_ 1/ r.

•7

2

1

З

ý

ESTIMATED USUAL INTAKE OF FISH AND MERCURY FROM FISH BY U.S. WOMEN AGE 15-44

.....

× **.**

ž

Prepared for: U.S. Tuna Foundation

, Prepared by: ENVIRON International Corporation

November 1, 2000

Table of Contents

. . . .

t

.

¢

I.	lı	ntroduction	1
II.	N	1ethods	1
A	۱.	Portion Size	1
Е	3.	Fish Species Consumed by CSFII Respondents	2
C	2.	Mercury Concentrations	2
Ľ).	Mercury Exposure Per Fish-Eating Occasion	4
E	.	Frequency of Fish Consumption	5
F	-	Monte Carlo Analysis	5
III.	R	esults and Discussion	6
IV.	R	eferences	6

Appendix. Translation of CSFII food codes to fish species percentages, by processing method

۰

, ·

٦,

ESTIMATED USUAL INTAKE OF FISH AND MERCURY FROM FISH BY U.S. WOMEN AGE 15-44

.

I. Introduction

ENVIRON International Corporation (ENVIRON) is pleased to provide to the United States Tuna Foundation (USTF) estimates of the distribution of consumption of fish and intake of mercury from fish by U.S. women age 15-44. These estimates are based on data on the amount of fish consumed per eating occasion, the frequency of consumption of fish, and on EPA/FDA data on the concentration of mercury in fish. In this report, the term "fish" is used to included both finfish and shellfish.

In order to determine the contribution of fish to women's exposure to mercury, it is necessary to estimate their "usual intake" of fish—i.e., the average amount per day they consume over an extended period of time. "Usual intake" of a food cannot be directly observed in most food consumption surveys because they are typically based on respondents' reports of consumption for only a few days. Rather, two separate types of information are required: first, the amount of fish women consume when they eat it—the portion size; second, the frequency with which they eat fish.

Of course, women do not all choose the same portion sizes of fish, nor do they all eat fish with the same frequency. Both of these types of data may be expressed in distributions representing the range of individual différences. If both types of data are available for the same individuals, they can be directly linked. However, if they are not available for the same people, then the linkage must be accomplished probabilistically by using a mathematical model to bring the two distributions together. This is what was done in the Environmental Protection Agency's 1997 Mercury Study Report to Congress (EPA, 1997), and the same procedure is followed here.

II. Methods

A. Portion Size

The food consumption data used to establish the distribution of portion sizes for fish were results of the 1994-96 USDA Continuing Survey of Food Intakes by Individuals (CSFII) and its Supplemental Children's Survey (CSFII 1998), as provided on CD-ROM (USDA, 2000).

The CSFII 1994-96 was conducted between January 1994 and January 1997 with noninstitutionalized individuals in the United States. In each of the three survey years, data were collected from a nationally representative sample of individuals of all ages. The CSFII 1998 was a survey of children ages 0 through 9 which was supplemental to the CSFII 1994-96. It used the same sample design as the CSFII 1994-96 and was intended to be merged with CSFII 1994-96 to increase the sample size for children. The merged surveys are designated as CSFII 1994-96, 1998.

In the CSFII 1994-96, 1998, dietary intakes were collected through in-person interviews using 24-hour recalls on 2 nonconsecutive days approximately one week apart. A total of 21,662 individuals provided data for the first day; of those individuals, 20,607 provided data for a second day. For the USTF analyses, subjects were limited to women ages 15-44 who provided two complete days of dietary recall data.

B. Fish Species Consumed by CSFII Respondents

A CSFII Food Code-to-Commodity Translation File was developed in a joint effort by USDA and EPA to allow estimation of human exposures to pesticide residues and environmental contaminants through intakes of foods and beverages (EPA, 2000). This file translates each CSFII food code into EPA commodity percentages. EPA commodity codes for finfish and shellfish are as follows:

Table 1. Fish commodity codes used in the CSFII Food Code-to-Commodity Translation File

Code	Description
80001570	freshwater finfish
80001580	freshwater finfish, farm
80001590	saltwater finfish, tuna
80001600	saltwater finfish, other
80001610	, crustacean
80001620	mollusc

ENVIRON used the USDA-EPA Food Code-to-Commodity Translation File to quantify the relative amounts of fish commodities in each CSFII food code. After quantifying the fish commodity percentages for each CSFII food code, the commodities were further characterized using the CSFII Recipe Ingredient File provided on CD-ROM (USDA, 2000).

Data on percentages of specific fish species determined for each CSFII code are shown in the Appendix.

Each individual eating occasion that included fish was identified for women age 15-44, and the amount of fish of each species consumed was determined. There were 717 such eating occasions in the data set. This information is summarized in Table 4.

C. Mercury Concentrations

For products other than canned tuna, ENVIRON used mercury concentration data which were presented in EPA documentation for previous mercury exposure estimates (EPA, 1997). For canned tuna, FDA's value from the 1991 Canned Tuna Survey (0.17 mcg/g) was used in ENVIRON analyses (Yess, 1993). Concentration values used for each species are presented in Table 2.

Mercury concentration data for raw fish species were adjusted to reflect cooking losses using the strategy outlined by EPA for baked/broiled products (dry heat methods) and fried products; concentration factors for boiled/steamed (moist heat methods), pickled, smoked, and canned fish (other than tuna) were estimated using cooking yield data from USDA and other sources. Concentration factors applied to mercury levels, by CSFII food code, are shown in the Appendix.

