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Out-of-home consumption of seafood in Spain

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SUMMARY – This text contains a description of out-of-home consumption of seafood in Spain, using the food consumption survey conducted by the Spanish Ministry of Agriculture, Fisheries and Food. Both restaurant and institutional consumption are considered.

Key words: Seafood, Spain, food consumption survey, restaurants, institutions.

RESUME – *"La consommation hors foyer de produits de la mer en Espagne". Ce texte présente la description de la consommation de produits de la pêche dans l'Espagne par l'enquête de la consommation alimentaire du Ministère pour l'Agriculture, la Pêche et l'Alimentation dans les restaurants et les collectivités.*

Mots-clés: *Produits de la mer, Espagne, enquête de la consommation alimentaire, restaurants, institutions.*

Introduction

Out-of-home consumption is related to the evolution of the sectors involved and to the new habits and characteristics of the Spanish household. The demographic analysis of the MAPA (Ministry of Agriculture, Fisheries and Food) study (MAPA, 2000) illustrates the main traits of this type of consumption: (i) the big cities have attracted a great number of families because of employment opportunities; the new jobs favour out-of-home consumption habits; an important number of students have lunch out of home too; (ii) the time devoted to cooking has changed; (iii) the modern family is smaller, with a larger number of households having one (14%) or two people (25%); also women participation in the labour market favours this tendency; (iv) income rise results in a lower share being spent on food and a higher share spent on leisure, including eating out-of-home, and tourism with gastronomic incentives; gastronomy is by itself a matter of interest; and (v) tourism is very important in Spain; the value of the importance of foreign tourism in food consumption is difficult to measure, but it can reach 3% of total food consumption.

The distribution of these aspects throughout the year shows a seasonality pattern of consumption in restaurants and institutions. Moreover, any development influencing any of the above-mentioned traits is a determining factor of the changes in out-of-home seafood consumption. In particular, the evolution of the economic cycle is a very important determinant of out-of-home consumption.

In the next section, the characteristics of the establishments, restaurants and institutions, in the MAPA Food Consumption Survey are presented. The following section describes the evolution of out-of-home consumption, mainly in restaurants, by groups and by some species of interest. Some concluding comments close the paper.

The MAPA Food Consumption Survey

The main source of information on seafood consumption surveys is the MAPA. The Food Consumption Survey of the MAPA is not conducted by the MAPA itself, but by private companies. This survey began in 1987 and the methodology has changed several times, because the companies have changed. However, the MAPA has made an effort in showing homogeneous information as if there was not any break in the series.

The survey takes into account all restaurants and hotels in Spain, an average of 236,375

establishments, because its number varies according to the season. It includes restaurants, hotels with dining rooms, pubs, coffee-shops, etc. The sample consists of 700 establishments. The information is collected monthly and processed quarterly. Until 1996, the sample size was 500 establishments, and the information was processed each semester.

The establishments are located in coastal areas (tourism) and in the big cities. However, it seems that the development of small cities inland (conventions, congresses, seminars, etc.) has led to lower concentration along the coast and in big cities in the last decade. About 60% of the establishments are pubs and about 30-40% (according to the criteria followed in the classification) are restaurants. Only 8.4% of the sample analysed are considered fast-food restaurants (92.5% of them are independent firms and only 7.5% belong to franchise corporations).

Consumption according to the type of establishment is linked to the number of establishments in each class. The share of hotels is 6% of the total food and drink expenditure, the share of restaurants is 33% and the share of pubs and coffee shops is 61%. It is clear that both alcoholic and non-alcoholic drinks are very important in total consumption, due to the importance of pubs and coffee-shops (only 42% is food). The structure of the consumption for restaurants (66.5% in food) and hotels (72% in food) is very similar.

Institutions include the following sectors: educational and health centres, the Navy and other military centres, penitentiaries, residential homes for the elderly, fishing ships, camps and other centres. The heterogeneity of the group, the geographical dispersion and the functional structure of institutions is a very important limitation in studying this type of consumption. 25,179 establishments are considered in this category. The sample consists of 200 centres and catering firms. Since 1997, there are 200 collaborating units, instead of 100, and the information is collected monthly and processed quarterly.

