Some Perspective on the Future for Farmed Salmon in France

Frode Nilssen and Marie C. Monfort

In this paper some perspectives on the future market for farmed salmon in France is discussed. The discussion draw on a survey conducted during 1999/2000, and the findings suggest that there still are substatial un-explored markets that can be developed. The main new market segment is the so-called ”social catering” market.

The purpose of this paper is to discuss aspects of the future market for farmed salmon in France. The discussion is based on findings from a research project on the ”Future trends for farmed salmon and farmed salmon products in France”. The main research question driving the study was: *What are the main factors affecting future use of farmed salmon in France, and based on this, what are the main potential directions for the future market development?*

The in-depth information on these issues is acquired through a three-tired process. First, the existing stream of literature on factors shaping future trends in general, and future market trends for foodstuffs in particular are examined. At this stage the main emphasis is laid on the economic-structural factors, while factors pertaining more directly to consumer behaviour are identified for subsequent use and investigation. In addition to the literature review, a preliminary survey among processors, importers and retailers dealing with salmon and salmon based products in France was carried out during the autumn 1998 and 1999. The main reason for carrying out the preliminary study was to test the relevance of the key factors that we identified through the literature review. Drawn from the results hereof a questionnaire was developed for formal interviews of selected (28) respondents in France, dealing with salmon[1].

The respondents participating in the main survey are carefully selected across different levels of the vertical marketing channel. Although they are not so many in numbers, the variety of different roles and functions in the marketing channel dealing with farmed salmon in France is presumably well represented. Further, the sample covers a relatively substantial part of the volumes of farmed salmon that flow into the French market.

The questionnaire is semi-structured, consisting of some open-ended questions and some closed questions. The questionnaire is taking the respondent through a set of questions dealing with factors that are assumed to be important forces to shape the future.

In the broadest sense the main categories of factors that affect the future use of farmed salmon in France can be summed up as psycographic factors, demographic factors and economic-structural factors. I addition does the more general question of food safety issues also call for attention (Nilssen, 1999; OECD, 1998)[2].

A glimpse at The french seafood market

France is today the most important salmon market in Europe, with over 110.000 tonnes (output weight) imported in 1999, of which farmed *Salmo salar* represents over 85%.

There are two main channels for food products in France (as for most western economies) are the catering sector, and the retail sector.

The retail sector is primarily concerned with the dine-at-home market. In Western Europe this generic market segment represent approximately 80% of the total food sales, in volumes (Gordon, 1998).

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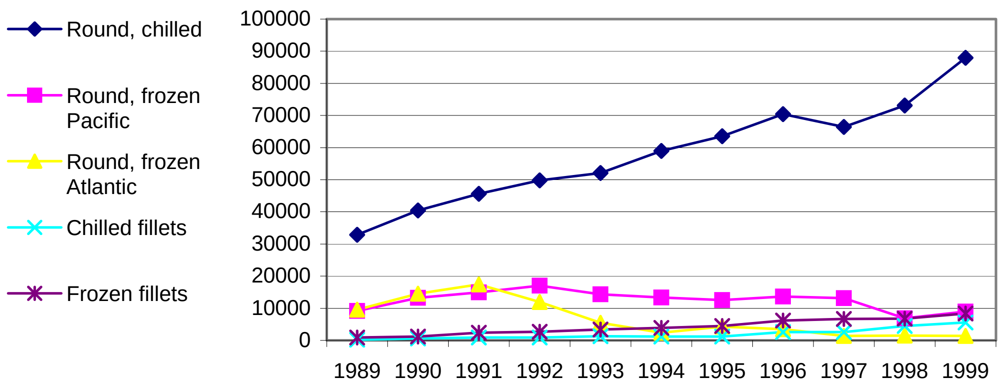

Figure 1 France Imports of Salmon Products, in Output Weight (tonnes). Source : Eurostat, National customs data

The two main outlet types are hyper- and supermarkets, and independent grocers and open consumer market outlets.

