# FROZEN PROCESSED FISH AND SHELLFISH CONSUMPTION IN INSTITUTIONS AND PUBLIC EATING PLACES

Denver, Colorado

UNITED STATES DEPARTMENT OF THE INTERIOR
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United States Department of the Interior, Fred A. Seaton, Secretary Fish and Wildlife Service, Arnie J. Suomela, Commissioner Bureau of Commercial Fisheries, Donald L. McKernan, Director

INSTITUTIONS AND PUBLIC EATING PLACES are among the best of all potential markets for frozen fishery products. In recognition of this, a survey was undertaken to obtain information on the consumption of frozen processed fish and shellfish in these establishments.

This study was conducted in ten selected cities by Crossley, S-D Surveys, Inc., of New York City in order to obtain information which could be used by the fishing industry to increase consumer demand for fishery products. The data obtained for each city as a result of this survey, together with an explanation of the methods and procedures used, are published in a series as follows:

Circular 66 - Survey Methods and Procedures

Circular 67 - Atlanta, Georgia

Circular 68 - Chicago, Illinois

Circular 69 - Cleveland, Ohio

Circular 70 - Denver, Colorado

Circular 71 - Houston, Texas

Circular 72 - Los Angeles, California

Circular 73 - New York, New York

Circular 74 - Omaha, Nebraska

Circular 75 - Portland, Oregon

Circular 76 - Springfield, Massachusetts

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These publications are available upon request from the Director, Bureau of Commercial Fisheries, U. S. Department of the Interior, Washington 25, D. C.

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#### DENVER, COLORADO

Prepared in the Division of Industrial Research and Services

Branch of Market Development

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#### SUMMARY OF FINDINGS

(Denver)

#### A. Use of Frozen Processed Sea Food (Tables 1, 2)

More than two thirds of all the establishments in Denver said they bought sea food in the previous twelve months. Among buyers of sea food, the great majority said they made purchases of sea food in the frozen processed form.

Forty-three per cent of all the establishments said they had bought frozen processed fish in November, 1958; 33 per cent said they had bought frozen processed shellfish; and 16 per cent said they had bought portions.

Of the ten cities in the survey, Denver ranked third, in terms of the percentage of all establishments buying frozen processed sea food.

## B. Frozen Processed Fish - Purchases, Attitudes, and Practices

#### 1. Purchases: Species and Amount of Prepreparation (Tables 3, 4)

Among Denver users of frozen processed fish, two fifths bought halibut steaks during November, 1958. This item was also the leader, in terms of total pounds purchased.

Halibut steaks were also bought widely in Chicago, Los Angeles, Omaha, and Springfield.

Frozen raw halibut was bought in large quantities by many establishments in Denver.

Other items frequently purchased in the city

were ocean perch fillets, sole fillets, and salmon steaks. Red snapper fillets. while bought by fewer establishments, were purchased in large quantities.

## 2. Attitudes Toward Prepreparation and Quality and Condition of Fish (Tables 5, 6)

A great majority of Denver purchasers were satisfied with the quality and condition of the fish.

There was more dissatisfaction with the prepreparation of fish in Denver than in other cities. Dissatisfaction was expressed by 14 per cent of the purchasers of halibut, by 14 per cent of the purchasers of ocean perch, and by 12 per cent of salmon purchasers.

#### 3. Packaging of Fish (Tables 7, 8)

Denver establishments most typically bought frozen fillets and steaks in 5 pound packages. Frozen raw halibut and frozen raw salmon were bought in larger packages, of varying weights.

## 4. Methods of Preparing and Serving Fish (Table 9)

Frying was the most popular method of preparing fish among Denver establishments. The average

establishment served 68 per cent of its fish fried. Frying was the leading method in all ten cities of the study.

Raking was also a common method of preparation in Denver. The average establishment served 22 per cent baked. Baking was also popular in other Western cities.

#### C. Frozen Processed Shellfish - Purchases, Attitudes, and Practices

## 1. Purchases: Species and Type of Prepreparation (Tables 10, 11)

Half of the shellfisb users in Denver bought breaded shrimp in November, 1958. Almost as many bought raw shrimp, while a substantial number bought raw scallops.

Frozen lobster tails led in Denver in terms of total pounds purchased, owing to quantity purchases.

Breaded shrimp and raw sbrimp were both bought widely and in large quantities in all of the other cities included in the study.

# 2. Attitudes Toward Prepreparation; Toward Quality and Condition of Shellfish (Tables 12, 13)

The great majority of purchasers were satisfied with the quality and condition of the shellfish which they bought, and with the prepreparation of most species of shellfish.

In the case of lobster, one fifth of the purchasers said they were not satisfied with the prepreparation.

#### 3. Packaging of Shellfish (Tables 14, 15)

Leading shellfish items were most often bought in 5 pour i packages in Denver.

## 4. Methods of Preparing and Serving Shellfish (Table 16)

Frying was the most usual way of preparing shellfish in Denver. The typical establishment served four fifths of its shellfish fried.

As with fish, frying was the leading method of preparing shellfish in all ten cities of the study.

#### D. Portion Controlled Sea Food - Purchases, Attitudes, and Practices

## 1. Purchases: Type of Prepreparation (Tables 1, 17, 18, 19)

One sixth of all the establishments in Denver bought portions during November, 1958.

Denver ranked sixth among the ten cities, in percentage of establishments huying portions.

In Denver, portions were most widely bought uncooked and breaded; and the quantity purchased was greater than that of any other type of prepreparation.

Almost half of the Denver purchasers said that they were currently buying more portions than the year before. Forty-one per cent said they were buying about the same amount, while 7 per cent said they were buying less.

This trend towards an increasing use of portions was not so strong in most cities. The trend was also notable in Springfield.

## 2. Attitudes Toward Portions (Tables 20, 21, 22, 23, 24)

Nearly all establishments said they were satisfied with the quality and condition of portions that they bought.

However, one sixth of the users of portions said they thought the quality of portions was poorer than that of other frozen processed fish. More than two thirds rated the quality as about the same, while 9 per cent considered the quality better.

While three fifths of the users specified no disadvantage to using portions, 25 per cent said portions were not economical; and 18 per cent said the quality was not as good.

Major advantages cited for portions included.

	% of Users Citing
Convenience, ease of preparation	69
Can control food costs better -	0.0
know profit	23
Fast, timesaving	20
Size of portions, uniform portions	16
No bones	16

Users of portions generally thought their customers liked portions the same as other types of frozen processed fish. Fewer than 6 per cent said that their customers liked portions

less than other types 'frozen processed sea form.

#### 3. Packaging of Portions (Tables 25, 26)

Denver purchasers tended to buy portions in smaller packages than purchasers in other cities. The average weight of a package of portions for the city was 4.7 pounds.

They also tended to buy individual portions of smaller size. The average weight of an individual portion was 3.8 ounces.

A large majority of establishments, in Denver and the other nine cities, said they were satisfied with the size of portions in the packages.

## 4. Methods of Preparing and Serving Portions (Tables 27, 28)

Frying was the most widely used method of preparing and serving portions in Denver, with 79 per cent of the establishments serving them this way. The average establishment served 61 per cent of its portions fried.

Frying was the leading method in nine of the ten cities of the study. The exception was Springfield, Massachusetts, where baking was the most popular method.

