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Fish Consumption in Connecticut, Florida, Minnesota, and North Dakota



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National Center for Environmental Assessment Office of Research and Development U.S. Environmental Protection Agency Washington, DC 20460

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ABSTRACT

Fish consumption rates derived from national surveys may not accurately reflect consumption rates in a particular population such as recreational anglers. Many state and local health agencies in the United States have conducted area-specific surveys to study fish consumption patterns in local populations, assess exposure to environmental contaminants, or evaluate compliance with fish advisories. The National Center for Environmental Assessment (NCEA) of the Environmental Protection Agency's (EPA) Office of Research and Development (ORD) has conducted an analysis of data from fish consumption surveys from the states of Connecticut, Florida, Minnesota, and North Dakota. The primary objective of the analysis was to identify populations within these state that consume more fish and shellfish than either the state's or the Nation's general population and thus may be at higher risk from exposure to contaminants in fish. EPA was particularly interested in estimating each state's fish and shellfish consumption for recreational anglers, low income populations, children, and ethnic groups. The report provides distribution of fish consumption rates for different age cohorts, ethnic groups, socioeconomic status, fish types (i.e., freshwater, marine, estuarine), and fish sources (i.e., storebought versus self-caught).

Fish and shellfish intake for those who consume both self-caught and store-bought fish is higher than for those who reported eating only bought or only self-caught. In Connecticut, mean fish consumption per kilogram of bodyweight ranged from 0.23 g/kg-day to 0.84 g/kg-day. In Minnesota, mean fish consumption per kilogram of bodyweight ranged from 0.11 g/kg-day to 0.69 g/kg-day. The highest values observed in the Connecticut and Minnesota data corresponded to females 16–29 years of age. In Florida, mean fish consumption per kilogram of bodyweight ranged from 0.64 g/kg-day to 2.34 g/kg-day. In North Dakota, mean fish consumption per kilogram of bodyweight ranged from 0.64 g/kg-day to 2.34 g/kg-day. In North Dakota, mean fish consumption per kilogram of bodyweight ranged from 0.20 g/kg-day to 0.70 g/kg-day. The highest values observed in the Florida and North Dakota data corresponded to children 1–5 years of age. The Florida data showed a statistically significant increase in the percentage of the population that reported eating fish and shellfish with increased household income and education. This trend was not observed in the other states. Some minor differences were observed between Whites,

non-Hispanic and other ethnic groups, but these differences were not statistically significant and not consistent across states. Because of differences in survey methodologies for the collection, processing, and analysis of the data, comparisons across states should be interpreted with caution.

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PREFACE

The Exposure Factors Program of the of the U.S. Environmental Protection Agency's (EPA) Office of Research and Development (ORD) has three main goals: (1) provide updates to the *Exposure Factors Handbook* (U.S. EPA, 2011) and the *Child-Specific Exposure Factors Handbook* (U.S. EPA, 2008); (2) identify exposure factors data gaps and needs in consultation with clients; and (3) develop companion documents to assist clients in the use of exposure factors data. The activities under each goal are supported by and respond to the needs of the various EPA Program Offices.

The Exposure Factors Handbook: 2011 Edition (U.S. EPA, 2011) and the Child-Specific *Exposure Factors Handbook* (U.S. EPA, 2008) provide a summary of statistical data on various exposure factors used in assessing environmental exposures to both adults and children. Fish consumption is one of the factors included in both handbooks. The National Center for Environmental Assessment (NCEA) of EPA's Office of Research and Development (ORD) has conducted an analysis of data from fish consumption surveys from the states of Connecticut, Florida, Minnesota, and North Dakota. These states were selected from a previous effort aimed at collecting available fish consumption rate data from state-wide surveys. These states were selected for analysis based on sample size, study design, and data availability. The primary objective of the analysis was to identify populations that consume more fish and shellfish than the general population within each state and relative to the national general population and thus may be at higher risk from exposure to contaminants in fish. EPA was particularly interested in estimating fish and shellfish consumption for recreational anglers, low income populations, children, and ethnic groups within each state. Results of this analysis were incorporated into both the Exposure Factors Handbook: 2011 Edition (U.S. EPA, 2011) and the Child-Specific Exposure Factors Handbook (U.S. EPA, 2008).

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EXECUTIVE SUMMARY

Many state and local health agencies throughout the United States conduct area-specific surveys that monitor and evaluate contaminant levels in local fish and study local populations for fish consumption behavior. Summary information on these fish consumption surveys, which are also available to the public, were compiled, summarized, and published by the National Center for Environmental Assessment (NCEA), Office of Research and Development (ORD) of the Environmental Protection Agency (EPA) in the *Exposure Factors Handbook: 2011 Edition* (U.S. EPA, 2011).

Three surveys covering four states were selected for further analysis because they contained data for specific targeted populations, had adequate sample size, and obtainable raw data. In addition, they were selected because they identified recreational anglers and collected information on the amount of fish consumed that was purchased versus self-caught. These surveys covered Connecticut, Florida, and a combined survey of Minnesota and North Dakota. The fish consumption data were extracted from each of the database files provided by the states and a single file was created in order to analyze the data consistently for each individual state.

The primary objective of the analysis was to identify populations that consume more fish and shellfish within the state's general population and relative to the national general population and thus may be at higher risk of exposure to contaminants in fish and shellfish. To achieve this objective, the study focused on estimating fish and shellfish consumption for not only the general population within the state, but also for recreational anglers, low income populations, children, and other targeted populations.

The three surveys had similar procedures for selecting participants. The Florida survey selected participants using a random sample within strata defined by counties. The Connecticut and Minnesota/North Dakota surveys selected participants randomly from a state's general population mailing list. The Connecticut and Minnesota/North Dakota surveys also collected data from targeted populations of interest (e.g., anglers, Native American tribes). The respondents that were randomly selected from the state's general population are referred to as the "general" population. The means and percentiles for the general populations in each state were statistically weighted in order to estimate the values for the states' general population. The means and percentiles from the targeted populations were not weighted, since they statistically represent only themselves.

Tables at the end of each section and in the Appendices show the fish and shellfish consumption rates for subgroups classified by demographic characteristics and by the source of the fish and shellfish consumed (i.e., freshwater versus marine, and store-bought versus self-caught). The measurement units used to describe consumption rates are: (1) grams of fish and

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shellfish consumed per day (g/day), and (2) grams per kilogram of bodyweight per day (g/kgday). Both of these measures are presented for consumer-only of fish and shellfish and for the entire surveyed population (i.e., per capita). Consumer-only intake is defined as the quantity of fish and shellfish consumed by individuals during the survey period. These estimates are generated by averaging intake across only the individuals in the survey who consumed fish and shellfish. Per capita intake rates are generated by averaging consumer-only intakes over the entire population (including those individuals that reported no intake).

The three surveys had different questionnaires for collecting the fish consumption information, procedures for classifying the fish consumed into species groups, and for processing the data. The primary difference between surveys was the method for collection of fish consumption data. Florida used a telephone survey approach, while Connecticut, North Dakota and Minnesota used mail surveys. In Connecticut, the respondents were asked how often each type of seafood was eaten, without specifying a recall period. However, a long recall period was implied, since one of the precoded response options was the number of times per year. In the Minnesota/North Dakota survey, respondents were asked the rate of fish or shellfish consumption in the previous 12 months. In Florida, the respondents were asked for their fish consumption during the "last 7 days" prior to the telephone interview.

The difference in data collection procedures may result in different consumption patterns. Therefore, comparisons among the states should be interpreted with caution. Alternatively, differences in reported fish and shellfish consumption across states may be due to geography or other factors. For example, the fishing habits of the populations vary by state. In particular, Florida residents have easy access to marine fishing, whereas, Minnesota and North Dakota residents have good access to freshwater fishing, but not marine fishing.

This report focuses primarily on differences among groups of respondents within states, where the groups are defined by categorical independent variables for income, age and gender, race-ethnicity, education, and source of fish consumed. General observations are summarized below.

Overall, the percentage of respondents surveyed in the four states (Connecticut, Florida, Minnesota, and North Dakota) that consumed fish and shellfish was higher for adults than children. The consumption rate in g/day was higher for adults than children, but the consumption rate in g/kg-day was generally lower for adults than children.

Anglers had higher consumption rates than the general population in Connecticut, Minnesota, and North Dakota. Anglers were not sampled in the Florida survey. In Connecticut, Asians, commercial fishermen, Expanded Food and Nutrition Education Program (EFNEP) participants, and Women, Infants and Children Program (WIC) participants also had higher fish consumption rates than the state's general population. In all four states, respondents that ate both self-caught and store-bought fish and shellfish consumed more fish and shellfish than other respondents.

In the Florida and Minnesota/North Dakota surveys, the percentage of the population that reported eating fish increased with increasing household income. The Florida data showed a statistically significant difference: for households with annual incomes below \$20,000, 45% of residents reported they ate fish or shellfish during the previous week, whereas households with annual incomes above \$50,000 the percentage increased to 57%.