	Mercury Concentration	Mercury
Fish Species	(mcg/g, wet weight)	Compilation Source*
anchovy	0.047	EPA
carp	0.093	EPA
catfish	0.088	EPA
catfish, farmed	0.088	EPA
clam	0.023	EPA
cod	0.121	EPA
conch	0.042	EPA value for scallops
crab	0.117	EPA
croaker	0.125	EPA
eel	0.213	NMFS
flounder	0.092	EPA
haddock	0.089	EPA
halibut	0.25	EPA
herring	0.013	EPA
lobster	0.232	EPA
mackerel	0.081	EPA
mullet	0.009	EPA
mussels	0.023	EPA value for clams
ocean perch	0.116	EPA
oysters ,	0.023	EPA
perch	0.11	EPA
pike	0.31	EPA value for Northern pike
pollock	0.15	EPA
pompano	0.104	EPA
porgy	0.522	NMFS
rockfish	0.34	FDA
salmon	0.035	EPA
sardines	0.1	NMFS
scallops	0.042	EPA
sea bass	0.135	NMFS
shrimp	0.047	EPA
snapper	0.25	EPA
squid	0.026	EPA
trout	0.149	EPA
trout, farmed	0.149	EPA
trout, mixed /-	0.149	EPA
tuna, canned	0.17	Yess (1993)
tuna, fresh	0.206	EPA
whitefish	, 0.054	FDA
whiting	0.041	NMFS
The mercury compilation a Study Report to Congress values were compiled and	source refers to the source of merc Volume IV: An Assessment of Ex used by: US EPA in the Mercury	ury values reported in "EPA-452/R-97-006 Mercury posure to Mercury in the United States", 1997. The Study Report to Congress (1997) (EPA); US FDA in the

Table 2. Mercury concentrations in fish species reported by CSFII respondents

Report on the Chance of U.S. Seafood Consumers Exceeding "The Current Daily Intake for Mercury and Recommended Regulatory Controls" (1978) (FDA); or data supplied by NMFS (NMFS).

, .

3

D. Mercury Exposure Per Fish-Eating Occasion

Mercury exposure per fish-eating occasion was calculated by multiplying the mercury concentration in the species of fish consumed by the amount of the fish. On any occasions in which more than one species of fish was consumed at a single eating occasion, the exposures from each species were summed to obtain the total exposure for the eating occasion.

We compared the distribution of mercury exposures with the data reported by EPA (1997), as shown in Table 3.

	Mercury Intake (mcg)			
	Current Estimate	EPA (1997) Estimate		
Mean	9.0	10.2		
Standard Deviation	14.9	16.8		
50 th Percentile	5.4	6.0		
75 th Percentile	11.6	13.2		
90 th Percentile	19.0	23.4		
95 th Percentile	27.4	31.8		

Table 3. Intake of Mercury per Fish Eating Occasion, Current v. EPA Estimate

Since EPA made a "simplifying assumption" that all the fish consumed during a day "was consumed in a single meal" (p. D-3), the EPA figures are actually mercury intake per day rather than mercury intake per eating occasion. This is likely the primary reason why the EPA estimates are about 15% higher than the current ENVIRON estimates.

Following the method employed by EPA for its 1997 report to Congress (EPA, 1997, Appendix D), a lognormal approximation was developed to represent the distribution of fish consumption and mercury exposures per fish-eating occasion. The parameters of the empirical and lognormal distributions are as follows (Table 4):

	Fish Con	sumption (g)	Mercury	Intake (mcg)
	Empirical Lognormal Empiri Data Approximation Data		Empirical Data	Lognormal Approximation
Mean /-	72.4	72.4	9.0	9.0
Standard Deviation	119.8	119.8	14.9	14.9
25 th Percentile	16.9	16.9	2.1	2.1
50 th Percentile	43.4	37.0	5.4	4.6
75 th Percentile	93.3	81.2	11.6	10.1
90 th Percentile	152.8	162.4	19.0	20.2
95 th Percentile	-220.3	246.8	27.4	30.7
97.5 th Percentile	270.1	354.6	33.6	44.1
99 th Percentile	385.9	541.1	48.0	67.3

 Table 4. Consumption of Fish and Intake of Mercury per Fish Eating Occasion, Empirical Data v. Lognormal Approximation

E. Frequency of Fish Consumption

In its 1997 report, EPA estimated frequency of consumption of all fish species combined based on a single frequency question presented to adult respondents in the Third National Health and Nutrition Examination Survey conducted in 1988-1994 (EPA, 1997). For this analysis, we relied on this question combined with another source of information to provide more precise data on the frequency of consumption of fish by high-frequency consumers, the National Eating Trends (NET) survey conducted annually by the NPD Group. Each annual NET survey consists of 2,000 responding households, each of which maintains a daily journal of consumption for food consumed at home or prepared at home and taken away for 14 consecutive days; the panels are staggered to provide coverage throughout the year. In order to obtain an adequate number of respondents, four survey years ending in February 2000 were combined. This provided a sample of 3,881 women age 18-44 (the closest to the age 15-44 target group available). Of these women, 2,014 (51.9%) reported eating fish at least one time over the 14-day survey period. Just over half of them (1029, 51.1%) reported eating fish only one time during the two weeks. The highest reported frequency of consumption of fish was 14 occasions over 14 days.

All reported consumption frequencies were converted from "number of times in 14 days" to "number of times in 30 days" or "times per month." Thus, a person who reported eating fish 7 times in 14 days was assumed to eat fish 15 times in 30 days. The NET data include only fish consumed at home or prepared at home and taken away. According to data from the 1994-96 CSFII, 36% of the mercury intake from fish by women age 15-44 resulted from fish consumed away from home; the remaining 64% was from fish either consumed at home or prepared at home and taken away and thus included in the NET database. In order to account for these additional eating occasions, all NET frequencies were multiplied by 1.56 (100%/64%). Thus, a woman who reported eating fish at home 5 times in 14 days was estimated to have eaten fish (both at home and away from home) a total of 7.8 times (5 x 1.56) in 14 days, or 16.7 times in 30 days.

While these data provide information about frequency of consumption of fish for those who eat it fairly frequently, they do not help establish frequencies for those who eat fish less often, such as once a month or once every few months. To address infrequent consumption, we used the NHANES frequency question as reported by EPA (1997, p. 4-17)

Again following the EPA method, the combined empirical frequency was approximated by a lognormal distribution. The parameters of the empirical and lognormal distributions (in times fish is eaten per month) are as shown in Table 5:

	Times per N	Nonth Fish Is Eaten
	Empirical Data	Lognormal Approximation
Mean	4.6	4.6
Standard Deviation	4.5	4.5
25 th Percentile	1.4	1.5
, 50 th Percentile	2.5	2.9
/ 75 th Percentile	4.3	6.2
90 th Percentile	8.7	9.8
95 th Percentile	11.8	12.8
97.5 th Percentile	14.9	16.1
99 th Percentile	19.5	21.1

Table 5. Times Per Month Fish Is Eaten, Empirical Data v. Lognormal Approximation

F. Monte Carlo Analysis

1

It will be noted that both lognormal distributions somewhat exaggerate the empirical distributions. Since these overestimates assure that all exposure estimates will be conservative, they were accepted. Crystal

Ball®, Version 4.0 (Decisioneering, 1996), was used to run 10,000 Monte Carlo iterations using the two lognormal distributions. The output was reported in g fish and mcg mercury from fish consumed per month by women age 15-44; these estimates were divided by 30 to estimate daily exposure.

