EXAMPLES OF FISH CONSUMPTION HABITS IN FINLAND

2018

REPORT SUMMARY

Pia Polsa Zhuravleva Anna **Emil Westerlund** Johanna Viilo and Julius Tallqvist Ville Salonen Katrin Schütz and My Nguyen Assi Anttila and Veera Rytsölä Alexandra Ahlroth and Ida Riikonen Tomas Biaudet and Gurvinder Paul Essi Lohva and Tram Nguyen Sara Nguyen Chengjing Jounio and Jenni Mäki-Reinikka Helena Matlouthi and Terhi Villanova Le ThiThien Phuoc and Le Phuong Khanh Robin Kipfer and Aleksi Nieminen Karri Mikael Huttunen Jonna Haikonen and Lina Raunio Emilia Gädda Amna Furgan Michael Fabricius Markus Mitikka and Christopher Weber Haimi and Toppari







Contents

1 AIM OF THE REPORT	3
2 FISH MARKETS IN FINLAND	
2.1 Types of fish products and prices in Finland	-
2.2 Retailing environment for fish	
2.3 Shopping online	
2.4 Logistics	•
3 FISH-SHOPPING STORIES	





1 AIM OF THE REPORT

The general aim of the report was to study the Finnish retailing environment of fish and the Finnish fish consumption habits. The data for this report was collected by students of the Hanken School of Economics during the course Qualitative Research Methods in Business Studies.

The main research aim is to find out A) how Finnish consumers purchase and use fish OR B) how the Finnish supply chain looks for imported fish. Specific research questions for the general aims are:

Research aim A	Research aim B
1. How do Finnish people shop for fish?	What organisations import fish to Finland?
2. How do Finnish people use fish?	2. How do importers source fish to Finland?
3. How does the Finnish retailing environment look for	3. How do wholesalers source fish in Finland?
fish (display, type of retailers, etc.)? 4. How is fish stored in Finnish homes?	4. How do retailers source fish in Finland?
	5. Any other supply chain actors involved?

However, each student or student team were free to construct a more detailed aim of their work. Their aims were as follows:

- The main aim of my study is to find out how Finnish consumers purchase fresh fish and how the Finnish retail environment looks for fresh fish; more specifically I want to find out how the fish is displayed in retail stores and also what kind of retailers sell fresh fish.
- How to choose certain type of fish and how to choose fish over other food products
- How do Finnish university students purchase fish?
- How do women with children in Helsinki shop for fish? How does the retail environment look for fish shopping for women with children in Helsinki?
- Which factors influence a student's purchasing decision of fish?
- Why do Finnish people buy vacuum-packed or fresh fish from the counter? What affects the choice of buying vacuum-packed or fresh fish?
- To investigate whether the consumers are aware of the product origin and manufacturing place, while discovering the correlation between such awareness and purchasing decisions in Finnish consumers.
- How does the display and package design of fish products affect the purchasing decision? I will also add a social perspective on fish: Do Finnish consumers prefer to eat fish alone or together? Which fish is preferred for social gatherings?
- 1. How do Finnish mothers of young children purchase fresh fish? 2. How do they approach the decision-making process?
- To explore the fish consumption habits of Finnish families that have children.
- What is the structure of the supply chain, and the reasoning behind it, for Finnish fish suppliers?
- Do healthiness, taste, environment, origin or other factors influence the choice of fish? Do people know the supply chain behind fish, and does it influence their choice of fish?

Information on importing fish to the European Union can be found here.





