directly influence consumers’ expectations of taste, healthiness and fattening consequences of their food, as well as food choices.



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3. FOOD CLAIMS

3.1. CLASSIFICATION

Regarding health-related claims, three categories can be differentiated

Nutrient content

- It expresses or implies the level of a nutrient in a food product and inform about the level or range of a nutrient. In addition, could inform about the absence of a nutrient.
- Example: "low sodium", "high in omega-3".

Structure/function

- It expresses the effect of a nutrient/ingredient on the structure or function of the organism, without making reference to a disease.
- Example: "calcium builds strong bones", "antioxidants maintain cell integrity".

Health

- It expresses a relationship between a food component or food ingredient and a disease or health-related condition.
- Only food products with an adequate nutritional profile are able to include health claims.



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3. FOOD CLAIMS

3.2. HOW TO DEVELOP THEM

Four types of front-of-package food claims could be created by food companies. And they can be classified according to their nature or science foundation and to the presence or not of the specific product attribute.

Adding positive

(Ex. High calcium, high vitamins;
high protein...)

Removing negatives

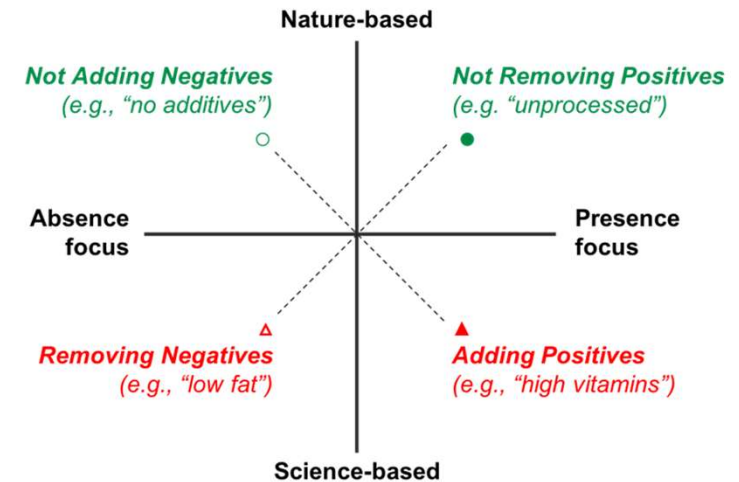
(Ex. Low fat, high, low
cholesterol...)

Not adding negatives

(Ex. No artificial flavour, no
preservatives, no pesticides...)

Not removing positives

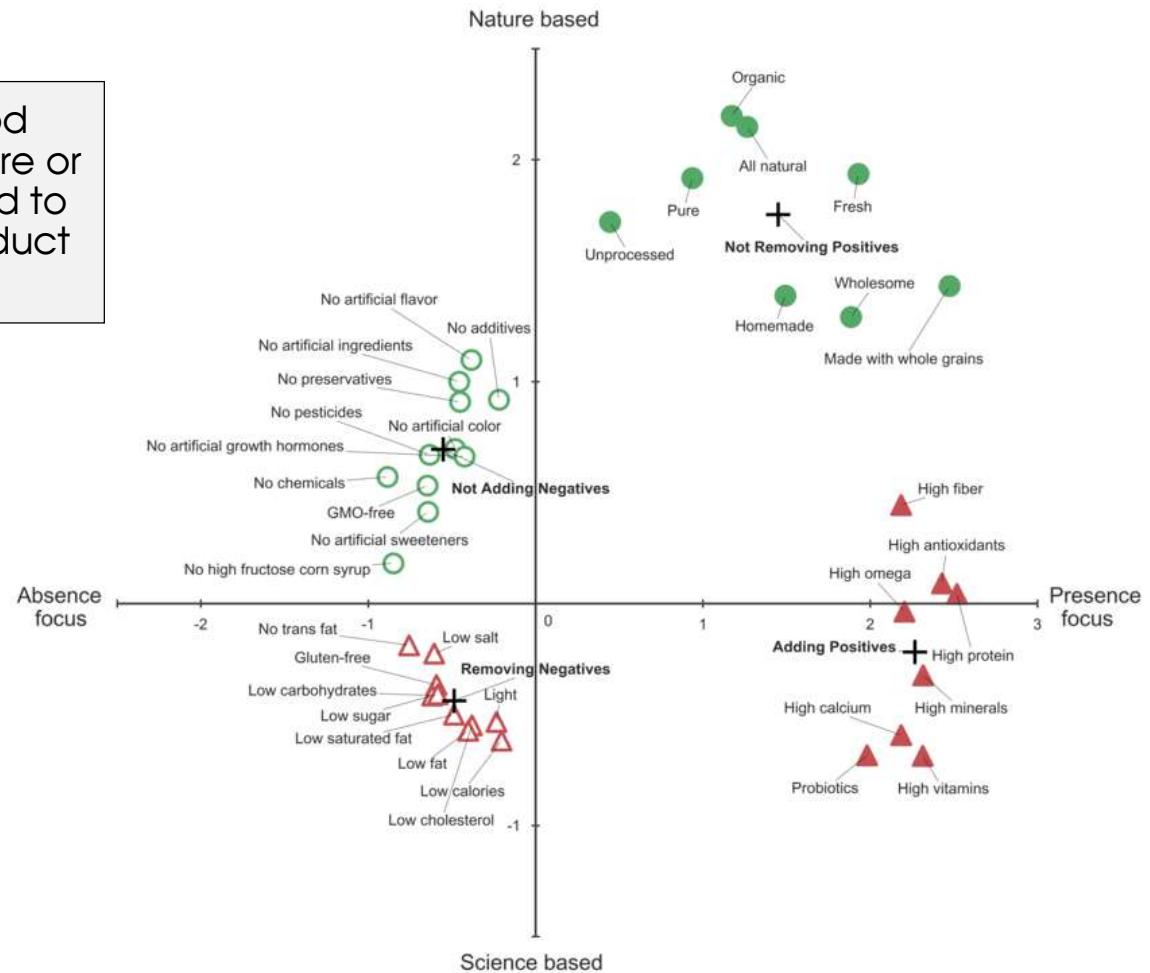
(Ex. All natural, homemade,
pure, fresh...)