In Denver, the average establishment served 30 per cent baked.

Two thirds of the Denver establishments using portions cooked them while frozen.

#### 5 Cost of Using Portions (Table 29)

One third of the establishments using portions said they were more expensive than other forms of frozen processed fish. Another third considered them less expensive, while a third rated them about the same.

## Miscellaneous Findings About Portions (Tables 30, 31)

Virtually all Denver establishments said they specified the kind of fish when ordering portions.

Only 5 per cent of the users suggested any new portion items, not now available, which they would like to have.

#### 7. Nonusers of Portions (Table 32)

Establishments which used frozen processed sea food, but not portions, gave a number of reasons for not buying portions: they sold comparatively little fish, portions were too expensive, they served other types of fish.

Frice also figured as a reason for not buying portions in Atlanta, Los Angeles. and Portland.

## E. Suppliers of Frozen Processed Sea Food (Tables 33, 34, 35, 36)

Establishments in Denver tended to buy frozen processed sea food from sea food wholesalers, usually less than ten miles away, to have it delivered once a week, and to be satisfied with the services of the suppliers. Sea food wholesalers supple i  $\delta^4$  per cent of the establishments, while frozen food distributors accounted for another 11 per cent.

Main suppliers in Denver were located less than  $1^{\circ}$  miles from the establishment, in 83 per cent of the cases.

In 43 per cent of the cases, deliveries were made once a week, while deliveries were made from two to four times a week in another 18 per cent of the establishments.

Only a small fraction of the purchasers said they could think of ways in which the suppliers could improve their services.

#### F. Expenditures for Frozen Processed Sea Food; Its Profitability (Tables 37, 38)

More than a third of the establishments reporting in Denver said that they spent less than \$250 for frozen processed sea food during the preceding twelve months. The highest figure reported fell between \$30,000 and \$49,999. Other establishments were between these two extremes, with the median coming at \$500.

More than two thirds of the profit-making establishments which expressed an opinion, considered frozen processed sea food more profitable than other high protein foods.

#### G. Government Inspection of Frozen Processed Sea Food - Awareness, Effect, and Attitudes (Tables 39, 40, 41, 42)

Three fourths of the establishments in Denver were aware that they could buy frozen processed sea food, which had been inspected or graded by the United States Government.

Of those who were unaware, the majority said they would buy about the same amount, if Government inspected sea food were available. Of the establishments aware that they could buy Government inspected or graded see food, almost all had bought some. When purchasers were asked if the inspection had affected the amount of frozen processed sea food which they bought, 9 per cent said the inspection had caused them to buy more.

#### H. Nonusers of Frozen Processed Sea Food; Cold Storage Facilities (Tables 43, 44, 45)

Most nonusers in Denver said they had never bought frozen processed sea food, the main reason given being that they sold little or no fish.

Findings regarding cold storage facilities among nonusers in Denver may be summarized as follows:

Total Nonusers of Frozen	Z
Processed Sea Food	100
Have cold storage facilities	<u>60</u>
Don't use sea food at all	41
Use sea food, but not frozen processed sea food	19
No cold storage facilities	40

#### DETAILED FINDINGS

Table 1

DID THE ESTABLISHMENT BUY SEA FOOD IN THE PRECEDING TWELVE MONTHS?

According to Type of Establishment and Sales Volume

		Type of Establishment			Sales Volume			
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over	
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)	
	<u>%</u>	<u>%</u>	<u> 2</u>	<u> 76</u>	<u> 76</u>	<u> 76</u>	<u> %</u>	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Yes, bought sea food	69.6	63.8	93.0	52.3	82 6	76.2	93.8	
Bought frozen processed sea food  Bought frozen processed fish  Bought frozen processed shellfish  Bought portions	58.8 43.1 32.5 16.4	53.4 40.2 37.9 13.2	80.2 54.7 10.5 29.1	39.6 29 4 18.3 8.6	65.1 42.2 29.4 26.6	71.4 60.3 49.2 17.5	93.8 69.2 64.6 21.5	
No, did not buy sea food	30.4	36.2	7.0	47.7	17.4	23.8	6.2	

Table 2

DID THE ESTABLISHMENT BUY FROZEN PROCESSED SEA FOOD IN THE PRECEDING TWELVE MONTHS?

According to Type of Establishment and Sales Volume

		Type of	Sales Volume				
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100.000 and Over
Total Establishments Purchasing Sea Food in Preceding 12 Months	(166)	(86)	(80)	<b>(</b> 52 <b>)</b>	(48)	(28)	(38)
	<u>%</u>	<u>%</u>	<u> </u>	<u>%</u>	<u> %</u>	<u> 26</u>	<u> %</u>
	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes, bought frozen processed sea food	84.4	83.8	86.3	75.7	78.9	93.8	100.0
No, did not buy frozen processed sea food	15.6	16.2	13.7	24.3	21.1	6.2	-

Table 3

FROZEN PROCESSED FISH BOUGHT IN NOVEMBER, 1958 - HOW PROCESSED BEFORE PURCHASE

According to Sales Volume

	<u>Total</u>	Less Than \$40,000	\$40,000 and Over		Total	Less Than \$40,000	\$40,000 and Over
Total Users of Frozen Processed Fish	(102)	(52)	(50)		<u>%</u>	<u>4</u>	<b>½</b>
	<u>%</u>	<u>%</u>	<b>½</b>	Ocean Perch Cooked	1.6	2.9	_
	100.0*	100.0	100.0	Fillets	26.2	33.7	16.9
Catfish Fillets Steaks	1.6 .5	1.0	3.6 -	Red Snapper Fillets Raw	5.3 3.7	5.8 -	4.8 8.4
Cod Cooked Fillets Steaks Breaded fillets	1.6 12.8 .5	2.9 14.4 1.0	10.8	Salmon Cooked Fillets Steaks Raw	1.6 1.1 20.9 11.8	2.9 1.0 18.3 3.8	1.2 24.1 21.7
Raw Fish Cakes	1.6	-	3.6	Smelts Raw	1.6	2.9	-
Cooked and breaded	1.6	2.9	-	Sole Fillets	24.1	17.3	32.5
Cooked Fille*. Haddook	1.6 1.6	2.9	3.6	<u>Swordfish</u> Cooked Steaks	1.6 1 o	2.9 2.9	-
Cooked Fillets Striks	1.6	10.6 -	18 1 6.0	Chunk Raw		-	2.4 2.4
Raw	ť	, • <sup>(4)</sup>	-	Trout Raw	4 3	2.9	6.0
Halibut Cooked Preside Fillets	1 h 1 h .2.2	14 t	-	Whitefish Fillets	1 6	-	3.0
Ctersor Brended ' Thine Raw	14 F 1 1 15 O		. + - - !• .	Whitner Fillets Row	E,	. 0	1 2