The French seafood-marketing channel consists of a wide variety and a high number of actors performing different functions from importers, agents, traders, wholesalers, processors, retailers, restaurants etc. To illustrate the point it can be mentioned that the number of food retail outlets in France (1997) was close to 58.000, whereof close to 8.000 and 1.000 was super- or hypermarkets respectively (Euromonitor 1998a). The retail sector is highly concentrated where the market is dominated by four companies (retail chains) with around 55-60% market share (Corstjens and Corstjens, 1995; Gauthier, 1996). The strong concentration at the retail level has put a squeeze on the suppliers in general, and on the wholesalers in particular (OECD 1998). One effect hereof is the development of the home shopping/delivery segment. This segment has primarily been concerned with frozen food and other shelf-stable food products. In France, home delivery of food products represent approximately 15% of retail sales. While the home delivery E-commerce with foodstuffs has been relatively stable an estimate of the development over the next 10 years has been set to around 10-15% increase for packaged groceries (Gordon, 1998).

The catering sector can be divided in four generic segments: Social, workplace, commercial and transport segments. The largest are the Social catering and the commercial segments representing schools, universities/higher education, health sector, prisons and the army, and cafés, bars and restaurants respectively. The number of consumer catering outlets was 148.000 (1997), whereof close to 81.000 was restaurants, 45.000 was cafe's and bars and 19.000 and 2.000 was hotel catering and fast food outlets, respectively (Euromonitor, 1998b). The catering sector is correspondingly fragmented, where the fast-food chain McDonalds, is the single leading operator with a market share (value) of 5,3% in 1997 (Euromonitor, 1998b).

Table 1 The relative importance of social versus commercial catering the segments in France in 1995 and 1998

	Meals/year	*% of meals served in 1995*		*Estimated Trend 1995/2000*
	(millions)	*Social*	*Commercial*	*% yearly increase in no. of meals*
1995	6625	56	44	0,5
1998	6940	53,3%	46,7%	
Turn-over (billion FF)	299 000	34,3%	65,7%	

Source: GIRA Sic

As can be seen from table 1 below, the relative importance of the social catering segments is higher than the commercial in terms of volume

The main players in the seafood sector are not that many. In example there are 4000 fishmongers, (Monfort, 1998), while there are less than 20 large producers of frozen seafood in France (Pàlsson, 1993). In addition there are a relatively large number of other intermediate actors in the seafood-marketing channel.

Perspectives on the future market development

Behind the large diversity of behaviour related to food consumption and purchase there has been identified a set of common features that explain, or at least, can be used for characterisation and prediction of consumer behaviour. One pertains to an aspect of inherited culture that might be termed tradition (See for example James, 1996; or Southgate, 1996). At the other side there are product attributes, such as price and perceived quality. While tradition mainly denotes learned social behaviour and often is related to enduring, relatively strong attitudes toward purchase and use of products, perceived product attributes can to a much larger extent explain situational choice when the consumer is exposed to a range of products offering the same (functional) value. Some sociologists claim, according to Warde (1997), that lifestyle increasingly has become a basis for social identity – displacing class as a central organising principle. The significance of this contention is related to the items identified earlier that characterise the consumers and the major factors that shape future trends.

Main patterns of food consumption in France

Tradition proves to rank quite highly amongst all decision criteria (Wisner-Bourgeois, 2000). For example, the permanency of higher consumption of fish on Fridays compared to the rest of the week illustrates the attachment to the traditional Christian rule. Traditions are also reflected in the geographical pattern of chilled finfish consumption, being 85% higher along the West Coast compared to Eastern provinces (along the German border).

Price is another highly ranked purchase decision criteria, and few purchases will be made if the price level does not give the perception of a good or at least satisfactory deal. The success of supermarkets and more recently the success of hard-discount retailers illustrate this point. Long term analysis of specific food performances often roots changes in relative price alteration[3)]. But what is considered as ”a good deal” varies greatly from one consumer to another, and also from one period to another.