Because age and bodyweight are closely related, fish and shellfish consumption per kilogram bodyweight adjusts in part for differences associated with age. The results from these four states suggest that a combination of females, non-whites, children, and those that consume both self-caught and store-bought fish will have the highest fish and shellfish consumption rate per kilogram bodyweight.

For race-ethnicity, the data suggest that Asians and American Indians may consume more fish and shellfish than Whites, Blacks, or Hispanics on a per capita and per consumer basis. Some significant differences between Whites and other race-ethnicity groups were found, with Whites generally being more likely to consume fish and shellfish, but having a lower consumption rate than other race-ethnicity groups. However, it is difficult to make generalizations because the differences among race-ethnicity categories were not consistent across states and were often not significant.

In the Florida survey, there was a significant increase in the percentage of the population that reported eating fish with an increase in the education level of the head of the household. A similar, though non-significant trend was seen in Minnesota and North Dakota. Although comparisons across states should be done with caution, given the differences in survey methodologies, some observations can be made based on per capita estimates. The per capita fish and shellfish intake (averaged across the entire population of those who eat fish and those that do not) is not directly affected by the length of the recall period and thus is more comparable between states. The estimated average per capita intake in grams of "as-consumed" (generally cooked) fish and shellfish per day is 27.10 g/day in Florida, 26.46 g/day in Connecticut, 18.06 g/day in Minnesota, and 18.99 g/day in North Dakota. Given that the Florida consumption is likely to be underestimated because away-from-home consumption was not obtained for some respondents, Florida residents may consume as much or more fish and shellfish per capita than residents of the other three states. The estimates from the four states are higher than those for the entire U.S. general population as calculated from the USDA's 1994–1998 Continuing Survey of Food Intakes by Individuals (CSFII) (USDA, 1998). The average per capita consumption of fish and shellfish for the U.S. population, based on the CSFII survey, is 12.83 g/day.

Although fish and shellfish consumption data from National Health and Nutrition Examination Survey (NHANES) 2003–2006 are reported in the *Exposure Factors Handbook: 2011 Edition* (U.S. EPA, 2011), they are presented in g/kg-day and therefore not directly comparable. The average per capita fish and shellfish consumption from NHANES 2003–2006 for all ages combined was estimated to be 0.22 g/kg-day (U.S. EPA, 2011). The average per capita fish and shellfish intake from Florida, Connecticut, Minnesota, and North Dakota in g/kgday can be estimated by calculating a weighted average from all age groups and genders combined. These are calculated to be 0.47 g/kg-day, 0.42 g/kg-day, 0.29 g/kg-day, and 0.33 g/kg-day for Florida, Connecticut, Minnesota, and North Dakota, respectively. These are higher than the value obtained from NHANES 2003–2006 of 0.22 g/kg-day. United States regional estimates based on NHANES 1999–2002 have also been reported (Mahaffey et al., 2005). The average per capita 24-hour consumption estimates reported are: 20.8 g/day for the Atlantic Coast region (which includes most of Connecticut and almost half of Florida); 13.5 g/day for the Gulf Coast region (which includes the rest of Florida); and 11.5 g/day for the Midwest (which includes Minnesota and North Dakota).

1. INTRODUCTION

1.1. OVERVIEW OF THE SURVEYS

Many state and local health agencies throughout the U.S. conduct area-specific surveys that monitor and evaluate contaminant levels in local fish as well as survey local populations for fish consumption behavior. These fish consumption surveys were compiled, summarized, and published by the National Center for Environmental Assessment (NCEA), Office of Research and Development (ORD) of the Environmental Protection Agency (EPA) in the *Exposure Factors Handbook: 2011 Edition* (U.S. EPA, 2011).

Three studies covering four states for which raw data were available were selected for further analysis. These were selected because they contained data for specific targeted populations, had adequate sample size, and obtainable raw data. In addition, they were selected because they identified recreational anglers and collected information on the amount of fish consumed that was purchased versus self-caught. Appendix A provides additional information about each survey and describes the development of the combined database with fish consumption data from all three studies. Reports on those three studies (referred to as the study reports) are:

- Steven A. Benson, Charlene R. Crocker, John Erjavec, Robert R. Jensen, Carolyn M. Nyberg, Constance Y. Wixo, and Jill M. Zola. (2001) *Fish Consumption Survey: Minnesota and North Dakota*, prepared by of the Energy & Research Center, University of North Dakota, Grand Forks, ND.
- N.C. Balcom, C.M. Capacchione, and D.W. Hirsch. (1999) *Quantification of Fish and Seafood Consumption Rates for Connecticut*; submitted to the CT Dept. of Environmental Protection, Contract No. CWF-332-R. CT Sea Grant Publication No. CT-SG-99- 02.
- Robert L. Degner, Charles M. Adams, Susan D. Moss, and Stephanie K. Mack. (1994) *Per Capita Fish and Shellfish Consumption in Florida*, University of Florida, Gainsville, FL.

Although these reports provide state-wide estimates of fish consumption rates, information provided in the surveys allowed for a more thorough examination of the variability in the survey population. Thus, EPA obtained the raw data from these studies and conducted further analysis of the data. The primary objective of the EPA's analysis was to identify populations that consume more fish and shellfish than the general population within each state and relative to the national data and thus may be at higher risk to exposure from contaminants in fish and shellfish. To achieve this objective, the study focused on estimating fish and shellfish intake for not only the general population within the state, but also for recreational anglers, low income populations, children, and other targeted populations.

Table 1-1 presents summary information for the three studies that are discussed in this report. The three surveys had different questionnaires and procedures for collecting the fish consumption information, classifying the fish consumed into species groups, and processing the data. The primary difference between surveys was the method for collection of fish consumption data. All three studies used household surveys in which data was collected on fish and shellfish consumption for all or most members of the household.

Study Location	Florida	Connecticut	Minnesota/North Dakota		
Population/sample/mode	Population/sample/mode				
General population	RDD Phone interviews	Randomized HH list Mailed questionnaire	Randomized HH list Mailed questionnaire		
Saltwater anglers		Convenience Mailed questionnaire			
Freshwater anglers			Randomized license list Mailed questionnaire		
Commercial fishermen		Randomized license list Mailed questionnaire			
Southeast Asians		Convenience Mailed questionnaire			
Food stamp recipients/WIC participants	Convenience In-person interviews	Convenience In-person interviews			
New mothers			Randomized list (MN only) Mailed questionnaire		
Tribal members			Convenience Direct contact canvassing		
Fish	All fish for respondent. Fish eaten at home for other HH members	All fish for all family members	All fish for up to five family members		
Recall	7 days	Unspecified, asked rate of consumption	Past 12 months, asked rate of consumption		

Table 1-1. Summary of fish consumption surveys

Study Location	Florida	Connecticut	Minnesota/North Dakota
Information on seasonal patterns in fish consumption	Calls uniformly distributed over 1 year, call date in the file	As reported by respondent	As reported by respondent
How fish consumption was asked	Type of fish/seafood, amount eaten, how cooked in the last 7 days Asked specifically for 24 fish types and 13 shellfish types and room for 'others'	 1 – FFQ (how often/much fish/seafood types eaten) list 19 fish dishes + space for Other 2–10-day diary including type, amount, preparation (for a subset of respondents) 	Number of meals, including usual portion size for five categories of purchased fish/swordfish/shark, breaded fish products, canned tuna, shellfish, other fish) and seven categories of caught fish (panfish, walleye/sauger, pike/muskie, bass, salmon/lake trout, stream trout, other self- caught fish)
How fish consumption was reported	Uncooked edible weight by person by fish	Apparently as-consumed weight of edible fish by person by fish (g/day), response units not carefully defined	Apparently, as-eaten consumption by person by category of fish, as reported by the respondent
Self-caught vs. store- bought categories of each fish type	Percent caught by fish	Source check boxes: Self- caught, store-bought, restaurant	Non-purchased or (store- bought or restaurant)
Information on location of caught fish	Asked but not provided in the data file, respondent county known	Text description, name of waterbody, town	One of several geographic areas
Data collection period	March 1993 to March 1994	July 1996 to May 1997	October to November 2000
Number of households	8,740	810	1,568
Number of individuals	17,213	2,080	4,262

 Table 1-1 Summary of fish consumption surveys (continued)

HH stands for household; FFQ stands for Food Frequency Questionnaire; RDD stand for Random Digit Dialing.

There are several approaches for collecting fish consumption data. The approach used depends on the purpose of the data collection. More detailed information regarding approaches used for collecting fish consumption data and their advantages and limitations can be found in

the report entitled *Consumption Surveys for Fish and Shellfish: A Review and Analysis of Survey Methods* (U.S. EPA, 1992). Five approaches reviewed by the EPA included: (1) recalled information collected by telephone; (2) recalled information collected by in-person interviews; (3) recalled information using mailed questionnaires; (4) diaries maintained by anglers; and (5) on-site creel surveys (U.S. EPA, 1992). Each approach has its advantages and limitations and usually a combination of various approaches is used to improve the validity of the data collected. Survey instruments used by the three studies are described below.

