

ENCOURAGING FISH CONSUMPTION THROUGH RETAILER AND CONSUMER

by

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 ABSTRACT

Reviews and discusses the various factors which influence fish consumption such as retailing, educational, catering and similar establishments and public relations.

INTRODUCTION

Getting people to eat more fish depends largely on successful marketing. Successful marketing depends on the physical preparation of the fish (degree of care in handling, processing, storing, for example) and the psychological preparation of the customer.

Some more specific factors are shown in the circular diagram in Appendix 1. In addition, the "fish balance" (PRF p. 49)* shows how availability and demand are interdependent and how all factors must be considered in reaching the goal of "more fish in the kitchen".

This paper deals with some factors in increasing the demand for fish by influencing:

1. retailers
2. educational, catering and similar establishments.
3. the public.

ACTIONS DIRECTED TOWARD RETAILERS

The usual reasons consumers give for low fish consumption are lack of shops, irregular supply, lack of variety, bad quality, high prices and other marketing deficiencies. While these reasons may be valid, they may also stem from consumers' lack of interest and ignorance of fish. Fish marketing surveys are needed to clarify these situations.

Such a survey was made during six months in 1953 in the

*Copies of the publication 'Encouraging the use of protein-rich foods' Rome: FAO, 1962 (2nd printing, 1964) by the author of this paper, have been distributed to the participants as a supplement to the paper. It is referred to as the "PRF" publication.

Federal District of Rio de Janeiro, Brazil* (Appendices 2 and 3). The survey covered an area of 1,167 km² and a population of about three million.

It showed that consumers in the areas of high population density received better service from retailers than consumers in areas of low population density. Retailers in the section of high population density benefited from better supply and more customers. This bigger turnover makes it economically feasible for a retailer to offer better service, which in turn stimulates fish sales and consumption.

In the low population density section where area is bigger and distance from wholesale markets is longer the transportation of the fish supply from the wholesale market to the outlets takes more time, costs more money and involves the risk of spoiling the fish. The thinly spread population limits the number of clients per shop and the turnover and handicaps the retailer in his efforts to increase sale of fish. The survey showed, that only low-cost outlets, such as hawkers and open street markets can prosper in these outlying and sparsely-settled sections, and that the types of retailers who accept the working conditions in such sections, can normally afford neither professionally nor economically, to offer the

consumers the kind of service which will stimulate fish consumption.

The survey recommended that small-volume retailers in areas of low population density:

a) should be provided with appropriate buying facilities to allow them to have fish for sale that would satisfy the consumers' requirements, and

b) should be taught methods to increase the consumer interest in fish.

This teaching of the retailers was based on information from the survey about the retailer himself, the retail outlet and its operation (see PRF page 65). The teaching was initiated simultaneously with the survey. During a series of interviews with the retailers, the surveyors visited each outlet and explained that the survey was part of a program to stimulate demand for fish, and that the retailer's co-operation in efforts to stimulate the sale of fish, therefore, would be in the retailer's interest. The teaching included suggestions about (a) methods to improve the retailer's sales practices and (b) ways and means by which the retailer could co-operate in the general effort to encourage the consumption of fish.

*FAO/EPTA Report No. 1169 (Rome 1959) to the Government of Brazil on the IMPROVEMENT OF FISH MARKETING in the FEDERAL DISTRICT OF RIO DE JANEIRO and in SAO PAULO based on the work of John Fridthjof.

To support his suggestions, the surveyor used (a) a set of technical information worked out for him about factors influencing quality of fresh fish (see app. 4) and (b) a series of home economics charts on the use of fish (see PRF page 55).

The survey revealed cases in which consumers refused to buy iced fish thinking that ice was used to disguise stale fish. To help the retailer keep using ice for storage and display, information about the importance of ice and refrigeration to keep fish fresh was stressed in programs of consumer education.

ACTIONS DIRECTED TO THE CONSUMERS THROUGH EDUCATIONAL, CATERING AND SIMILAR ESTABLISHMENTS.

The value of fish as a source of animal protein, seldom understood by those suffering from protein malnutrition, is useful in efforts to get the co-operation of the staff of schools and other institutions, that aim at improving the welfare of the population. The teaching content through these and other channels (chapters I and III) should be co-ordinated and an exchange of experience between those in charge of the various programs should be organized. Cooperation in production of teaching aids will keep cost down to a minimum and increase the effectiveness of the promotion activities by a uniform presentation of the teaching content through all channels.

