# FROZEN PROCESSED FISH AND SHELLFISH 

## CONSUMPTION IN

## INSTITUTIONS AND PUBLIC EATING PLACES

## Portland, Oregon

UNITED STATES DEPARTMENT OF THE INTERIOR<br>FISH AND WILDLIFE SERVICE<br>bureau of commercial fisheries<br>WASHINGTON 25, D. C.

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<br>Circular 67 - Atlanta, Georgia<br>Circular 68 - Chicago, Illinois<br>Circular 69 - Cleveland, Ohio<br>Circular 70 - Denver, Colorado<br>Circular 71 - Houston, Texas<br>Circular 72 - Los Angeles, California<br>Circular 73 - New York, New York<br>Circular 74 - Omaha, Nebraska<br>Circular 75 - Portland, Oregon<br>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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Table ..... Page
SUMMARY OF FINDINGS ..... 1-5
DETAILED FINDINGS
Did the Establishment Buy Sea Food in the PrecedingTwelve Months?6
Did the Establishment Buy Frozen Processed Sea Foodin the Preceding Twelve Months?7
Frozen Processed Fish Bought in November, 1958How Processed Before Purchase8
Quantity of Frozen Processed Fish Bought in November, 1958 ..... 9
Satisfaction or Dissatisfaction with Prepreparation of FrozenProcessed Fish10
Satisfaction and Dissatisfaction with Quality and Condition ofFrozen Processed Fish10
Package Sizes of Frozen Processed Fish Bought inNovember, 1958 and Average Number of ServingsPer Pound11
Satisfaction and Dissatisfaction with Types and Sizes of
Frozen Processed Fish Packages ..... 12
Percentage of Frozen Processed Fish Served Fried,
Broiled, Baked, and in Other Ways ..... 12
Frozen Processed She llfish Bought in November, 1958
How Processed Before Purchase ..... 13
Quantity of Frozen Processed Shellfish Bought in November, 1958 ..... 14
12
Satisfaction or Dissatisfaction with Prepreparation of Frozen Processed Shellfish ..... 15
13Satisfaction and Dissatisfaction with Quality andCondition of Frozen Processed Shellfish15
14
Package Sizes of Frozen Processed Shellfish Boughtin November, 1958 and Average Number of ServingsPer Pound.16
1516
Satisfaction and Dissatisfaction with Types and Sizes of Frozen Processed Shellfish Packages. ..... 17
Percentage of Frozen Processed Shellfish Served Fried, Broiled, Baked and in Other Ways. ..... 18
Types of Portions Bought in November, 1958 ..... 19
Quantity of Portions Bought in November, 1958 ..... 19
Amount of Portions Bought by Establishments, as Compared to the Previous Year ..... 20
Satisfaction and Dissatisfaction with Quality and Condition of Portions ..... 20
Is the Quality of Portions Better than that of other Frozen Processed Fish - For What Reasons?. ..... 21
Advantages of Using Portions ..... 21
Disadvantages of Using Portions ..... 22
Do Establishments Think Customers Prefer Portions to Other Frozen Processed Fish - For What Reasons? ..... 22
Average Weight of Portions and Average Number of
Servings Per Package ..... 23
Satisfaction with the Size of Portions in a Package ..... 23
Percentage of Portions Served Fried, Broiled, Baked, and in Other Ways ..... 24
Do Establishments Cook Portions While Still Frozen? ..... 25
Cost of Using Portions, as Compared to Other FrozenProcessed Fish and Reasons Why Portions areThought More or Less Expensive25
When Ordering Portions from Suppliers, Do Establishments
Specify the Kind of Fish? ..... 26
Would the Establishments Like to Have Other Portion
Controlled Sea Food Items Not Now Available?. ..... 26
Reasons Establishments Did Not Buy Portions During November, 1958. ..... 27
Was Price a Reason Establishments Did Not Buy Portions?. ..... 27
Types of Supplier Providing Frozen Processed Sea Food to Establishments ..... 28
Distance of Establishment from Main Supplier of Frozen Processed Sea Food ..... 29
Frequency of Deliveries of Frozen Processed Sea Food ..... 30
Can Suppliers of Frozen Processed Sea Food Improve
Services to Establishments? ..... 31
Table Page
37
Amount Spent for Frozen Processed Sea Food During Preceding Twelve Months. ..... 32383940414243
Profitability to Establishments of Frozen Processed Sea Food and Other High Protein Foods ..... 33
Do the Establishments Know they can buy Government Inspected or Graded Frozen Processed Sea Food? ..... 34
Do the Establishments Buy Government Inspected or Graded Frozen Processed Sea Food? ..... 34
Reasons Establishments Buy Government Inspected or Graded Frozen Processed Sea Food ..... 35
Has Government Inspection Affected the Amount of Frozen Processed Sea Food Bought by the Establishments? ..... 36
If Government Inspected or Graded Frozen ProcessedSea Food were Available Would the EstablishmentBuy More or Less?36
(Information has been omitted as too few EstablishmentsQualified to Respond)
Previous Use of Frozen Processed Sea Food byNonusers and Reasons for Stopping Use orfor Never Using37
Do Establishments Have Cold Storage Facilities for Keeping Frozen Processed Sea Food? According to Type of Establishment and Sales Volume. ..... 38
According to Nonusers of Sea Food and Users Not Using Frozen Processed Sea Food. ..... 39

## DISTRIBUTION OF SAMPLE

Total Receipts from Meals Served During 1957 or
Last Fiscal Year............................................................................. 40
b Amount Establishments Spent for Food During
Previous Twelve Months41

Percentage of Total Operating Cost Spent for
Food in Previous Twelve Months.42

Average Number of Meals Served by Establishments43
e Average Price Per Meal Served. ..... 44
Number of Regular Employees Engaged in Preparingand Serving Food.45
Seating Capacity of Establishments ..... 45
g
Number of Days of the Week on Which EstablishmentsServe Meals.46
Percentage of Establishments Serving Specialized Types of Food ..... 47

## SUMMARY OF FINDINGS

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

Three fourths of all the establishnents in Portland said they bought sea food in the previous twelve months. Ariong buyers of sea food, a substantial majority said they made purchases of sea food in the frozen processed form.

Thirty-three per cent of all the establishments said they had bought frozen processed fish in November,
1358; 26 per cent said they had bought frozen processed shellfish; and 15 per cent said they had bought portions.

Among institutions (such as schools and hospitals). the incidence of use of frozen processed sea food was greater than among public eating places.

Of the ten cities in the survey, Portland ranked eighth, 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 )

Almost half of the users of frozen processed fish bought frozen raw halibut during November, 1958. This was the most popular of the frozen processed fish items served in this area. Frozen raw halibut was also the leading item, in terms of total quantity purchased.

Frozen raw salmon was also frequently bought in Portland. Halibut steaks and salmon steaks were each bought in a substantial quantity by establishments in Portland.

Other cities in the survey tended to prefer frozen fish which had been processed into steaks or fillets. Portland was exceptional in that the leading species were bought in the raw form where the processing consisted mainly of cleaning and freezing.
2. Attitudes Toward Prepreparation and Quality and Condition of Fish (Tables 5, 6)

Most Portland purchasers were satisfied with the present prepreparation of fish, and with the quality and condition of the fish.
3. Packaging of Fish (Tables 7, 8)

Both of the leading Portland items--frozen raw halibut and frozen raw salmon--were bought in a great variety of package sizes.
4. Methods of Preparing and Serving Fish (Table 9)

Frying was the most popular method of preparing fish among Portland establishments. The average establishment served 70 per cent of its fish fried. Frying was the leading method in all ten cities of the study.