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 4

QUANTITY OF FROZEN PROCESSED FISH BOUGHT IN NOVEMBER, 1958

							er of Pounds
			er of Pounds		Total	All	User
	Total	All	User		Pounds	Establishments	Establishments
	Pounds	Establishments	Establishments	Ocean Perch			
Catfish				Cooked	15	(a)	5.0
Fillets	(a)	-	-	Fillets	1,049	(a) 2.4	21.4
Steaks	(a)	-	-				
0000210	<b>\</b> ->			Red Snapper			
Cod				Fillets	7,905	18.2	790.5
Cooked	60	(b)	20.0	Raw	1,960	4.5	280.0
Fillets	2,134	4.9	88.9				
Steaks	, 24	(h)	24.0	Salmon	20	(2.)	10.0
Breaded fillets	(a)	(, )	48.0	Cooked Fillets	30 502	(b) 1.2	10.0 251.0
Raw	144	(b)	40.0	Steaks	1,771	4.1	45.4
Dish Calses				Raw	2,979	6.9	135.4
Fish Cakes Cooked and breaded	18	(a)	6.0	I CAN	= 1010		-5/**
Cooked and breaded	10	(4)		Smelts			
Flounder				Raw	(a)	-	
Fillets	<b>2</b> 25	• 5	75.0				
Cooked	30	.5 (b)	10 0	Sole			1.6
				Fillets	2,110	4.9	46.9
Haddock				0 3 6 2 3			
Cooked	15	(a)	5.0	Swordfish Cooked	15	(a)	5.0
Fillets	1.331	3.1	51.2 115.0	Steaks	180	(b)	60.0
Steaks Raw	575 15	1.3 (a)	5.0	Chunk	90	(b)	45.0
MEM	1)	(a)	7.0	Raw	30	(b)	15.0
Halibut					3	. ,	
Cooked	60	(b)	20.0	Trout			
Breaded	60	(b)	20.0	Raw	355	.8	44.4
Fillets	1,907	4.4	56.1				
Steaks	23,280	53. ó	314.6	Whitefish	-,-	(1.)	30.0
Breaded fillets	80	(b)	40.0	Fillets	90	(b)	30.0
Chunk	12	(a)	12.0	this bin a			
Raw	8,610	19.8	307.5	$rac{ ext{Whiting}}{ ext{Fillets}}$	<b>2</b> 25	. 5	225.0
				Raw	150	.5 <b>(</b> ъ)	150.0
				A 10.4 TV	-/-	(-)	,

<sup>(</sup>a) Purchases were not reported in quantities large enough to compute meaningful figures.

<sup>(</sup>b) Less than half a pound.

Table 5

#### SATISFACTION OR DISSATISFACTION WITH PREPREPARATION OF FROZEN PROCESSED FISH

	Total Users (1)		Total Users (1)
Total Purchases of Cod	100.0	Total Purchases of Ocean Perch	100.0
Prefer more prepreparation of cod Prefer less prepreparation of cod Prefer prepreparation as it is No answer	6.3 90.6 3.1	Prefer more prepreparation of ocean perch Prefer less prepreparation of ocean perch Prefer prepreparation as it is	7.7 5.8 86.5
Total Purchases of Haddock  Prefer more prepreparation of haddock  Prefer less prepreparation of haddock  Prefer prepreparation as it is  No answer	100.0 5.4 83.8 10.8	Total Purchases of Salmon  Prefer more prepreparation of salmon  Prefer less prepreparation of salmon  Prefer prepreparation as it is  No answer	100.0 18.1 - 71.2 16.7
Total Purchases of Halibut  Prefer more prepreparation of halibut  Prefer less prepreparation of halibut  Frefer prepreparation as it is  No answer	100.0 9 7 4.1 79.3 6.9	Total Purchases of Sole  Prefer more prepreparation of sole  Prefer less prepreparation of sole  Prefer prepreparation as it is  No answer	95.6 4.4

(1) The percentages shown in the body of the table are computed on the total number of purchases of each species of fish

Many users bought more than one species. Some establishments also bought a species prepared in two different ways. For example, haddock fillets and haddock steaks. This was counted as two purchases of the species.

Because purchases of many species were few in number, the species are not included in the table.

Table 6

#### SATISFACTION AND DISSATISFACTION

#### WITH QUALITY AND CONDITION

#### OF FROZEN PROCESSED FISH

	Total
Total Users of Frozen Processed Fish, November, 1958	(102)
	<u>Z</u>
	100.0
Satisfied	96.3
Dissatisfied	2.1
Don't know	1.1
No answer	. 5

PACKAGE SIZES OF FROZEN PROCESSED FISH BOUGHT IN NOVEMBER, 1958 AND AVERAGE NUMBER OF SERVINGS PER POUND(1)

Table 7

			Total
	Total Z	Total Purchasers of Halibut Fillets	<u>4</u>
Total Purchasers of Cod Fillets  Packages less than 1 pound 1 pound packages 5 pound packages 15 pound packages 17 pound packages 25 pound packages No answer	100.0 12.5 25.0 37.5 8.3 4.2 8.3 4.2	1 pound packages 2 pound packages 3 pound packages 4 pound packages 5 pound packages 17 pound packages 30 pound packages 40 pound packages 50 pound packages No answer	5.8 2.9 8.9 2.9 53.0 2.9 2.9 8.9 8.9
Average number of servings per pound	3- <b>7</b>	Average number of servings per pound	2.9
Total Purchasers of Haddock Fillets	100.0	Total Purchasers of Halibut Steaks	100.0
Packages less than 1 pound 1 pound packages 4 pound packages 5 pound packages 15 pound packages 17 pound packages 10 pound packages No answer  Average number of servings per pound	11.6 11.6 3.8 50.0 3.8 3.8 11.6 3.8	3 pound packages 4 pound packages 5 pound packages 6 pound packages 9 pound packages 10 pound packages 14 pound packages 16 pound packages 16 pound packages 30 pound packages 50 pound packages No answer	4.1 4.18 4.1 4.1 12.1 14.1 9.4 4.1 5.4 6.7
		Average number of servings per pound	3.7

<sup>(1)</sup> The table st figures for those species and types of prepreparation which occur most often in the city.

Sometim - Tigures are shown for package sizes but not average number of servings per pound. In these cases the data on servings per pound is limited.

The percentages in the body of the table are based on the number of establishments which bought one species of fish, preprepared in one manner.

Table 7 (Contd.)

#### PACKAGE SIZES OF FROZEN PROCESSED FISH BOUGHT IN NOVEMBER, 1958 AND AVERAGE NUMBER OF SERVINGS FER POUND(1)

			Total
	Total	Total Purchasers of Salmon Steaks	<u>\$</u>
	<u> </u>	3 pound packages 5 pound packages	7.7 38.4
Total Purchasers of Halibut - Raw	100.0	9 pound packages 10 pound packages 50 pound packages and over	5,1 18.0 12.8
10 pound packages 11 pound packages	10.7 14.3	No answer Average number of servings	18.0
12 pound packages 16 pound packages 20 pound packages	3.6 21.5 7.1	per pound	4.2
21 pound packages 27 pound packages	3.6 7.1 3.6	Total Purchasers of Salmon - Raw	100.0
30 pound packages 35 pound packages 40 pound packages	10.7 10.7	9 pound packages 10 pound packages	45,4 36.3
50 pound packages and over  Average number of servings	7.1	12 pound packages 13 pound packages 15 pound packages	4.6 4.6 9.1
per pound	2.5	Average number of servings per pound	3.4
Total Purchasers of Ocean Perch Fillets	100.0	Total Purchasers of	
Packages less than 1 pound	6.2	Sole - Fillets	100.0
1 pound packages 2 pound packages	24.5 2.0 2.0	Packages less than 1 pound 1 pound packages	6.7 17.8
3 pound packages 5 pound packages 10 pound packages No answer	53.1 2.0 10.2	3 pound packages 5 pound packages 10 pound packages 12 pound packages	6.7 35.5 2.2 6,7
Average number of servings per pound	3.9	20 pound packages 25 pound packages 36 pound packages No answer	11.1 6.7 2.2 4.4
		Average number of servings per pound	3.4

<sup>(1)</sup> The table shows figures for those species and types of prepreparation which occur most often in the city

Sometimes figures are shown for palkage sizes but not average number of serving: per pound. In these cases the data on servings per pland is limited

The percentages in the body of the table are based on the number of establishments which bought one species of fish, preprepared in one manner.