2 FISH MARKETS IN FINLAND

It has been well established that eating fish is healthy due to fish containing healthy fatty acids, several key vitamins, and being a good source of healthy protein. Evira (Finnish Food Safety Authority, 2017) recommends a variety of fish to be eaten twice a week, and substituting fish for red meat is, in general, a healthier option. Fish is also a good source of healthy n-3 fatty acids and vitamin D, and it has been shown to reduce the risk of cardiovascular diseases. However, some limitations on consumption do exist due to negative environmental factors. Indeed, for young children and pregnant mothers, Evira recommends that the consumption of salmon, trout and herring caught in the Baltic Sea should be limited to 1-2 times a month due to chemicals, PCBs and mercury, all of which affect the quality of the fish. Knowing where the fish has been caught is an important factor in judging the amount of fish consumed in a short period due to the aforementioned dangers. Although fish accounts for only a small percentage of the food pyramid, it is still a staple food in Finland. On average, Finns eat fish once a week, but annual consumption of fish is around 16 kg per person (Pro Kala, 2018). (Robin Kipfer and Aleksi Nieminen)

The region of residence affects consumption of different kinds of seafood items (Trondsen et al., 2004; Myrland et al., 2000). Health-conscious and elderly people prefer to eat more fish (Olsen, 2003). According to Myrland et al. (2000), people holding university degrees had higher fish consumption rates. Processed salmon and smoked salmon are mainstream and widely sold and frequently bought (CBI, 2014). Finland imports salmon from Norway, China, Thailand and Vietnam (CBI, 2014) and people's preferences change with the country of origin. Supermarkets sell products under their private labels for instance K-market sells products under its Pirkka store brand (CBI, 2014). (Text modified from Amna Furqan).

2.1 Types of fish products and prices in Finland

Fish is sold in Finland in five different forms: fresh, frozen, tinned/canned, processed, and as packaged food. Dried fish is rare in Finland. In the following, pictures and prices of different types of fish are illustrated.



Fresh fish assortment and fresh fish packing – Prisma Kauppakeskus Sello, Espoo. (Photo and <u>video</u>: Helena Matlouthi and Terhi Villanova)



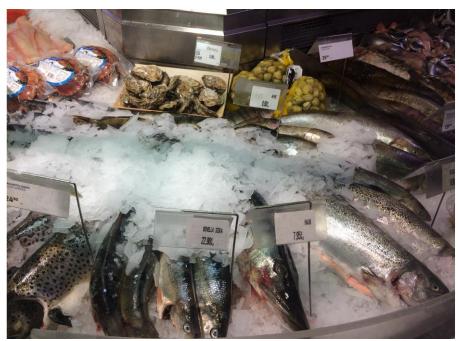
Fresh fish assortment and prices per kilogram and how fresh fish is packaged – S-market Vallila, Helsinki (Photo and <u>video</u>: Helena Matlouthi and Terhi Villanova)





Comparison of two observations (Table: Helena Matlouthi and Terhi Villanova)

	Participant 1	Participant 2
Fresh fish selection	Standardised	Standardised
Position towards the fresh fish counter	Further (approximately 1 metre apart)	Closer (approximately 20 cm apart)
Checking the fresh fish offer before taking a ticket	Yes	No, the participant went for a ticket immediately
Focusing immediately on a specific area of fresh fish offer	Yes	Yes
Asking immediately for a specific fish from a seller	Yes	Yes
Asking questions from the seller	No	No
Checking price tag	Yes	No



Fresh fish counter, where price and species are visible but not country of origin – Food Market Herkku, Helsinki
The customer 'was not very concerned with the origin, which either indicated that she trusted the safeness of the products or that she was not familiar with the information (such as risks) associated with fish products originating from certain countries.'

(Photo: Chengjing Jounio and Jenni Mäki-Reinikka)



Packaged fish in fish cooler – Lidl Myyrmäki, Vantaa (Photo: Katrin Schütz and My Nguyen)







A package of salmon, which is reduced 30% in price (left) and a package of deep-frozen "Deep Sea Scallops", which have the Marine Stewardship Council (MSC certificate). Lidl Myyrmäki, Vantaa (Photo: Katrin Schütz and My Nguyen)

To learn more about MSC, please visit this website.