Baking was also a rather common method of prep
aration in Portland. The average establish-
ment served 15 per cent of its fish baked.
C. Frozen Processed Shellfish - Purchases,

Attitudes, and Practices

1. Purchases: Species and Type of Preprep-
aration (Tables 10, 11)
More than a third of the shellfish users in Portland bought raw shrimp in November, 1958. This item also ranked first in Portland, in terms of total quantity purchased.

A somewhat smaller number of establishments bought breaded shrimp. Raw scallops, raw clams, and raw oysters were also comion pur-
chases in Portland.
Breaded shrimp and raw shrimp were bought
widely and in large quantities in all of the
cities included in the study.
2. Attitudes Toward Prepreparation; Toward Quality and Condition of Shellfish
(Tables 12, 13)
Most purchasers were satisfied with the present prepreparation of shellfish, and with the quality and condition of the shellfish which they bought. The same held generally true for the other cities in the survey.
3. Packaging of Shellfish (Tables 14, 15)

Both 3 and 5 pound packages were popular in Portland.
4. Methods of Preparing and Serving Shellfish (Table 16)

Fryiat as the most popular way of preparing shellfish. in Portland. The typical establishment served almost three quarters 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)

Fifteen per cent of all the establishments in Portland bought portions during November, 1958.

Portland ranked seventh among the ten cities, in percentage of establishments buying portions.

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

About two thirds of the purchasers of portions said that they were currently buying about the same amount of portions as the year before. Twenty-one per cent said they were buying more, and 4 per cent said they were buying less.
2. Attitudes Toward Portions (Tables 20, 21,

22, 23, 24)
Nearly all establishments said they were satis-
fied with the quality and condition of portions.
One fifth of the users of portions said they
thought the quality of portions was better than that of other frozen processed fish. Two thirds rated the quality as about the same, while 4 per cent considered the quality poorer.

Major advantages cited for portions included:

$\%$ of<br>Users<br>Citing

Convenience, ease of preparation 50
Size of portions, uniform portions 38
Can control food costs better - 32
know profit
29
Fast, timesaving 20 8
32
29
Economy, no weste

One fifth of the users specified some disadvantage to using portions. A variety of disadvantages were mentioned.

Users of portions generally thought their customers liked portions as well as other types of frozen processed fish. Fewer than 4 per cent said that their customers liked portions less than other types of frozen processed sea food.
3. Packaging of Portions (Tables 25, 26)

Portland purchasers tended to buy portions in
packages of about the same size as those preferred by purchasers in other cities. The average weight of a package of portions for the city was 5.0 pounds.

They also tended to buy individual portions of average size. The average weight of an individual portion was 4.1 ounces.

Almost all establishments, in Portland 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 Portland, with 05 per cent of the establishments serving them this way. The average establishment served 81 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.

Seven eighths of the Portland establishments using portions cooked them while frozen.
5. Cost of Using Portions (Table 29)

Only 14 per cent of the establishments using portions said they were more expensive than other forms of frozen processed fish. A large majority of users considered them less expensive, or rated them about the same.
6. Miscellaneous Findings About Portions (Tables 30, 31)

Four fifths of the Portland establishments said they specified the kind of fish when ordering portions.

Only 2 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: portions were too expensive, they preferred to prepare their own fish, the size of the portions was not suitable.

Price also figured as a reason for not buying portions in Atlanta, Denver, and Los Angeles. It was less important as a reason in the other six cities of the survey.
E. Suppliers of Frozen Processed Sea Food
(Tables 33, 34, 35, 36)
Establishments in Portland tended to buy frozen processed sea food from sea food wholesalers, almost always 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 supplied 84 per cent of the establishments. Frozen food distributors accounted for 9 per cent.

Main suppliers in Portland were located less than ten miles from the establishment, in 97 per cent of the cases.

In 40 per cent of the cases, dellveries were made once a week, while deliveries wore 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 tie suppiers could improve their services.
F. Expenditures for Frozen Processed Sea Food; Its Profitability (Tables 37,38 )

More than three fiftbs of the establishments reporting in Portland said that they spent less than $\$ 250$ for frozen processed sea food during the preceding twelve months. The figures ranged upward to $\$ 100,000$ and over. The median came at $\$ 197$.

Considerably more than half 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)
Four fifths of the establishments in Portland were aware that they could buy frozen processed sea food, which had been inspected or graded by the United States Government.

All of the establishments interviewed in Portland, who were aware that they could buy Government inspected or graded sea food, said tbat they had bought some. When purchasers were asked if the inspection bad affected the amount of frozen processed sea food which they bought, 4 per cent said the inspection had caused them to buy more.
H. Nonusers of Frozen Processed Sea Foad; Cold Storage Facilities (Tables $43,44,45$ )

Most nonuserz in Portland said they had never bought frozen processed sea food. A great percentage said they used lit+le or no fish.

Findings regarding cold sturage facilitips among nonusers in Portland may be summarized as follows.


## DETAILED FINDINGS

Table 1

DID THE ESTABLISHMENT BUY SEA FOOD IN THE PRECEDING TWELVE MONTHS？
According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment Public |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Less Sales Volume $\quad \$ 40,000$ |  |  |
|  |  | Eating <br> Places |  | Than <br> \＄10，000 | $\begin{aligned} & \$ 10,000- \end{aligned}$ | and |
|  |  |  | Institutions |  | $39,999$ |  |
| Total Establishments | （281） | （223） | （58） | （126） | （83） | （72） |
|  | 中 | 中 | 中 | 中8 | $\underline{8}$ | 中 |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100．0 | 100.0 |
| Yes，bought sea food | 74.9 | 69.8 | 97.1 | 57.6 | 85.0 | 89.9 |
| Bought frozen processed sea food | 46.8 | 41.7 | 69.1 | 27.2 | 54.9 | 67.7 |
| Bought frozen processed fish | $\overline{33.1}$ | 26.8 | 60.3 | 17.9 | 36.3 | 52.5 |
| Bought frozen processed shellfish | 26.2 | 29.5 | 11.8 | 15.9 | 23.9 | 44.4 |
| Bought portions | 15.4 | 17.3 | 7.4 | 12.6 | 15.0 | 20.2 |
| No，did not buy sea food | 25.1 | 30.2 | 2.9 | 42.4 | 15.0 | 10.1 |

## Table 2

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

According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment Public |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Public } \\ & \text { Eatic } \\ & \text { Places } \end{aligned}$ | Institutions | $\begin{gathered} \text { Less } \\ \text { Than } \\ \$ 10,000 \end{gathered}$ | $\begin{array}{r} \$ 10,000- \\ 39,999 \\ \hline \end{array}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { over } \\ \hline \end{gathered}$ |
| Total Establishments Purchasing Sea Food in Preceding_12 Months | (204) | (148) | (56) | (69) | (70) | (65) |
|  | q | \& | 2 | \% | \& |  |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Yes, bought frozen processed sea food | 62.5 | 59.7 | 71.2 | 47.1 | 64.6 | 75.3 |
| No, did not buy frozen sea food | 37.5 | 40.3 | 28.8 | 52.9 | 35.4 | 24.7 |