In this field, a large number of immaterial values attributed to food enter into the picture and influence the final choice. Above all comes the social dimension of the actual consumption of the meal (the eating action) (Crédoc, 1998): eating carries an intense symbolic value. One aspect is that it evokes the connotation of the gathering in a protective group, with family, with friends, for sharing a pleasant moment, in a generous and careful atmosphere. Another aspect is the health issue, which according to the Crédoc, is as a highly ranked intangible value in France.

The health issue pertains to a wide set of factors such as the hygiene at the point of sale, good icing of fish desk, information on packaging, etc. In this respect, the recent BSE crisis has by no doubt been unfavourable to the image of read meat. Further, French consumers have revealed a relatively strong reluctance to accept products based on GMO. A majority of consumers in France believe that product should not be authorized for sale if there is any doubt that it not has been subject to GMO[4)].

Seafood in the French diet

The consumption of seafood is estimated to 28 kg per capita per annum, compared to 100 kg of meat (beef, pork and poultry) in the same period.

”Finfish consumption is still deeply, consciously or unconsciously, linked to religious rules. Consumption is still higher on Fridays and during the Easter period. Although, the symbolic value of penitence has vanished, fish still carries the idea of should-be-eaten-at-least-once-a-week. Today, the main explanation for this is by and large related to nutritional reasons rather than religious. Fish is considered by many as the ’reason-food’ when red meat is referred to as the ’sensual-food’. We are not far from the Middle Age fasten-carnival dichotomy. ’Everyone’ agrees that fish is more healthy than meat, but it is perceived as having less nutritious value since it is not filling in as much as meat “(Wisner-Bourgeois, 2000).

An aspect that brings another ”burden” to fish as compared to meat is that the price of finfish is perceived to be high in general, and in particular higher than meat prices. This constitutes one of the mains discouraging attributes for further consumption (O-fimer, 1997).

In many respects farmed salmon has a remarkable sales performance in France. One reason for this is that, salmon belong to French food tradition, not as an ordinary food, but clearly as a high society favourite[5)]. As such the product carried, both in the past and still today, a universal image of product dedicated for the rich. In the French conception, the most frequent expression used to qualify the success of salmon is ”democratisation”: It is now accessible to all ”people” and represents the number one finfish species consumed by the French.

The specific French pattern of three structured and regular daily meals dates back in the late nineteen century. It stems from workers long lasting struggles concerning the organization of their workday and the reduction of work hours and their claims to have a ”familial, private and individual life” (Grignon, 1996). This pattern is still valid, with a large proportion of two or three courses (77%) dinners taken at home. In a recent survey it was found that as much as 90% of the families dine at home 5 times a week at fixed hours (Volatier, 1999) All together 84% of the dinners are taken together with all other family members during the week.

Choice of products

Women predominantly choose food products for domestic consumption. Hence, they still perform the function, amongst others, of a gatekeeper who operate as filters for the whole family (Grignon, 2000). Compared to one or two generations ago, women are now endowed with a higher level of education and enjoy a higher employment rate. The first gives them easier access and a better understanding of a larger spectrum of information (daily newspapers, women magazines, doctor prescriptions). The second factor stimulates their demand for timesaving products. These higher educated consumers are also more health oriented. Amongst others they represent the group of consumers that are ”responsible for” the high increase in yoghurt and mineral water. This is also consistent with the findings of Bourdieu (1984) where he noted that as the income rise the proportion of the total food spending used on heavy, fattening and cheap food declines while that spent on leaner lighter and non-fattening food increases.

Meals structures

One subject that has been most frequently investigated by sociologists concerns the development of new eating habits (snacking, fast food consumption) versus the traditional meal model. Although the fast food consumption has increased somewhat, the traditional three meals a day rhythm is still not challenged (Grignon, 1999). A study on the conditions of life among French university students confirms the relative stability of the present-day French pattern of meals. Some key findings are; they do not skip meals, they eat only small to moderate amounts of fast food, and don’t practice ”snacking”[6)]. Since the students are both young and destined to belong to the growing upper-middle classes, such a survey casts some light on the future evolution of French food habits. Yet, Poulain (1996) propose a somewhat different perspective indicating that the classical meals are loosing grounds and the food intakes all-day-through are developing, especially in the 30/40 years old, urbanised population. The snacking, outside the traditional meal periods, is still mainly sweets (cereal bars, chocolate, fruits). However there seems to be some agreement that the ”grazing” – or ”Americanisation”- of food pattern meets strong resistance in France, yet somehow mainly due to strict social norms[7)]. This is further supported by Volatier (1999) who suggest that the resistance of the French model to the American model is mainly explained by the important social role of meals in France as the ”collective dimension of eating as fundamental”.