Table 8

# SATISFACTION AND DISSATISFACTION WITH TYPES AND SIZES OF FROZEN

#### PROCESSED FISH PACKAGES

	Tota
Total Users of Frozen Processed Fish, November, 1958	(105
	26
	100.0
Satisfied	94.
Dissatisfied	2.
Don' know	2.1
No muwer	

PERCENTAGE OF FROZEN PROCESSED FISH SERVED FRIED, BROILED, BAKED, AND IN OTHER WAYS

According to Sales Volume

Table 9

Total Users of Frozen Processed Fish	Total (102)	Less Than \$10,000 (30)	\$10,000- 39,999 (22)	\$40,000 and Over (50)
	100.0	100.0	100.0	100.0
Establishments Serving Fried  None fried  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%  Don't know, no answer, refused  Average percentage served	9.6 1.6 4.3 21.4 11.8 49.2 2.1	3.4 1.7 - 22.4 5.2 62.1 5.2 76.4	15.2 2.2 28.3 10.9 43.4	10.8 2.4 8.4 16.9 16.9 43.4 1.2
Establishments Serving Broiled  None broiled  1 - 14 \$\frac{4}{15} - 34 \$\frac{4}{55} - 64 \$\frac{4}{65} - 84 \$\frac{4}{5}\$  Don't know, no answer, refused	80.8 3.2 5.4 5.0 	87.9 5.2 1.7 - - 5.2	89.1 8.7 2.2	71.1 3.6 8.4 12.1 3.6 1.2
Average percentage served	0.3	• 14	3.2	11.0
Establishments Serving Baked  None baked  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%  Don't know, no answer, refused  a grage is reentage verved	51.3 4.3 10.7 24.1 .5 7.0 2.1	62.1 6.0 20.6 - 5.2 5.2 17.6	47.8 2 2 2 2 34 8 - 13.0 -	45.8 8.4 18.1 20.5 1.2 4.8 1.2 20.8
Est light its Derving in Other Way:    one   r   other way.   -	64.2 2.1 .5 1.1 2.1 .8	A 8	4° 7	92 8 4 8 1.2 - 1 2 .7

Table 10

#### FROZEN PROCESSED SHELLFISH BOUGHT IN NOVEMBER, 1958 -

#### HOW PROCESSED BEFORE PURCHASE

		Total
	Total Users of Frozen Processed Shellfish	(63) <u>%</u> 100.0*
Clams Cooked Chopped Raw; clean		.7 2.1 5.7
Crabs Cooked Crab legs cooked Raw; whole, clean		.7 .7 2.1
Lobster Cleaned and deheaded Raw; clean	tails	1 <b>9.</b> 1 8.5
Oysters Cooked Breaded Canned Raw; clean		.7 4.3 .7 13.5
Scallops Cooked Breaded Raw; clean		2.1 4.3 28.4
Shrimp Cooked Breaded Patties Cooked and breaded Deheaded, raw in she Raw; clean, deheaded shelled and deveind	,	.7 49.6 2.1 1.4 2.8

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 11

QUANTITY OF FROZEN PROCESSED SHELLFISH BOUGHT IN NOVEMBER, 1958

	Total	All	User
	Pounds	Establishments	Establishments
Clams Cooked Chopped Raw. clean	10	(a)	10.0
	120	(b)	40.0
	126	(b)	15.8
Crabs Cooked Crab legs cooked Raw: whole, clean	60	(b)	60.0
	60	(b)	60.0
	789	1.8	26.3
Lotster Cleaned and deheaded tails Raw; clean	21 <b>,046</b>	48.5	779-5
	1,288	3.0	107 <b>-</b> 4
Oysters Cooked Breaded Canned Raw; clean	5	(a)	5.0
	90	(b)	15.0
	(a)	-	-
	732	1.7	38.5
Scallops Cooked Breaded Raw; clean	6 366 2,272	(a) .8 5.2	2.0 61.0 56.8
Shrimp Clocked Breaded Patties Clocked and breaded Deheaded, raw in shell	2.920 (a) (a) 1,620	(a) 6.7 - 3.7	5.0 41.7 - - 405.0
Raw: crean, deheaded, shelled, deveined	15,576	35.9	236.0

<sup>(</sup>a) Purchases were not reported in quantities large enough to compute meaningful figures.

<sup>(</sup>b) less than half a pound.

SATISFACTION OR DISSATISFACTION WITH PREPREPARATION OF FROZEN PROCESSED SHELLFISH

Table 12

	Total Users (1)		Total Users (1)
	<u>%</u>		<u>45</u>
Total Purchases of Lobster	100.0	Total Purchases of Scallops	100.0
Prefer more prepreparation of lobster Prefer less prepreparation of lobster Prefer prepreparation as it is No answer	12.8 7.7 64.1 15.4	Prefer more prepreparation of scallops Prefer less prepreparation of scallops Prefer prepreparation as it is No answer	4 1 - 93.9 2.0
Total Purchases of Oysters	100.0	Total Purchases of Shrimp	100.0
Prefer more prepreparation of oysters Prefer less prepreparation of oysters Prefer prepreparation as it is	3.7 - 96.3	Prefer more prepreparation of shrimp Prefer less prepreparation of shrimp Prefer prepreparation as it is No answer	2.1 3.4 91.8 2.7

(1) The percentages shown in the body of the table are computed on the total number of purchases of each species of shellfish.

Many establishments bought more than one species. Some establishments also bought a species prepared in two different ways. For example, shrimp breaded and shrimp cooked. This was counted as two purchases of the species.

Because purchases of some species--clams, abalone, and others-were few in number, the species are not included in the table.

Table 13

#### SATISFACTION AND DISSATISFACTION

#### WITH QUALITY AND CONDITION OF

#### FROZEN PROCESSED SHELLFISH

	Total
Total Users of Frozen Processed Shellfish, November, 1958	(63)
	2
	100.0
Sa*.sfied	91.5
Dissatisfied	3.5
Don't know	.7
No answer	4.3

Table 14

#### PACKAGE SIZES OF FROZEN PROCESSED SHELLFISH BOUGHT IN NOVEMBER, 1958 AND AVERAGE NUMBER OF SERVINGS PER POUND(1)

	Total		Total
	<u>£</u>		<b>£</b>
Total Purchasers of Lobster Tails - Cleaned and Deheaded  Packages less than 1 pound 12 pound packages 20 pound packages 24 pound packages 50 pound packages no pound packages No answer	100.0 33.4 3.7 18.5 11.1 11.1 22.2	Total Purchasers of Shrimp - Breaded  1 pound packages 2 pound packages 3 pound packages 4 pound packages 5 pound packages 10 pound packages	100.0 4.3 22.9 21.4 5.7 41.4 4.3
		Average number of servings per pound	3.4
Total Purchasers of Scallops - Raw  1 pound packages 4 pound packages 5 pound packages 8 pound packages 8 pound packages	100.∪ 7.5 2.5 80.c 7.5	Total Purchasers of Shrimp - Raw  1 pound packages 3 pound packages 5 pound packages	100.0 6.1 7.6 75.7
50 pound packages and over	2.5	50 pound packages and over	10.6
Average number of servings per pound	4.5	Average number of servings per pound	3.9

(1) The table shows figures for those species and types of prepreparation which occur most often in the city.