A mail survey instrument was used to collect fish consumption data for the Minnesota/North Dakota study (Dillman, 1978; Dillman, 2000; U.S. EPA, 1998). The questionnaire design in this study was aimed at obtaining the most recent years' intake of fish from all sources, personal information from each respondent, and enough sociodemographic information to categorize responses. In the Minnesota/North Dakota survey, respondents were asked the rate of fish or shellfish consumption in the past 12 months. An advisory board was selected to aid in the development of the survey design.

In the Connecticut study, a mailed survey questionnaire was also used to collect the fish consumption data, with a telephone follow-up (Peters and Houseknecht, 1992; West et al., 1993). A food frequency questionnaire was used in the Connecticut survey as a more accurate approach to collecting food consumption data than a 24-hour recall survey. The Connecticut respondents were asked how often each type of seafood was eaten, without specifying a recall period. However, a long recall period was implied, since one of the precoded response options was the number of times per year.

For the Florida study, a telephone survey was chosen for its relatively low cost and the ease of probability sampling (Peters and Houseknecht, 1992; Dubois and Boivin, 1990; Block, 1982). To enhance the accuracy of the respondents recall, an approach known as aided recall was used. In this approach, the questionnaires used six commonly eaten types of finfish and five major types of shellfish as memory cues to screen for finfish and shellfish consumers. To improve portion size estimates, a range of portion sizes were offered to respondents (Block et al., 1986; Block, 1982). The respondents were asked for their fish consumption during the last 7 days prior to the telephone interview (Anderson, 1988). Thus, these data represent short-term consumption patterns and comparisons among the states should be interpreted with caution.

It should be noted that fishing habits of the populations in the states covered by the surveys are quite different. In particular, Florida residents have easy access to marine fishing and Minnesota and North Dakota residents have good access to freshwater fishing. Since the consumption differences between states may be due in part to different procedures used in the different surveys and the focus of the analysis is to identify subgroups with high fish and shellfish consumption, the statistical analysis focuses on differences between subgroups within

states rather than comparisons between states. At the same time, the data from the surveys were combined using common categories for demographic variables and a common definition of consumption in order to allow a general comparison of per capita consumption across states.

1.2. DIFFERENCES AMONG THE SURVEYS

The three surveys differed primarily in their procedures for the collection of the fish consumption data. In Connecticut, the respondents were asked how often each type of seafood was eaten, without specifying a recall period. However, a long recall period was implied by the option of responding using the number of times per year. In the Minnesota/North Dakota survey, respondents were asked the rate of fish or shellfish consumption in the past 12 months. In Florida, the respondents were asked for their fish consumption during the "last 7 days" prior to the telephone interview. All of these values were converted to a consumption rate and, using the raw data and the respondents reported weight, a consumption rate per kilogram bodyweight.In the Connecticut and the Minnesota/North Dakota surveys, the questionnaires collected data on all fish and shellfish consumption for all or most respondents in the household. However, in Florida, the questionnaire did not collect away-from-home fish and shellfish consumption data for children. Away-from-home meals are defined in the Florida survey as meals not prepared in the household (e.g., fast food places, restaurants, ready-to-eat meals, TV-dinners). As a result, the consumption estimates presented in this report for children in Florida tend to underestimate their fish and shellfish consumption. Also, the lower proportion of children eating fish and shellfish in Florida is due, in part, to not collecting away-from-home consumption.

In all three surveys, some populations were less likely to respond to the questionnaire than others. In addition, the Minnesota/North Dakota survey collected data on up to five household members and the Florida survey did not collect data on some household members if the primary meal preparer was not available. All three surveys collected data from a random sample of the state's populations stratified by county, referred to in this report as the state's general population. The fish and shellfish consumption estimates for the general population were weighted in order to calculate estimates for the state's population, after adjusting for different sampling rates in different counties and different response rates.

The Minnesota/North Dakota and Connecticut surveys also collected questionnaire data from members of targeted populations of interest. The consumption estimates for these populations were not weighted.

1.3. OVERVIEW OF THE REPORT

This report has three sections, this Introduction (Section 1) and:

- Section 2 describes data processing and statistical analysis methodologies, including:
 - The conversion between raw and as-consumed weight of fish and shellfish;
 - The calculation of analytical weights;
 - The identification and handling of outliers; and
 - The calculation of summary statistics (including percentiles).
- Section 3 provides a discussion of the results from the surveys.
- Appendices A though D describe the database development, QA/QC process, and calculation of percentiles, and provide a glossary of terms.
- Appendix E provides extensive tables and graphics, including:
 - Tables of fish and shellfish consumption, as-consumed, for the general population; and
 - Plots of consumption estimates with 95% confidence intervals and significance tests for the general population and its populations defined by state, state, age, gender, education, income, race-ethnicity, and fish type consumed. These plots provide basic summary statistics for the three surveys.

Because there are a large number of data tables, Appendix E begins with a listed directory to the tables within the Appendix organized to help the reader find the tables by consumption characteristics – consumers only, per capita, amount consumed, percent consumers—and state, age, gender, education, income, race-ethnicity, and type of fish consumed.

2. METHODS AND STATISTICAL ANALYSES

The quality of the fish and shellfish consumption estimates depends on the quality of the original data, the processing of the data to obtain consumption estimates for individuals, and the processing of the data to calculate the estimates within states and demographic subgroups. Appendix A has information on the surveys and provides details on the processing of the data. An important part of the processing is the conversion between raw weight and as-consumed (or cooked) weight of fish and shellfish. Section 2.1 describes how this conversion was done for each survey. Section 2.2 describes the variables used in the analysis. Section 2.3 describes the identification and handling of outliers. Section 2.4 tabulates the sample sizes for the analysis tables. Section 2.6 describes the analysis weights used for the estimation of fish and shellfish consumption for the general populations in each state. All calculations were performed using SAS version 9.1.3.

2.1. CONVERSIONS BETWEEN RAW AND AS-CONSUMED WEIGHT

The weight of fish consumed can be expressed as the weight of fish as caught, as cleaned and prepared for cooking, and as cooked. As a general rule depending on cooking practices, the cooked weight is less than the uncooked weight due to moisture loss. The data from the three surveys were processed to estimate the raw weight and the as-consumed weight (raw or cooked weight, depending on how the fish or shellfish was consumed). Where possible, the procedures used by the original investigators were used for this conversion. In general, there was inadequate data to distinguish between weight loses due to trimming the raw fish or removing the shell from the shellfish (refuse factors) and due to the cooking method. The following sections describe the conversions to calculate the raw and as-consumed weights of fish and shellfish for each of the surveys. Additional details are provided in Appendix A.

2.1.1. Florida Survey

The Florida survey questionnaire requested both the quantity eaten and the cooking method used. The as-consumed weight of fish was calculated from the respondent's estimate of the volume of fish consumed compared to a slice of bread and the typical density of fish. The weight of shellfish was requested in units likely to be familiar to the respondent, such as pounds for lobster, number and size of shrimp, and cups of canned fish. The respondent's replies were converted to the as-consumed weight in the data files received from Florida. The reported as-consumed quantity was converted to uncooked weight using conversion factors documented in the study report and shown in Table 2-1. The conversion factors depend on the type of food

(several types of shellfish, other shellfish, or any finfish) and the cooking method. An assumed value was used when the cooking method was not provided.

		Imita- tion Misc.								
Cooking Method	Salad Shrimp	Clams	Blue crab	Crab meat	crab meat	Conch	Cray- fish	shell- fish	Finfish	
Fried	0.75	0.57	0.75	0.57	0.75	0.57	0.75	0.67	0.75	
Broiled	0.78	0.60	0.78	0.60	0.78	0.60	0.78	0.70	0.78	
Steamed	0.79	0.62	0.79	0.62	0.78	0.62	0.79	0.72	0.78	
Broiled or poached	0.80	0.63	0.80	0.63	0.78	0.63	0.80	0.72	0.78	
Raw	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Microwave baked	0.80	0.66	0.80	0.66	0.87	0.66	0.80	0.75	0.87	
Conventional oven	0.85	0.64	0.85	0.64	0.79	0.64	0.85	0.75	0.79	
Grilled or smoked	0.78	0.60	0.78	0.60	0.78	0.60	0.78	0.70	0.78	
Other ^a	0.77	0.61	0.77	0.61	0.82	0.61	0.77	0.71	0.82	

 Table 2-1. Factors for converting the Florida data from uncooked to asconsumed weights

^aOther includes: other cooking methods, don't know, and missing data values.

2.1.2. Connecticut Survey

The Connecticut data files provide the quantity of consumed fish as "cooked weight of edible fish." However, for the few items that were clearly eaten uncooked (e.g., oysters, sushi), the quantity is assumed to be the uncooked weight. This weight is referred to as the asconsumed weight. The Connecticut respondents assessed the quantity of a food item by selecting a shape of the food item from a set of pictures and a corresponding thickness. Connecticut collected cooking method information for only a subset of the respondents and this information was apparently not used in the conversion to as-consumed consumption. When converting the reported shape and thickness to the as-consumed weight some assumptions were made such as assuming that certain dishes were eaten uncooked or cooked or that the reported shape corresponded to an uncooked or cooked food item. The conversion factors used were provided in an appendix to the study report. If the respondent reported the as-consumed quantity, then no conversion was needed. For this analysis, the as-consumed weights in the data file were converted to uncooked weights. The conversion used the conversion factors in the report, if provided. In a few cases judgment was used to decide what conversion factor to use. Otherwise, a conversion factor from the *EPA Mercury Study Report to Congress* (U.S. EPA, 1997) was used. The conversion factors used to calculate the uncooked weight from the as-consumed weight for each fish or shellfish are shown in Table A-10 in Appendix A. If the conversion factor did not come directly from the Connecticut study report, a comment column explains the source of the conversion factor. In some cases the conversion factors were based on the report *Agriculture Handbook* (USDA, 1987).