|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 40,000 \\ & \hline \end{aligned}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 40,000 \\ & \hline \end{aligned}$ | $\$ 40,000$ and Over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tota：Users of Frozen Processed Fish | （92） | （51） | （41） |  | 里 | $\underline{\square}$ | $\underline{1}$ |
|  | q | 里 | E | $\frac{\text { Ocean Ferch }}{\text { Fillets }}$ | 2.5 | 2.0 | 2.9 |
|  | 100．0＊ | $\underline{100.0}$ | 200.0 | Pieces | 1.7 | 2.9 | 3.8 |
|  |  |  |  | Raw |  |  |  |
| $\begin{gathered} \text { Cod }_{\text {Fillets }} \\ \text { Flaked } \end{gathered}$ | $\begin{array}{r} 5.8 \\ .8 \end{array}$ | 1.5 | $\begin{gathered} \therefore 1.5 \\ \therefore . \end{gathered}$ | $\frac{\text { Red Smaper }}{\text { Fincets }}$ | 11.7 | 13.2 | 9.6 |
| Fiominder |  |  |  | Whole center cut | ． 8 | － | ．． 9 |
| Ka | 1.7 | － | 3.8 | Chunk | 1.7 | 1，5 | 2.4 |
|  |  |  |  | Raw | 21.7 | 13.2 | 30.0 |
| Hado－k |  |  |  |  |  |  |  |
| Fitete | $1 .-$ | － | 3.8 | Sole |  |  |  |
| Piosee | 4， 2 | こ． | 5.4 | Finlets | 9.2 | 5．0 | 23.5 |
|  |  |  |  |  |  |  |  |
| $\overline{\text { F．}}$ ， | $\stackrel{\square}{ }{ }^{5}$ | 103 | 3. | Swortifist |  |  |  |
| $3+\cdots .8$ | 17 | $\ldots$ | －${ }^{-1}$ | S＊eart | 1.7 | － | 3.8 |
| Bhe ．i．antor at： | 4 | ＋，$\cdot$ | 3.5 | Ri\％ | ．．？ | － | 3.8 |
| $F_{\square} \cdot$ |  | － | 1． 7 |  |  |  |  |
| $\because$ | \％ | $\cdots$ | $\therefore 4$ | Trout |  |  |  |
| R1：－ | 483 | ＇ 2 | － 3 | Freaded Fin | $\therefore 5$ | 4.4 | 3.8 |

＊Denotes that percentages might add to more than the total because of more than one reply to a question．

|  | Total Pounds | Average Number of Founds |  |  | Total <br> Pounds | Average Number of PoundsAll UserEstablishments Estallishments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Establishments | Establishments |  |  |  |  |
|  |  |  |  | Ocean Perch |  |  |  |
| $\underline{\text { Cod }}_{\text {Fillets }}$ |  |  |  | Fillets | 94 | (b) | 31.3 |
|  | 857 | 2.4 | 122.4 | Pieces | 10 | (a) | 5.0 |
| Flaked | 1,392 | 3.8 | 1392.0 | Raw | (a) | - | - |
| $\frac{\text { Fish Cakes }}{\text { Breaded }}$ | 72 | (b) | 72.0 | $\frac{\text { Red Snapper }}{\text { Fillets }}$ | 307 | 1.0 | 2 b .2 |
| Flounder |  |  |  | Salmon |  |  |  |
| Kaw | (a) | - | - | Fillets | 1,439 |  | 479.7 324 |
|  |  |  |  | Steaks | 3.677 | 10.1 | 334.3 |
| Haddock |  |  |  | Whole center cut | 200 | (b) | 200.0 |
| Fillets | 200 | . 6 | 100.0 | Chunk | 125 | (b) | 62.5 |
| Pieces | 390 | 1.1 | 78.0 | Raw | 2.850 | 7.9 | 114.0 |
| Halibut |  |  |  | Sole |  |  |  |
| Fillets | 192 | . 5 | 21.3 | Fillets | 463 | 1.3 | 42.1 6.0 |
| Steaks | 2,835 | 7.8 | 202.5 | Cooked fillets |  |  |  |
| Whole center cuts | 1,619 | 4.5 | 323.8 |  |  |  |  |
| Fletch | 60 | (b) | 60.0 | Swordfish |  |  |  |
| Chunk | 685 | 1.9 | 62.3 | Steaks | (a) | - | - |
| Raw | 23,583 | 65.0 | 491.3 | Raw | (a) | - | - |
| Mahi-Mahi |  |  |  | Trout |  |  |  |
| Fillets | (a) | - | - | Breaded fillets | (a) | - | 20.0 |

(a) Purchases were not reported in quantities large enough to compute meaningful figures.
(b) Less than half a pound.

Table 5

SATISFACTION OR DISSATISFACTION WITH FREPREPARATION OF FROZEN FROCESSED FISH

|  | Total Users (1) |  | $\begin{aligned} & \text { Tut } \mathrm{I} \\ & \mathrm{~W} \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | 中 |  | \% |
| Total Purchases of Hillibut | 100.0 | Total Purchases of Saimon | 1 1 |
| paration of halitut | - | Prefer more prepreparation of salmon |  |
| paration of halibut | - | Prefer less prepreparation of salmon | - |
| ion as it is | 85.7 | Prefer prepreparation as it is | ${ }^{2} 14$ |
|  | 14.3 | No gnswer | 18.0 |

Table 6

SATISFACTION AND DISSATISFACTION

## WITH QUALTTY AND CONDITION

OF FROZEN PROCESSED FISH

Total Users of Frozen Processed Fish, November, 1958

Dissatisfied

No answer
(1) The percentages shown in the boay 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 jifferent ways. For example, haddock fillets and haddock steaks. This was counted as two purchases of the species

Eecause purchases of manj species were few in number, the species are not included in the table

## Table 7

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

(1) The table shows figures for those species and types of prepreparation which occur most of ten 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 specias of fish, preprepared in one manner.

Table 8

SATISEACTIO:: AND DISSATISFACTION

WITH TYPES AND SIZES OF FROZEN
PROCESSED FISH PACKAGES

Total Users of Frozen Processed
Fish., November, 1958

Table 9

PERCENTAGE OF FROZEN PROCESSED FISH SERVED FRIED, BROILED, BAKED, AND IN OTHER WAYS
According to Sales Volume

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 10,000- \\ & 39,999 \\ & \hline \end{aligned}$ | $\$ 40,000$ and Over |
| :---: | :---: | :---: | :---: | :---: |
| Total Users of Frozen Processed Fish | (92) | (21) | (30) | (41) |
|  | \& | 中 | 中 | \$0 |
|  | 100.0 | 1.00 .0 | 100.0 | 100.0 |
| Establishments Serving Fried $\quad \underline{100.0} \quad \underline{100.0}$ |  |  |  |  |
| None fried | 8.3 | 3.7 | 4.9 | 13.5 |
| 1-14\% | 1.7 | 7.4 | , | 13.5 |
| 15-34\% | 2.5 | . | - | 5.8 |
| 35-64\% | 10.8 | 3.7 | 7.3 | 17.3 |
| 65-84\% | 6.7 | $3 \cdot 7$ | . | 15.3 |
| Over 84\% | 42.5 | 70.4 | 34.1 | 34.6 |
| Don't know, no answer, refused | 27.5 | 14.8 | 53.7 | 13.5 |
| Average percentage served | 69.5 | 79.2 | 76.0 | 61.8 |
| Establishments Serving Broiled |  |  |  |  |
| None broiled | 57.5 | 81.5 | 46.3 | 53.8 |
| 1-14\% | 2.5 | - | - | 5.8 |
| 15-34\% | 7.5 | 3.7 | - | 1.5 .4 |
| 35-64\% | 3.3 | - | - | 7.7 |
| 65-84\% |  | - | - | , |
| Over 84\% | 1.7 | - | - | 3.8 |
| Don't know, no answer, refused | 27.5 | 14.8 | 53.7 | 13.5 |
| Average percentage served | 7.2 | 1.1 | - | 13.4 |
| Establishments Serving Baked |  |  |  |  |
| None baked | 50.8 | 70.4 | 31.7 | 55.8 |
| 1-14\% | 1.7 | - | 4.9 | - |
| 15-34\% | 7.5 | - | - | 17.3 |
| 35-61\% | 5.0 | 37 | 7.3 | 3.8 |
| 65-84\% | 2.5 | 3.7 |  | 3.8 |
| Over 84\% | 5.0 | 74 | 2.4 | 5.8 |
| Don't know, no answer, refused | 27.5 | 14.8 | 53.7 | 13.5 |
| Average percentage served | 15.1 | 13.4 | 135 | 16.6 |
| Establishmerts Serving in Other Ways |  |  |  |  |
| None in other ways | 64.3 | 85.2 | 39.0 | 73.1 |
| i-149 | 3.3 | - | 49 | 3.8 |
| 15-34\% | 3.3 | - | - | 7.7 |
| 35-64\% | . 8 | - | - | 19 |
| 65-84\% | - | - | - | - |
| Over 84\% | . 8 | - | 24 | - |
| Don't know, no answer, refused | 275 | 14.8 | 537 | 135 |
| Average percentage served | 3.1 | - | 5.7 | 3.6 |