It must be recognized that lognormal approximations are unbounded—i.e., they include non-zero probabilities of consumption of impossibly large portions of fish and frequencies of consumption. As a result, intakes of fish and mercury at extreme upper percentiles of intake are likely overestimated by these models and the probabilistic methods that employ them.

III. Results and Discussion

The results of these analyses are reported below in Table 6.

	Fish Consumption (g/day)	Mercury Exposure (mcg/day)
Mean	11.3	1.4
25 th Percentile	0.8	0.1
50 th Percentile	4.1	0.5
75 th Percentile	12.1	1.5
90 th Percentile	27.3	3.4
95 th Percentile	45.8	5,7
97.5 th Percentile	69.9	8.7
99 th Percentile	115.0	14.3

Table 6: Usual Daily Consumption of Fish and Exposure to Mercury From Fish

Although women age 15-44 eat more than 70 g of fish per eating occasion, on average, their mean frequency of eating occasions that include fish is only about 4.6 times per month. Thus, their usual daily consumption of fish is about 11.3 g.. As a result, the intake of mercury from consumption of fish by most U.S. women age 15-44 is very low. At the mean, the daily intake of mercury from fish is about 1.4 mcg. However, at the extreme upper percentiles of intake (above the 95th percentile), mercury exposure from fish may exceed the RfD suggested in the National Academy of Sciences report (NAS, 2000).

IV. References

Environmental Protection Agency (EPA) (1997). Mercury Study Report to Congress; Volume IV: An Assessment of Exposure to Mercury in the United States; EPA-452/R-97-006.

Environmental Protection Agency. (2000), Food Commodity Intake Database (FCID) [CD-ROM], data and documentation. National Technical Information Service, Accession No. PB2000-500101.

National Academy of Sciences, Committee on the Toxicological Effects of Methylmercury (2000). Toxicological Effects of Methylmercury. National Academy Press, Washington DC.

US Department of Agriculture, Agricultural Research Service (2000). 1994-96, 1998 Continuing Survey of Food Intakes by Individuals [CD-ROM], data and documentation. National Technical Information Service, Accession No. PB2000-500027.

Yess, N.J. (1993). U.S. Food and Drug Administration Survey of Methyl Mercury in Canned Tuna. JAOAC 76(1):36-37.

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code (g/100g)
14420200	CHEESE SPREAD, CREAM CHEESE OR NEUFCHATEL BASE	0	crab	canned	1.1	0.001
14420200	CHEESE SPREAD, CREAM CHEESE OR NEUFCHATEL BASE	0	salmon	canned	1.1	0.001
14620120	SHRIMP DIP, CREAM CHEESE BASE (INCL CLAM DIP)	0	crab	canned	1.1	0.001
14620120	SHRIMP DIP, CREAM CHEESE BASE (INCL CLAM DIP)	0	shrimp	canned	1.1	26.100
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	200968	cod	dry heat	1.33	21.150
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	0	cod	dry heat	1.33	21.130
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	200968	flounder	dry heat	1.33	14.383
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	0	flounder	dry heat	1.33	14.370
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	200968	pollock	dry heat	1.33	45.316
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	0	pollock	dry heat	1.33	45.273
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	200968	rockfish	dry heat	1.33	6.674
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	0	rockfish	dry heat	1.33	6.667
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	200968	whiting	dry heat	1.33	6.487
26100120	FISH, NS AS TO TYPE, BAKED OR BROILED	0	whiting	dry heat	1.33	6.481
26100130	FISH, NS AS TO TYPE, BREADED OR BATTERED, BAKED	0	cod	dry heat	1.33	16.763
26100130	FISH, NS AS TO TYPE, BREADED OR BATTERED, BAKED	0	flounder	dry heat	1.33	F1.400
26100130	FISH, NS AS TO TYPE, BREADED OR BATTERED, BAKED	0	pollock	dry heat	1.33	35.916
26100130	FISH, NS AS TO TYPE, BREADED OR BATTERED, BAKED	0	rockfish	dry heat	1.33	5.289
26100130	FISH, NS AS TO TYPE, BREADED OR BATTERED, BAKED	0	whiting	dry heat	1.33	5.141
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	0	cod	fried	1.14	16.729
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100854	cod	fried	1.14	16.729
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100258	cod	fried	1.14	16.729
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	0	flounder	fried	1.14	11.377

Appendix. Translation of CSFII food codes to fish species percentages, by processing method

۲.

Ń

Food Code	Foodname	Recipe Modification Code	Fish Specie s	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100258	flounder	fried	1.14	11.377
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100854	flounder	fried	1.14	11.377
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100854	pollock	fried	1.14	35.844
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	0	pollock	fried	1.14	35.844
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100258	pollock	fried	1.14	35,844
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100854	rockfish	fried	1.14	5.279
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	0	rockfish	fried	1.14	5.279
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100258	rockfish	fried	1.14	5.279
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	0	whiting	fried	1.14	5.131
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100854	whiting	fried	1.14	5.131
26100140	FISH, NS AS TO TYPE, FLOURED OR BREADED, FRIED	100258	whiting	fried	1.14	5.131
26100150	FISH, NS AS TO TYPE, BATTERED, FRIED	0	cod	fried	1.14	15,190
26100150	FISH, NS AS TO TYPE, BATTERED, FRIED	0	flounder	fried	1.14	10.329
26100150	FISH, NS AS TO TYPE, BATTERED, FRIED	0	pollock	fried	1.14	32.540
26100150	FISH, NS AS TO TYPE, BATTERED, FRIED	0	rockfish	fried	1.14	4.793
26100150	FISH, NS AS TO TYPE, BATTERED, FRIED	0	whiting	fried	1.14	4.658
26100170	FISH, NS AS TO TYPE, DRIED	0	cod	dried	4.5	88.910
26100180	FISH, NS AS TO TYPE, CANNED	0	salmon	canned	,1.1	24.620
.26100180	FISH, NS AS TO TYPE, CANNED	0	tuna,	canned	1	74.480
26100190	FISH, NS AS TO TYPE, SMOKED	0	salmon	smoked	1	85.160
26100190	FISH, NS AS TO TYPE, SMOKED	0	whitefish	smoked	1.1	13.080
26)00210	FISH STICK/FILLET, COOKED, NS TYPE & COOKING METHOD	0	pollock	dry heat	1.33	44.840
26100230	FISH STICK/FILLET, NS TYPE, BREADED/BATTERED, BAKED	0	pollock	dry heat	1.33	44.840
26100240	FISH STICK/FILLET, NS TYPE, FLOURED/BREADED, FRIED	0	pollock	fried	1.14	74.400
26100240	FISH STICK/FILLET, NS TYPE, FLOURED/BREADED, FRIED	101130	pollock	fried	1.14	74.400
26100250	FISH STICK OR FILLET, NS AS TO TYPE, BATTERED, FRIED	0	pollock	fried	1.14	67.630
26101110	ANCHOVY, COOKED, NS AS TO COOKING METHOD	0	anchovy	pickled	1.9	91.566
26105120	CARP, BAKED OR BROILED	202727	carp	dry heat	1.33	90.370