2.1.3. Minnesota and North Dakota Survey

The Minnesota/North Dakota questionnaire asked for the "usual" portion size in ounces. Pictures of the food items with associated weights were provided as a guide. The pictures showed the food on a plate, suggesting that the weight provided with each picture was the asconsumed quantity. The respondent was asked the weight of the fish, and if that weight was the cooked or raw weight. The questionnaire did not inquire if the item was cooked before being eaten. The Minnesota and North Dakota data file has programming code to calculate fish consumption. However, this code ignores the uncooked versus cooked responses. A distinction between cooked and uncooked weights was made for this analysis. For the purposes of converting from uncooked to as-consumed or visa versa, it was assumed that all reported consumption was eaten cooked because the questionnaire was not specific enough to identify food items that might have been consumed uncooked. All food items were converted from asconsumed to uncooked weight by dividing the as-consumed weight by 0.75, the value used in the *EPA Mercury Study Report to Congress* (U.S EPA, 1997).

2.2. VARIABLES USED FOR THE DATA ANALYSIS

The combined database has fish consumption data for Florida, Connecticut, Minnesota, and North Dakota. The variables were divided into three files, one with household information, a second with information about individuals within the sampled households, and a third with fish consumption information for each type or species of fish or shellfish eaten by each individuals. It also has information on individual fish and shellfish consumption of both self-caught and purchased (or store-bought) fish and shellfish. The total consumption for a specific fish or shellfish is the sum of the self-caught and store-bought quantities. The fish consumption rates were expressed in two units, grams of uncooked fish (i.e., weight before any cooking[g]) and grams of as-consumed fish (i.e., weight of fish as prepared for eating) per day (g/day). The data also include the type of fish (e.g., finfish or shellfish) and fish habitat (freshwater, estuarine, or

marine). The files with household and individual characteristics include demographic information.

2.2.1. Dependent Variables

For the purpose of analysis, the variables in the data file can be divided into dependent variables that are the primary focus of the analysis, and independent variables that may be associated with differences in the dependent variables. The primary dependent variables are the: (1) consumption rate in grams of fish or shellfish per day; (2) consumption rate per kilogram of bodyweight (g/kg-day), and (3) percentage of respondents that reported consuming fish and shellfish.

The data from the combined database were processed to calculate the total fish and shellfish consumption for each individual by summing the consumption across all (or a selected subset of) fish and shellfish species. For those individuals that did not report any fish or shellfish consumption, the total is zero. For some tables the consumption was calculated separately for (1) fish and shellfish, (2) fish habitat (freshwater, estuarine, and marine), and (3) fish source, store-bought or self-caught.

2.2.2. Independent Variables

Summary statistics for the dependent variables were calculated for selected populations defined by state, income categories, race-ethnicity categories, age and gender categories, and education categories. The following paragraphs describe the independent variables that were used.

Household income was derived from the original data files. Different surveys used different categories for classifying income. However, the categories used in the surveys could be combined to create the following common income categories across the three surveys: \$0 to \$20,000, \$20,000 to \$50,000, and greater than \$50,000. Fifteen percent of households did not provide income information. Households without income information were placed into an "Unknown" category.

Race-ethnicity was also defined differently in the three surveys. Categories were combined to create the following common set of generic race-ethnicity categories:

- American Indian
- Asian (includes a general Asian category, Asian Indian, Cambodian, Chinese, Filipino, Hmong, Laotian, and Vietnamese)

- Black non-Hispanic
- Hispanic (include a general Hispanic category and Central American, Dominican, Mexican, Puerto Rican, and South American)
- White non-Hispanic, and
- Unknown

The population was divided into **age and gender groups** using several different variables to create several sets of age and gender categories, including: adults (18 and older) and children (aged < 18), ages 1 to <6, 6 to <11 and 11 to <16 for children, ages 16 to <30, 30 to <50, and 15 to <45 to cover women of child-bearing age, females 45 and older, 50 and over, and men aged 16 to <30, 30 to <50, 15 to <45, 45 and older, and 50 and over. In the tables, these age categories are written as 1-5, 6-10, 11-15, 16-29, 30-49, 50+, 15-44, and 45+, respectively.

Education of the head of household was defined differently in the different surveys. The categories in the different surveys were recoded to create the following common categories for the highest level of education:

- Some High School: Completion of some high school or 11 or fewer years of education.
- High School: Completion of high school, 12 years of education, or a GED.
- Some College: Completion of "Some College" or 13 to 15 years of education.
- College Graduate: Completion of 16 or more years of education, a 2–4 year degree, graduate or post-graduate education.

Some judgment was used to define the common education categories. In addition, different respondents were asked about their education in the different surveys. In the Minnesota/North Dakota study education was requested for the first two listed household members, the respondent and the second listed member. The combined files have the education of the respondent. The Connecticut study asked for the education of the head of household. The Florida study asked for the education of the randomly selected adult. Since the randomly selected adult may not be the head of household and the respondent (the person that filled out the questionnaire) in the Minnesota/North Dakota study was not randomly selected and might not be an adult, the measures of education level associated with the household are not completely equivalent between studies. The education is thus a general way to classify households rather

than a classification related to a specific definition of household education or an indication of the education of individuals within the household.

Based on their reported fish consumption, respondents were classified as eating only selfcaught fish, both self-caught fish and self-caught and store-bought fish and shellfish, or only store-bought fish and shellfish. A second classification grouped freshwater and estuarine selfcaught fish to create the classifications: (1) exclusively, (2) occasionally, or (3) never eats freshwater and estuarine self-caught fish and shellfish.

Finally, the Connecticut and Minnesota/North Dakota surveys collected fish consumption information from populations of interest, referred to here a targeted populations. The questionnaires for the targeted populations were collected in addition to the questionnaires for the general population. The general population and the populations are described in Table 2-2. The last two columns of Table 2-2 indicate if the respondents were selected randomly from an identifiable targeted population and, if so, the response rate reported in the survey reports.

State	Populations	Sampled from:	Statistical Sample	Response Rate
Florida	General population	Random digit dialing procedure	Yes	Not reported
	General population	Stratified random sample of household addresses	Yes	6%
	Angler/Recreational fisherman	Lists of saltwater anglers Interviewers compiled lists of anglers at sites with shore- and vessel-based fishing opportunities along Long Island Sound	No	
Connecticut	Aquaculture students	Students at a vocational aquaculture school	No	
	Asians	Southeast Asian households identified by one field interviewer	No	
	Commercial fishermen	List of licensed commercial fishermen	Yes	10%
	EFNEP ^a participants	Identified through Connecticut EFNEP offices	No	
	WIC ^b participants	Identified through Connecticut WIC offices	No	
Minnesota	General population	Stratified random sample of household addresses	Yes	21%
	American Indians	Identified through members of the Bois Forte Tribe	No	
	Angler/Recreational fishermen	List of licensed fishermen	Yes	21%
	Families with new mothers	List of women who gave birth in 1999	Yes	15%
North Dakota	General population	Stratified random sample of household addresses	Yes	21%
	American Indians	Identified through members of the Spirit Lake Nation and three Affiliated Tribes	No	
	Angler/Recreational fishermen	Two different lists of licensed fishermen	Yes	21%

Table 2-2. Targeted populations

^aExpanded Food and Nutrition Education Program.

^bWomen Infants and Children Program.

2.3. IDENTIFICATION AND HANDLING OF OUTLIERS

Individuals with particularly unusual observations were removed from the data before the analysis tables were prepared. Outliers are observations that are particularly unusual compared to expected values or compared to other observed values. Outliers may be correct observations

for very unusual individuals or incorrect observations. Removing incorrect observations will improve the quality of the results by removing a source of bias. However, removing correct observations for unusual individuals can result in increased bias and reduced quality of the results. Unfortunately, without additional data collection, it is not possible to determine whether an unusual observation is an error or is a correct value for an unusual individual. There may also be observations that are incorrect but are not unusual. Such observations are difficult to identify without additional data collection. The procedures for identifying outliers focused on identifying highly unusual observations that were unlikely to be correct. Although the primary observations are estimates of fish consumption, important outcomes of the research is an analysis of fish consumption by age and an analysis of fish consumption per kilogram bodyweight. As a result, unusual combinations of age and bodyweight may also affect the fish consumption estimates. Decisions about how to detect and handle outliers are somewhat subjective. The objective was to remove the values that were most unusual on the assumption that these values were most likely to be incorrect and removing them would decrease the bias in the fish consumption estimates.