Sometimes figures are shown for package sizes but not average number of servings per pound. In these cases the data on servings per pound is limited.

The percentages in the body of the table are based on the number of establishments which bought one species of shellfish, preprepared in one manner.

Table 15
SATISFACTION AND DISSATISFACTION

WITH TYPES AND SIZES OF FROZEN
PROCESSED SHELLFISH PACKAGES

	Total
Total Users of Frozen Processed Shellfish	(b3)
	<u>4</u>
	100.0
Satisfied	91.5
Dissatisfied	2.1
Don't know	2.1
No answer	4.3

Table 16

PERCENTAGE OF FROZEN PROCESSED SHELLFISE SERVED FRIED, BROILED, BAKED, AND IN OTHER WAYS

Total Users of Frozen Processed Shellfish	Total (63) <u>\$</u>	Total Users of Frozen Processed Shellfish	Total (63) <u>\$</u>
Establishments Serving Fried  None fried  1 - 14\$  15 - 34\$  35 - 64\$  65 - 84\$  Over 84\$  Don't know, no answer, refused  Average percentage served	1.4 2.1 1.4 11.3 17.8 60.3 5.7	Bstablishments Serving Baked  None baked  1 - 145  15 - 345  35 - 645  65 - 845  Over 845  Don't know, no answer, refused  Average percentage served	83.0 3.5 4.3 2.8 -7 5.7
Establishments Serving Broiled  None broiled  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%  Don't know, no answer, refused	76.5 6.4 7.1 4.3	Establishments Serving in Other Ways  None in other ways  1 - 14\$  15 - 34\$  35 - 64\$  65 - 84\$  Over 84\$  Don't know, no answer, refused	65.2 8.5 12.8 3.5 - 4.3 5.7
Average percentage served	4.6	Average percentage served	10.0

Note: Percentages, other than average percentages, are based on total establishments interviewed. Average percentages are computed by assigning the cases in any one of the six intervals to the midpoint of the interval, and taking an average of all the cases.

Table 17

# TYPES OF PORTIONS BOUGHT IN NOVEMBER, 1958

 Total
 Total

 42)
 42)

 6
 100.0\*

 Cooked breaded
 12.8

 Cooked - plain

 Uncooked - breaded
 68.2

 Uncooked - plain
 28.5

Table 18

QUANTITY OF PORTIONS BOUGHT IN NOVEMBER, 1958

		Average Number of Pounds		
	Total Pounds	All Establishments	User Establishments	
Cooked - breaded	390	•9	43.3	
Cooked - plain	(a)	-	-	
Uncooked - breaded	1,603	3.7	33-4	
Uncooked - plain	784	1.8	39.2	

(a) Purchases were not reported in quantities large enough to compute meaningful figures.

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 19

# AMOUNT OF PORTIONS BOUGHT BY ESTABLISHMENTS, AS COMPARED TO THE PREVIOUS YEAR

	Total
Total Users of Portions	(42)
	d E
	100.0
Use more now	46.5
Use about the same	40.9
Use less now	7.0
Don't know	5.6

#### Table 20

# SATISFACTION AND DISSATISFACTION WITH QUALITY AND CONDITION OF PORTIONS

	Total
Total Purchases of Types of Portions, November, 1958	(46)
	Z
	100.0
Satisfied	98.7
Dissatisfied	-
Don't know	1.3

Note: Figures are based on total purchases of types of portions. Some establishments bought more than one type.

Table 21

### IS THE QUALITY OF PORTIONS BETTER THAN THAT OF OTHER

#### FROZEN PROCESSED FISH - FOR WHAT REASONS?

#### Table 22

#### ADVANTAGES OF USING PORTIONS

Total Users of Portions	<u>Total</u> (42)	Total Users of Portions, November, 1958	Total (42)  4 100.0*
Say portions better Quality Uniform controlled serving - always same amount Don't know - no answer	8.5* 5.6 1.4 2.8	Convenience, ease of preparation - save labor, already prepared  Can control food cost better - know profit  Fast, timesaving - quicker to serve, prepare	69.0 22.5 19.7
Portion roomer  Poor quality - inferior quality, can't tell what is in them Dry - dry out when cooked, not flexible	16.9 15.5 1.4	Size of portions - uniform, controlled servings, the right size serving  No bones	15.5 15.5
About the same  Don't know	£9.0	Economical - no waste  Customers like them	11.3
		All others	2.8
		No advantages	4.2

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 23

#### DISADVANTAGES OF USING PORTIONS

Table 24

# DO ESTABLISHMENTS THINK CUSTOMERS PREFER PORTIONS TO OTHER FROZEN PROCESSED FISH - FOR WHAT REASONS?

<u>Total Users of Portions</u>	Total (42)	Total Users of Portions	Total (42)
	100.0*		<u>%</u>
Not economical - more expensive to buy	25.4		100.0
Quality not as good - not always sure what's in them  Lack flavor - not as tasty, sometimes dry  Portions wrong size - too small	18.3 4.2 1.4	Think customers like portions better  Uniform controlled servings - always the same amount Customers order - seem to like them Faster quicker to serve - no waiting Attractive - eye appealing	22.6* 12.7 5.6 4.2 4.2 1.4
All others No disadvantages	1.4 60.6	No bones - safer for children  Think customers like portions less  Lack flavor - not as tasty  Don't know - no answer	5.6 4.2 1.4
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Think customers like portions about the same	53.5
Don't know, no answer	4.2	Don't know	18.3

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

#### Table 25

#### AVERAGE WEIGHT OF PORTIONS AND AVERAGE NUMBER

#### OF SERVINGS PER PACKAGE

tal users of portions, November, 1958	43
Average weight of package of portions, in pounds	4 .
Average number of servings per package	23.
Average weight of individual servings, in ounces	
Average weight of individual portions, in ounces	3.

Note: Average weight of portions does not equal average weight of individual servings since some operators obtained more than one serving from a portion, while other operators used more than one portion for a serving.