Fish selection and processed fish. Prisma in Kannelmäki, Helsinki (Photo: My Ngyuen)

Factors involved in Fish Shopping behaviours of Finnish consumers			
FISH TYPE	TYPES OF PRICES	Item information	
Processed fish	Discount	Best before date	
Unprocessed fish	No discount	Nutritious value	
Whole item	Price per gram	Appearance (colour, smell)	
Ready-packed item			
Imported fish			
Regular fish			

(Table: My Ngyuen)



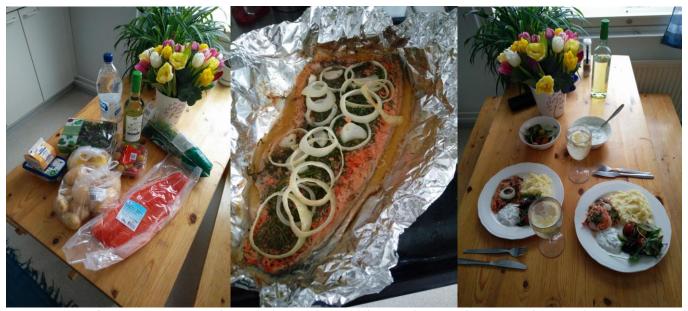
Packaged fish – Food Market Herkku, Helsinki (Photo: Markus Mitikka and Christopher Weber)







Packaged salmon, country of origin is Finland, and the price is EUR 12.95 per kilogram (<u>www.kalamesta.fi</u>) -Citymarket Ruoholahti (Photos: Sara Nguyen)



All that is needed for a salmon meal: dill (EUR 1.63), salad (EUR 2.49), water (EUR 1.59), tomatoes (EUR 2.49), butter (EUR 2.49), salmon (EUR 11.09), cream (EUR 0.99), lemon (EUR 1.06), potatoes (EUR 1.59) and Riesling wine (EUR 11.62), total EUR 36.62 (Photos: Sara Nguyen)



Fridge counter - K-Citymarket, Sello shopping centre, Espoo. (Photo: Essi Lohva and Tram Nguyen)







Checking information of burbot fish from phone - K-Citymarket, Sello shopping centre, Espoo (Photo: Essi Lohva and Tram Nguyen)



The price of the purchased burbot on the left (EUR 12.95 per kilogram), price of the ready fillet burbot on the right (EUR 19.99 per kilogram), and in the middle pike (EUR 5.99 per kilogram). K-Citymarket, Sello shopping centre, Espoo (Photo: Essi Lohva and Tram Nguyen)

Example of fish prices per kilogram that the report covered (price in EUR):

Example of fish prices per knogram that the report covered (price in EoK).						
Fish	S-market	Stockmann	Prisma	Citymarket	K-Citymarket	K-Supermarket
Zander fillet	26.99			27.95		
Benella white fish		22.90				
Brown trout		24.90				
Pike		7.05			5.99	
Rainbow trout				12.95	11.99	
Salmon fillet				14.99		
Norwegian salmon		39.90				
Burbot					12,95	
Burbot fillet					19.95	
Smoked white fish			32.00			
Smoked eel			56.00			
Tuna and sardine						1.25-6.15 piece
cans						
Flounder on sale				9.95		





2.2 Retailing environment for fish

'Fish can be purchased in many different places, e.g. in restaurants, in exclusive fish shops, REKO-local Facebook groups that sell in Facebook and deliver items in parking lots, market halls and even online if you use hypermarkets' online shopping service.' (Sara Nguyen). This study has examples from the following retailers: 1) <u>K-Supermarket</u>, 2) <u>Hakaniemen kauppahalli</u>, 3) <u>K-Citymarket</u> 4) <u>Prisma</u> (some information in English <u>here</u>), 5) <u>S-market</u>, 6) <u>Vanhakauppahalli</u>, 7) <u>Food Market Herkku</u> and 8) <u>Kala-Auto</u> (online shop).



