



Fish innovators: European consumers with an interest in farmed fish

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Fish is good for you. Most consumers do not question this. But the health benefits of fish do not always tempt people to buy it. Not enough European consumers are following the dietary recommendations to eat more fish. The nutritional value of the product is, of course, an asset to be cherished, but it does not induce consumers to eat more of it. The answer might lie in product innovation. The European research project 'Diversify' is looking for innovative ideas to supplement nutritional value as a 'classic' core quality of fish and to make fish more appealing to today's consumer. Five new species of farmed fish were studied.

Fish is, first and foremost, a traditional product category. But that does not imply that there is no movement in the fish market. On the contrary, the supply side of the wild-caught fish market and the farmed fish market is bristling with dynamism; while, on the demand side, fish is recognised as an essential source of protein in a future characterised by a fast-growing global demand for animal proteins. Though captured fish is more plentiful on the current fish market, fish that is produced on farms – whether for reasons of sustainability or growth potential – is set to gain ground in the future.

Innovative ideas

In the second half of January 2015 two consumer focus groups (N=60) were set up in the five European countries with the biggest fish markets (UK, Germany, Spain, France and Italy). These ten (in total) focus groups were tasked with developing concepts and ideas for product innovation in farmed fish (specifically, for new products made from five farmed species): meagre (*Argyrosomus regius*), greater amberjack (*Seriola dumerili*), wreckfish (*Polyprion americanus*), Atlantic halibut (*Hippoglossus hippoglossus*), flathead grey mullet (*Mugil cephalus*), and pikeperch (*Sander lucioperca*)).

The participants in all the countries were sympathetic to the idea of marketing new products from farmed fish. There was certainly no desire to cling to the 'tried and trusted' ways of the past. This global shift in attitude was boosted by the knowledge that fish is and will continue to be an important constituent in the human diet, and by concerns about overfishing and threats to marine life. One of the added benefits of farmed fish is that it indirectly protects marine life by offering an alternative to wild-caught fish. Accordingly, it can count upon consumer support and appreciation, provided the welfare of the farmed fish is guaranteed.

The consumers in the focus groups put forward various ideas to inspire innovation in farmed fish products. Among the suggestions were roasted pieces of fish and fish 'finger food' for receptions and special occasions, and cubes of fish for serving



on crackers or as amuse-bouche. It was suggested that children might be attracted by fish-sticks shaped like fish or by the use of colours (in the breadcrumb coating). Another recommendation was to provide pertinent information on the environmental advantages of farmed fish and the nutritional value and health benefits. Packaging that promoted freshness and convenience was also discussed in the focus groups; the idea of ready-made barbecue packaging was raised. Besides exploring product improvements, the groups came up with innovative ideas for product information and packaging.

Value creation

The qualitative study with the focus groups revealed a certain enthusiasm for farmed fish products and indicated that the attractiveness of these products could be enhanced if they were marketed in an innovative and creative manner. However, not all consumers are quite as fish-minded or open to change as the participants in the focus groups. To gain a more representative picture of the percentage of ‘fish innovators’ in the population of the five countries, we looked at the results of the quantitative survey which was conducted under the umbrella of the Diversify project in July 2014.

The outcome of this consumer survey (N=2511) indicated that consumers differed in terms of their appreciation for innovation and change. Not only did consumers assign value to conservatism and change, they also took the balance between costs and benefits into consideration. It emerged that, above all, value was created by the feel-good factor conveyed by the product (‘it makes me happy’). In addition, for other people, value stems from the protection of the environment and animal welfare (‘Is the product or production process responsible in my eyes?’). It appears therefore that value creation is not only about objective facts and rational criteria, but also about subjective and emotional consumer perceptions.

The 500 consumers who participated in the survey in each of the five countries could be split into three clusters: the Involved traditional, the Involved innovators, and the Ambiguous indifferent. While the third cluster showed no particular interest in farmed fish products, the other two characteristically expressed a certain attachment to fish products; they enjoyed eating wild-caught and farmed fish, and they possessed some culinary knowledge about fish. These differences were also reflected in the amount of fish they ate every week or month: the Involved traditional and the Involved innovators ate significantly more fish than the Ambiguous indifferent (see Table 1).

Table 1 – Consumption and clusters (in %)

	Cluster 1 Involved traditional	Cluster 2 Involved innovators	Cluster 3 Ambiguous indifferent
Consumption of farmed fish:			
Once a week or more	23.1	22.9	16.5
Two-three times a week	29.7	32.4	27.2
Once a month or less	32.6	32.6	38.6
Never	9.8	7.2	8.0



Consumption of wild fish:			
Once a week or more	21.6	17.9	11.9
Two-three times a week	27.9	26.8	22.6
Once a month or less	33.1	35.7	33.9
Never	11.1	12.5	22.1

Appreciation

As the name suggests, Involved innovators are open to new experiences with regard to fish products and are more inclined to accept new species of farmed fish. They showed the highest perceived value and the lowest perceived costs in association with the new farmed fish species. The true ‘fish innovators’ – the participants who were most open to new fish experiences and species, and to innovative fish products – belonged to this cluster. From the perspective of innovation this cluster is therefore the most interesting of the three. What is particularly auspicious in terms of both the market opportunities and innovations in farmed fish is that this cluster (N=911, 36%) emerged as the largest in the study, compared with the Involved traditional (N=728, 30%) and the Ambiguous indifferent (N=872, 34%).

Interestingly, the involved innovators in general tended to be older and more likely to be married than the people in the other two clusters, and they belonged in higher income groups. Their appreciation of fish was based largely on taste and indulgence; on luxury and enjoyment. Such hedonistic and subjective motives were far less relevant to the Involved traditional’s appreciation of fish. The consumers in this segment were far more interested in a good price-quality ratio. The value of eating fish with family or friends and the sustainability aspects of fish products were important in both clusters. Traditional and innovative consumers also shared a positive attitude towards farmed fish and both attached value to fish as nutritious food. The innovators placed a stronger emphasis on the health aspect and the sustainability benefits of farmed fish than the other two clusters.

It is also interesting with a view to export opportunities that in two important countries for the fish sector, Germany and Italy, Involved innovators were in the majority in the consumer survey. In both countries more than one third of the research population were Involved innovators (34% and 37% respectively). They were followed closely by Spain (30%) while the UK and France brought up the rear (24% and 15%).

The search for fish innovation from the consumer perspective revealed fish innovators in each of the five countries. These were consumers with an interest in fish and change, who supported fish innovations and therefore offered market opportunities for farmed fish products.



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