Table 26

# SATISFACTION WITH THE SIZE OF PORTIONS IN A PACKAGE

	Total
Total Users of Portions	(42)
	<b>½</b>
	100.0
Satisfied	88.7
Dissatisfied	1.4
Don't know, no answer	9.9

 $Table\ 27$  PERCENTAGE OF PORTIONS SERVED FRIED, BROILED, BAKED, AND IN OTHER WAYS

	<u>Total</u>		Total
Total Users of Portions	(43)	Total Users of Portions	(43)
	<u>%</u>		<u>%</u>
	100.0		100.0
Establishments Serving Fried  None fried  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%  Average percentage served	21.1 2.8 18.3 9.9 47.9	Establishments Serving Baked  None baked  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%  Average percentage served	49.3 1.4 16.9 9.9 1.4 21.1
Establishments Serving Broiled  None broiled  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%	88.8 4.2 5.6 1.4	Establishments Serving in Other Ways  None in other ways  1 - 14%  15 - 34%  35 - 64%  65 - 84%  Over 84%	100.0
Average percentage served	2.4	Average percentage served	-

Table 28

# DO ESTABLISHMENTS COOK PORTIONS WHILE STILL FROZEN?

Total Users of Portions (42)

2 100.0

Yes, cook while frozen 66.2

No, do not cook while frozen 26.8

No answer 7.0

Table 29

# COST OF USING PORTIONS, AS COMPARED TO OTHER FROZEN PROCESSED FISH AND REASONS WHY PORTIONS ARE THOUGHT MORE OR LESS EXPENSIVE

	Total
Total Users of Portions	(42)
	<u> 4</u>
	100.0
Say portions more expensive	31.0
Price includes processing and packaging - preprepa- ration would tend to raise cost	9.9
Cost is more for amount of serving	1.4
Don't know - no answer	19-7
Portions less expensive	32.4
Labor saving - requires no preparation	18.3
Time saving	14.1
Uniform controlled servings	4.2
Cuts cost of preparation	4.2
Less or no waste	1.4
Don't know - no answer	7.0
About the same	32.4
Don't know	4.2

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 30

#### WHEN ORDERING PORTIONS FROM SUPPLIERS,

#### DO ESTABLISHMENTS SPECIFY

#### THE KIND OF FISH?

	Total
Total Users of Portions	(42)
	<u>K</u>
	100.0
Specify kind of fish	94.4
Do not specify kind of fish	4.2
No answer	1.4

#### Table 31

## WOULD THE ESTABLISHMENTS LIKE TO HAVE OTHER PORTION CONTROLLED SEA FOOD ITEMS NOT NOW AVAILABLE?

Total Users of Frozen Processed Sea Food	<u>Total</u> (142)
	<u> %</u>
	100.0
Yes, would like other items	5.1
No, would not like other items	76.9
Don't know	9.4
No answer	8.6

#### REASONS ESTABLISHMENTS DID NOT BUY PORTIONS DURING NOVEMBER, 1958

Total Establishments Using Frozen Processed Sea Food, but Not Portions	Total (100)	WAS PRICE A REASON ESTABLISHMENTS  DID NOT BUY PORTIONS:	
	100.0*		
Sell, serve little or no fish - no demand, calls for it	23.4		Total
Too expensive - cheaper to use fresh fish, cheaper to prepare ourselves	19.6	Total Nonusers Who Did Not Volunteer	
Serve other types - perch, shrimp, halibut, etc., other types more popular	16.8	Price as a Reason	(82)
Size of portions - prefer to cut own portions, want larger portions, get more with other kinds	13.6		<u> 76</u>
Prefer to prepare own - rather bread my own, do not like way it must be cooked, prefer own methods	12.0		100.0
Il particular reason - just didn't	12.0	Yes, price was a reason	13.5
Quality not as good - doesn't meet our quality standards, can't tell what is in it	9.2	No, price was not a reason	79.1
Dislike flavor - fresh fish has more flavor, no taste to portion controlled sea foods Don't like them so wouldn't serve them Use fresh fish - prefer fresh fish Company makes the rules - policy against it	4.3 2.2 1.6 .5	No answer	7-4
All others	E . 4		
Don't know, no answer	6.0		

Table 32

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 33

TYPES OF SUPPLIER PROVIDING FROZEN PROCESSED SEA FOOD TO ESTABLISHMENTS

According to Sales Volume

	Total	Less Than \$10,000	\$10,000~ 39,999	\$40,000 and Over
Total Users of Frozen Processed Sea Food	(142)	(40)	(38)	(64)
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
	100.0*	100.0	100.0	100.0
Sea food processors	-	-	-	-
Sea food wholesalers	84.3	79 - 5	71.8	96.2
Frozen food distributors	10.6	6.4	16.9	9.4
All other, grocery stores, supermarkets	9.0	19.2	8.5	1.9
No answer	.8	-	2.8	-

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 34

DISTANCE OF ESTABLISHMENT FROM MAIN SUPPLIER OF FROZEN PROCESSED SEA FOOD

According to Location

	Total	Out of Central Business District	In Central Business District
Total Users of Frozen Processed Sea Food	(142)	(116)	(26)
	<u>%</u>	<u>%</u>	<u>%</u>
	100.0	100.0	100.0
Less than 10 miles	83.1	77.6	100.0
10 - 50 miles	16.1	21.4	-
51 - 100 miles	-	-	-
More than 100 miles	-	-	-
Don't know	.4	•5	-
No answer	. 14	•5	-

Table 35

FREQUENCY OF DELIVERIES OF FROZEN PROCESSED SEA FOOD

According to Type of Establishment and Sales Volume

			Type of Establishment		Sales Volume		
	Total	Public Eating Places	<u>Institutions</u>	Less Than \$10,000	\$10,000- 39,999	\$40,000 and Over	
Total Users of Frozen Processed Sea Food	(142)	(73)	(69)	(40)	(38)	(64)	
	<u>4</u>	<u>16</u>	Ł	<u>%</u>	<u> 1</u>	<u>%</u>	
	100.0	100.0	100.0	100.0	100.0	100.0	
Every day	11.0	14.5	1. 4	1.3	5.6	21.7	
2 - 4 times per week	17.7	24.2	-	7.7	26.8	18.9	
Once a week	42.7	42.0	44.9	48.7	25.4	50.0	
2 - 3 times per month	16.1	7.5	39.1	18.0	29.6	5.7	
Once a month	4.7	3, 8	7.3	5.1	7.0	2.8	
Less than once a month	4.3	3.2	7.3	11.5	1.4	٠9	
Don't know, no answer	3.5	4.8	-	7.7	4.2	-	

Table 36

CAN SUPPLIERS OF FROZEN PROCESSED SEA FOOD IMPROVE SERVICES TO ESTABLISHMENTS?

According to Sales Volume

	Total	Less Than \$10,000	\$10,000- 39,999	\$40,000 and Over_
Total Users of Frozen Processed Sea Food	(142)	(40)	(38)	(64)
	<u>4</u>	2	26	<u></u>
	100.0	100.0	100.0	100.0
Yes, can improve services	3.9	5.2	-	5.7
No, cannot improve services	89.4	87.1	95.8	86.8
Don't know	6.3	7.7	4.2	6.6
No answer	. 4	_	_	. 9

Table 37

AMOUNT SPENT FOR FROZEN PROCESSED SEA FOOD DURING PRECEDING TWELVE MONTHS

According to Sales Volume

	Total	Less Than \$10,000	\$10,000- 39,999	\$40,000 and Over
Total Users of Frozen Processed Sea Food	(142)	(40)	(38)	(64)
	<u>4</u>	<u> %</u>	<u>4</u>	<u>%</u>
	100.0	100.0	100.0	100.0
Spent under \$250 \$250 - 499 \$500 - 999 \$1,000 - 2,499	38.0 11.9 15.1 21.4	78.1 12.2 7.3	45.9 12.5 33.3 8.3	8.2 11.5 13.1 41.0
\$2,500 - 4,999 \$5,000 - 9,999 \$10,000 - 14,999 \$15,000 - 29,999	4.0 3.2 2.4 1.6	- 2.4 - -	- - -	8.2 4.9 4.9 3.3
\$30,000 - 49,999 \$50,000 - 99,999 \$100,000 and over	2.4 - -	- - -	- - -	4.9 - -