The fish products were present in three main areas: the frozen aisle (below), the canned food aisle (upper left) and the fish counter aisle (upper right) – K-Supermarket Kamppi, Helsinki (Photos: Tomas Biaudet and Gurvinder Paul)



For example, frozen fish products were also present at the end of the frozen area on the side of the aisle. (Photos: Tomas Biaudet and Gurvinder Paul)



Frozen foods section: the fish product presented were all already prepared and were mostly fish sticks or pan fish (kalapuikot, kalafileet, fish crispies). Fish products could also be found in pizzas. Raw fish products were also found in the frozen form next to the fresh fish counter. About 15-20 different brands and packages were found with a price range from EUR 1 to EUR 6. Other products mainly found were frozen sushi rolls (Tomas Biaudet and Gurvinder Paul)





Fish products in the form of fish soups were also found in the ready-to-eat area, near the cans at the end of the aisle, just next to the fresh fish counter. Fish products were also found in pizzas or at the sandwich counter, which is situated before the entrance of the shops for fast buys. (Tomas Biaudet and Gurvinder Paul)



Can area: The range consisted of 15-20 different products. Most of the products were tuna fish cans presented in different flavours and brands. The other product family was sardines. Some special products were also found but overwhelmed by the tuna and sardine cans. The price range was from EUR 1.25 to EUR 6.15. (Tomas Biaudet and Gurvinder Paul)







Fish counter area: in the fish counter area, two families of products were found. The ready-prepared and ready-to-eat and the raw fish. Twenty-four different kinds of products were found. (Photos: Tomas Biaudet and Gurvinder Paul)



Looking at different fish vendors, searching for fresh fish. Hakaniemen Kauppahalli, Helsinki (Photos: Jonna Haikonen and Lina Raunio



The fish cost EUR 11.50 (a piece weighing over 400 grams) which is more expensive than when buying the same amount of fish from a grocery store, the fish then being vacuum packed or frozen, affecting the price of the fish. Hakaniemen Kauppahalli, Helsinki (Jonna Haikonen and Lina Raunio) Association of MBAs



Packed fresh fish area, and salmon filet (14.99 Eur per kilogram) – K-Citymarket, Sello, Espoo (Photos: Le Thi Thien Phuoc and Le Phuong Khanh)



Whole salmon shelf – K-Citymarket, Sello, Espoo (Photos: Le Thi Thien Phuoc and Le Phuong Khanh)



Fresh fish counter, where they have fresh whole fish on ice and marinated fish, K-Citymarket, Sello, Espoo (Photos: Le Thi Thien Phuoc and Le Phuong Khanh)



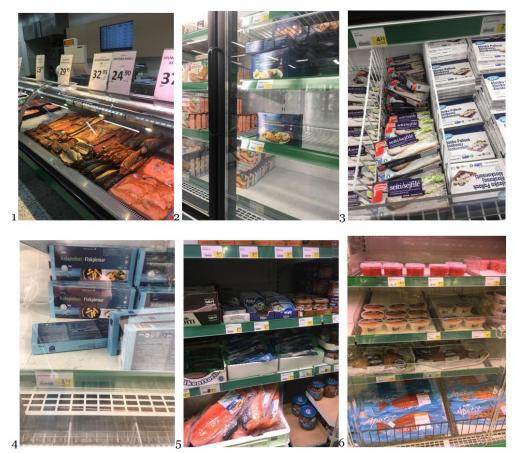
Salmon head, white fish, flounder on sale (EUR 9.95) and zander (EUR 27.95) (Photos: Le Thi Thien Phuoc and Le Phuong Khanh)







Shopping cart – K-Supermarket Konala, Vantaa (Photos: Robin Kipfer and Aleksi Nieminen)



Selection of fish at PRISMA - White fish at a price of EUR 34.90 per kg (Photos: Robin Kipfer and Aleksi Nieminen)







S-market Helsinki. (Photos: Anna Zhuravleva)



Vanha Kauppahalli Helsinki. (Photo: Anna Zhuravleva)



People looking at fresh gourmet salmon, K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)







Among other varieties of fish, salmon can be seen. Also "Makujen sinfonia kalakeitoissa" or fish soup cookbook/recipe can be seen on the top of this counter, K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)



On the left side of the counter that was selling salmon, Baltic herring steak, shrimps in liquor, fish salad, rainbow trout and mango crayfish can all be found, K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)



A couple came towards the counter to buy salmon. On this side, salmon, tuna, squid, oysters, clams and prawns, K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)







Two men purchasing fish (rainbow trout). K-Citymarket had an offer of EUR 11.99 per kg on rainbow and salmon trout. There were many people gathered on this side of the counter and sales staff was busy selling at K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)