The social catering sector does also serve three main meals a day, breakfast, midday and evening meals. The meal function is slightly different from the private sphere, though. Not surprisingly, the most important in terms of volume is the midday meal. As seen from the perspective of the caterer, the main emphasis is on low price, value and rapidity (Gordon, 1998).

Meal preparation

Time spent for making food decline over time, due to lack of time of many working women, the drop in interest in this activity, considered by some as of minor interest, the increasing supply of time-saving items. From 1995 to 1997, time for making food has decreased from 42 minutes for weekday dinners (with no guest) to 36, and from 60 minutes to 44 during week ends. There are, however, strong regional differences. When in South Western France (Aquitaine, Midi-Pyrénées) 42% spend more than 30 min with the evening dinner, in Northern France only 19%. According to Volatier, these differences are linked to traditions and not to changes in the young generation attitude.

In the traditional French home, the housewife have normally been prepared the meals (Wood, 1995). It is worth noting that men’s participation of cooking is a recent trend in France. What used to be the former domain of the women, is now increasingly shared by men and children. In 1997 47% of men said to never cook, compared to 50% in 1995 and 54% in 1988 (Volatier, 1996; Wood, 1995).

Obviously, there has still not been carried outany studies on the effect of the reduced work week from 39 hours to 35 hours. Intuitively, this large-scale social scheme may be seen as a means of reducing housewives time constraints on traditional activities such as meals preparation.

Toward the future market

During the period from the introduction of farmed salmon to the French market in the late 1970s and till today there has been a tremendous development. At the one side there has been great changes in the intermediate market, which are the buyers facing the Norwegian and other suppliers of farmed salmon. At the other side the product itself has seen a grand consumer acceptance in the market. The single most influential factor to which the wide use of farmed salmon can be attributed to is probably the improvements in efficacy and effectiveness in production – which in turn has enabled the suppliers to reduce the price. This has again, moved salmon (salmo salar) from being a (very) expensive product to a relatively affordable and accessible food product for the average French consumer. Some would also claim that there has been a corresponding move for farmed salmon on the downward slope on the ”vanity” scale from being an exclusive product for special occasions to a more common item if not an ordinary everyday product today.

The main factors affecting future use of salmon

The move on the ”vanity scale” toward a broader use and a wider potential customer base has opened a whole array of market possibilities for the industry. This is confirmed through the survey as one of the main findings related to the future areas of opportunities for farmed salmon. The development potential should, however, be divided in two main segments;

- The retail sector
- The catering sector

Growth in the retail sector

Within the retail sector the highest growth potential for farmed salmon appears to be within the ready-meals sector and as a chilled plain product in various forms (fillets, steaks, cutlets). It is interesting to note, though, that there are expectations for further growth across all product forms, including smoked salmon and frozen plain salmon. Further, farmed salmon is increasingly used not only as a main ingredient, but also as a minor ingredient or additive to a product (frozen ”stir-fry” meals, patés, quiche). This is especially valid for the ready-meal segment. The different uses will also increasingly pave the way for greater differentiation along two dimensions; segmentation of retail markets and product use (requirements) within segments.

From the buyers' perspective, that is supermarket chains and other retail outlets, and the processing industry, the biggest growth potential is related to the changing consumer needs and preferences. The main new demands are for diversity and convenience products. New product development is also a priority area among the industrial actors.