## FROZEN PROCESSED SHELIFTSH BOUGHT IN NOVEMBER, 1958 -

HOW PROCESSED BEFORE PURCHASE
According to Sales Volume

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 40,000 \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Total Users of Frozen } \\ & \text { Processed Shellitish } \\ & \hline \end{aligned}$ | (72) | (38) | (34) |
|  | 2 | \& | \% |
|  | 100.0* | 100.0 | 100.0 |
| $\frac{\text { Abalone }}{\text { Steaks }}$ | 2.1 | - | 4.5 |
| $\frac{\text { Clams }}{\text { Faw; clean }}$ | 18.9 | 11.9 | 27.3 |
| Crabs |  |  |  |
| Cooked | 10.5 | 7.8 | 13.6 |
| Whole frozen uncooked | 12.0 | 7.8 | 18.2 |
| Crab meat - shelled and debellied, frozen and canned | 5.3 | 3.7 | 8.8 |
| canned | 1.1 | 2.0 | - |
| Lobster |  |  |  |
| Cooked | 1.1 | - | 2.3 |
| Raw; whole, Slean | 7.4 | 3.9 | 11.4 |
| Oysters |  |  |  |
| Breaded | 2.1 | - | 4.5 |
| Canned | 1.1 | 2.0 | - |
| Raw; clean | 15.8 | 5.9 | 27.3 |
| Scallops |  |  |  |
| Breaded | 6.3 | - | 13.0 |
| Coc*ed and breaded | 2.1 | - | 4.5 |
| Canned | 1.1 | 2.0 | 8 |
| Raw; clean, shelled | 22.1 | 13.7 | 31.8 |
| Shri ${ }^{\text {P }}$ |  |  |  |
| T uoked | 13.7 | 17.0 | 36.4 |
| Treaded Cooked and hreaded | 10.5 | 7.8 | 136 |
| Deheaded. raw in shell | 2.1 | 39 | - |
| Deheaded and sherled | 11 | 20 | - |
| Raw; clean, dehesded, shelled and deveined | 37.9 | 314 | 45.5 |

* Denotes that percentages might add to more than the total because of more than one reply to a question.

|  | Total <br> Pounds | Average Number of Pounds |  |
| :---: | :---: | :---: | :---: |
|  |  | All | User: |
|  |  | Establlshments | Establishments |
| Aba lone |  |  |  |
| Steaks | 20 | (b) | 10.0 |
| Clams |  |  |  |
| Raw; clean | 367 | 1.0 | 20.4 |
| Crabs |  |  |  |
| Cooked | 742 | 2.0 | 74.2 |
| Whole frozen uncooked | 1,449 | 4.0 | 120.8 |
| Crab meat - shelled and debellied, frozen and canned | 82 | (b) | 16.3 |
| Canned | 5 | (a) | 5.0 |
| Lobster |  |  |  |
| Cooked | 18 | (b) | 18.0 |
| Raw; whole, clean | 560 | 1.5 | 80.0 |
| Oysters |  |  |  |
| Breaded | (a) | - | - |
| Canned | 5 | (a) | 5.0 |
| Raw; clean | 1,382 | 3.8 | 92.1 |
| Scallops |  |  |  |
| Breaded | 129 | . 7 | 21.5 |
| Cooked and breaded | 12 | (a) | 6.0 |
| Canned | 5 | (a) | 5.0 |
| Raw; clean, shelled | 2.394 | 6.6 | 114.0 |
| Shrimp |  |  |  |
| Cooked | 209 | .ó | 16.1 |
| Breaded | 1.803 | 5.0 | 62.2 |
| Cooked and breaded | 148 | (b) | 14.5 |
| Deheaded, raw in shell | 40 | (b) | 20.0 |
| Deheaded and shelied | 75 | (b) | 75 |
| Raw; clean, deheaded, shelled and deveined | 6.415 | 17.? | 178.8 |

(a) Purchases were not reported in quantities large enough to compute meaningful figures.
(b) Less than hilf a pound.

SATISFACTION OR IISSATISFACTION WTIH PREPREFARATION OF FROZEN FROCESSED SHELLFISH

|  | Total Users (1) |  | $\begin{aligned} & \text { To' al } \\ & \text { 'Yers } \\ & 121 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | 6 |  | t |
| Total Purchases of Crabs | 100.0 | Total Furchases of Shrimi | 12 |
| Prefer more prepreparation of crabs | 3.6 | Prefer more prepreparation of shrimr | 3 |
| Frefer less prepreparation of crabs | - | Prefer less prepreraration of shrimp | 2 |
| Prefer prepreparation as it is | 85.7 | Prefer fremreparation as it is | 3.4 |
| No answer | 10.7 | No answer | 11 |
| Total Purchases of Scallops | 100.0 |  |  |
| Prefer more prepreparation of scallops | - |  |  |
| Prefer less prepreparation of scallops | - |  |  |
| Prefer prepreparation as it is No answer | $\begin{array}{r} 93.3 \\ 6.7 \end{array}$ |  |  |

(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 otherswere few in number, the species are not included in the table.

To al
=ers :
-
3
22
11

Table 13

SATISFACTION AND DISSATISFACTION
WITH QUALTIY AND CONDITION OF
FROZEN PROCESSED SHELILFISH

Total

(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

BATISFACTIOR AND DISSATIBFACTITON
WITH TYPES AND SIZES OF FROZEN
PROCESSED SHELLFTSH PACFAGEB

## Total

Total Users of Frozer.
Processea Shellfish

```
(TE)
```

    是
    100.0
$\begin{array}{lr}\text { Satisfied } & 95.7 \\ \text { Dissatisfied } & 3.2\end{array}$

No answer 1.1

|  |  | Less <br> Than <br> $\$ 40,000$ | $\$ 40,000$ and Over |  |  |  | $\$ 40,000$ and Over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Processed Shellfish | (72) | (38) | (34) | Processed Shellfisb | (72) | (38) | (34) |
|  | \% | \$ | q |  | $\underline{6}$ | \& | $\underline{2}$ |
|  | 100.0 | $\underline{100.0}$ | 100.0 |  | 100.0 | 100.0 | 100.0 |
| $\frac{\text { Establishments Serving Fried }}{\text { None }}$ |  |  | 6.8 | $\frac{\text { Establishments Serving Eaked }}{\text { None baked }}$ | 87.3 | 88.2 | 86.3 |
| None fried $1.14 \%$ |  | 13.7 | 6.8 | 1-14\% | 8.3 3.2 | 3.9 | 86.3 2.3 |
| 15-34\% | 1.1 | - | 2.3 | 15-34\% | 4.2 | - | 9.1 |
| 35-64\% | 15.8 | 11.8 | 20.5 | 35-64\% | 2.1 | 2.0 | 2.3 |
| 65-84\% | 5.3 | - | 11.4 | 65-84\% | - | - | - |
| Over $84 \%$ | 66.2 | 72.5 | 59.0 | Over 84\% | 2.1 | 3.9 | - |
| Don't know, no answer, refused | 1.1 | 2.0 | - | Don't know, no answer, refused | 1.1 | 2.0 | - |
| Average percentage served | 73.8 | 74.0 | 73.5 | Average percentage served | 4.3 | 5.0 | 3.5 |
| Establishments Serving Broiled |  |  |  | Establishments Serving in Other Ways |  |  |  |
| None broiled | 87.3 | 94.1 | 79.5 | None in other ways | 75.7 | 78.4 | 72.7 |
| 1-14\% | 3.2 | 3.9 | 2.3 | 1-14\% | 1.1 | - | 2.3 |
| 15-34\% | 4.2 | - | 9.1 | 15-34\% | 4.2 | - | 9.1 |
| 35-63\% | 4.2 | - | 9.1 | 35-64\% | 8.4 | 9.8 | 6.8 |
| 65-84\% | - | - | - | 65-84\% | 1.1 | - | 2.3 |
| Over $84 \%$ | - | - | - | Over $84 \%$ | 8.4 | 9.8 | 6.8 |
| Don't know, no answer, rerused | 1.1 | 2.0 | - | Don't know, no answer, refused | 1.1 | 2.0 | - |
| Average percentage served | 3.4 | $\cdot 3$ | 6.9 | Average percentage served | 14.0 | 14.2 | 13.7 |