In the centre of the counter that was selling fish, showcased mussels, plaice, fresh mackerel, gutted whitefish and fresh herring fillet. Some people were ordering fish standing on this side. K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)



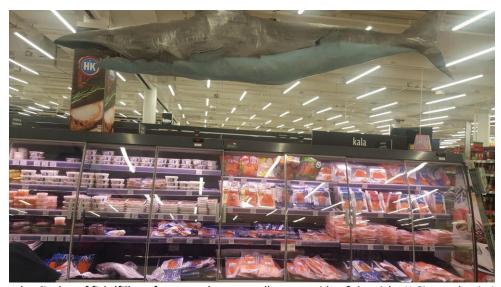
People were placing orders for fresh fish. Sales staff were busy taking orders and dealing with customers. K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)





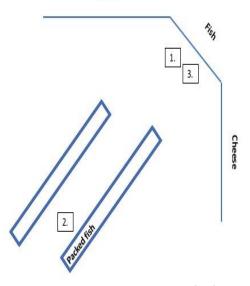


The fish aisle. On the right side, fillets of salmon were displayed. Some were marinated, and some were not. On the left side, frozen and processed fish were displayed. K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)



This picture shows the display of fish (fillets, frozen and processed) on one side of the aisle. K-Citymarket in Iso Omena (Espoo) (Photo: Amna Furqan)

Meat



Citymarket Iso-Omena, layout for fish







The subject in the fish section. (Photos: Eva Toppari, 2018)



In the end, the product he chose to buy was a 300g package of Norwegian cured salmon with white pepper (costing EUR 11.97 and EUR 39.90 per kg). Food Market Herkku, Helsinki (Photos: Assi Anttila and Veera Rytsölä



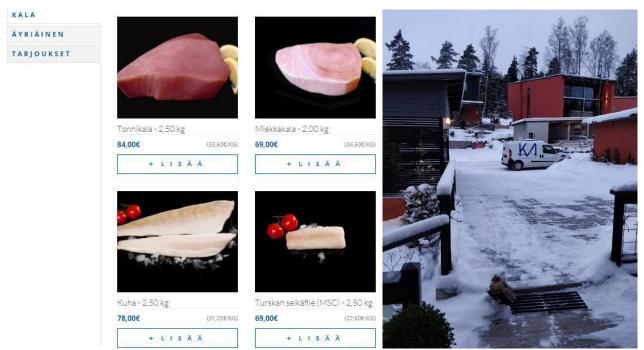


2.3 Shopping online

In Finland, it is possible to buy fish online as well; the process is illustrated below.



Ordering fish on Kala-Auto's website. (Photos: Michael Fabricius)



Kala-Auto's delivery van, which is equipped with a freezer, arrives on Friday afternoon to the customer's home. Approximately 15 minutes before arrival, the delivery person calls the customer to check if she is home and whether it is possible to deliver the fish.

(Photos: Michael Fabricius)







The fish order is in his hands, one small black box of roe and a large bag of frozen king prawns. After discussions about future deliveries, their discount offers and supply of swordfish and tuna, the sales representative begins the transaction process using a mobile card transaction device. (Photos: Michael Fabricius)

2.4 Logistics

These observations were made at LTP Cargo Oy's premises. The products were piled on a pallet wrapped in plastic. The first observation that can be made is that the pallet's height does not comply with EU regulations for international transportation. The height should not exceed 1.80 metres, which the pallet in this case does. On the other hand, the piled products do not exceed the pallets width dimensions, which ensures that the boxes on the pallet have less of a risk of getting damaged. Through the plastic wrap it can be noticed that the individual packages are securely packed with plastic wires to ensure that they do not open during the logistical process. The terminal where the products were delivered to was under strict surveillance. The temperature in the main terminal should not exceed 6 degrees Celsius, and the freezers had to be -18 degrees or colder. This surveillance worked as a service from the warehouse-owning company, LTP Cargo Oy. The products received were all frozen products. The regulations are strict in transporting frozen products, and in most fish-related products, products can be marked contaminated if they exceed the temperature above -18 degrees. In order to check the temperatures, the receiving company makes standardised temperature checks on the products received, immediately after the transportation arrives. All the delivered goods have high standards and are strictly regulated. Products must be marked accordingly so that it is possible to track the entire supply chain and the origin of the product. These processes seemed to be done in a certain routine and because of clearly packaged products, the processes were very seamless. In order to penetrate a market like this in Finland, the fish producer must be able to comply with all the regulations of the receiving country and also satisfy the demands of the receiving company.