The evolution of seafood consumption in restaurants and institutions

Figure 1 presents the evolution of out-of-home consumption per capita by main groups. In summary, consumption increases for all main groups in restaurants, less for frozen fish, with the largest growth for crustaceans and molluscs.

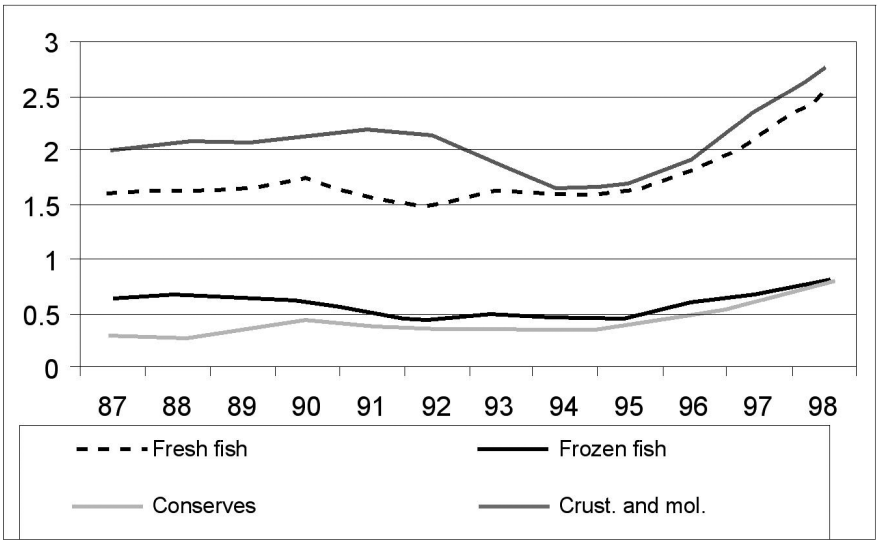

Fig. 1. Evolution of seafood consumption per capita (kg) in restaurants. Main groups (MAPA).

The consumption per capita of fresh fish rises in restaurants, but after a decline at the beginning of the 90s, particularly in 1992. In a different way, frozen fish consumption shows a declining trend until 1995 and the it recovered in the last years. The consumption of seafood conserves per capita is stable. On the other hand, crustacean and mollusc consumption has increased in restaurants.

However, it is very important to distinguish between fresh and frozen crustaceans and molluscs, as Fig. 2 shows. There is a large increase in per capita consumption for frozen crustaceans and molluscs, after a decline in the mid 90s, but the decline since 1990 until 1995 has been very strong for fresh crustaceans and molluscs, and in 1998 its per capita consumption equalled that of the 80s. Figure 2 also shows that hake consumption remains at the same level in 1998 as in 1987, both for fresh and frozen consumption. On the other hand, the per capita consumption of sardines and anchovies has doubled.