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

Table 18

QUANTITY OF PORTIONS BOUGHT IN NOVEMBER, 1958

|  | Total Pounds | Average Number of Pounds |  |
| :---: | :---: | :---: | :---: |
|  |  | All | User |
|  |  | Establishments | Establishments |
| Cooked - breaded | 342 | . 9 | 24.4 |
| Cooked - plain | - | - | - |
| Uncooked - breaded | 1,775 | 4.9 | 46.7 |
| Uncooked - plain | 217 | . 6 | 19.7 |

* 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 ESTABL ISHMENTS, AS COMPARED

TO THE PREVIOUS YEAR


## Table 20

SATLSFACTION AND DISSATISFACTION WITTH QUALITTY AND CONDITION OF PORTIONS

## Total

Total Purchases of Types of Portions, November, 1958(47) \&
100.0

Satisfied 96.8

Dissatisfied
3.2

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 |
| :---: | :---: |
| Total Users of Portions, November, 1958 | (43) |
|  | d |
|  | $\underline{100.0 *}$ |
| Convenience, easy of preparation - save labor, already prepared | 50.0 |
| Size of portions - uniform, controlled servings, the right size serving | 37.5 |
| Can control food cost better - know profit | 32.1 |
| Fast, timesaving - quicker to serve, prepare | 28.6 |
| Economical - no waste | 19.6 |
| Attractive, eye appealing | 3.6 |
| Quality | 1.8 |
| All others | 3.6 |
| Don't know, no answer | 3.6 |

* 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 |  |
| :---: | :---: |
|  | Total |
| Total Users of Portions | (43) |
|  | 里 |
|  | 100.0* |
| Hot ennmical - more expensive to buy | 8.9 |
| La-k travor - not as tasty, sometimes dry | 1.8 |
| Ail others | 1.8 |
| No disadvantares | 80.4 |
| Don't know, no answer | 8.9 |

Table 24

DO ESTABLISHENTS THINK CUSTOMERS PREFER FORTIONS TO OTHER
FROZEN PROCESSED FISH - FOR WHAT REASONS?
Total

Total Users of Portions

Think customers like portions better
Uniform controlled servings - aiways the same amount
Customers order - seem to like them
Don't know - no answer
Think customers like portions less
Look artificial - not real
Think customers like portions about the same
Don't know
No answer

* Denotes that percentages might add to more than the total because of more than one reply to a question.

Table 25

## AVERAGE WEIGHP OF PORTIONS AND AVERACE NUMBER

## OF SERVINGS PER PACKAGE

Piatial users of portions, November, 1958
Average weight of package of fortions, in pounds
Average number of servings per package
Average weight, of individual servings, in ounces
Average weight of individual portions, in ounces

Note: Average weight of portions does not equal average weight, of individual servangs since some operators obtaired more than one servo ing 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

50
15.0
5.3
4.1

Total
Total Users of Portions

## Table 27

PERCENTAGE OF POPTIONS SERVED FRIED, BROILED, BAKED, AND IN OTHER WAYS

|  | Total |  | $\underline{\text { Tota }}$ |
| :---: | :---: | :---: | :---: |
| Total Users of Portions | (42) | Total Users of Portions | (42) |
|  | 中 |  | 㮛 |
|  | 100.0 |  | 100.0 |
| Establishments Serving Fried |  | Establishments Serving Baked |  |
| None fried | 5.4 | None baked | 85.6 |
| $1-14 \%$ | - | - $-14 \%$ | , |
| 25-34\% | 5.4 | 15-34\% | 5.4 |
| 35-64\% | 7.1 | 35-64\% |  |
| D5-84\% | - | 65-84\% | 3.6 |
| Over 84\% | 82.1 | Over $84 \%$ | 5.4 |
| Average percentage served | 80.8 | Average percentage served | 8.9 |
| Establishments Serving Broiled |  | Establishments Serving in Other Ways |  |
| Nane broiled | 91.0 | None in other ways | 100.0 |
| $1-14 \%$ | - | $1-14 \%$ | 100.0 |
| $15-34 \%$ | 5.4 | $15-34 \%$ | - |
| 35-64\% | 3.6 | 35-64\% | - |
| $55-84 \%$ | , | 65-84\% | - |
| Over $84 \%$ | - | Over $84 \%$ | - |
| Average percentage sprved | 3.1 | Average percentage served | - |

Table 28


| WHILE STILL FROZEN? |  |
| :--- | :---: |
|  |  |
| Total Users of Fortions | $(43)$ |
|  | $\underline{100.0}$ |
| Yes, cook while frozen | 87.5 |
| No, do not cook while frozen | 5.4 |
| No answer | 7.1 |

AND REASONS WTYY PORIIONS ARE THOUGHT MORE OR LESS EXPENSIVE
Total Users of Portions
Price includes processing and packaging - prepreparation would tend to raise cost
Don't know - no answer
Portions less expensive
Less or no waste
Labor saving - requires no preparation
Uniform controlled servings
No spoilage - can keep in freezer, can keep until

## Time saving

Goes further - more servings from package
Can control food costs better - know your profit
Don't know - no answer
About the same
Don't know
No answer

* 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 ESTABLISHMETTS SPECIFY
THE KIND OF FISH:

|  | Total <br> Total Users of Portions <br> $(43)$ |
| :--- | :---: |
| Specify kind of fish |  |
| Do not specify kind of fish | $\underline{100.0}$ |
| 82.1 |  |

Table 31

WOUTD THE ESTABLISHMEITS LIFE TO HAVE OTHER PORTION CONTROLLED SEA FOOD ITEMS NOT NOW AVAILABLE?

|  | Total |
| :---: | :---: |
| Total Users of Frozen Processed Sea Food | (129) |
|  | q |
|  | 100.0 |
| Yes, would like other items | 2.4 |
| No, would not like other items | 92.8 |
| Don't know | 2.4 |
| No answer | 2.4 |

## Table 32

|  | Total |  |  |
| :---: | :---: | :---: | :---: |
| Total Establishments Using Frozen Processed Sea Food, but Not Portions | (86) | WAS PRICE A REASON ESTABLISHMENTS |  |
|  | 里 | DID NOT BUY PORTIONS? |  |
|  | 100.0* |  |  |
| Too expensive - cheaper to use fresh fish, cheaper to prepare ourselves | 35.1 |  | Total |
| Prefer to prepare own - rather bread my own, do not like way it must be cooked, prefer own methods | 15.8 | Total Nonusers Who Did | - |
| Size of portions - prefer to cut own portions, want larger portions, get more with other kinds <br> Use fresh fish - prefer fresh fish | 14.0 8.8 | Not Volunteer Price as a Reason | (57) |
| Sell, serve little or no fish - no demand, calls for it | 8.8 |  | \% |
| Serve other types - perch, shrimp, halibut, etc., other types more popular | 5.3 |  | 100.0 |
| No particular reason - just didn't | 5.3 | Yes, price was a reason | 10.9 |
| Dislike flavor - fresh fish has more flavor, no taste to portion controlled sea foods | 4.4 | Ne, price was not a reason | 10.9 |
| Quality not as good - doesn't meet our quality standards, can't tell what is in it | 4.4 | No, price was not a reason | 77.7 |
| Don't like them so wouldn't serve them | $1.8$ | No answer | 9.6 |
| Just opened the restaurant - don't know what we will handle | . 9 | No answer |  |
| 111 others | 2.6 |  |  |
| Jon't know, no answer | 3.5 |  |  |

* Denotes that percentages might add to more than the total because of more than one reply to a question.