Table 38

PROFITABILITY TO ESTABLISHMENTS OF FROZEN PROCESSED SEA FOOD AND OTHER HIGH PROTEIN FOODS

According to Sales Volume

	Total	Less Than \$10,000	\$10,000- 39,999	\$40,000 and Over
Total Users of Frozen Processed Sea Food	(142)	(40)	(38)	(64)
	2	<u>%</u>	Z	<u>4</u>
	100.0*	100.0	100.0	100.0
Say sea food more profitable than other high protein foods Say beef more profitable than sea food Say meat (unspecified) more profitable	35·3 7·1	33·3 3·8	32. 4 8. 5	38.7 8.5
than sea food Say all foods the same in profitability	5.1 2.7	9.0 3.8	1.4	5.7 2.8
Say eggs more profitable than sea food Say pork more profitable than sea food Say miscellaneous other foods more	2.7 1.2	3.8 3.8	4.2	•9 -
profitable than sea food Nonprofit establishments	2.4 19.6	- 19.2	4.2 23.0	2.8 17.9
Don't know	26.3	29.5	25.4	24.5
No answer	3.9	1.3	9.9	1.9

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 39

#### DO THE ESTABLISHMENTS KNOW THEY CAN BUY GOVERNMENT

#### INSPECTED OR GRADED FROZEN PROCESSED SEA FOOD?

According to Type of Establishment

	Total	Public Eating Places	Instititions
Total Users of Frozen Processed Sea Food	(142)	(73)	(69)
	\$	26	<u>16</u>
	100.0	100.0	100.0
Yes, know they can	74.9	72.0	82.6
No, do not know they can	25.1	28.0	17.4

Table 40

#### DO THE ESTABLISHMENTS BUY GOVERNMENT INSPECTED OR

#### GRADED FROZEN PROCESSED SEA FOOD?

According to Type of Establishment

Total Establishments Knowing	Total	Public Eating Places	Institutions
Government Inspected or Graded Frozen Processed Sea Food Was Available	(111)	(54)	(57)
	<u> 1</u>	<b>%</b>	<b>%</b>
	100.0	100.0	100.0
Yes, do buy	96 9	96.3	98.2
No, do not buy	3.1	3.7	1.8

REASONS ESTABLISHMENTS BUY GOVERNMENT INSPECTED OR GRADED FROZEN PROCESSED SEA FOOD

According to Type of Establishment

	Total	Public Eating Places	<u>Institutions</u>
Total Purchasers of Government Inspected or Graded Sea Food	(108)	(52)	(56)
	<u>4</u>	2	<u>4</u>
	100.0*	100.0	100.0
Only type available - it's all inspected, that's what supplier carries	34.1	35.7	30.4
<pre>Best quality - use better products, more uniform quality</pre>	23.8	32.6	3.6
Government inspected foods are safe - pure, fresh, clean, no germs or disease	22.7	19.4	30.4
Prefer Government inspected - wouldn't buy any other	10.8	.8	33.9
Public demands it	4.9	7.0	-
Government/law requires it	4.9	7.0	-
Company demands that it's bought.	2.7	2.3	3.6
All others	3.8	3.9	3.6
Don't know, no answer	2.2	3.1	-

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question,

Table 42

#### HAS GOVERNMENT INSPECTION AFFECTED THE AMOUNT OF FROZEN

#### PROCESSED SEA FOOD BOUGHT BY THE ESTABLISHMENT?

According to Type of Establishment

Total Users of Government	Total	Public Eating Places	Institutions
Inspected Frozen Processed Sea Food	(108)	(52)	(56)
	<u>%</u>	<u>%</u>	<u>4</u>
	100.0	100.0	100.0
Buy more	9.2	4.7	19.6
Buy about the same	78.9	81.4	73.2
Buy less	-	-	-
Don't know	10.8	13.9	3.6
No answer	1.1	-	3.6

#### Table 43

# IF GOVERNMENT INSPECTED OR GRADED FROZEN PROCESSED SEA FOOD WERE AVAILABLE WOULD THE ESTABLISHMENT BUY MORE OR LESS?

Total Establishments Not Know-	Total
ing Government Inspected or Graded Frozen Processed Sea Food Was Available	(31)
	26
	100 - 0
Say they would buy more	-
Say they would buy less	-
About the same	85.9
Don't know	9.4
No answer	4.7

Table 44

### PREVIOUS USE OF FROZEN PROCESSED SEA FOOD BY NONUSERS AND

#### REASONS FOR STOPPING USE OR FOR NEVER USING

	Total
Total Nonusers of Frozen Processed Sea Food	(74)
	<u> %</u>
	100.0
Have served frozen processed sea food before	<u>11.1</u> *
No demand - didn't sell enough, no volume, customers prefer other foods Unable to handle preparation - didn't have the help More expensive than other forms of fish	10.6 1.1 c
Have not served frozen processed sea food before	<u>84.9*</u>
Sell little or no fish - no demand, call for it, not in that business  No storage facilities - no freezer	72.ti 5.0
Unable to handle preparation - no equipment, not enough room, no time, would need extra help	4.5 3.4
Use fresh fish - prefer to serve fresh fish, fresh fish available all year	2.8 .6
All others Don't know, no answer	4 5
Don't know	3 4
No answer	τ

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 45

DO ESTABLISHMENTS HAVE COLD STORAGE FACILITIES FOR KEEPING FROZEN PROCESSED SEA FOOD?

According to Type of Establishment and Sales Volume

		Type of	Establishment		Sales	Volume	
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,000	\$100,000 and Over
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)
	<u> %</u>	<u> %</u>	<u>%</u>	<u>%</u>	£	<u>%</u>	<u>%</u>
	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes, have cold storage facilities	76.5	73.8	87.2	67.0	87.2	74.6	89.2
No, do not have cold storage facilities	22.6	25.6	10.5	33.0	12.8	23.8	6.2
No answer	.9	.6	2.3	-	-	1.6	4.6
Average capacity, in cubic feet	47.6	45.1	54.5	13.1	21.2	110.5	131.8

Table 46

DO ESTABLISHMENTS HAVE COLD STORAGE FACILITIES FOR KEEPING FROZEN PROCESSED SEA FOOD?