.....

. . . .

٠.

یت است

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code
26105140	CARP, FLOURED OR BREADED, FRIED	0	carp	fried	1.14	67.870
26105140	CARP, FLOURED OR BREADED, FRIED	203086	carp	fried	1.14	67.870
26105160	CARP, STEAMED OR POACHED	0	carp	moist heat	1.14	100.000
26107120	CATFISH, BAKED OR BROILED	0	catfish,	dry heat	1.33	90,390
26107130	CATFISH, BREADED OR BATTERED, BAKED	201360	catfish,	dry heat	1.33	64,490
26107130	CATFISH, BREADED OR BATTERED, BAKED	100572	catfish,	dry heat	1.33	74.050
26107140	CATFISH, FLOURED OR BREADED, FRIED	100436	catfish,	fried	1.14	67.450
26107140	CATFISH, FLOURED OR BREADED, FRIED	0	catfish,	fried	1.14	67.450
26107140	CATFISH, FLOURED OR BREADED, FRIED	100387	catfish,	fried	1.14	67.450
26107150	CATFISH, BATTERED, FRIED (INCLUDE BULLHEAD)	0	catfish,	fried	1.14	57.090
26107150	CATFISH, BATTERED, FRIED (INCLUDE BULLHEAD)	201662	catfish,	fried	1.14	57.090
26107160	CATFISH, STEAMED OR POACHED	0	catfish,	moist heat	1.14	100.000
26109120	COD, BAKED OR BROILED	0	cod	dry heat	1.33	93,450
26109120	COD, BAKED OR BROILED	200971	cod	dry heat	1.33	93.420
26109130	COD, BREADED OR BATTERED, BAKED	203682	cod	dry heat	1.33	74.810
26109130	COD, BREADED OR BATTERED, BAKED	0	cod	dry heat	1.33	74.540
26109140	COD, FLOURED OR BREADED, FRIED	0	cod	fried	1.14	74.340
26109140	COD, FLOURED OR BREADED, FRIED	101002	cod	fried	1,14	74.340
26109150	COD, BATTERED, FRIED	0	cod	fried	1.14	69.860
26111140	CROAKER, FLOURED OR BREADED, FRIED	100455	croaker	fried	1.14	62.580
26113110	EEL, COOKED, NS AS TO COOKING METHOD	0	cel	dry heat	1.33	86.810
26115120	FLOUNDER, BAKED OR BROILED	100464	flounder	dry heat	1.33	96.860
26115120	FLOUNDER, BAKED OR BROILED	0	flounder	dry heat	1.33	93.470
26115140	FLOUNDER, FLOURED OR BREADED, FRIED	0	flounder	fried	1.14	74.390
26115140	FLOUNDER, FLOURED OR BREADED, FRIED	100907	flounder	fried	1.14	74.390
26115150	FLOUNDER, BATTERED, FRIED	201594	flounder	fried	1.14	67.580
26117120	HADDOCK, BAKED OR BROILED	201747	haddock	dry heat	1.33	93.320
26117130	HADDOCK, BREADED OR BATTERED, BAKED	0	haddock	dry heat	1.33	74.530

 \mathbf{v}

ш 1

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code
26117130	HADDOCK, BREADED OR BATTERED, BAKED	203691	haddock	dry heat	1.33	74.530
26117140	HADDOCK, FLOURED OR BREADED, FRIED	. 0	haddock	fried	1.14	74.370
26117150	HADDOCK, BATTERED, 'FRIED	0	haddock	fried	1.14	69.930
26119120	HERRING, BAKED OR BROILED	0	herring	dry heat	1.33	91.470
26121110	MACKEREL, COOKED, NS AS TO COOKING METHOD	0	mackerel	dry heat	1.33	93.610
26121180	MACKEREL, CANNED	0	mackerel	canned	1.1	99.240
26123140	MULLET, FLOURED OR BREADED, FRIED	100501	mullet	fried	1.14	67.130
26125120	OCEAN PERCH, BAKED OR BROILED	0	ocean	dry heat	1.33	93.480
26125120	OCEAN PERCH, BAKED OR BROILED	201950	ocean	dry heat	1.33	93.460
26125140	OCEAN PERCH, FLOURED OR BREADED, FRIED	100975	ocean	fried	1.14	74.390
26127120	PERCH, BAKED OR BROILED	200860	perch	dry heat	1.33	93.450
26127120	PERCH, BAKED OR BROILED	0	perch	dry heat	1.33	93.470
26127130	PERCH, BREADED OR BATTERED, BAKED	0	perch	dry heat	1.33	78.070
26127140	PERCH, FLOURED OR BREADED, FRIED	100829	perch	fried	1.14	64.140
26127140	PERCH, FLOURED OR BREADED, FRIED	0	perch	fried	1.14	64.140
26127150	PERCH, BATTERED, FRIED	0	perch	fried	1.14	69.960
26129120	PIKE, BAKED OR BROILED	201172	pike	dry heat	1.33	93.450
26131100	POMPANO, RAW	0	pompano	raw	, 1	100.000
26131120	POMPANO, BAKED OR BROILED	203073	pompano	dry heat	1.33	90.220
26131120	POMPANO, BAKED OR BROILED	202612	pompano	dry heat	1.33	90.220
26131140	POMPANO, FLOURED OR BREADED, FRIED	0	pompano	fried	1.14	67.420
26133120	PORGY, BAKED OR BROILED	200192	porgy	dry heat	1.33	88.460
26133140	PORGY, FLOURED OR BREADED, FRIED	101048	porgy	fried	1.14	62.740
26137120	SALMON, BAKED OR BROILED	201437	salmon	dry heat	1.33	96.440
26137120	SALMON, BAKED OR BROILED	203550	salmon	dry heat	1.33	92.370
26137120	SALMON, BAKED OR BROILED	200265	salmon	dry heat	1.33	92.420
26137120	SALMON, BAKED OR BROILED	0	salmon	dry heat	1.33	92.440
26137120	SALMON, BAKED OR BROILED	200202	salmon	dry heat	1.33	92.370