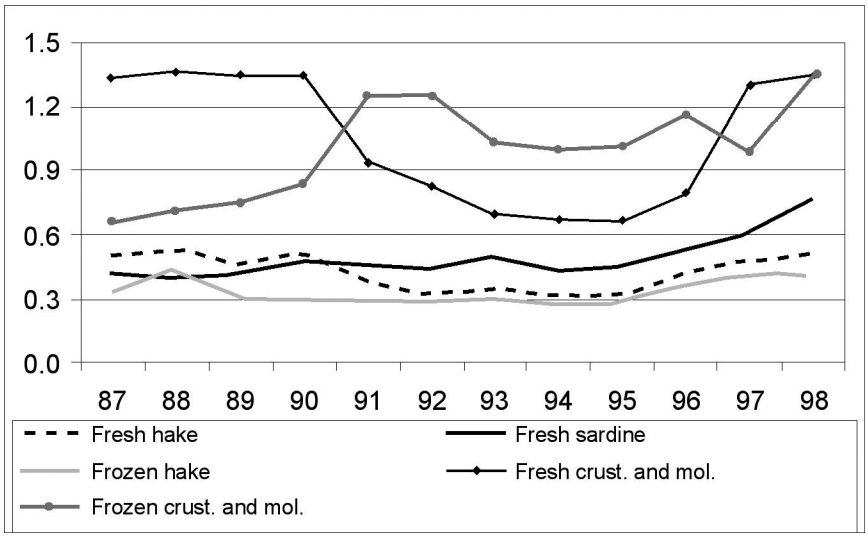

Fig. 2. Seafood per capita consumption (kg) in restaurants. Main species and presentations (MAPA).

Consumption in institutions grows in a different way than in restaurants, but the main differences are in composition and in volume, as the comparison of Figs 1 and 3 illustrates. The increase of institutional consumption is particularly important for frozen fish, and only for this category is consumption at the same level in restaurants and in institutions.

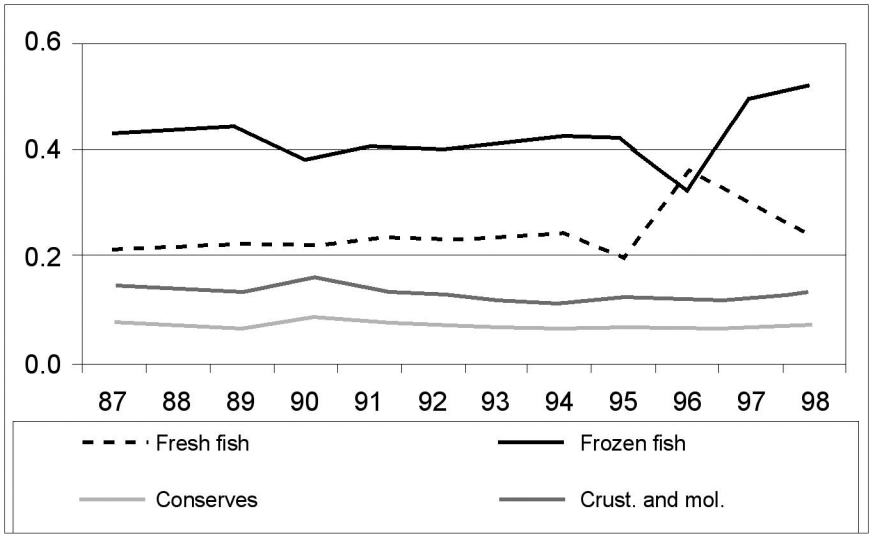

Fig. 3. Seafood consumption per capita (kg) in institutions. Main groups (MAPA).

A summary of seafood consumption in Spain in 1998 is shown in Table 1. The table gives a detailed presentation of home and out-of-home consumption (restaurants and institutions) and by type of preservation and species.

Table 1. Seafood consumption per capita (kg) and location (%) in 1998 (MAPA, 2000)

	Per capita	Home	Restaurants	Institutions
Total	30.31	74.24	22.69	3.07
Fish	18.01	77.19	18.62	4.19
Fresh fish	14.03	80.04	18.26	1.71
Hakes	3.02	81.74	16.95	1.30
Sardines and anchovies	3.33	76.04	22.78	1.18
Sole	1.20	85.08	14.21	0.70
Salmon	0.73	78.61	19.85	1.53
Cod	0.49	80.26	18.01	1.73
Tuna	0.59	78.64	15.67	5.69
Trout	0.51	76.42	20.81	2.77
Other	4.15	81.41	16.55	2.04
Frozen fish	3.99	67.18	19.90	12.93
Hakes	2.25	68.75	16.62	14.62
Sole	0.36	58.89	31.06	10.05
Salmon	0.05	43.89	39.51	16.60
Cod	0.14	42.09	44.09	13.83
Other	1.18	70.78	18.92	10.30
Fish conserves	3.92	78.47	20.15	1.38
Sardines and anchovies	0.40	70.44	27.43	2.14
Tuna	2.12	79.11	19.27	1.63
Other	1.40	79.80	19.41	0.79
Crustaceans and molluscs	8.37	65.92	32.63	1.45
Fresh	5.38	74.56	25.11	0.33
Cooked	0.21	78.06	19.50	2.44
Frozen	2.77	48.53	1.45	3.09