A common procedure is to remove cases from analyses if they have suspect or missing data for the variables in that analysis. Thus, for example, a bivariate analysis of bodyweight by gender would exclude cases with suspect or missing data for either of these variables. However, a multiple regression analysis of, say, fish consumption on weight, gender, age, geographic region, and ethnicity would necessarily exclude all cases with suspect or missing data for any of these variables. The regression analysis would therefore likely be based on fewer cases than the bivariate tabulation. An alternative approach would be to remove all cases with any missing or suspect data from any of the variables in any of the analyses. All analyses would be based on the same number of observations. This latter approach is what was used. As detailed below, a total of 13 observations were removed from all analyses due to outlying observations.

The highest eight age values were 98, 110, 120, 140, 190, 190, 341, and 731 years. There were seven values of 98 years. The National Health and Nutrition Examination Survey (NHANES) (CDC, 2002) is an ongoing national survey that collects health data on Americans. The NHANES data provides a comparison dataset against which to judge whether the age ranges and weight ranges in the various fish consumption surveys are reasonable. In the 2001–2002 NHANES data the highest ages are reported as \geq 85 years and 2.14% of respondents were in this bracket. In the data from the three studies, less than 2% of respondents have ages over 84 years. In the NHANES data, the oldest age when the respondent's heaviest weight was attained was 103 years. NHANES respondents were asked their age when various medical conditions were diagnosed. The oldest age of a reported medical condition was 98 years. Based on this information from the NHANES survey, seven values of 110 years or greater are assumed to be

unusually high, likely to be incorrect, and therefore outliers. One was from Florida, three were from Minnesota, and three were from North Dakota. Five of these records were also missing bodyweight data.

The six largest bodyweights reported were 400, 416, 420, 500, 530, and 686 pounds. The value of 500 pounds appeared in the data four times. In the 2001–2002 NHANES data (CDC, 2002), the highest reported bodyweight for a respondent was 434 pounds; the self-reported greatest bodyweight attained by a respondent was 500 pounds. Based on the distribution of the bodyweights in the study data and the NHANES data, six values over 425 pounds were judged to be outliers. One was from Connecticut, one was from North Dakota, and four were from Florida.

If children have an exponential bodyweight growth rate up to approximately age 18 and fairly constant bodyweight after age 18, a plot of log-transformed bodyweight versus age would show a linear increase up to age 18 and a constant level for ages above 18. The distribution of the log-transformed bodyweights around the mean for a selected age would be expected to be roughly normally distributed. Figure 2-1 shows a plot of log-transformed bodyweight versus age. The plot shows the basic pattern described above. However, there are some unusual combinations of bodyweight and age and the linear relationship expected at the lowest ages may not describe the data. The unusual combinations of bodyweight and age were identified by: (1) fitting a non-parametric smooth relationship between log-transformed weight and age; and (2) classifying bodyweights that differed significantly from the predicted mean for the observed age as outliers.

The smooth relationship was fit using SAS PROC LOESS with two iterations, one for an initial fit and a second iteration to reduce the effect of possible outliers. Separate smooth curves were fit for each study to accommodate differences between populations and differences in how the data were collected and reported.

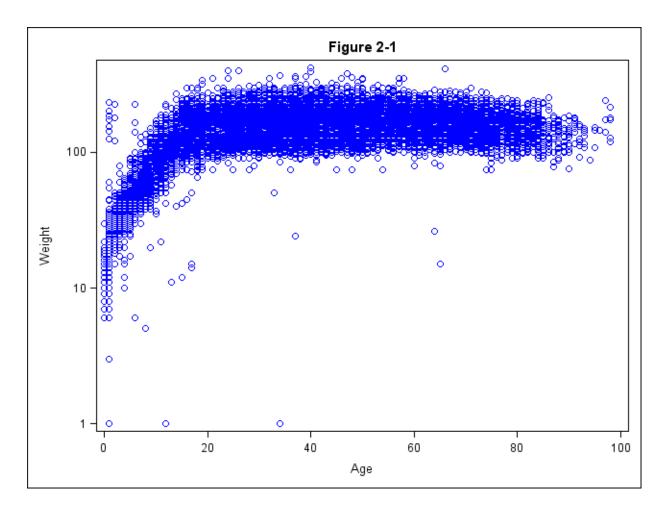


Figure 2-1. Log-transformed bodyweight (pounds) versus age (years).

Classifying the bodyweights as unusual assumed that the residuals around the predicted log-transformed bodyweights could be reasonably described by a smooth, roughly normal distribution. Figure 2-2 shows a Q-Q plot of the sorted residuals versus the corresponding values that would be obtained if the data had a standard normal distribution. If the residuals have a normal distribution, the data will fall on a straight line in the Q-Q plot. In Figure 2-2, most of the data fall on a straight line. However, there are several high and low residuals that are inconsistent with the assumption that the log-transformed bodyweights at a fixed age have a normal distribution. There are 21,293 residuals. If the residuals do have a normal distribution, the probability that all residuals are within 4.72 standard deviations of the mean is only 5%. One criterion for identifying outliers from a normal distribution is to classify all values outside 4.72 standard deviations from the mean as an outlier (Barnett and Lewis, 1996). In this case that corresponds to classifying residuals outside -0.50 to 0.50 as outliers. Since the distribution of the data might differ somewhat from a normal distribution, as indicated by the slight curvature in the

middle of portion of Figure 2-2, wider limits were used. The most extreme residuals, judged to be those outside the range from -0.62 to 0.62, were assumed to be outliers and were removed from the analysis. The cut-off of 0.62 was chosen because it corresponded to a gap in the Q-Q plot curve that separated the lower group of outliers from the majority of the residuals. The red values in Figure 2-2 were classified as outliers. Figure 2-3 shows the same data in Figure 2-1 with observations classified as outliers shown in red.

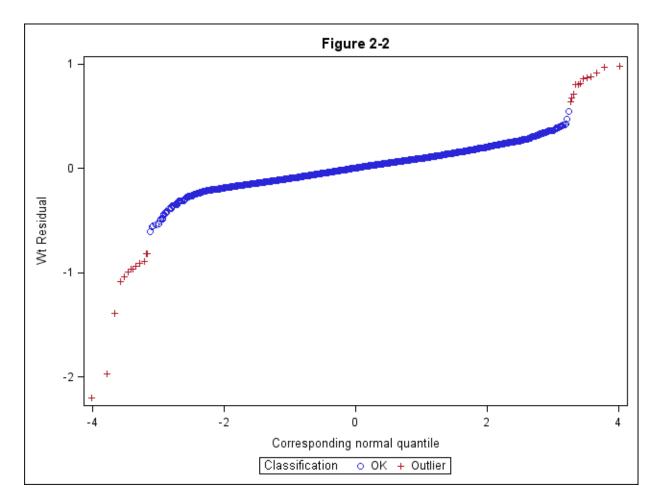


Figure 2-2. Q-Q plot of weight residuals (outliers in red).

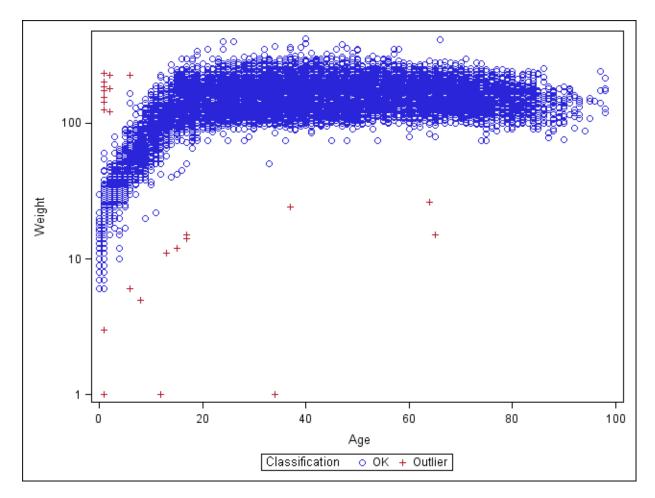


Figure 2-3. Log-transformed bodyweight (pounds) versus age (years) (outliers in red).

Similar procedures were used to identify outliers in raw fish consumption (g/kg-day). SAS PROC LOESS was used to fit a smooth curve to the fish consumption data. The normality assumption for the residuals appeared to be reasonable. There were only one or two observations that appeared to be inconsistent with the overall curve. Based on 13,270 residuals, the probability that all residuals are within 4.63 standard deviations of the mean is only 5%. In this case, a range of 4.63 standard deviations corresponds to residuals between -1.97 and 1.97. However, to accommodate the fact that the distribution might not be quite normal, a cutoff of 2.20 was used resulting in classifying the lowest two residuals as outliers. Figure 2-4 shows the log-transformed fish consumption per day per kilogram versus age with the two outliers shown in red. Figure 2-5 shows the Q-Q plot for the residuals when fitting the log-transformed fish consumption in g/kg-day.