.

٠,

Food Code	Foodname	Recipe Modification Code	Fish	Processing	Mercury Concentration	Amount of Fish per Food Code
26137140	SALMON, FLOURED OR BREADED, FRIED	100932	salmon	fried	1 14	(g/100g) 73.670
26137140	SALMON, FLOURED OR BREADED, FRIED	0	salmon	fried	1.14	73.670
26137150	SALMON, BATTERED, FRIED	0	salmon	fried	1.14	67 720
26137180	SALMON, CANNED	0	salmon	canned	1.1	98 900
26137190	SALMON, SMOKED (INCLUDE LOX)	0	salmon	smoked	1.1	98.100
26139180	SARDINES, CANNED IN OIL	0	sardines	canned	1.1	99 240
26141120	SEA BASS, BAKED OR BROILED	200913	sea bass	dry heat	1.33	92,340
26141120	SEA BASS, BAKED OR BROILED	203326	sea bass	dry heat	1.33	96.410
26141140	SEA BASS, FLOURED OR BREADED, FRIED	100856	sea bass	fried	1.14	73.610
26151120	TROUT, BAKED OR BROILED	202336	trout,	dry heat	1.33	46.765
26151120	TROUT, BAKED OR BROILED	200348	trout,	dry heat	1.33	46.780
26151120	TROUT, BAKED OR BROILED	0	trout,	dry heat	1.33	46.780
26151120	TROUT, BAKED OR BROILED	202336	trout,	dry heat	1.33	46.765
26151120	TROUT, BAKED OR BROILED	200348	trout,	dry heat	1.33	46.780
26151120	TROUT, BAKED OR BROILED	0	trout,	dry heat	1.33	46.780
26151140	TROUT, FLOURED OR BREADED, FRIED	0	trout,	fried	1.14	36.910
26151140	TROUT, FLOURED OR BREADED, FRIED	101083	trout,	fried	1.14	36.910
26151140	TROUT, FLOURED OR BREADED, FRIED	0	trout,	fried	1.14	36.910
26151140	TROUT, FLOURED OR BREADED, FRIED	101083	trout,	fried	1.14	36.910
26151150	TROUT, BATTERED, FRIED	202740	trout,	fried	1.14	35.190
26151150	TROUT, BATTERED, FRIED	0	trout,	fried	1.14	3.5.190
26151150	TROUT, BATTERED, FRIED	0	trout,	fried	1.14	35.190
26151150	TROUT, BATTERED, FRIED	202740	trout,	fried	1.14	35.190
26151160	TROUT, STEAMED OR POACHED	0	trout,	moist heat	1.14	50.000
26151160	TROUT, STEAMED OR POACHED	0	trout,	moist heat	1.14	50.000
26151190	TROUT, SMOKED	0	trout,	smoked	1.1	50.000
26151190	TROUT, SMOKED	0	trout,	smoked	1.1	50.000
26153100	TUNA, FRESH, RAW	0	tuna, fresh	raw	1	100.000

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor	Amount of Fish per Food Code
26153120	TUNA, FRESH, BAKED OR BROILED	0	tuna, fresh	dry heat	1.33	93 590
26155110	TUNA, CANNED, NS AS TO OIL OR WATER PACK	0	tuna,	canned	1	99.180
26155180	TUNA, CANNED, OIL PACK	0	tuna,	canned	1	93.250
26155190	TUNA, CANNED, WATER PACK	0	tuna,	canned	1	99.180
26157120	WHITING, BAKED OR BROILED	201895	whiting	dry heat	1.33	96.850
26157140	WHITING, FLOURED OR BREADED, FRIED	0	whiting	fried	1.14	74.360
26157140	WHITING, FLOURED OR BREADED, FRIED	202630	whiting	fried	1.14	74.360
26157150	WHITING, BATTERED, FRIED	203463	whiting	fried	1.14	69.910
26211100	ROE, STURGEON (INCLUDE CAVIAR)	0	roe	pickled	1.1	100.000
26213120	SQUID, BAKED OR BROILED	202157	squid	dry heat	1.33	96.360
26213120	SQUID, BAKED OR BROILED	201481	squid	dry heat	1.33	96.390
26213140	SQUID, BREADED, FRIED	0	squid	fried	1.14	77.020
26303100	CLAMS, RAW	0	clam	raw	1	100.000
26303120	CLAMS, BAKED OR BROILED	0	clam	dry heat	1.33	92.980
26303140	CLAMS, FLOURED OR BREADED, FRIED	0	clam	fried	1.14	76.970
26303160	CLAMS, STEAMED OR BOILED	0	clam	moist heat	1.14	100.000
26303180	CLAMS, CANNED	0	clam	canned	1.1	100.000
26304200	CONCH, BAKED OR BROILED	0	conch	dry heat	1.33	100.000
26305110	CRAB, COOKED, NS AS TO COOKING METHOD	0	crab	dry heat	1.33	100.000
26305120	CRAB, BAKED OR BROILED (INCL SAUTEED)	0	crab	dry heat	1.33	94.150
26305160	CRAB, HARD SHELL, STEAMED	0	crab	moist heat	1.14	100.000
26311120	LOBSTER, BAKED OR BROILED	0	lobster	dry heat	1.33	96.970
26311160	LOBSTER, STEAMED OR BOILED	0	lobster	moist heat	1.14	100.000
26313110	MUSSELS, COOKED, NS AS TO COOKING METHOD	0	mussels	dry heat	1.33	93.050
26313110	MUSSELS, COOKED, NS AS TO COOKING METHOD	203495	mussels	dry heat	1.33	93.010
26315100	OYSTERS, RAW	0	oysters	raw	1	100.000
26315180	OYSTERS, CANNED	0	oysters	canned	1.1	100.000
26317110	SCALLOPS, COOKED, NS AS TO COOKING METHOD	0	scallops	dry heat	1.33	74.400

×. a

Υ.