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 10,000- \\ & 39,999 \\ & \hline \end{aligned}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Total Users of Frozen Processed Sea Foud | (124) | (3') | (46) | (51) |
|  | Q | \% | \% | ¢ |
|  | $\underline{100.0 * *}$ | 1000 | 100.0 | 100.0 |
| Sea food processors | 2.9 | 7.3 | 3.2 | - |
| Sea food wholesalers | 83.5 | 70.7 | 85.5 | 89.6 |
| Frozen food distributors | 8.8 | 4.9 | 8.1 | 11.17 |
| All other, grocery stores, supermarkets | 6.5 | 17.1 | 4.8 | 1.5 |
| No answer | . 6 | - | - | 1.5 |

* Denotes that percentages might add to more than the total because of more than one reply to question.

DISTANCE OF ESTABLISHMENT FROM MAIN SUPPLIER OF FROZEN PROCESSETI SEA FOOD

According to Location

|  | Total** | Out of Central Business District |
| :---: | :---: | :---: |
| Total Users of Frozen Processed Sea Food | (129) | (113) |
|  | \% | \% |
|  | 100.0 | 100.0 |
| miles | 96.5 | 95.8 |
|  | 2.9 | 3.5 |
| es | - | - |
| miles | - | - |
|  | . 6 | . 7 |

** Includes ló establishments in the central business district which would be statistically misleading to show separately.

Table 35

FREQUEIVY OF DELIVERIES OF FROZEN PROCESSED SEA FOOD
According to Type of Establishment and Sales Volume

|  | Total | Type of EstablishmentPublicEatingFlaces Institutions |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Less <br> Than <br> $\$ 10,000$ | $\begin{array}{r} \$ 10,000- \\ 39,999 \\ \hline \end{array}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |
| Total Users of Frozen Processed Sea Food | (129) | (90) | (39) | (32) | (46) | (51) |
|  | \% | 2 | \& | E | \& | \% |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Every day | 14.0 | 16.1 | - | 2.8 | 7.1 | 25.9 |
| 2 - 4 times per week | 17.6 | 18.7 | 11.1 | 5.6 | 16.7 | 25.9 |
| Once a week | 40.5 | 42.4 | 27.8 | 50.0 | 47.6 | 29.3 |
| 2-3 times per month | 14.0 | 14.4 | 12.1 | 19.4 | 16.7 | 8.6 |
| Once a month | 8.8 | 5.9 | 27.8 | 11.1 | 7.1 | 8.6 |
| Less than once a month | 5.1 | 2.5 | 222 | 12.1 | 48 | 1.7 |

Table 36

CAN SUPPLIERS OF FROZEN PROCESSED SEA FOOD IMPROVE SERVICES TO ESTABLISMMENTS:
According to Sales Volume

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{array}{r} \$ 10,000- \\ 39,999 \\ \hline \end{array}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Total Users of Frozen Processed Sea Food | (129) | (32) | (46) | (51) |
|  | 里 | \% | \% | \% |
|  | 100.0 | 100.0 | 100.0 | 100.0 |
| Yes, can improve services | 8.3 | 9.7 | 3.2 | 11.9 |
| No, cannot improve services | 91.7 | 90.3 | 96.8 | 88.1 |

Table 37

AMOUNT SPENT FOR FROZEN PROCESSED SEA

## FOOD DURING PRECEDING TWELVE MONTHS

## According to Sales Volume

|  |  | Less <br> Than <br> Total Users of Frozen <br> Processed Sea Food | (129) |
| :--- | :---: | :---: | :---: |

Aceording to Sales Volume

|  | Total | Less <br> Than <br> \$10,000 | $\begin{array}{r} \$ 10,000- \\ 39,999 \\ \hline \end{array}$ | $\$+0,000$ <br> and <br> Over |
| :---: | :---: | :---: | :---: | :---: |
| Total Users of Frozen Processed Sea Food | $(129)$ | $(32)$ | $(46)$ | (51) |
|  | \% | \% | \% | 者 |
|  | 100.0* | 100.0 | 100.0 | 100.0 |
| Say sea food more profitable than other high protein foods | 21.2 | 14.0 | 19.4 | 26.9 |
| Say all foods the same in profitability | 5.9 | 4.9 | 6.5 | 6.0 |
| Say meat (unspecified) more profitable than sea food | 4.1 | 9.8 | 3.2 | 1.5 |
| Say beef more profitable than sea food | 1.8 | 2.4 | 1.6 | 1.5 |
| Say chicken more profitable than sea food | . 0 | 2.4 | - | - |
| Say miscellaneous other meats more profitable than sea food | 0 | 2.4 | - | - 5 |
| Say eggs more profitable than sea food | . 6 | - | - | 1.5 |
| Say miscellaneous other foods more profitable than sea food | 2.4 | ${ }^{-}$ | 16 | 4.5 |
| Nonprofit establishments | 24.7 | 22.0 | 35.5 | 16.4 |
| Don't know | 16.5 | 24.4 | 14.5 | 13.4 |
| No answer | 22.4 | 22.0 | 17.7 | 28.4 |

*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

|  | Public <br> Total ISers of Frozen <br> Prozessed Ses Food <br> Places | (129) | Institutions |
| :---: | :---: | :---: | :---: |

Table 40

DO THE ESTARLLSHMENIS BUY GOVERNMENT INSPECTED OR

## GRADED FROZEN PROCESSED SEA FOOD?

According to Type of Establishment.

|  | Public <br> Eating <br> Total Establishments Knowing <br> Government Inspected or <br> Graded Frozen Processed <br> Sea Food Was Available | Total | (106) |
| :--- | :---: | :---: | :---: |


|  | Total | Public Eating Places | Institutions |
| :---: | :---: | :---: | :---: |
| Total Purchasers of Government Inspected or Graded Sea Food | (105) | (71) | (35) |
|  | e | 管 | 告 |
|  | 100.0* | 100.0 | 100.0 |
| Only type available - it's all inspected, that's what supplier carries | 34.5 | 43.8 | 14.0 |
| Company demands that it's bought | 20.9 | - | 67.4 |
| Best quality - use tetter products, more uniform quality | 20.1 | 28.1 | 2.3 |
| Government inspected foods are safe - pure, fresh, clean, no germs or disease | 19.4 | 21.9 | 14.0 |
| Prefer Government inspected - wouldn't buy any other | 3.6 | 4.2 | 2.3 |
| Easy to handle - easy to serve, ready to cook, portion controlled | 2.2 | 21 | 2.3 |
| Public demands it, | 1.4 | 2.1 | - |
| Government/law requires it | . 7 | 1.0 | - |
| All others | 2.9 | 3.1 | 2.3 |
| Dor. 't know, no answer | 6.5 | 8.3 | 2.3 |

* 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 BOUGIPT BY THE ESTABLLSHMENT

According to Type of Establishment

| Totel Users of Government | Total | Public Eating Places | Institutions |
| :---: | :---: | :---: | :---: |
| Inspected Frozen Processed Sea Food | (106) | (71) | (35) |
|  | d | $\underline{L}$ | 2 |
|  | 100.0 | 100.0 | 100.0 |
| Buy more | 4.3 | 4.2 | 4.7 |
| Buy about the same | 84.9 | 81.3 | 93.0 |
| Buy less | - | - | - |
| Don't know | 5.8 | 8.3 | - |
| No answer | 5.0 | 6.2 | 2.3 |

## Table 43

IF GOVERNMENT INSPECTED OR GRADED FROZEN PROCESSED SEA FOOD WERE AVAILABLE WOULD

THE ESTABLISHMENT BUY MORE OR LESS?