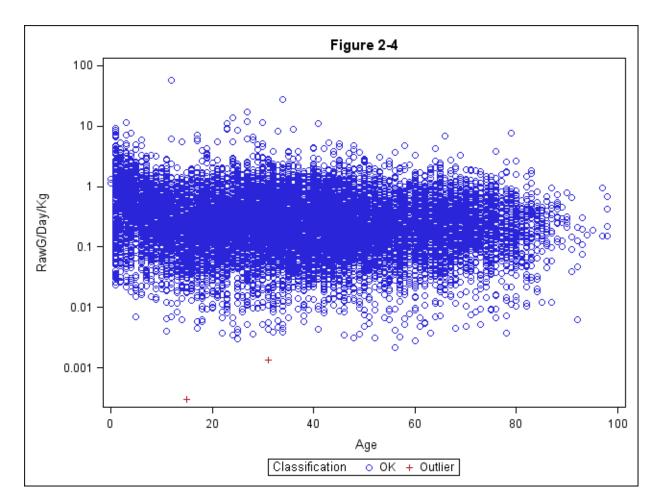


Figure 2-4. Log-transformed fish consumption as raw g/kg-day versus age (outliers in red).

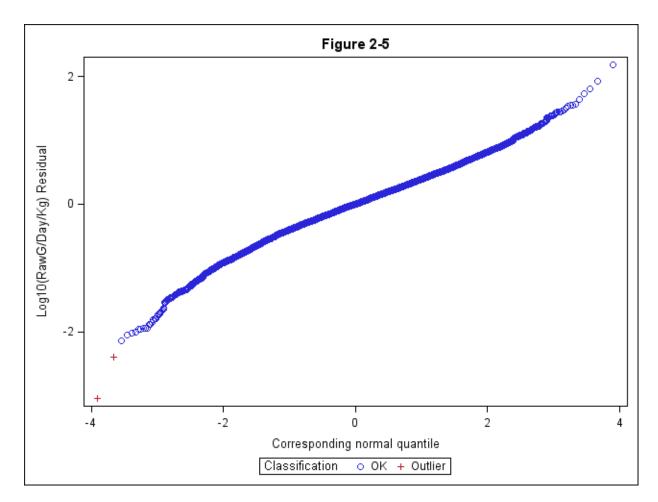


Figure 2-5. Q-Q plot of fish consumption residuals (outliers in red).

Only the relationships between age and bodyweight and age and raw consumption (g/kgday) were used to identify outliers. A review of the other consumption variables found no other outliers. A total of 44 individuals out of 23,566 (0.2%) were classified having unusual bodyweight or fish consumption and removed from the analysis based on the procedures above. Two individuals were removed due to unusual fish consumption values; 29 were removed due to unusual combinations of age and weight; and 13 were removed due to unreasonably high ages or bodyweights.

For most estimates, removing these outliers is not expected to have an important effect on the results. Removing outliers will generally have the greatest effect on estimates of extreme percentiles. Using data with and without the outliers, the minimum, maximum, mean and percentiles were calculated for the raw fish consumption in both g/day and g/kg-day for fish and shellfish consumers in the general population from each state and per capita. Most percentile estimates and means changed by much less than 3% as a result of removing the outlying values.

Differences that were greater than 3% are shown in Table 2-3. Even if the removed data values are correct, the estimates of extreme percentiles can be sensitive to the observed values and are not very precise.

Variable	State	Statistic	Population	Estimate: All Data	Estimate: With Outliers Removed	Ratio
Fish consumption	СТ	10 th percentile	Per capita	0.0106	0.1131	10.67
(g/day)		Minimum	Consumers	0.0388	0.4242	10.93
	MN	5 th percentile	Consumers	0.0590	0.4899	1.07
Fish consumption per kilogram (g/kg-day)	СТ	10 th percentile	Per capita	0.0002	0.0023	11.50
		Minimum	Consumers	0.0007	0.0070	10.50
	FL	99 th percentile	Consumers	7.618	7.127	0.94
		Maximum	Per capita and consumers	127.31	38.29	0.30
		Minimum	Consumers	0.0030	0.0047	1.58
	ND	10 th percentile	Per capita	0.0452	0.0466	1.03
		5 th percentile	Consumers	0.0414	0.0438	1.06

Table 2-3. State level estimates that changed by more than 3% as a result of removing outliers

2.4. SAMPLE SIZES

The summary tables in Section 3 and Appendix E tabulate fish consumption by state broken down by demographic characteristics or by the type of fish and shellfish consumed. Table 2-4 shows the number of survey respondents by state for the general population and targeted populations. The first two columns list the state and sampled population. The third column has the number of respondents in the combined data file. The fourth through seventh columns have the number of respondents for which summary statistics are presented after removing outliers. Sample sizes are shown separately for estimates of fish and shellfish consumption in g/day and g/kg-day on a per capita basis and for consumers only. The difference between the sample sizes for consumption (g/day) and (g/kg-day) are due to missing bodyweights for some individuals. The sample sizes are for statistics that are broken out by state and demographic characteristics. Since an individual can consume multiple types of fish, the sample size column in the tabulations by type of fish consumed will generally not add to the numbers shown in Table 2-4.

			Numb	er of records af	ter removing o	outliers	
		Number of	Consumpt	tion (g/day)	Consumption (g/day-kg)		
State	Sampled population	respondents in data file	Per capita	Consumers only	Per capita	Consumers only	
СТ	Angler/recreational fishermen	267	266	257	250	244	
	Aquaculture students	25	25	19	25	19	
	Asians	402	402	396	396	393	
	Commercial fishermen	178	178	171	173	166	
	EFNEP participants	71	71	60	67	58	
	General population	433	431	369	420	362	
	WIC participants	704	703	557	699	553	
FL	General population	17,213	17,181	8,566	15,367	7,757	
MN	American Indians	221	221	196	216	192	
	Angler/recreational fishermen	1,172	1,171	1,127	1,152	1,109	
	General population	843	841	796	837	793	
	Families with new mothers	415	415	352	401	341	
ND	American Indians	134	133	78	106	64	
	Angler/recreational fishermen	872	871	825	854	808	
	General population	605	602	570	575	546	

Table 2-4. Sample sizes for the general population and targeted populations

The summary statistics for the general population were weighted. Table 2-5 shows the weighted totals for the general population in both g/day and g/kg-day on a per capita basis and for fish consumers.

 Table 2-5. Weighted totals for the general population, in thousands

	Consum	ption (g/day)	Consumption (g/kg-day)		
State	Per capita	Consumers only	Per capita	Consumers only	
СТ	3,378	2,854	3,296	2,804	
FL	15,952	7,912	14,827	7,490	
MN	4,900	4,623	4,897	4,621	
ND	639	606	610	580	

In tables displaying demographic characteristics, if the demographic characteristic was missing for some respondents, an "Unknown" category was created so the totals would be consistent across tables.

2.5. SUMMARY STATISTICS AND STATISTICAL ANALYSIS METHODS

The tables in Section 3 show summary statistics for the dependent variables. Separate tables show statistics for per capita consumption and for consumer only. Separate statistics are shown for each category of the independent variables. The following summary statistics are presented in various tables:

- Sample size: The number of respondents used to calculate the summary statistics.
- Weighted population estimate, in thousands: The size of the general population represented by the respondents. The population size is not calculated for the targeted populations.
- Arithmetic mean (or average): For the population, this is the arithmetic mean fish consumption across all individuals (including zero consumption for those that ate no fish or shellfish). The arithmetic mean is useful for summarizing average consumption and estimating long-term exposure.
- Geometric mean: The geometric mean cannot be calculated when there are zeroes in the data. Therefore, the geometric mean is calculated only for respondents that reported consuming fish or shellfish. The geometric mean is an approximate estimate of the median consumption and, for fish and shellfish consumers, provides a better test of differences among population groups.
- Percent of respondents: Reported consuming fish or shellfish during a 7-day (in Florida) or year-long period.
- Minimum: The minimum reported consumption of fish and shellfish.
- Percentiles: The 5th, 10th, 25th, 50th, 75th, 90th, 95th, and 99th percentiles of the distribution of fish consumption quantities. Lower percentiles for the population (i.e., per capita) may be zero because some respondents did not report eating any fish or shellfish. For example, if 40% of the respondents consumed fish or shellfish, then the 5th, 10th, and 25th percentiles will be zero. All percentiles for consumers are greater than zero. As explained in Appendix C, extreme percentiles that cannot be estimated are shown as a dot, indicating a missing value.
- Maximum: The maximum reported consumption of fish and shellfish.
- 95% Confidence interval for the mean.

Section 2.5.1 discusses the skewness and distribution of the consumption data and usefulness of the geometric mean. Section 2.5.2 discusses the calculation of percentiles. Summary tables in Appendix E provide means for subgroups, 95% confidence intervals for the means, and significance tests for differences of means among the subgroups. Section 2.5.3 discusses the calculation of the confidence intervals and significance tests.

2.5.1. Distribution of the Consumption Data

Table 2-6 shows the skewness values for as-consumed fish and shellfish consumption in both g/day and g/kg-day or both for consumers-only of fish and shellfish and per capita. For a symmetric distribution the skewness is zero. Except for the log-transformed variables, all of the skewness values in Table 2-6 are greater than 3.0, indicating the data have a skewed distribution with a long tail on the high side of the distribution. For example, Figure 2-6 is a histogram of as-consumed fish and shellfish consumption for consumers in Florida. The distribution is highly skewed with a maximum observation (2,338) much higher than the range with most of the data. Figure 2-7 shows a histogram of the log-transformed data. The log-transformed fish and shellfish consumption data is reasonably normally distributed.