The different shares for species and locations in Table 1 suggest that an analysis of the importance of each group in out-of-home consumption is interesting. Figure 4 shows the shares of fresh fish, frozen fish and crustaceans and molluscs in restaurants. The remainder is for the least important category of seafood conserves. The relative shares do not vary a lot during the period analysed. Crustaceans and molluscs is the most important group, followed by fresh fish.

In Fig. 5, a more detailed picture for fresh fish is presented. Fresh hakes, sardines and anchovies account for 20% of seafood consumption in restaurants, more or less twice as much as other fresh fish. The share of sardines and anchovies and other species is increasing, but the share of fresh hake is declining,

Figure 6 shows the share of fresh fish, frozen fish and crustaceans and molluscs in institutions. Again, the remainder refers to seafood conserves. Frozen fish is increasingly more important as a group. Remarkably, fresh crustaceans and molluscs in 1987 accounted for the third part of total consumption of crustaceans and molluscs in institutions, and in 1998 their contribution was almost negligible.

It is interesting to analyse in more detail data concerning aquaculture or aquaculture-related consumption. The evolution of hake consumption, as a reference for any fish species aiming to increase market share, is described in Fig. 2. Tables 2 and 3 show the detailed figures for fresh hake and frozen hake, respectively. Restaurant consumption is replaced by home consumption in the fresh and, very clearly, in the frozen category. However, the more remarkable fact is the decline in hake consumption per capita.

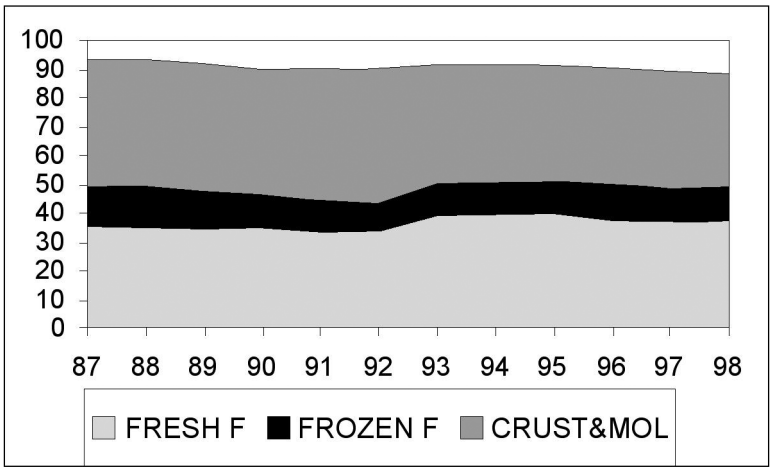

Fig. 4. Evolution of seafood consumption shares by main groups in restaurants (MAPA).

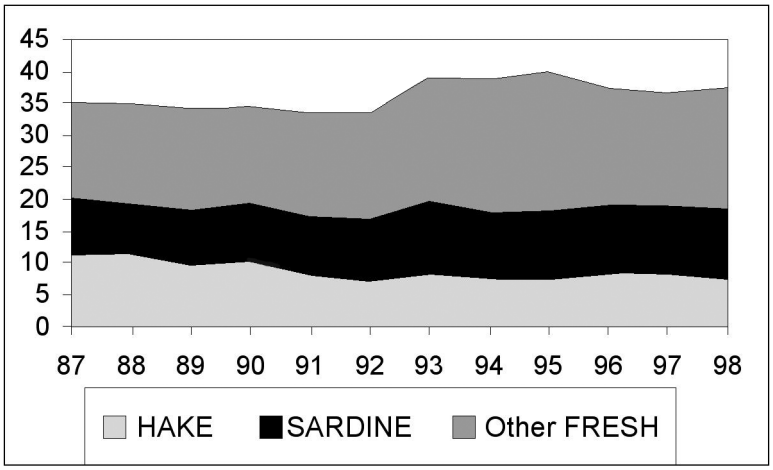

Fig. 5. Evolution of fresh fish consumption shares in restaurants (MAPA).