An open box of shrimp shipped from Vietnam. The shrimp have been packed in separate transparent plastic bags. These bags include the product description, a bar code and other necessary information about the product. This makes it possible for the importer to sell the products directly to the retail stores, without the need of repacking the shrimp. The labelling of the bag is also translated into Finnish, which is regulated by Finnish law in order to sell products in retail stores. (Photo: Karri Mikael Huttunen)



The transported pallet from the supplier in Belgium (Photo: Karri Mikael Huttunen)







One bag of shrimp in transparent plastic (Photo: Karri Mikael Huttunen



A label on the box, including one of the goods bought from the supplier (cooked, peeled and cleaned shrimp). This label includes all the necessary information in all the languages necessary. The label consists of EU codes, country of origin, date of harvest, date of freezing, best before date at -18°C, lot number, place farmed, size of shellfish and other regulated information. The lot numbers were carefully noted by the receiver, as they have strict regulations to be able to track down certain products in case products were harmed or found to be contaminated. (Photo: Karri Mikael Huttunen)



The terminal where the fish importer has its warehouse and where they receive their goods (Photo: Karri Mikael Huttunen)



A label that is used for identifying the sender and receiver of the pallets. This label had to be separately inserted on the box by the Belgian company. These types of workadding processes can increase the final prices of goods and should ideally be done by the original producer. (Photo: Karri Mikael Huttunen)



A label that needed to be inserted separately (Photo: Karri Mikael Huttunen)



A pallet of fish packaged in Styrofoam has been ruled to be contaminated, as the Styrofoam boxes were damaged. During transportation, the Styrofoam boxes broke on the edges, which led to liquids from the packaged fresh fish trickling down through the whole pallet. According to regulations, these Styrofoam boxes aren't supposed to be damaged in any way that leads to liquids running out of the boxes. The damaged pallet of fish will be returned. (Photo: Karri Mikael Huttunen)





3 FISH-SHOPPING STORIES

STORY 1:

Date: Tuesday 6 February 2018

17:10: The couple realizes that they forget their shopping list at home and decide to shop spontaneously.

17:15: They enter the store and start from the baby section. They constantly look at various options and comparing

prices.

17:21: With diaper and baby food shopping done, they move on to the next section. The wife is leading all the time while walking. They stop at a few places, e.g. to check out detergents, etc. They enter the produce section. They stay for a while and buy various types of fruits and vegetables. Decision making is spontaneous, and they seem to buy products that have special deals. The wife carefully selects fruits and vegetables by touching different options. While waiting, the husband says: "We prefer K-Citymarket. It has fresher vegetables, more variety and fresher meat and fish."

17:37: When the vegetable and fruit shopping is done, they move on to the next section. They stop by the bread section, and the husband quickly grabs several packages of bread without thinking, like in other places.

17:48: They move on to the fish section. The wife says: "We prefer shopping from Tuesday to Thursday. There are less people than on the weekend. Food seems to be fresher and the prices are good." They first stop at the pre-cut and packed fish section. They look at different fish types and don't seem to have a fixed idea about which fish type to buy. They pick up different packages and discuss it. The wife asks: "Oh could this go with the cauliflower?" and refers to the cauliflower in their shopping basket. They do not take anything from the refrigerated section and move on to the fresh counter. The husband takes out his phone while checking the fish. He looks for the fish names shown at the counter from the internet and constantly looks back and forth between the phone and the fish. After checking on the phone and discussing, they choose burbot (from Finland). A seller comes to ask if they want the fish to be filleted. Filleting is free. The husband says yes. While waiting, the wife keeps checking her phone. The husband also looks at other fish. The wife explains: "We like fish but don't know how some fish taste, so we need to look for recipes. I'm looking for recipes for 'prepared' fish." The husband asks the seller: "Can the fish be cooked in other ways than soup?" Seller: "You can smoke it or bake it, but soup is better." "Do you want the liver too?" The husband says yes. After they get the fish, the husband then notices, next to the fish type they have chosen, that there is also ready-cut burbot fillets. He discusses the prices of what they already bought and the fillets with his wife, deciding which one is cheaper.