...

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration	Amount of Fish per Food Code
26317120	SCALLOPS, BAKED OR BROILED	0	scallops	dry heat	1.33	96 390
26319110	SHRIMP, COOKED, NS AS TO COOKING METHOD	0	shrimp	dry heat	1.33	100.000
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	0	shrimp	dry heat	1.33	96.390
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	100113	shrimp	dry heat	1.33	96.360
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	203272	shrimp	dry heat	1.33	96.390
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	202863	shrimp	dry heat	1.33	100.000
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	200875	shrimp	dry heat	1.33	96.370
26319120	SHRIMP, BAKED OR BROILED (INCL SAUTEED; PRAWN)	200498	shrimp	dry heat	1.33	96.360
26319130	SHRIMP, STEAMED OR BOILED	0	shrimp	moist heat	1.14	100.000
26319140	SHRIMP, BREADED OR BATTERED, FRIED	0	shrimp	fried	1.14	66.730
26319140	SHRIMP, BREADED OR BATTERED, FRIED	203183	shrimp	fried	1.14	66.730
26319170	SHRIMP, DRIED	0	shrimp	dried	4.5	100.000
27150100	SHRIMP, CURRIED	0	shrimp	moist heat	1.14	36.700
27150110	SHRIMP COCKTAIL (SHRIMP W/ COCKTAIL SAUCE)	0	shrimp	moist heat	1.14	49.240
27150140	CLAM SAUCE, WHITE	0	clam	canned	1.1	65.590
27150210	FISH SAUCE (BAGOONG)	0	anchovy	pickled	1.9	4.670
27150230	SHRIMP SCAMPI	0	shrimp	dry heat	1.33	81.860
27150310	FISH W/ TOMATO-BASED SAUCE (MIXTURE)	203761	flounder	moist heat	1.14	65.830
27150410	SHRIMP TERIYAKI	0	shrimp	dry heat	1.33	66.820
27250020	CLAMS, STUFFED	<u>'</u> 0	clam	dry heat	1.33	51.380
27250030	CODFISH BALL OR CAKE	0	cod	dry heat	1.33	39.910
27250040	CRAB CAKE	0	crab	canned	1.1	81.400
27250050	FISH CAKE OR PATTY, NS AS TO FISH	0	cod	dry heat	1.33	39.910
27250070	SALMON CAKE OR PATTY (INCLUDE SALMON CROQUETTE)	0	salmon	canned	1.1	43.040
27250070	SALMON CAKE OR PATTY (INCLUDE SALMON CROQUETTE)	100890	salmon	canned	1.1	43.040
27250070	SALMON CAKE OR PATTY (INCLUDE SALMON CROQUETTE)	100813	salmon	canned	1.1	43.040
27250110	SCALLOPS & NOODLES W/ CHEESE SAUCE (MIXTURE)	0	scallops	moist heat	1.14	37.250
27250160	TUNA CAKE OR PATTY	0	tuna,	canned	1	42.590

Ì,

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code
27250250	FLOUNDER W/CRAB STUFFING	0	crab	canned	1.1	15.540
27250250	FLOUNDER W/CRAB STUFFING	. 0	flounder	dry heat	1.33	61.810
27250410	SHRIMP W/ CRAB STUFFING	0	crab	canned	1.1	74.230
27250410	SHRIMP W/ CRAB STUFFING	0	shrimp	moist heat	1.14	0.150
27250520	SEAFOOD, RESTRUCTURED (INCL IMITATION CRABMEAT)	0	pollock	canned	1.1	68.970
27250630	TUNA NOODLE CASSEROLE W/ (MUSHROOM) SOUP	203749	tuna,	canned	1	27.000
27250630	TUNA NOODLE CASSEROLE W/ (MUSHROOM) SOUP	202593	tuna,	canned	1	27.000
27250710	TUNA & RICE W/ (MUSHROOM) SOUP (MIXTURE)	0	tuna,	canned	1	17.530
27350050	SHRIMP CHOW MEIN OR CHOP SUEY W/ NOODLES	0	shrimp	canned	1.1	19.280
27350080	TUNA NOODLE CASSEROLE W/ VEG, CREAM OR WHITE SAUCE	0	tuna,	canned	1	15.330
27350080	TUNA NOODLE CASSEROLE W/ VEG, CREAM OR WHITE SAUCE	100388	tuna,	canned	1	15.340
27350100	FISH, NOODLES, VEG (NO CAR/DK GRN), CHEESE SAUCE	0	tuna,	canned	1	25.780
27350110	BOUILLABAISSE	0	catfish	moist heat	1.14	0.105
27350110	BOUILLABAISSE	0	clam	canned	1.1	6.946
27350110	BOUILLABAISSE	0	halibut	moist heat	1.14	10.594
27350110	BOUILLABAISSE	0	lobster	moist heat	1.14	5.265
27350110	BOUILLABAISSE	0	mussels	moist heat	1.14	6.946
27350110	BOUILLABAISSE	0	pompano	moist heat	1.14	10.594
27350110	BOUILLABAISSE	0	scallops	moist heat	1.14	6.946
27350110	BOUILLABAISSE	·0	shrimp	canned	1.1	5.265
27350110	BOUILLABAISSE	0	snapper	moist heat	1.14	10.594
27350310	SEAFOOD STEW W/ POT & VEG (W/ CAR/DK GREEN), TOM SCE	100142	catfish	moist heat	1.14	36.660
27350410	TUNA NOODLE CASSEROLE W/ VEG & (MUSHROOM) SOUP	0	tuna,	canned	1	22.470
27351030	STEWED CODFISH, P.R. (BACALAO GUISADO)	0	cod	moist heat	1.14	25.840
27450010	CRAB SALAD	0	crab	canned	1.1	63.790
27450010	CRAB SALAD	203402	crab	canned	1.1	64.470
27450030	SALMON SALAD	100335	salmon	canned	1.1	60.630
27450060	TUNA SALAD	201412	tuna,	canned	1	53.660