TABLE 43 HAS BEEN OMITTED AS TOO FEW ESTABLISHMENTS QUALIFIED TORESPOND.

## REASONS FOR STOPPING USE OR FOR NEVER USING

According to Sales Volume

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\$ 10,000$ and Over |
| :---: | :---: | :---: | :---: |
| Total Nonusers of Frozen Processed Sea Food | (152) | (94) | (58) |
|  | E | \% | E |
|  | 100.0 | 1000 | 1000 |
| Have served frozen processed sea food before | 5.2* | 55 | 4.8 |
| No demand - didn't sell enough, no volume, customers prefer other foods <br> Prefer to serve fresh fish | 311 | 3.6 .9 | 2.4 1.2 |
| Lacked flavor - own prepared fish has better flavor | - 5 | -9 | - |
| Unable to handle preparation - didn't have the help | . 5 | $\bigcirc$ | - |
| Don't know, no answer | . 5 | - | 1.2 |
| Have not served frozen processed sea food before | 24.8* | 94.5 | 95.2 |
| Sell little or no fish - no demand, call for it, not in that business | 56.5 | 66.4 | 43.4 |
| Use fresh fish - prefer to serve fresh fish, fresh fish available all year | 16.1 | 55 | 301 |
| Unable to handle preparation - no equipment, not enough room, no time, would need extra help | 9.3 | 100 |  |
| No storage facilities - no freezer | 6.7 | 9.1 |  |
| Ton expensive - cheaper to use fresh, prepare urselves | 4.1 | a | 84 |
| Like tact $\because$, freshness of fresh fish - don't trust fro: food, frosh fish tastes better, some frozen |  |  |  |
| $\because:$ kef $^{r}+00$ long | 1.6 .5 | 18 | 1.2 12 |
| dus r opened, don't know what T'll sell | 126 | 9 | 2.4 |
| Don $t$ know, no answer |  | 18 | 2.4 |

* 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 FACILITTES FOR FFEEPING FROZEN PROCESSED SEA FOOD：
According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public <br> Eating <br> Places | Institutions | $\begin{aligned} & \hline \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{gathered} \$ 10,000- \\ 39,999 \end{gathered}$ | \＄40，000 <br> and <br> Over |
| Total Establishments | （281） | （223） | （58） | （126） | （83） | （72） |
|  | \％ | 如 | \％ | 中 | \％ | 中8 |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Yes，have cold storage facilities | 62.0 | 66.1 | 44.1 | 58.9 | 58.4 | 70.7 |
| No，do not have cold storage facilities | 37.7 | 33.9 | 54.4 | 41.1 | 41.6 | 28.3 |
| No answer | ． 3 | － | 1.5 | － | － | 1.0 |
| Average capacity，in cubic feet | 44.3 | $37 \cdot 3$ | 88.0 | 25.4 | 25.7 | 90.8 |

## Table 46

DO ESTABLISHMENTS HAVE COLD STORAGE FACILITIES FOR KEEFING FROZEN PROCESSED SEA FOOD? According to Nonusers of Sea Food and Users Not Using Frozen Processed Sea Food

|  | Total | Nonusers <br> of <br> Sea Food | Users Not <br> Using <br> Frozen <br> Processed <br> Sea Food |
| :---: | :---: | :---: | :---: |
| Total Nonusers of Frozen Processed Sea Food | (152) |  |  |
|  | \% | $\pm$ | \% |
|  | $\underline{100.0}$ | 47.2 | 52.8 |
| Yes, have cold storage facilities | 49.7 | 22.3 | 27.4 |
| No, do not have cold storage facilities | 50.3 | 24.9 | 25.4 |

## 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 Establishments

|  | Total | Public Eating Places | Institutions |
| :---: | :---: | :---: | :---: |
| Total Establishments | （281） | （223） | （58） |
|  | 中 | 中 | 中 |
|  | 100.0 | 100.0 | 100.0 |
| Total Receipts |  |  |  |
| Less than \＄10，000 | 41.6 | 45.4 | 25.0 |
| \＄10，000－39，999 | 31.1 | 27.1 | 48.5 |
| \＄40，000－99，999 | 10.5 | 11.2 | 7.4 |
| \＄100，000 and over | 16.8 | 16.3 | 19.1 |

Table b

AMOUNT ESTABLISHMENTS SPENT FOR FOOD DURING PREVIOUS TWELVE MONTHS
According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public |  | Less |  | \$40,000 |
|  |  | Eating |  | Than | \$10,000- | and |
|  |  | Places | Institutions | \$10,000 | 39,999 | Over |
| Total Establishments | (281) | (223) | (58) | (126) | (83) | (72) |
|  | E | 是 | \$ | \% | 暑 | \% |
|  | 100.0 | 100.0 | 100.0 | 100.0 | $\underline{100.0}$ | 100.0 |
| Spent under \$ $\mathbf{2 l , 0 0 0}$ | 12.8 | 18.0 | - | 33.8 | 4.2 | 3.0 |
| \$1,000-2,499 | 6.6 | 8.6 | 1.8 | 22.0 | - | - |
| \$2,500-4,999 | 6.6 | 5.5 | 7.0 | 11.9 | 7.0 | 15 |
| \$5,000-9,999 | 12.8 | 13.7 | 10.5 | 15.3 | 22.6 | - |
| \$10,000-14,999 | 22.4 | 8.6 | 56.1 | 8.5 | 42.3 | 13.6 |
| \$15,000-29,999 | 15.8 | 19.4 | 7.0 | 6.8 | 18.3 | 21.3 |
| \$30,000-49,999 | 9.7 | 12.3 | 3.5 | - | 4.2 | 24.3 |
| \$50,000-99,999 | 5.1 | 5.0 | 5.3 | - | 1.4 | 13.6 |
| \$100,000-249,999 | 5.1 | 4.3 | 7.0 | 1.7 | - | 13.6 |
| \$250,000 and over | 3.1 | 3.6 | 1.8 | - | - | 9.1 |

Table c

PERCENTAGE OF TOTAL OPERATING COST SPENT FOR FOOD IN PREV IOUS TWELVE MONTHS
According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public |  | Less |  | \＄40，000 |
|  |  | Eating |  | Than | \＄10，000－ | and |
|  |  | Places | Institutions | \＄10，000 | 39，999 | Over |
| Total Establishments | （281） | （223） | （58） | （126） | （83） | （72） |
|  | \％ | \％ | 中 | 中 | \＆ | 中 |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Spent under 5\％for food | 4.0 | 4.0 | 4.1 | 8.6 | 2.6 | 1.6 |
| 5－14\％ | 4.5 | 3.3 | 8.2 | 12.1 | 2.6 | － |
| 15－24\％ | 6.0 | 6.7 | 4.1 | 12.1 | 3.8 | 3.2 |
| 25－34\％ | 8.1 | 8.0 | 8.2 | 5.2 | 11.5 | 6.3 |
| 35－44\％ | 33.2 | 43.3 | 2.0 | 27.6 | 24.4 | 49.2 |
| 45－54\％ | 16.6 | 20.0 | 6.1 | 10.3 | 17.9 | 20.6 |
| 55－64\％ | 5.5 | 6.7 | 2.0 | 8.6 | 6.4 | 1.6 |
| 65－74\％ | 17.1 | 2.0 | 63.3 | 10.3 | 25.7 | 12.7 |
| 75－84\％ | 4.0 | 5.3 | － | 3.5 | 5.1 | 3.2 |
| 85－94\％ | － | － | － | － | － | － |
| 95－1．00\％ | 1.0 | ． 7 | 2.0 | 1.7 | － | 1.6 |