The Ministry of Education in Chile, during an FAO-assisted campaign to increase fish consumption, briefed the teachers in 4,000 primary schools on government's policy, the importance of increasing the fish consumption, that the schools should participate in the national effort to encourage fish consumption. During a three-week period the subject of 'fish as food' was introduced into lessons on geography, natural science, arithmetic, national language, civics, history, drawing, manual work, home economics and others (see PRF p. 73). The school program finished with an exhibition on the children's achievements to show parents and the public what the pupils had learned about 'fish as food'. At the same time, the exhibition taught the visitors about the importance of fish as food.

Reasons for eating more fish can be taught to the public also through health centers as a permanent part of the centers' program of advising the public on health questions.

In home economics courses, teaching about fish could well be strengthened in accordance with the general effort to stimulate fish consumption.

It is possible to stress the importance of fish in all educational and social programs of any government agencies. Catering departments could make an extra effort to cook fish in attractive ways and could furthermore teach their clients

on use of fish.

Non-government agencies involved in programs to improve living and working levels of the population can integrate the subject of fish as food in their programs. Examples of their participation are shown in the PRF publication page 42.

ACTIONS DIRECTED TO THE CONSUMERS

Information about consumers' reasons for consumption and non-consumption of fish is needed for planning activities to encourage interest in fish consumption. The information should include the housewives' basic motivations in relation to the purchase, preparation and eating of fish. Examples of surveys to determine such reasons are given in PRF, page 59. They show, that reasons can refer to marketing as dealt with in Chapter One of this paper, or to consumers' insufficient knowledge and interest in fish. 'Lack of money' also appears amongst the reasons for non-consumption. Price is important in consumer purchases, especially in case of the cheaper species. But the surveys showed that higher income had a comparatively small effect on fish consumption. This leads to the conclusion that raising consumption in these cases is more a problem of consumer education than of economics.

A continuous check on reasons is necessary to be able to evaluate activities to stimulate consumption and to adapt the action program in accordance with the situation.

Follow-up surveys measure success creating interest in fish and what action is needed. The teaching content in programs to encourage the use of fish is based on information about the value of fish as food, the various types of fish available and how to buy, cook and serve them. This information is adapted to the area of action in accordance with area consumers' reasons for consumption and non-consumption.

Common reasons given for eating fish were: "like it", "more nourishing", "religious reasons", "makes a change", "easy to prepare", "good for children", "easily digested", "like it occasionally", "cheaper than meat". Consumers' reasons for eating fish are helpful to get more people interested in fish. They can be used to support the programs' arguments in favor of fish. The most common consumers' reasons for non-consumption, excluding those referring to marketing, deficiencies, are: "don't like", "not satisfying", "doesn't keep", "difficult to cook", "tasteless". These reasons for non-consumption, according to their order of importance in the area of action, will help to adapt the teaching content to the local need for information.

An example of teaching about the nutritive value of fish is illustrated in PRF, page 58. The illustration shows comparative price and bulk of three types of fish and of meat requirements to obtain 100 grams of protein. The price of the

protein in this case varies from the price for dried fish as the cheapest source to high-priced species of fresh fish as a ten times more expensive source of protein. In between these extremes you have low-priced species of fresh fish and an average quality of meat. The example was used to teach consumers to compare food according to its value to sustain health, and that inexpensive fish is as good for growth and strength as expensive fish. Another example of teaching how to select the most healthy foods at the lowest prices is a food game organized in Morocco to provide useful amusement for 800 children, ages 10 to 18, in a holiday camp. The illustrated report on this food game is included in the PRF publication, page 68.

Providing information about the various types of fish available for consumption normally includes teaching consumers how to identify fish in the market and how to avoid buying cheap species under the name of more expensive fish, while also paying the higher price.

Examples of teaching how to cook and serve fish are illustrated by the home economics charts on page 55 (PRF). These charts are used in teaching the consumers easy, inexpensive, acceptable ways of using fish and that inexpensive fish can taste as good as more expensive fish. These charts also illustrate how to test fish for freshness and give other advice

on keeping fish fresh. The charts stress the importance of fish as healthy food for building strong bodies.