.1

44 - 4 - 4

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code (g/100g)
27450060	TUNA SALAD	200449	tuna,	canned	1	53.790
27450060	TUNA SALAD	202153	tuna,	canned	1	62.530
27450060	TUNA SALAD	200685	tuna,	canned	1	53.180
27450060	TUNA SALAD	200099	tuna,	canned	1	52.990
27450060	TUNA SALAD	200020	tuna,	canned	1	53.760
27450060	TUNA SALAD	100321	tuna,	canned	1	53.660
27450060	TUNA SALAD	100008	tuna,	canned	1	54.150
27450060	TUNA SALAD	0	tuna,	canned	1	53.660
27450070	SHRIMP SALAD	0	shrimp	canned	1.1	62.020
27450090	TUNA SALAD W/ CHEESE	100275	tuna,	canned	1	45.850
27450100	TUNA SALAD W/ EGG	0	tuna,	canned	1	46.410
27450100	TUNA SALAD W/ EGG	201509	tuna,	canned	1	46.110
27450100	TUNA SALAD W/ EGG	202694	tuna,	canned	1	45.960
27450100	TUNA SALAD W/ EGG	200455	tuna,	canned	1	46.290
27450100	TUNA SALAD W/ EGG	100224	tuna,	canned	1	54.820
27450100	TUNA SALAD W/ EGG	100039	tuna,	canned	· 1	46.870
27450100	TUNA SALAD W/ EGG	201154	tuna,	canned	1	45.780
27450100	TUNA SALAD W/ EGG	100026	tuna,	canned	1	46.500
27450120	SHRIMP GARDEN SALAD (NO TOMATO/CARROT, NO DRESSING)	0	shrimp	canned	1.1	42.800
27450130	CRAB SALAD MADE W/ IMITATION CRAB	· 0	pollock	canned	1.1	43.810
27450130	CRAB SALAD MADE W/ IMITATION CRAB	202453	pollock	canned	1.1	43.170
27450130	CRAB SALAD MADE W/ IMITATION CRAB	100551	pollock	canned	1.1	44.270
27450190	SEAFOOD GARDEN SALAD W/ TOM/CAR, NO DRESSING	0	crab	canned	1.1	14.990
27450190	SEAFOOD GARDEN SALAD W/ TOM/CAR, NO DRESSING	0	shrimp	canned	1.1	14.990
27450310	LOMI SALMON	0	salmon	pickled	1.1	34.560
27450410	SHRIMP & VEG (W/ CAR/DK GREEN, NO POT), SOY SAUCE	203621	shrimp	moist heat	1.14	13.700
27450410	SHRIMP & VEG (W/ CAR/DK GREEN, NO POT), SOY SAUCE	0	shrimp	canned	1.1	12.890
27450450	SHRIMP CREOLE, NO RICE	0	shrimp	moist heat	1.14	52.220

. .

.

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration	Amount of Fish per Food Code
27450510	TUNA CASSEROLE W/ VEG & SOUP, NO NOODLES	0	tuna,	canned	1	30.380
27450750	FISH & VEGETABLES (NO CAR/DK GRN), SOY-BASED SAUCE	100467	porgy	moist heat	1.14	63.640
27460010	CHOW MEIN, NS AS TO'TYPE OF MEAT, NO NOODLES	0	shrimp	canned	1.1	6.690
27460510	ANTIPASTO W/ HAM, FISH, CHEESE, VEGETABLES	0	anchovy	pickled	1.9	6.020
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	100414	crab	canned	1.1	1.893
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	0	crab	canned	1.1	1.893
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	0	oysters	moist heat	1.14	5.330
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	100414	oysters	moist heat	1.14	5.330
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	100414	shrimp	canned	1.1	1.997
27464000	GUMBO, NO RICE (NEW ORLEANS TYPE W/MEAT, TOM, OKRA)	0	shrimp	canned	1.1	1.997
27550000	FISH SANDWICH, ON BUN, W/ SPREAD	100254	haddock	fried	1.14	35.300
27550000	FISH SANDWICH, ON BUN, W/ SPREAD	0	haddock	fried	1.14	35.390
27550100	FISH SANDWICH, ON BUN, W/ CHEESE AND SPREAD	0	haddock	fried	1.14	29.750
27550710	TUNA SALAD SANDWICH W/ LETTUCE	0	tuna,	canned	1	34.240
27550720	TUNA SALAD SANDWICH	0	tuna,	canned	1	36.420
27550720	TUNA SALAD SANDWICH	100053	tuna,	canned	1	35.520
27550720	TUNA SALAD SANDWICH	100844	tuna,	canned	1	36.630
27550720	TUNA SALAD SANDWICH	200109	tuna,	canned	、 1	36.470
27550720	TUNA SALAD SANDWICH	201529	tuna,	canned	1.	36.420
27550750	TUNA SALAD SUB, ON ROLL, W/ LETTUCE	. 0	tuna,	canned	1	26.200
28153010	SHRIMP & CLAMS IN TOMATO SCE, W/ NOODLES(FROZ MEAL)	0	clam	canned	1.1	12.840
28153010	SHRIMP & CLAMS IN TOMATO SCE, W/ NOODLES(FROZ MEAL)	0	shrimp	canned	1.1	9.050
28310330	BEEF & NOODLE SOUP, ORIENTAL (VIETNAMESE PHO BO)	0	anchovy	pickled	1.9	0.080
28350040	FISH STOCK, HOME RECIPE	0	cod	moist heat	1.14	1.720
28350040	FISH STOCK, HOME RECIPE	0	salmon	moist heat	1.14	1.720
28350050	FISH CHOWDER (INCL FISHERMAN'S SOUP, SEAFOOD CHOWD)	0	cod	moist heat	1.14	33.060
28350210	CLAM CHOWDER, NS AS TO MANHATTAN OR NEW ENGLAND	Ō	clam	canned	1.1	37.890
28355110	CLAM CHOWDER, NEW ENG, NS AS TO MILK OR WATER ADDED	0	clam	canned	1.1	39.910

. -

.