It is worth mentioning that the industry and retailers alike emphasise that the farmed salmon per se has no intrinsic advantage in development of new products in comparison with other fish species. The main strength of farmed salmon is related to the continuous availability and possibilities for stable deliveries of a consistent quality product. Although this is an important prerequisite for the industry in general, this is especially important for the fresh product segment. The continuation of the growth is further supported by the general positive image of salmon as perceived by the consumers. This appreciation seems to survive despite of the drop on the ”vanity” scale. The lower price is, however, seen as a requirement for continuous growth in the market.

Growth in the catering sector

The catering sector consists of two main segments, the commercial catering outlets and the social catering establishments. As for the retail sector, the catering sector does also promise significant growth in the use of farmed salmon during the next ten years. In the commercial catering sector, the main growth potential is expected within new uses of salmon in entrees (other than smoked salmon), but also as main courses, yet to a more limited extent[8)].

The social catering stands out as the ”unexplored” market segment for farmed salmon, with a high potential for farmed salmon. The main potential for volume consumed is as a main course served in hospitals, schools, prisons, and in the army. As a ”something in between” the commercial and the social caterers are the company canteens. These establishments also represent a significant potential market, although smaller, than the social catering establishments, with 500 million meals served in 1998.

The main key to open these markets for salmon producers is the drop on the ”vanity” scale and a corresponding drop in price ”per-dish” level. The potential volume in the social catering sector is large considering the high number of meals served. It is worth noting that the number of meals served is not expected to increase significantly over the years to some. In any case the market represent a big potential. Yet, being so far unexplored, this market segment represents a huge potential provided that the industry is able to produce cheaper-per-unit salmon based meals. The possibilities seems to exist considering the drop in salmon production of farmed salmon, but also through a more extensive use of salmon meat left unutilised from other processes.

Potential obstacles and inhibitors for market growth

The description of the future market possibilities as outlined above can at first glance seem quite rosy and straightforward. There are, however, some potential problems that can inhibit the expected growth. At the one side there are supplier-related factors. These are primarily ”standard” problems of suppliers’ ability to deliver products (stable volumes over time and a consistency in quality) that match the positive image of farmed salmon, as perceived by French consumers. At the other side some impeding factors that can arise all through the supply chain have been identified. The single most frequently mentioned factors are the risk for contamination of bacteria, primarily listeria, and/or presence of undesirable substances such as dioxin and antibiotics. The high media coverage of food scandals during the last years have brought the industrial actors on their tip toes in order to avoid further negative speak of their products in the media. There is little doubt that any incident of contamination can be subject to a hype-up in the media with subsequent slowdown in growth, or even distrust to the product.

This latter aspect is an other potential problem which can harm the salmon industry on a long-term basis. The fact that the French consumer, despite knowing, seems to evade the fact that the salmon they normally buy in the shop, at the market or in the restaurant is farmed salmon. A strong focus on contamination and food scares related to farmed salmon can potentially create distrust to the production of farmed salmon and subsequently to (farmed) salmon as a generic product.

Table 2 Performances of Quality labelled products in 1997 and 1998

Quality Label	*Definition*	*Sector*	*Production development 1998/1997*
label Rouge	The Label Rouge logo guarantees that the product is of superior quality. All along the production and processing steps severe quality and taste controls have been undertaken. This is one of the most known and appreciated quality label by French consumers. When seafood is concerned, one find this label on chilled Scottish salmon, smoked salmon, oysters, farmed seabass, canned sardines.	Fruits and vegetables All seafood	+10,5%
		Of which salmon	+18,2%
		All meat	+23,8%
		Beef	+2,2%
		Chicken	+0,7%
		Pork	+1,6%
			+1,6%
APPELLATION D'ORIGINE CONTRÔLÉE	AOC identify a close link between the product, a region and the traditional local know-how. It qualifies wines, diary products, olive oil, fruits and vegetables.	Dairy products	+4,5%
		Fruits and vegetables	+67,2%
ATOUT CERTIFIÉ QUALITÉ CARACTÉRISTIQUES CERTIFIÉES	The logo Atout Certifié Qualité guaranties a regular quality distinct to standard products quality (superior).	Fruits and vegetables	+13 (number of units in 1998 compared to 1997)
		Meat	+2
		Chicken	+8
		Eggs	+2
AB AGRICULTURE BIOLOGIQUE	The AB logo « organic logo » guaranties that the production process used is environment friendly. Producers must follow strict terms of references.	Number agricultural farms	+12,2% (98/97)
		Surface exploited	+35,8% (98/97)
		Milk	+19% (97/96)
		Eggs	+50% (97/96)
		Chicken	+135% (97/96)
		Pork	+39% (97/96)