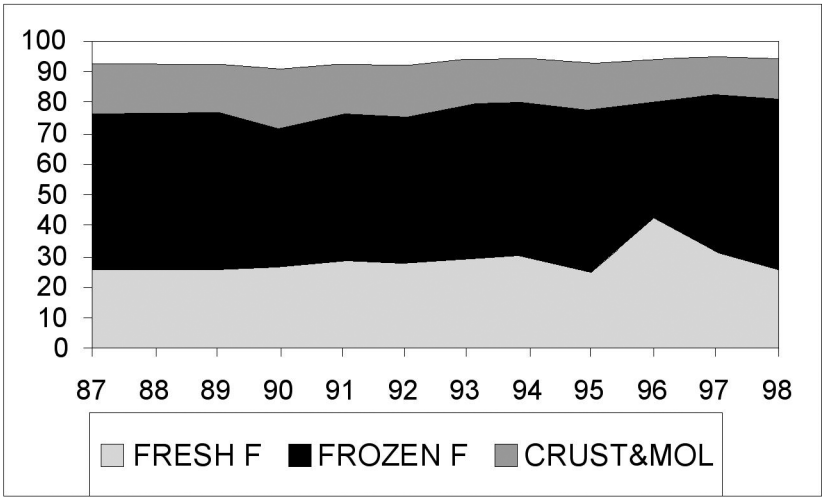

Fig. 6. Evolution of seafood consumption shares by main groups in institutions (MAPA).

Table 2. Hake consumption per capita and location (MAPA)

	Fresh				Frozen			
	kg per capita	Household (%)	Restaurants (%)	Institutions (%)	kg per capita	Household (%)	Restaurants (%)	Institutions (%)
1987	3.70	85.40	13.57	1.03	4.50	85.26	7.41	7.33
1988	3.70	84.56	14.41	1.04	4.50	83.76	8.72	7.53
1989	3.30	84.74	14.08	1.18	4.40	83.97	8.29	7.74
1990	3.20	82.68	16.01	1.30	3.80	84.69	7.60	7.71
1991	3.20	86.42	12.14	1.44	3.70	83.97	7.86	8.16
1992	3.20	88.74	9.85	1.40	3.20	82.18	8.59	9.23
1993	3.10	87.25	11.27	1.48	2.80	78.21	10.96	10.83
1994	3.50	87.13	8.71	4.16	2.70	77.47	9.68	12.86
1995	3.30	87.92	9.39	2.68	2.30	74.57	11.74	13.69
1996	2.80	79.41	14.85	5.74	1.80	66.65	19.89	13.46
1997	3.00	82.32	15.73	1.96	2.30	69.55	17.31	13.14
1998	3.02	81.74	16.95	1.30	2.25	68.75	16.62	14.62

Table 3. Fresh trout consumption per capita and location (MAPA)

	kg per capita	Household (%)	Restaurants (%)	Institutions (%)
1987	0.60	89.68	7.24	3.08
1988	0.60	85.47	11.71	2.82
1989	0.60	86.02	11.15	2.84
1990	0.60	87.91	8.85	3.23
1991	0.70	87.82	8.37	3.81
1992	0.80	88.80	7.80	3.40
1993	1.00	89.41	7.56	3.03
1994	1.00	90.08	8.69	1.23
1995	0.90	87.79	9.74	2.48
1996	0.90	90.40	6.65	2.95
1997	0.60	81.90	11.85	6.26
1998	0.59	78.64	15.67	5.69

The only aquaculture product with coverage during the period analysed is fresh trout. The evolution of fresh trout consumption is presented in Table 3. It is remarkable that out-of-home consumption has doubled in the 1987-1998 period. However, the large increase in the years 1992 to 1994 refers mainly to household consumption.