18:01: Fish shopping done and moving to cashier. 18:08: Done (Story: Essi Lohva and Tram Nguyen)

STORY 2:

Date: Saturday 10 February 2018

Pre-purchase: The fish consumer journey started already before arrival at the hypermarket. Pekka's task was given at the breakfast table at 11:30. The task was to buy fish for EUR 10 and make a fish dish of it. Pekka started by planning what he was going to buy and prepare with the fish. His facial expression was focused. While he was eating muesli and Greek yoghurt, he was thinking about what he wanted to cook. Pekka thought that EUR 10 is not enough to prepare fish. He wanted to buy salmon, lemon and fresh dill. The informant asked how much money we should spend for the meal if we would also buy prawn salad and white wine. Pekka thinks that prawn salad is very expensive. He also thought that it would be delicious to eat fish with mashed potatoes. But then he would need to peel the potatoes. Pekka already decided what he was going to buy, so he made a shopping list. When we were walking to the hypermarket at 11:50, there was a smell of fish in the stairway. Pekka immediately felt that there was a smell of fish sticks. He already made up his mind then that he would not buy fish sticks because of the poor quality of the fish, probably due to the rest of the fish products. Pekka thought that it would take a while before lunch is ready, and since it is Saturday, he could also buy some white wine.

During the shopping event: In the Ruoholahti Citymarket at 11:59, Pekka immediately looks for the other ingredients before buying the fish. It was fairly crowded in the store, people were also Saturday shopping. There was also sample tasting in many corners. His facial expression was very focused, and his eyes were constantly searching. He saw the lemons first, weighed them with his hands and picked two. He also picked the potatoes, weighing them with his hands and then looks for the fresh dill. Since there were very many choices in the hypermarket, he was looking around for the fish. He finally found the sign for the fish shelves around 12:06. When selecting the fish, he was looking around to see which alternatives there were and checked the price. He was first standing farther away and then went closer, looking at the salmon or rainbow trout. When he finally made his decision as to which product



Association of MBAs

he would choose, he did not take the first one he saw. Instead he looked for the fish that looked the best and tastiest. He picked the rainbow trout because of its red colour, he later said on the way back. He also picked the one with a very small product label. He spent approximately 1-2 minutes at the fish shelves. Pekka also said that the fish was over the EUR 10 budget, but if you want the good stuff then you have to pay. Pekka did not immediately look for the unpacked fish dish where people were standing in line to buy. He looked at the price tag of the fish and said that the kilogram price was too high. The fish shopping did not end there. He also picked up lightly salted butter, cream, sparkling water, lettuce and tomatoes. Basically, Pekka went back to where he started with the lemons. His facial expression in the hypermarket was very focused until he had collected everything he needed, and then he started to look more relaxed. Since Alko is in the same shopping centre complex, Pekka also wanted to buy white wine at 12:10. He had previously tasted a Riesling wine and thought it was okay. (Story: Sara Nguyen)

STORY 3:

First of all, Juha looked for a longer period of time at the different fish offers Lidl provided. This extra time means that the offer of products was sufficient and, as customer, he had to think about his needs and wants before he chooses a fish. In this case, he chose the 30%-price-reduced fish. Second, Juha stopped at the deep freezer to look at the MSC-certified fish. This indicates that his first choice of the 30%-price-reduced fish might not be the best, and he wants to re-evaluate his choice. Furthermore, it indicates that the deep-frozen fish might be a better option as the storage possibility length is extended in comparison to the fresh fish. Third, Juha opened the refrigerator door the first day after the purchase but returned the fish to the fridge after a short packaging check. This body language shows uncertainty about the point of time of the consumption of the fish. However, it can also be interpreted as if Juha wants to check how long the fish is good, as it is already 30% price reduced; this pressures Juha on the need to consume the bought fish before it becomes bad.