According to Nonusers of Sea Food and Users Not Using Frozen Processed Sea Food

	<u>Total</u>	Nonusers of Sea Food	Users Not Using Frozen Processed Sea Food
Total Nonusers of Frozen Processed Sea Food	(74)		
	<u> </u>	<u>4</u>	<u>%</u>
	100.0	73.7	26.3
Yes, have cold storage facilities	60.3	40.7	19.6
No, do not have cold storage facilities	39•7	33.0	6.7

#### DISTRIBUTION OF SAMPLE

(Tables a through i contain classification data regarding operations of the establishments)

Table a

Total receipts from Meals served during 1957 or last fiscal year

According to Type of Establishment

	Mat al	Public Eating	Turkikukiana
	Total	Places	Institutions
Total Establishments	(216)	(130)	(86)
	<u>%</u>	<u> 1</u>	<u>%</u>
	100.0	100.0	100.0
Total Receipts	<del></del>		
Less than \$10,000	45.4	47.9	34.9
<b>\$1</b> 0,000 - 39,999	25.1	23.9	30.2
\$40,000 - 99,999	14.5	14.1	16.3
\$100,000 and over	15.0	14.1	18.6

Table b

AMOUNT ESTABLISHMENTS SPENT FOR FOOD DURING PREVIOUS TWELVE MONTHS

According to Type of Establishment and Sales Volume

		Type of	Establishment		Sales	Volume	
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)
	<u>%</u>	<b>%</b>	<u>%</u>	<u>%</u>	<u> 1</u>	<u>%</u>	<u>%</u>
	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Spent under \$1,000 \$1,000 - 2,499 \$2,500 - 4,999 \$5,000 - 9,999 \$10,000 - 14,999	10.2 9.5 17.6 9.1 10.7	11.1 10.4 18.8 7.7 10.4	7.0 7.0 14.0 14.0	24.2 24.2 30 4 13.7 4.5	2.4 17.1 17.1 31.7	3.0 3.0 8.9 3.0 8.9	4.4 6.5 2.1
\$15,000 - 29,999 \$30,000 - 49,999 \$50,000 - 99,999 \$100,000 - 249,999 \$250,000 and over	12 3 8.6 11.8 8.6 1.6	14.5 9.7 10.4 6.3	4.6 4.6 16.3 16.3 4.6	3.0 - - - -	29.3 2.4 - -	17.5 35.1 11.7 8.9	6.5 6.5 39.2 28.3 6.5

Table c

PERCENTAGE OF TOTAL OPERATING COST SPENT FOR FOOD IN PREVIOUS TWELVE MONTHS

According to Type of Establishment and Sales Volume

		Type of	Type of Establishment		Sales Volume				
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over		
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)		
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u></u>		
	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Spent under 5% for food 5 - 14% 15 - 24% 25 - 34%	4.7 7.5 3.8 8.9	5.5 5.5 3.0 6.6	2.0 14.3 6.1 16.3	12.0 17.3 1.3 9.3	1.6 8.2 13.1	2.9 5.9 - -	4.6 9.3		
35 - 44% 45 - 54% 55 - 64% 65 - 74%	22.1 3 <sup>1</sup> 4.7 11.7 2.8	24.4 43.3 4.3 3.7	14.3 6.1 36.8	13.3 26.8 10.7 4.0	19.7 31.2 16.4 4.9	29.4 50.0 11.8	3 <sup>4</sup> ·9 41.9 7·0		
75 - 84% 85 - 94% 95 - 100%	3.8	3.7 - -	4.1 - -	5· 3 -	4.9 -	- -	2.3		

Table d

AVERAGE NUMBER OF MEALS SERVED BY ESTABLISHMENTS

According to Type of Establishment and Sales Volume

		Type of Establishment			Sales Volume				
	<u>Total</u>	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over		
Total Establishments	216	130	<u>86</u>	<u>87</u>	<u>56</u>	<u>33</u>	<u>40</u>		
Average Number of Main Meals Served									
Midday, weekdays	141	110	252	42	113	242	423		
Sea food meals	13		31	3	10	23	49		
Midday, Saturdays and Sundays	<b>80</b>	68	123	20	60	112	294		
Sea food meals	5	6	1	4	5	2	15		
Evening, weekdays	57	<b>49</b>	<b>88</b>	15	33	76	232		
Sea food meals	6	6	6	1	3	10	35		
Evening, Saturdays and Sundays	55	48	79	15	36	54	238		
Sea food meals	6	7	-		2	13	23		

Table e

AVERAGE PRICE PER MEAL SERVED

According to Type of Establishment and Sales Volume

			Establishment		Sales	Volume	
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)
	<u> 2</u> 6	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>46</u>
	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under \$.25 \$.2549 \$.5074 \$.7599	.2 11.3 18.9 38.4	5.7 21.0 46.0	1.2 33.6 10.5 7.0	6.6 20. <b>9</b> 45.7	21.1 16.5 41.3	14.3 22.2 35.0	6.2 13.8 13.8
\$1.00 - 1.49 \$1.50 - 1.99 \$2.00 - 2.49 \$2.50 - 2.99	11.5 4.6 .2 .2	13.5 5.7 .3 .3	3.5 - -	14.7 1.5 -	9.2 - - -	7.9 9.5 -	9.2 16.9 1.5 1.5
\$3.00 - 3.99 \$4.00 - 4.99 \$5.00 and over	.2 - -	·3 -	-	-	- - -	- - -	1.5 - -
No answer	9.2	6.9	18.6	7.1	4.6	7.9	24.8
Nonprofit establishment	5.3	•3	25.6	3.0	7-3	3.2	10.8

Table f

#### NUMBER OF REGULAR EMPLOYEES ENGAGED IN PREPARING AND SERVING FOOD

#### According to Sales Volume

	Total	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over
Total establishments	216	87	56	33	40
Average number per establishment	9	2	14	13	39

Table g

#### SEATING CAPACITY OF ESTABLISHMENTS

According to Type of Establishment and Sales Volume

		Type of Establishment		Sales Volume			
	<u>Total</u>	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over
Total establishments	216	130	86	87	56	33	40
Average seating capacity, in seats	106	84	201	53	95	179	220

NUMBER OF DAYS OF THE WEEK ON WHICH ESTABLISHMENTS SERVE MEALS

According to Type of Establishment and Sales Volume

		Type of	Type of Establishment		Sales Volume			
	Total	Public Eating Places	Institutions	Less Than \$10,000	\$10,000- 39,999	\$40,000- 99,999	\$100,000 and Over	
Total Establishments	(216)	(130)	(86)	(87)	(56)	(33)	(40)	
	<u> 1</u>	<u> 1</u>	<u>4</u>	<u>L</u>	<u> 1</u>	<u> 1</u>	<u>4</u>	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Serve on 7 days	60.6	60.6	60.5	67.0	42.2	57.2	75.4	
Serve on 6 days	28.6	34.2	5.8	21.8	42.2	36.5	18.4	
Serve on 5 days	10.1	4.6	32.5	10.7	15.6	6.4	3.1	
Serve on less than 5 days	.2	-	1.2	- 5	-	-	-	
No answer	.5	.6	-	-	-	-	3.1	

Table i

PERCENTAGE OF ESTABLISHMENTS SERVING SPECIALIZED TYPES OF FOOD

According to Sales Volume

Less \$100,000 \$10,000-\$40,000-Than and 39,999 99,999 Total \$10,000 Over (33) (216)(87)(56)(40) Total Establishments % Þ % % % 100.0 100.0 100.0 100.0 100.0 69.5 87.2 76.7 Establishments will no specialty 79.0 97.0 Establishments with specialty 21.0\* 30.5 12.8 23.8 3.0 6.2 10.7 9.5 Mexican, Spanish 2.8 Steak or chophouse 5.8 10.7 1.5 4.8 4.8 6.1 5.5 Italian food 9.5 1.5 Chinese food 1.6 4.6 1.2 Chicken specialty 1.5 Barbecue .7 1.8 Sea food .5 .7 1.5 All others

48 67176

<sup>\*</sup>Denotes that percentages might add to more than the total because of more than one reply to a question.