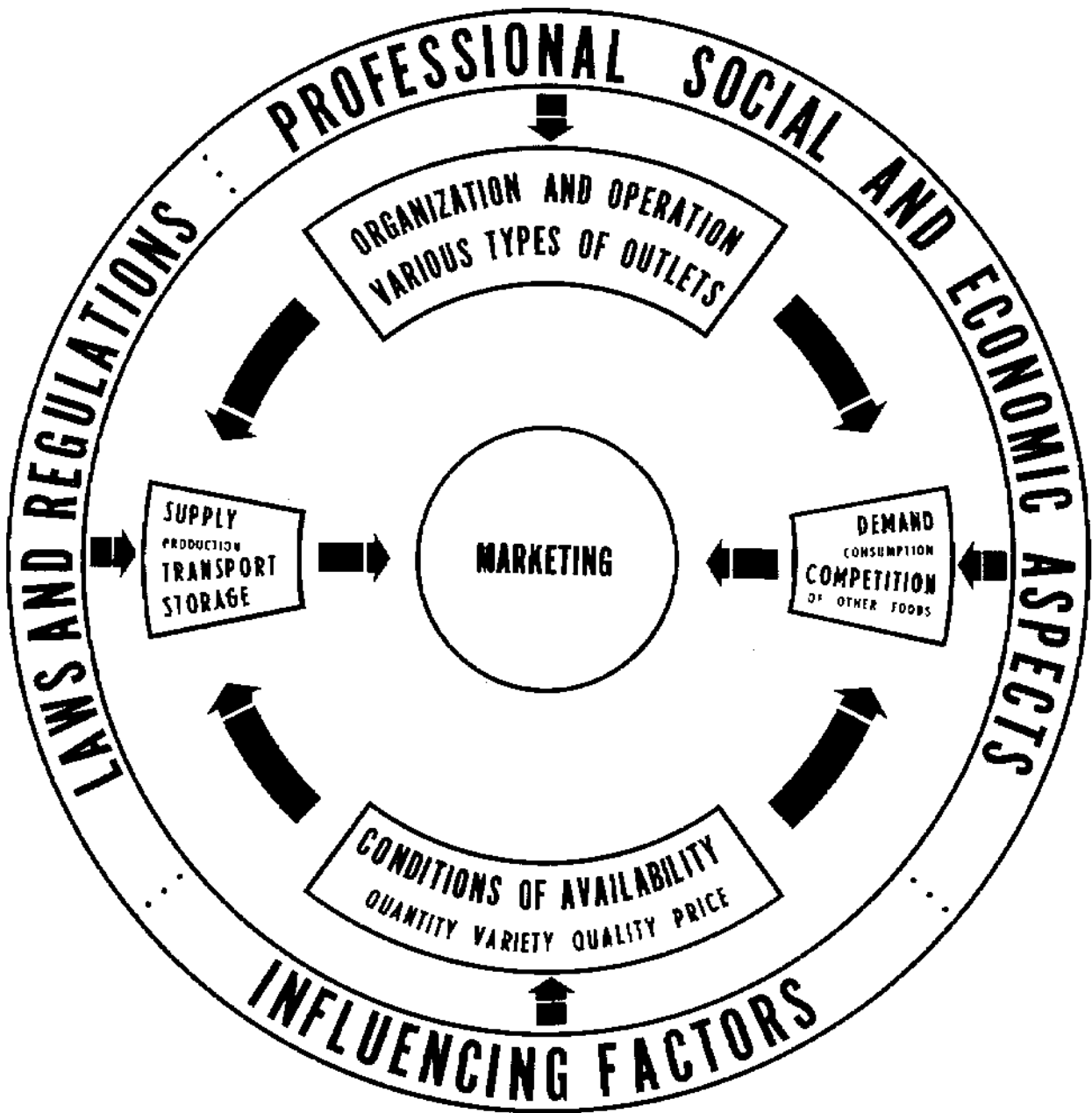
The presentation of the teaching content will depend on available means of mass communication. Examples from Latin America and Africa are shown in the PRF publication.

As described on page 45 (PRF) local children have often been most successful in preparing materials for teaching the public, and it has been found valuable to include children and young people in the audience when testing teaching aids to help insure that they will be understood and accepted by the public.

GENERAL ADVICE

During all stages of a campaign to encourage the consumption of fish it is extremely important to maintain a proper balance between the supply of the food being promoted and the demand for it. When supplies have increased more quickly than demand, the resulting surplus may well cause producers to lose money and also interest in the campaign. On the other hand, if supply is not stepped up quickly enough to meet an increasing demand, consumers may easily lose confidence in a campaign promoting a food which is not available. Once lost, it is difficult to regain either the producer's or the consumers' confidence.