	Per	capita	Fish and Shellfish Consumers					
State	g/day	g/kg-day	g/day	g/kg-day	Log ₁₀ (g/day)	Log ₁₀ (g/kg-day)		
СТ	5.4	5.2	5.3	5.2	-0.6	-0.7		
FL	11.1	9.5	9.5	8.3	-0.1	-0.1		
MN	8.4	9.9	8.5	9.8	-0.3	-0.1		
ND	3.5	5.9	3.5	5.9	-0.1	0.1		

 Table 2-6. Skewness of consumption variables, general population (asconsumed weight)

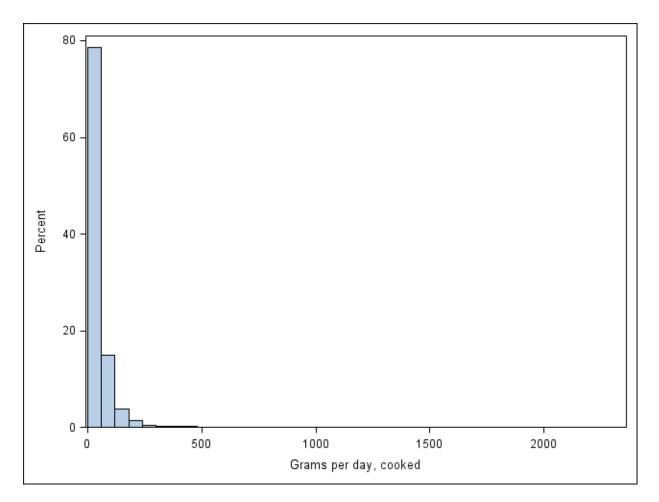


Figure 2-6. Histogram of fish and shellfish consumption, consumers only, asconsumed g/day.

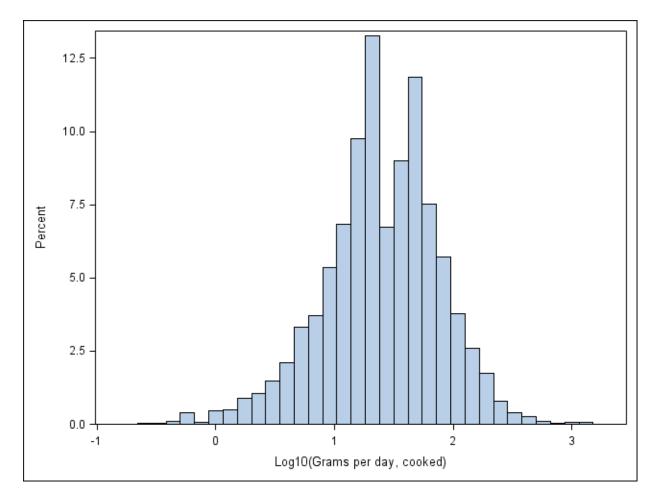


Figure 2-7. Histogram of log-transformed fish and shellfish consumption, consumers only, as-consumed g/day.

For consumers, the distributions of both the consumption in g/day and the consumption in g/kg-day are skewed. However, the distribution of the log-transformed values (see Figures 2-5 and 2-7) is reasonably normally distributed. Because many statistical methods, such as analysis of variance, have higher power when the data are normally distributed, comparing the mean of the log-transformed consumption, or equivalently the geometric mean of the consumption, may be more useful for comparing different categories of respondents. The arithmetic mean is more useful for summarizing average consumption and estimating long-term exposure. However, estimates of the arithmetic mean can be influenced by the small number of high consumption values in the data file.

All of the statistics for the general population are weighted to estimate state population values. For targeted populations, the statistics are unweighted. Means were calculated using SAS PROC MEANS. Geometric means were calculated as: GeomMean =

10×(Mean(log10(data))), where the mean of the log-transformed data was calculated using SAS PROC MEANS.

2.5.2. Calculation of Percentiles

There are many different methods for calculating percentiles. SAS provides several different algorithms for calculating percentiles. However only one of those algorithms (SAS PROC Univariate with PCTLDEF = 5) is implemented for weighted data. The disadvantage of this option is that:

- The estimated percentiles are always equal to the observed values even though values between the observed values are possible responses. In this case interpolation between the observed values can be used to improve the estimate.
- When the number of observations is small the SAS estimates of extreme percentiles are all equal to the minimum or maximum. However, with small sample sizes the upper percentiles of the population may be greater than the observed maximum and lower percentiles of the population may be less than the observed minimum.

To remedy these problems, a macro was used to calculate weighted percentile estimates with the following characteristics:

- Percentile estimates interpolate between the observed values to create a continuous (rather than discrete) distribution function; and
- Extreme percentiles are reported as missing when the expected percentile is greater than the maximum or less than the minimum observed value.

Details of the algorithm are shown in Appendix C.

The percentiles of the consumption distribution are affected by the measurement method. If the data are meant to represent the long-term consumption rate, the ideal consumption estimate might be obtained using a detailed consumption diary with measurements of fish and shellfish weight, completed over an extended time period. Measurements based on a one-time questionnaire with approximate weights (judged perhaps in terms of the equivalent number of bread slices) will be less precise, sometimes over- and sometimes under-estimating the correct long-term fish consumption. As a result, the measurements based on the survey questionnaire are likely to be more spread out (have a higher standard deviation) than the true values. In particular, the estimated upper percentiles may over-estimate the long-term consumption rate for those with the highest consumption rate.

2.5.3. Calculation of Confidence Intervals and Significance Tests

Appendix E provides confidence intervals and significance tests for differences in fish and shellfish consumption among subgroups defined by selected analysis variables. The confidence interval calculations assume the estimates have a normal distribution. This assumption is valid if the sample size is large or the log-transformed data have a reasonably normal distribution. When the data are highly skewed and the sample sizes in the subgroups are small (perhaps <100), the confidence intervals and significance tests are approximate. The significance tests evaluate if there are mean (or geometric mean) differences among all categories being tested versus a null hypothesis that the means (or geometric means) in all groups are identical.

Q-Q plots were used to evaluate the distribution of the data. Formal tests of normality to evaluate if the data deviated from a normal distribution were not done. The confidence intervals have the nominal coverage (in this case 95%) if the data has a normal distribution or if, due to the central limit theorem, the sample size is large enough that the distribution of the mean has a reasonably normal distribution. As long as the data are roughly normally distributed, as are the log-transformed values, the results are not sensitive to the exact distribution. Since the log-transformed fish consumption values have a roughly normal distribution, confidence intervals for the geometric mean calculated from the log-transformed values should have the nominal coverage. Confidence intervals for the arithmetic mean will be approximate, particularly when based on small sample sizes.

Confidence intervals were calculated using SAS PROC SURVEYMEANS. Significance tests for consumption differences among subgroups defined by categorical variables were calculated using PROC SURVEYREG using analysis of variance. Significance tests for differences among subgroups in the percentage of respondents that eat fish were calculated using PROC SURVEYLOGISTIC. The significance tests excluded the "Unknown" category from the calculations. However, the mean for the "Unknown" category is still shown in the tables along with its confidence interval. Note that confidence intervals based on a small number of respondents can be very imprecise. If there is only one respondent in a subgroup, the confidence interval has width of zero, incorrectly implying great precision. Confidence intervals for subgroups with only one respondent were set to missing (indicated by a period in the output). Significance tests comparing the percentages of respondents that eat fish and shellfish among subgroups can be adversely affected if all respondents in a subgroup have the same response. In these cases, subgroups in which all responses were identical were combined with another

subgroup to create an "Other" group for assessing significance. The tables indicate which groups were combined to assess significance. For race-ethnicity in North Dakota, it was not possible to assess significance because all responses were identical in all but one subgroup.

p-values below 0.05 are described as statistically significant. If the differences among subgroups are statistically significant, apparent trends across ordered subgroups may be described without a formal test for a linear trend.

2.6. ANALYSIS WEIGHTS

All of the surveys collected some fish consumption data from members of randomly selected households within the surveyed states (referred to as the general population). Based on the sample selection methods described in the survey reports, statistical weights were calculated to calculate weighted estimates of population statistics, that is, summary statistics that describe the entire population of the state. The weighted results are presented for the general population. Details of the weight calculation can be found in Appendix A, Section A.6. Note that the weights adjust for missing household members in Minnesota and North Dakota (if there are more than five household members) and Florida (if the primary meal preparer was not available).

The Connecticut and Minnesota/North Dakota surveys also collected data from target populations of particular interest. The targeted populations are listed in Table 2-2. In some cases the populations were selected using a probability sample from a list of individuals (such as a sample of those with fishing licenses in Minnesota). In such cases, weighted estimates could be calculated for the populations. However, without additional information for calculating nonresponse adjustments, the weighted estimates would be the same as the unweighted estimates. Members of other populations were selected using non-probability methods, such as those that happened to go to the WIC office at the time the interviewer was present. It is difficult to describe the population represented by these respondents and there is no basis for constructing weights. Unweighted results are presented for all targeted populations.