Juha clearly chose Lidl as store of his choice even though two more highly regarded Finnish stores could have been chosen. This means that Juha feels Lidl is a better option. Furthermore, he looked closer at the fish, which is price reduced or has the MSC certificate. Both of these considerations are criteria for him to buy fish, but one has more value than the other. In this case, the price had a higher value for him than the MSC certificate. It can be said that Juha puts no values in the correct storage of the fish, because he mixed all the goods in the cooling bag, even though some were warm and did not need cooling, and he puts the fish into the refrigerator without further consideration as the picture shows.



Juha was more concerned about the correct and valuable usage of the fish, because he prepared fresh baguette with the fish and also chose to divide the fish into equally big pieces to share between the baguettes, as shown.



Juha also recycled the packaging material properly afterwards. This indicates his positive interest in the environment and might also explain why he examined the fish with the MSC certificate. (Photos and story: Katrin Schütz and My Nguyen)





STORIES 4-5:

Shop	How was it selected?	Easy and quick decision. Convenient location and access.	She almost always goes to the same shop, which is close to her home. She knows it perfectly. Factors, such as discounts, product ranges, or special needs, do not affect her choice.
	Fish range offered	Frozen, fresh, already prepared, already packed fish are offered. The two fresh fish stands have the biggest range. However, no clear information about prices and origins were displayed at this moment.	A full range of products is available. The store spotlights the fresh fish selection. It can be because a more expensive price is also a more profitable price, or due to the growing demand for fresh products. Not to clearly show the prices and origins is certainly a marketing strategy that was successful with Participant 1 – who bought without asking anything.
Individual	General behaviour	Follow a shopping list. Know exactly what to buy and where it is.	Prices, daily discounts, or feeling and desire of the day do not influence her selection. No impulsive purchases are made, only healthy and needed products.
	Attention to nutritional information	No attention is given. However, she bought only organic products, or at least not low-quality and cheap products.	Participant 1 cares about the quality more than about the price. She does not look at the precise list of ingredients, but trusts in logos such as 'ecological', 'freerange', or 'local products'. Hence, health and quality seem to be an important factor in the selection.
	Fish purchased (origin, type, quantity)	Bought fresh 'whitefish' for one family dinner. She checked the origin and price only at the checkout. She came with a clear idea of what she wanted to buy. She mentioned her disgust for salmon or fish from Norway.	Only has fish once per week and does not often vary the type of fish. She has fixed and clear mental ideas (stereotypes) about Norwegian fish that also influence her choice. Again, her choices do not follow recommendations such as Evira, but are healthier than frozen or canned products.
Shop	How was it selected?	Size of the shop and the availability of a car.	Typically, the same shop is visited depending on necessity, available sales, discounts etc. Cheaper prices and a larger range of products in larger shops. As the participant has access to a car, location is not an issue.
	Fish range offered	Varied offering of fish. Participant bought one small pack.	The large offering of fish implies that customers have access to a wide range of fish instead of just a select few, which is a positive aspect considering Evira's recommendation.
Individual	General behaviour	Looking at the variety of groceries bought, a broad and knowledgeable approach towards shopping was taken.	Participant's purchasing behaviour is based on the needs of the family; 2 adults and 2 children are part of the family, which means that a large quantity of healthy foods is required.
	Attention to nutritional information	Although a healthy variety of foods is included, it is unclear whether special or specific attention is paid to nutritional information.	Since the observation was made by the participant, without observer interference, it is not possible to tell whether the participant paid special attention to nutritional information.
	Fish purchased (origin, type, quantity)	One vacuum-packed pack of salmon (150g) produced by Rainbow brand.	The participant's selection of fish is due to the participant already having fish in stock and a relocation of residence is soon to occur, i.e. the freezer needs to be emptied.

(Stories: Robin Kipfer and Aleksi Nieminen)