This latter aspect leads us to the other side of food safety and hygiene issues and ethics in production (farming). The survey reveal that welfare issues related to farming of salmon is not considered to have significant impact on the future market development for farmed salmon in France. The same opinion albeit with somewhat less unity, was revealed on the question of ecologically produced salmon. Although the relatively clear response on these issues most likely will prove to hold good over the next ten-year period, the two factors represent labile structures in people's minds both touching on the notion of consumer's emotions. There are many examples of how the emotional appraisal of a case (intensive breeding of pork) has discouraged consumers to purchase these products. As the consumers increasingly are getting a distant apprehension of how breed food is brought up and produced, one might well foresee a reluctance to accept intensive farming. Again the question of ethics, sustainable breeding, and ecologically produced food might gain momentum among the consumers.

One of the means of meeting the demand for food safety and information in France is the introduction of various quality labels. In some respects the second half of the twentieth century is characterised by deep changes in the food supply chain, decline of rituals (fasting and carnival periods), loss of cultural dimension, and standardisation. While the origin of food products were rather obvious in the past, the production processed was known and quality easily appraised, the consumers seems to know less today about the origin and quality of the products. This lack of basic knowledge leaves room for uncertainty, loss of confidence and even scares, and creates a sheer need for information.

In order to try to comply with the needs and expectations of the consumers the quality labels has been introduced. So far, the labels, according to the industrial actors themselves, has been a success. Below are examples of these labels and their relative growth in the market (volume).The growing concern about food safety, increasing demand for quality guaranties, and high consumer awareness on these issues make demands for the industry to develop a consistent production and processing strategy that meet future consumer demands on this topic. Through the survey it appeared clear that in professionals' mind, to do and as importantly to let know what is done, will play a true role in the sector competitiveness.

A question-mark for the future market development

The main ”joker” in the development of the future market for farmed salmon is presumably the problem of genetic engineering. The contemporary French consumer does in all likelihood not have any suspicion of farmed salmon being raised on fodder containing genetically modified ingredients, such as GM soybeans. Notwithstanding, there is a strong negative opinion about the use of GM ingredients in the salmon fodder among the trade and industry in the French seafood business. Further, the respondents in this survey report an unambiguous opinion about the negative effect that any genetically modification of the farmed salmon will have on the future acceptance of farmed salmon.

Nevertheless, several scientists in salmon producing countries, amongst other Norway, are eagerly promoting the advantages of genetic modification (GM) of for instance farmed salmon. The obvious mismatch between the general opinion of the consumers and the trade and industry calls for attention and caution. The issue of GM is at present far from clarified, and doubts about the ”naturalness” of the farmed salmon that is offered to the customers may therefore severely harm the development of the future consumption.

Although most salmon farmers claim to not use any fodder containing GM ingredients, the trade and industry are asking for better labelling of the product along with a system for traceability. All-in-all one impression is that there will be an increasing demand for increased communication attached to the tangible product (the fish). In other words, the relative significance of the communication part of the product will in all likelihood need to be improved.

The potential for growth and the obstacles and uncertainties are closely related. The positive development hinted at in the two first paragraphs may well be discontinued if one or more of the obstacles mentioned are brought up. Provided that the actors at all levels in the industry are taking the potential hindrances seriously, one would be inclined to adhere to the view that the industry will see a continuation of the market penetration and growth in new segments rather than a stagnation or shortfall in the French market.