FACTORS INFLUENCING FISH MARKETING



Costs of distributing fish in the Federal District
of Rio de Janeiro, by Type of Outlet, 1958
(in cruzeiros; 140 Cr. = 1 US\$)

	A. Stands in Open Street Markets	B. Hawkers (in Open Street Markets)	C. Other Hawkers Markets	D. Stands outside Markets	E. Fish shops in municipal markets	F. Fish shops in private markets	G. Fish shops outside markets
	(64,800 Kgs.)	(14,400 Kgs.)	(9,000 Kgs.)	(30,000 Kgs.)	(15,000 Kgs.)	(35,000 Kgs.)	(64,800 Kgs.)
Annual sales per outlet:							
Annual operating costs per outlet:							
Taxes:							
Imposto de Locacao	4,320	4,320	0	2,400	6,900	6,900	6,900
Industria e Profissao	0	0	0	0	7,200	7,200	7,200
Imposto de Venda	4,800	4,800	1,800	6,000	18,000	36,000	64,800
Imposto Sindical	100	100	100	100	180	200	200
Chape de Ambulante	0	395	395	395	0	0	0
Sub-Total	9,220	9,615	2,295	9,895	37,280	50,300	79,100
Rent	-	-	-	-	24,000	36,000	72,000
Depreciation and Maintenance	2,500	600	300	4,000	1,000	25,000	25,000
Transport of Fish	48,000	9,000	5,000	18,000	9,000	18,000	24,000
Labor	120,000	-	-	24,000	30,000	144,000	144,000
Electricity and Telephone	-	-	-	-	-	24,000	24,000
Other Expenses	60,000	9,000	6,000	40,000	15,000	40,000	60,000
Total:	239,720	28,215	13,595	95,895	111,280	337,300	428,100
Average cost per Kg. sold:							
Taxes	0.14	0.66	0.25	0.30	2.15	1.40	1.22
Rent	-	-	-	-	1.60	1.00	1.11
Depreciation and Maintenance	0.04	0.04	0.03	0.13	0.07	0.69	0.39
Transport of Fish	0.74	0.63	0.56	0.60	0.60	0.50	0.37
Labor	1.85	-	-	0.80	2.00	4.00	2.22
Electricity and Telephone	-	-	-	-	-	0.67	0.37
Other Expenses	0.93	0.63	0.67	1.33	1.00	1.11	0.93
Total:	3.70	1.96	1.51	3.16	7.42	9.37	6.61

NOTES

TAXES:

Imposto de Locacao: is a fixed tax in the case of outlets A, B and D while in the case of E, F and G it is fixed according to an official rent valuation (V.L.)

Industria e Profissao: is only paid by E, F and G, and calculated on the same basis as Imposto de Locacao.

Imposto de Venda: is a fixed tax for A, B, C and D, and calculated for E, F and G according to turnover.

Imposto Sindical: paid by all outlets.

Chapa de Ambulante: paid by B, C and D only.

RENT: In the case of A, B and D, rent is included in the tax of Imposto de Locacao. In the case of fish shops in municipal markets (E) the rent includes expenses for electricity, telephone, etc.

DEPRECIATION AND MAINTENANCE:

These expenses are calculated on available investment data. In the case of fish outlets, the equipment has been provided by the Municipality; the expenses under this item are attributable to maintenance only.

TRANSPORT OF FISH:

This item covers expenses for the transport of fish from the wholesale market to the outlet. In the case of A and G the cost is based on a monthly payment irrespective of quantity, while the transport in the other cases is calculated according to quantity purchased.

ELECTRICITY & TELEPHONE: Applicable only to fish shops.

OTHER EXPENSES: e.g. ice, water, wrapping materials, etc.

Sanitation	Handling	Temperature	Time
Flesh of healthy, live fish is sterile. Bacterial spoilage starts from the intestines, the gills and the surface slime.	Bruised flesh spoils rapidly.	Low temperature defers spoilage.	Spoilage increases progressively during the period from catch to kitchen use.
<u>Spoilage may be prevented by:</u> heading, gutting and washing immediately after catch, using clear, running water for washing,	<u>Spoilage may be prevented by:</u> avoiding deep layers of fish, avoiding piling of boxes of different sizes on top of each other,	<u>Spoilage may be prevented by:</u> using cold water for washing, placing the fish in crushed ice immediately after catch,	<u>Spoilage may be prevented by:</u> speeding up handling at each stage, avoiding delays in loading, unloading and transport.
using sterile ice and salt, using clean boxes, keeping the fish away from dirty, smelly places,	avoiding rough handling in connection with packing, loading and unloading.	keeping the fish covered and away from the sun, using refrigerated storage rooms or cabinets,	
protecting the fish from dust and insects, ensuring cleanliness of all persons who handle the fish.		ensuring that the low temperature is maintained during sorting, weighing and display operations.	

* Spoilage starts immediately after the fish is dead, but it can be checked if the fish is handled properly at all stages of production and distribution.