Salmon consumption as shown in Table 4 has only been recorded very recently. Its consumption is larger than that of trout. More remarkably, the share of out-of-home consumption is very important. This suggests that out-of-home consumption is a possibility for the development of new products.

Table 4. Salmon consumption per capita and location (MAPA)

	Fresh				Frozen			
	kg per capita	Household (%)	Restaurants (%)	Institutions (%)	kg per capita	Household (%)	Restaurants (%)	Institutions (%)
1997	0.60	77.39	21.11	1.50	0.10	34.33	50.64	15.02
1998	0.73	78.61	19.85	1.53	0.05	43.89	39.51	16.60

Table 5 presents detailed data on crustacean and mollusc consumption, which have been partially depicted in Figs 2, 3, 4 and 6. The increasing trend for the share of restaurants in frozen consumption is clear. The decline of fresh consumption in restaurants in the years 1991 to 1996, and the disappearance of fresh crustaceans and molluscs in institutions are worth mentioning.

Table 5. Crustacean and mollusc consumption per capita and location (MAPA)

	Fresh				Frozen			
	kg per capita	Household (%)	Restaurants (%)	Institutions (%)	kg per capita	Household (%)	Restaurants (%)	Institutions (%)
1987	4.80	71.00	27.61	1.38	2.60	72.24	25.20	2.56
1988	4.90	70.94	27.68	1.38	2.90	73.31	24.37	2.32
1989	4.60	69.43	29.13	1.44	3.00	72.90	24.88	2.22
1990	4.60	69.45	29.15	1.40	3.60	74.38	23.18	2.44
1991	4.50	78.30	20.65	1.05	4.10	67.59	30.41	2.00
1992	4.60	80.94	18.03	1.02	4.10	67.59	30.36	2.04
1993	4.30	82.88	16.20	0.92	3.40	67.85	30.13	2.03
1994	4.70	85.08	14.09	0.83	3.00	64.69	33.00	2.31
1995	4.70	85.03	14.21	0.75	2.90	62.57	34.72	2.71
1996	4.90	83.24	16.18	0.59	2.90	57.31	39.84	2.85
1997	5.30	74.99	24.50	0.51	2.40	55.42	41.06	3.52
1998	5.38	74.56	25.11	0.33	2.77	48.53	48.38	3.09

Conclusion

The evolution of consumption of the main groups and species of seafood products illustrates that the different factors explaining out-of-home consumption contribute with varying intensity to the different food items. Concerning high quality (price) out-of-home consumption for fresh fish and shellfish, the economic cycle seems a very important determining factor. The trend for frozen fish consumption in restaurants is better explained by the changes in consumption habits, and people who are studying or working do not have time to cook or are not interested in cooking.

Out-of-home consumption of seafood depends on two separate aspects: the determinants of out-of-home consumption in a rather general way, without considering the food chosen, and the importance of seafood in the diet (meat or fish?).

In this study, the prices of seafood products are not considered. It is an important factor omitted which very probably acts also in different ways. The main two aspects of out-of-home consumption of seafood are related to price issues: (i) the decision about eating at home or out of home, by schedule needs or by gastronomy, and the effect of the price of other goods (transport, other leisure, etc.); and (ii) meat or fish? not only preferences, but also relative prices, and perhaps related to home consumption of seafood.

The description of the series of consumption at home, in restaurants and in institutions indicates that an analysis of the entire time period is needed to achieve conclusions about the evolution of seafood consumption. A comparison of 1987 and 1998 levels does not show any change for several seafood items (fresh fish), but the evolution is by far more complex and informative. More precisely, the analysis of a particular year can be quite misleading about the importance of the different aspects of home or out-of-home consumption of seafood.

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