References

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste.* London: Routledge and Kegan Paul.
Corstjens, J. & M. Corstjens (1995). Retail Competition in the fast-moving consumer goods industry: France and the UK, INSEAD Working paper 95/50/MKT, Fontainbleau, France
Crédoc (1998). Crise de l'immatériel et nouveaux comportements alimentaires des Français, cahier de recherche, 113, p. 191.
Euromonitor (1998a). Retail sector report: French food & non-food retailing, *Retail monitor international*, May.
Euromonitor (1998b). Major markets: Leisure. The French market for consumer catering, *Market research Europe*, October.
Gauthier, R. (1996). France: Food market report. Voluntary report, FR 6047, Bank of America.
Gordon, A.D. (1998). Changes in food and drink consumption, and the implications for food marketing. In The future of food. Long-term prospects for the agro-food sector, OECD.
Grignon, C. (1996). Rule fashion, work: The social genesis of the contemporary French pattern of meals, *Food and Foodways*, **6**:3-4, pp 205-241.
Grignon, C. (2000) Personal communication Director of CORELA Consumption Research laboratory, INRA, Ivry.
Grignon, C. & C. Grignon (1999). Long-term trends in Food consumption: a French portrait, *Food and Foodways*, **8**:3, pp.151-174.
James, A. (1996). *Cooking the books. Global or local identities in contemporary British food cultures*. In Cross-cultural consumption. Global Markets Local realities (sitert i Solomon, 1999). London: Routledge.
Monfort, M.C. (1998). The market for seafood in Paris and Ile de France. Globefish report, Rome.
Nilssen, F. (1999). Trender og fremtidsforskning i et samfunnsvitenskapelig perspektiv. Arbeidsnotat, Fiskeriforskning, Tromsø
OECD (1998). The future of food. Long-term prospects for the agro-food sector.
Ofimer (1997). Attitudes et perception des consommateurs à l'égard du poisson frais, rapport de synthèse, p. 67.
Pàlsson, T. (1993). Market for fish-based ready meals in France. Globefish report, Rome.
Poulain, J.P. (1996). Les nouveaux comportements alimentaires in La Revue des hôtels, Restaurants et collectivités, May, pp.53-58.
Southgate, D.A.T. (1996). *Dietary change: changing patterns of eating.* In: Food choice, acceptance, and consumption, H.M. Meiselman & H.J.H. MacFie (eds.). Blackie Academic & Professional.
Volatier, J.L. (1996). Les nouveaux comportements alimentaires, La revue, pp.53-58.
Volatier, J.L. (1999). Le repas traditionnel se porte encore bien, Crédoc Consommation et modes de vie, N°132.
Warde, A. (1997). *Consumption, Food & Taste. Culinary Antinomes and Commodity Culture.* London: Sage Publications,
Wisner-Bourgeois, C. (2000). Personal communication, Associate professor, Institut National Agronomique Paris-Grignon, Department of Sociology.
Wood R.C. (1995). The sociology of the meal. Edinburgh University Press Ltd.

Notes

1) The questionnaire consisit of a combination of closed questions with a lickert-type scale, and open-ended questions.
2) *Psycographic factors*
   - Time as scarce factor
   - More people are working from home
   - More women are taking non-housework jobs

   Demographic factors

- Ageing population
- The household size decreases
- Increase in ethnic diversity

Economic-structural factors
- Increase in electronic communication
- Accessibility for purchases are increasing
- Concentration at the retail level is increasing

3) This is the case for the decline of beef consumption in the early eighties, or the decline of chilled finfish in the early nineties.
4) In a survey run on internet (no random sample !), 72% of respondents said to be unfavourable to the introduction of GMO in food. Source : planete.org
5) This refers to the 20th century situation. In a more distant past, salmon which was quite abundant in some rivers, was considered as an ordinary food in some regions.
6) The share of meals skipped is 2,6%, the share of meals taken in fast food was estimated to 1,6%, and meals made of snacks 3,3%. Source: Grignon (1996).
7) The social norms on meals are quite strong : a real meal is a three courses meal for 62% of the population, snacking or eating outside formal meals is regarded as negative from a health point of view by 81% (Poulain 1996).
8) Salmon is already quite well introduced in the average-price commercial catering segment.