## Table d

AVERAGE NUMBER OF MEALS SERVED EY ESTABLISHMENTS
Accordine to Type of Establishment and Sales Volume

|  | Total | Type of EstablishmentPublicEatingPlaces Institutions |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \hline \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 10,000- \\ & 39,999 \\ & \hline \end{aligned}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |
| Total Establishments | 281 | 223 | 58 | 12E | 83 | 12 |
| Main Meals Served |  |  |  |  |  |  |
|  | $\begin{array}{r} 123 \\ 14 \end{array}$ | $\begin{aligned} & 78 \\ & 14 \end{aligned}$ | $\begin{array}{r} 200 \\ 19 \end{array}$ | $\begin{array}{r} 39 \\ 2 \end{array}$ | $\begin{array}{r} 143 \\ 10 \end{array}$ | $\begin{array}{r} 218 \\ 41 \end{array}$ |
| s and Sundays | $\begin{array}{r} 60 \\ 7 \end{array}$ | $\begin{array}{r} 58 \\ 9 \end{array}$ | $65$ | $19$ | $\begin{array}{r} 34 \\ 1 \end{array}$ | $\begin{array}{r} 150 \\ 20 \end{array}$ |
| 5 | $\begin{array}{r} 50 \\ 9 \end{array}$ | $\begin{array}{r} 50 \\ 8 \end{array}$ | $\begin{aligned} & 53 \\ & 13 \end{aligned}$ | $\begin{gathered} 13 \\ 1 \end{gathered}$ | $\begin{array}{r} 34 \\ 2 \end{array}$ | $\begin{array}{r} 129 \\ 31 \end{array}$ |
| ys and Sundays | $\begin{array}{r} 55 \\ 7 \end{array}$ | $56$ | $49$ | $\begin{aligned} & 10 \\ & * * \end{aligned}$ | $\begin{array}{r} 34 \\ 2 \end{array}$ | $\begin{array}{r} 152 \\ 26 \end{array}$ |

** Less than one half meal.

Table e

## AVERAGE PRICE PER MEAL SERVED

According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment |  | －Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public |  | Less |  | \＄40，000 |
|  |  | Eating Places |  | Than <br> \＄20，000 | $\begin{gathered} \$ 10,000- \\ 39,999 \end{gathered}$ | and Over |
|  |  |  | Institutions | $\$ 10,000$ | $39,999$ |  |
| Total Establishments | （281） | （223） | （58） | （126） | （83） | （72） |
|  | \％ | 中 | q | 中 | 中 | 中 |
|  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under \＄． 25 | ． 3 | － | 1.5 | ． 7 | － | － |
| \＄．25－． 49 | 19.6 | 12.9 | 48.5 | 20.5 | 24.8 | 12.1 |
| \＄． $50-.74$ | 17.4 | 19.3 | 8.8 | 20.5 | 16.8 | 13.0 |
| \＄．75－．99 | 21.2 | 25.1 | 4.4 | 21.9 | 22.1 | 19.2 |
| \＄2．00－1．49 | 16.0 | 19.3 | 1.5 | 13.2 | 14.2 | 22.2 |
| \＄1．50－1．99 | 3.9 | 4.7 | － | ． 7 | 2.7 | 10.1 |
| \＄2．00－2．49 | 1.9 | 2.4 | － | － | 1.8 | 5.1 |
| \＄2．50－2．99 | － | － | － | － | － | － |
| \＄3．00－3．99 | ． 3 | － 3 | － | － | － | 1.0 |
| \＄4．00－4．99 | － | － | － | － | － | － |
| \＄5．00 and over | － | － | － | － | － | － |
| No answer | 12.9 | 14.9 | 4.4 | 17.9 | 9.7 | 9.1 |
| Nonprofit establishment | 6.6 | 1.0 | 30.9 | 4.6 | 8.0 | 8.1 |

According to Sales Volume

|  | Less <br> Than | $\$ 10,000-$ <br> $\$ 10,000$ | $\$ 40,000$ <br> and <br> Over |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total establishments | 281 |  |  |

## Table g

## SEATING CAPACITY OF ESTABLISHMENTS

## According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public <br> Eating <br> Places | Institutions | Less Than $\$ 10,000$ | $\begin{array}{r} \$ 10,000- \\ 39,799 \\ \hline \end{array}$ | \$40,000 and Over |
| Total establishments | 281 | 223 | 58 | 126 | 83 | 72 |
| Average seating capacity, in seats | 104 | 63 | 285 | 44 | 133 | 166 |

Table h

## NIMBER OF DAYS OF THE WEFK ON WH ICH ESTABLISHMENTS SERVE MEAL．

According to Type of Establishment and Sales Volume

|  | Total | Type of Establishment Public |  | Sales Volume |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public Eating Places Places | Institutions | Less Than $\$ 10,000$ | $\begin{array}{r} \$ 10,000- \\ 39,999 \\ \hline \end{array}$ | $\begin{gathered} \$ 40,000 \\ \text { and } \\ \text { Over } \\ \hline \end{gathered}$ |
| Total Establishments | （281） | （223） | （58） | （126） | （83） | （72） |
|  | \＄ | 中 | 中 | 中 | 中 | 中 |
|  | 100.0 | $\underline{100.0}$ | $\underline{100.0}$ | 100.0 | 100.0 | $\underline{100.0}$ |
| Serve on 7 days | 46.0 | 46.4 | 44.1 | 37.7 | 45.1 | 59.6 |
| Serve on 6 days | 33.1 | 39.3 | 5.9 | 41.1 | 29.2 | 25.3 |
| Serve on 5 days | 16.5 | 9.2 | 48.5 | 14.6 | 24.8 | 10.1 |
| Serve on less than 5 days | 1.4 | 1.7 | － | 2.0 | － | 2.0 |
| No answer | 3.0 | 3.4 | 1.5 | 4.6 | ． 9 | 3.0 |

## Table i

## PERCENTAGE OF ESTABLISHMENTS SERVING SPECIALIZED TYPES OF FOOD

According to Sales Volume

|  | Total | $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & \$ 10,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 10,000- \\ & 39,999 \\ & \hline \end{aligned}$ | $\$ 40,000$ and Over |
| :---: | :---: | :---: | :---: | :---: |
| Total Establishments | (281) | (126) | (83) | (72) |
|  | \% | \% | \% | \% |
|  | 200.0 | 100.0 | 100.0 | 100.0 |
| Establishments with no specialty | 84.0 | 90.7 | 841 | 73.7 |
| Establishments with specialty | 16.0* | 9.3 | 15.9 | 26.3 |
| Sea food | 3.6 | 1.3 | - | 11.1 |
| Chicken specialty | 3.3 | 2.0 | 2.6 | 6.1 |
| Steak or chophouse | 2.8 | - | 4.4 | 5.1 |
| Barbecue | 2.2 | 4.0 | . 9 | 1.0 |
| Chinese food | 1.7 | - | 1.8 | 4.0 |
| Italian food | 1.7 | 1.3 | 3.5 | - |
| Mexican, Spanish | . 6 | . 7 | . 9 | - |
| All others | . 8 | - | 1.8 | 1.0 |

* Denotes that percentages might add to more than the total because of more than one reply to a question.

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