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ¹	Amount of Fish per Food Code
28355120	CLAM CHOWDER, NEW ENGLAND, W/ MILK	100130	clam	canned	1.1	39.910
28355120	CLAM CHOWDER, NEW ENGLAND, W/ MILK	0	clam	canned	1.1	39.910
28355120	CLAM CHOWDER, NEW ENGLAND, W/ MILK	202311	clam	canned	1.1	39.910
28355260	LOBSTER GUMBO	0	lobster	moist heat	1.14	11.060
28355350	SALMON SOUP, CREAM STYLE	0	salmon	canned	1.1	45.350
28355470	SEAFOOD SOUP W/ VEGETABLES (INCL DK GREEN LEAFY)	0	cod	moist heat	1.14	31.150
54406200	SHRIMP CHIPS	0	shrimp	fried	1.14	11.930
58100900	ENCHILADA W/ SEAFOOD, TOMATO SAUCE	101090	cod	moist heat	1.14	27.800
58100900	ENCHILADA W/ SEAFOOD, TOMATO SAUCE	0	shrimp	canned	1.1	27.990
58101540	TACO OR TOSTADA W/ FISH	0	crab	canned	1.1	19.395
58101540	TACO OR TOSTADA W/ FISH	0	shrimp	canned	1.1	19.395
58106910	PIZZA W/ SEAFOOD, THIN CRUST	0	anchovy	pickled	1.9	4.610
58106910	PIZZA W/ SEAFOOD, THIN CRUST	0	shrimp	canned	1.1	6.980
58110120	EGG ROLL, W/ SHRIMP	0	shrimp	canned	1.1	5.590
58111200	PUFFS, FRIED, CRAB MEAT & CREAM CHEESE FILLED	0	crab	fried	1.14	10.920
58112110	DIM SUM, MEAT FILLED (INCL SHRIMP, PORK, HAM)	0	shrimp	canned	• 1.1	13.530
58112510	DUMPLING, STEAMED, FILLED W/ MEAT OR SEAFOOD	0	clam	moist heat	1.14	3.840
58112510	DUMPLING, STEAMED, FILLED W/ MEAT OR SEAFOOD	0	pollock	canned	1.1	3.840
58112510	DUMPLING, STEAMED, FILLED W/ MEAT OR SEAFOOD	. 0	salmon	moist heat	1.14	3.840
58112510	DUMPLING, STEAMED, FILLED W/ MEAT OR SEAFOOD	· 0	shrimp	canned	1.1	3.840
58125110	QUICHE W/ MEAT, POULTRY OR FISH	0	crab	canned	1.1	0.280
58125110	QUICHE W/ MEAT, POULTRY OR FISH	100851	crab	canned	1.1	0.280
58125110	QUICHE W/ MEAT, POULTRY OR FISH	0	pollock	canned	1.1	0.270
58125110	QUICHE W/ MEAT, POULTRY OR FISH	100851	pollock	canned	1.1	0.270
58125110	QUICHE W/ MEAT, POULTRY OR FISH	100851	salmon	canned	1.1	0.280
58125110	QUICHE W/ MEAT, POULTRY OR FISH	0	salmon	canned	1.1	0.280
58125110	QUICHE W/ MEAT, POULTRY OR FISH	100851	shrimp	canned	1.1	0.280
58125110	QUICHE W/ MEAT, POULTRY OR FISH	0	shrimp	canned	1.1	0.280

``

;

Food Code	Foodname	Recipe Modification Code	Fish Species	Processing	Mercury Concentration Factor ⁱ	Amount of Fish per Food Code (g/100g)
58136130	LO MEIN WITH SHRIMP	0	shrimp	canned	1.1	20.620
58145120	MACARONI OR NOODLES W/ CHEESE & TUNA	200545	tuna,	canned	1	16.220
58145120	MACARONI OR NOODLES W/ CHEESE & TUNA	0	tuna,	canned	1	16.230
58148130	MACARONI SALAD W/ TUNA	0	tuna,	canned	1	15.080
58148130	MACARONI SALAD W/ TUNA	202070	tuna,	canned	1	15.070
58148140	MACARONI SALĄD W/ CRAB MEAT	0	crab	canned	1.1	13.580
58148140	MACARONI SALAD W/ CRAB MEAT	203037	pollock	canned	1.1	8.820
58148160	MACARONI SALAD W/ TUNA & EGG	0	tuna,	canned	1	16.720
58148550	PASTA SALAD W/ MEAT (MACARONI, VEG, MEAT, DRESSING)	101031	shrimp	canned	1.1	15.650
58148550	PASTA SALAD W/ MEAT (MACARONI, VEG, MEAT, DRESSING)	101089	shrimp	canned	1.1	15.780
58150510	RICE, FRIED, W/ SHRIMP	0	shrimp	canned	1.1	6.190
58151100	SUSHI, NFS	0	halibut *	raw	1	8.540
58151130	SUSHI, W/ VEGETABLES & FISH	0	flounder	гаw	1	12.480
58151130	SUSHI, W/ VEGETABLES & FISH	100733	tuna, fresh	raw	1	12.620
58407050	INSTANT SOUP, NOODLE W/ EGG, SHRIMP OR CHICKEN	0	shrimp	dried	4.5	1.040
58409000	NOODLE SOUP, W/ FISH BALL, SHRIMP, & DK GREEN LEAFY VEG	0	cod	moist heat	1.14	5.940
58409000	NOODLE SOUP,W/ FISH BALL,SHRIMP,&DK GREEN LEAFY VEG	0	shrimp	canned	1.1	2.600
72116140	CAESAR SALAD (W/ ROMAINE)	0	anchovy	pickled	,1.9	3.190
74304000	TOMATO JUICE W/ CLAM OR BEEF JUICE	0	clam	canned	1.1	0.270
75414020	MUSHROOMS, STUFFED	201920	crab	canned	1.1	3.800
75414020	MUSHROOMS, STUFFED	202767	crab	canned	1.1	.3.800
83102000	CAESAR DRESSSING	0	anchovy	pickled	1.9	0.230
83203000	CAESAR DRESSING, LOW CALORIE	0	anchovy	pickled	1.9	0.370

۲.

۵

~^*

1

.

^{&#}x27; Mercury concentrations, which are based on the weight wet of fish, were multiplied by the Mercury Concentration Factor to account for cooking losses.