3. FOOD CLAIMS

3.3. POSITIONING MAP

An example of the most frequent food claims classified according to their nature or science foundation (horizontal axis) and to the presence or not of the specific product attribute (vertical axis).

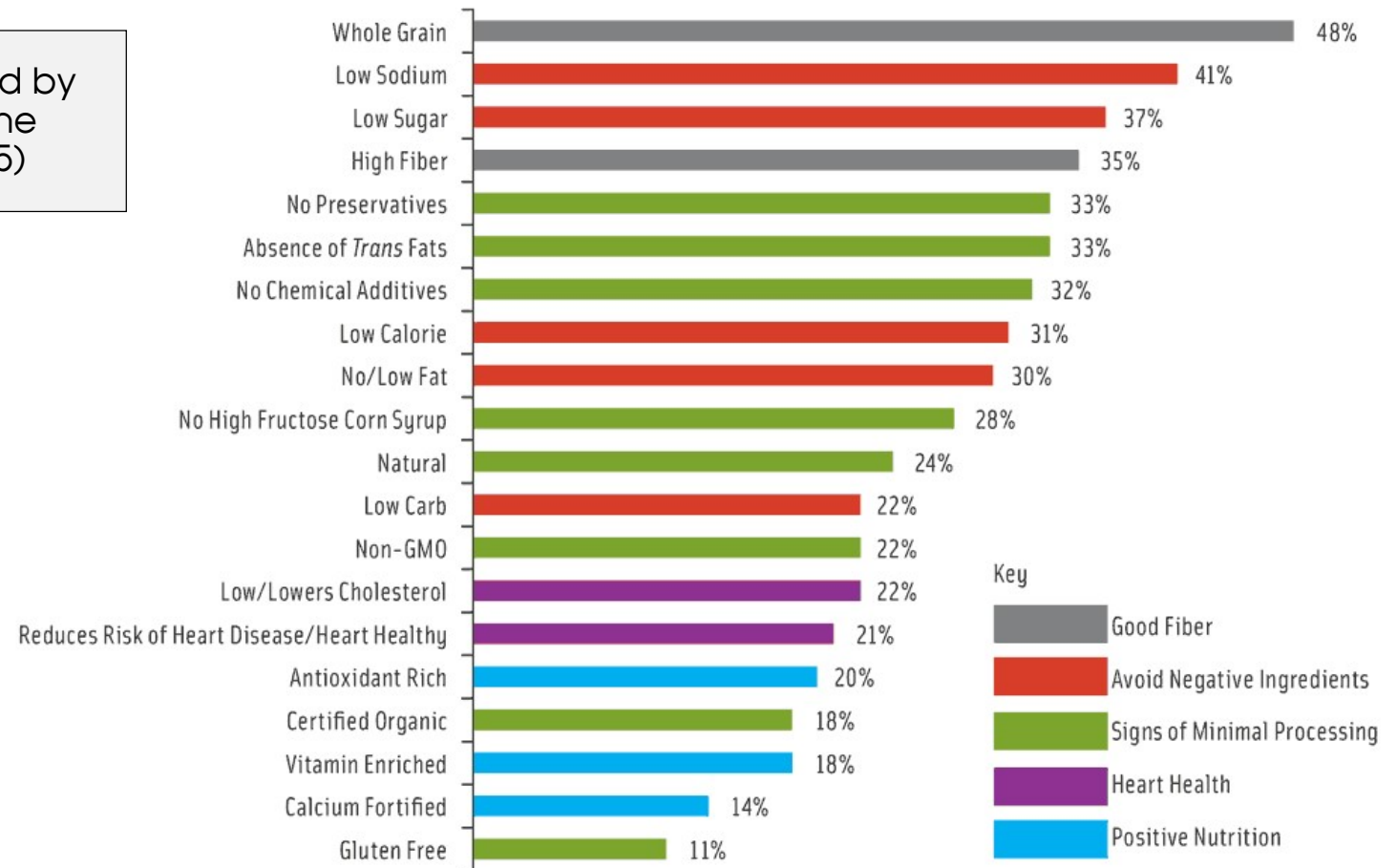


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3. FOOD CLAIMS

3.4. IN THE FOOD INDUSTRY

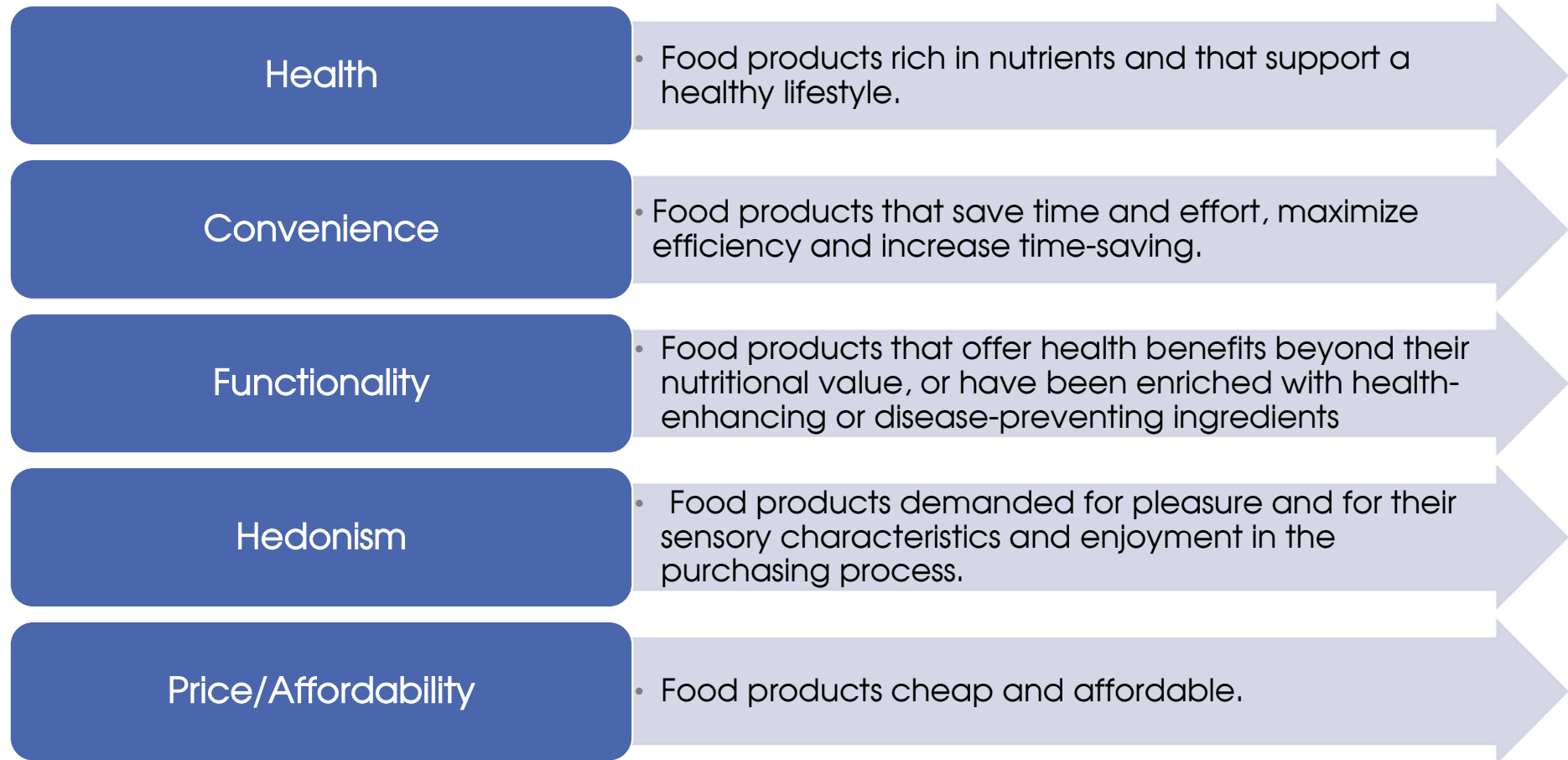
Food claims most preferred by consumers, regardless the product category (2015)



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3. FOOD CLAIMS

3.5. IN THE FISH INDUSTRY



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3. FOOD CLAIMS

3.5. IN THE FISH INDUSTRY

Health

Convenience

Functionality

Hedonism

Affordability

Rich source of Omega-3



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3. FOOD CLAIMS

3.5. IN THE FISH INDUSTRY

Health

Convenience

Functionality

Hedonism

Affordability

Ready to eat

Easy to open or easy to serve



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3. FOOD CLAIMS

3.5. IN THE FISH INDUSTRY

Health

Convenience

Functionality

Hedonism

Affordability

Help to support heart,
have anti-aging properties
or even the brand name is
“Life Extension”



Great flavour



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3. FOOD CLAIMS

3.5. IN THE FISH INDUSTRY

Health

Convenience

Functionality

Hedonism

Affordability

Affordable or cheap

Sustainable and responsible sourced
(certification marks)



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