3. RESULTS AND DISCUSSION

The combined database used in this analysis has information on fish consumption in four states, Connecticut, Florida, Minnesota, and North Dakota. The data are useful for identifying consumption patterns within states among respondents from the general population including various age groups, gender, and different targeted populations. The survey estimates may differ between states because of differences in fish consumption or because of differences in how the data were collected in the three surveys. The discussion is divided into five characteristics of interest within states, such as differences by income, gender and age, race-ethnicity and targeted populations, education, and fish source (i.e., self-caught and store-bought). A selected number of tables are presented in Section 3. This is followed by Section 3.7 discussing the differences between data collection methods in the different surveys and the resulting effect on the consumption estimates. The results and discussion focus primarily on patterns of differences among subgroups within states. However, a general discussion of consumption differences between states is also included at the end of this Section 3. Additional tables and plots showing more detailed results are included in Appendix E.

3.1. DIFFERENCES BY INCOME

The Florida data show a statistically significant difference in the percentage of the population that report eating fish among income categories (p < 0.0001), corresponding to an increase in the percentage with increasing household income. Differences in fish consumption by income are shown in Table 3-1. For households with annual incomes below \$20,000, 45.1% of residents ate fish or shellfish in the previous week. For households with annual income above \$50,000 that percentage increased to 56.7%. Differences among income categories in Minnesota and North Dakota show a similar pattern, but are only marginally significant (p = 0.067) in Minnesota. Table 3-2 shows that for Minnesotans that eat fish and shellfish, increasing income is associated with a significant decrease in the geometric mean grams of fish and shellfish eaten per day (p = 0.012). Table 3-3 shows that differences in the arithmetic mean were not significant. Other differences associated with income were not significant and not consistent across states.

State	Subgroup	N	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	\$0-20,000	41	312	86.8	74.7	98.8	0.9161
	\$20,000-50,000	155	1,179	85.3	76.0	94.7	
	\$50,000-	219	1,778	83.8	76.2	91.4	
	Unknown	16	119	73.4	50.1	96.7	
FL	\$0-20,000	3,746	3,408	45.1	41.8	48.4	< 0.0001
	\$20,000-50,000	7,353	6,814	50.0	48.2	51.7	
	\$50,000-	3,417	3,250	56.7	54.1	59.4	
	Unknown	2,665	2,480	45.4	42.0	48.8	
MN	\$0-20,000	89	373	91.0	82.5	99.6	0.0668
	\$20,000-50,000	328	1,802	91.3	85.0	97.6	
	\$50,000-	327	2,155	97.9	95.0	100.8	
	Unknown	97	570	92.9	86.2	99.7	
ND	\$0-20,000	53	56	94.0	87.6	100.5	0.1729
	\$20,000-50,000	252	268	93.3	89.4	97.3	
	\$50,000-	239	251	97.1	95.0	99.3	
	Unknown	58	63	93.1	86.0	100.2	

Table 3-1. Percent eating fish and shellfish, per capita, by state and income (with95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

State	Subgroup	N	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	\$0-20,000	36	270	16.72	11.07	25.25	0.8365
	\$20,000-50,000	135	1,006	18.59	13.90	24.85	
	\$50,000-	186	1,490	16.54	13.02	21.01	
	Unknown	12	87	25.13	16.80	37.58	
FL	\$0-20,000	1,707	1,537	35.75	33.30	38.38	0.6722
	\$20,000-50,000	3,709	3,404	35.95	34.17	37.82	
	\$50,000-	1,960	1,844	34.83	32.98	36.77	
	Unknown	1,190	1,126	32.08	29.83	34.49	
MN	\$0-20,000	79	339	19.16	13.39	27.41	0.0118
	\$20,000-50,000	302	1,645	10.49	7.79	14.12	
	\$50,000-	321	2,109	9.88	7.58	12.88	
	Unknown	94	530	10.98	8.08	14.94	
ND	\$0-20,000	50	53	13.71	8.44	22.26	0.0517
	\$20,000-50,000	235	250	10.04	8.14	12.38	
	\$50,000-	231	244	12.93	10.72	15.60	
	Unknown	54	59	12.24	8.07	18.55	

Table 3-2. Geometric mean consumption, consumers only, by state and income (as-
consumed g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	\$0-20,000	36	270	27.12	16.49	37.76	0.5102
	\$20,000-50,000	135	1,006	37.52	22.60	52.44	
	\$50,000-	186	1,490	28.10	23.14	33.06	
	Unknown	12	87	30.70	20.06	41.33	
FL	\$0-20,000	1,707	1,537	57.65	51.15	64.15	0.5398
	\$20,000-50,000	3,709	3,404	56.27	52.28	60.27	
	\$50,000-	1,960	1,844	53.93	50.35	57.52	
	Unknown	1,190	1,126	46.81	43.28	50.33	
MN	\$0-20,000	79	339	31.26	17.29	45.24	0.1734
	\$20,000-50,000	302	1,645	21.11	11.06	31.17	
	\$50,000-	321	2,109	16.71	12.42	21.00	
	Unknown	94	530	14.99	11.33	18.66	
ND	\$0-20,000	50	53	26.08	10.03	42.13	0.5251
	\$20,000-50,000	235	250	18.80	14.40	23.19	
	\$50,000-	231	244	19.78	16.12	23.44	
	Unknown	54	59	20.69	11.67	29.70	

Table 3-3. Mean consumption, consumers only, by state and income (asconsumed g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

3.2. DIFFERENCES BY GENDER AND AGE

By far the most statistically significant patterns in the data were differences by age. These differences vary somewhat among states and genders. The percentages of individuals eating fish and shellfish by state, age, and gender are presented in Table 3-4. As would be expected, the percentage of individuals eating fish and shellfish is less for children than adults. As children grow, the grams of fish and shellfish consumed per day increases to around age 18, after which the consumption rate continues to increase more slowly until about age 50. On a per kilogram bodyweight basis, fish and shellfish consumption is generally higher for younger children.

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	Child 1–5	28	274	47.6	25.1		<0.0001
	Child 6–10	28	259	80.0	61.2	98.8	
	Child 11–15	22	201	86.1	67.4	104.9	
	Female 16–29	17	141	79.9	57.8	102.0	
	Female 30–49	88	656	87.1	80.4	93.9	
	Female 50+	79	579	90.9	83.6	98.1	
	Male 16-29	14	119	70.5	48.3	92.7	
	Male 30-49	81	600	92.9	87.3	98.6	
	Male 50+	63	461	90.5	82.4	98.6	
	Unknown	11	99	76.1	48.4	103.9	
FL	Child 1–5	1,107	1,138	37.6	33.7	41.4	< 0.0001
	Child 6–10	943	962	39.3	35.5	43.2	
	Child 11–15	865	849	42.8	38.4	47.2	
	Female 16–29	1,636	1,518	48.7	45.8	51.5	
	Female 30–49	2,546	2,296	56.4	54.2	58.3	
	Female 50+	2,367	2,142	55.7	53.5	57.8	
	Male 16-29	1,702	1,567	45.9	43.0	48.7	
	Male 30-49	2,673	2,411	52.9	50.9	54.8	
	Male 50+	2,347	2,127	54.4	52.2	56.6	
	Unknown	995	941	39.2	34.3	44.1	
MN	Child 1–5	47	437	97.4	92.0	102.8	< 0.0001
	Child 6–10	47	299	88.4	73.0	103.8	
	Child 11–15	68	337	92.8	83.5	102.1	
	Female 16–29	47	331	96.0	89.1	103.0	
	Female 30–49	133	723	95.0	89.3	100.6	
	Female 50+	162	854	94.9	90.7	99.0	
	Male 16-29	55	275	92.3	77.8	106.8	
	Male 30-49	120	731	96.0	91.8	100.3	
	Male 50+	156	852	99.8	99.5	100.1	
	Unknown	6	62	1.5	-2.0	5.0	

Table 3-4. Percent eating fish and shellfish, per capita, by state and age/gender (with 95% CIs)

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
	0		,				1
ND	Child 1–5	31	30	91.5	82.6	100.4	0.0942
	Child 6-10	46	44	92.4	80.7	104.0	
	Child 11–15	58	54	97.2	93.5	100.9	
	Female 16–29	45	47	85.6	73.2	98.0	
	Female 30–49	99	105	98.4	96.1	100.7	
	Female 50+	102	116	93.6	89.1	98.1	
	Male 16-29	37	39	100.0	100.0	100.0	
	Male 30-49	92	99	97.8	94.8	100.9	
	Male 50+	85	97	94.3	89.4	99.2	
	Unknown	7	7	75.2	39.5	111.0	

 Table 3-4.
 Percent eating fish and shellfish, per capita, by state and age/gender (with 95% CIs) (continued)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

The Florida data show a significant difference in the percentage of the population that reports eating fish and shellfish among nine age and gender categories (p < 0.0001), corresponding to increasing percentages of consumers with increasing age, up to age 49. The percentage for those 50 and over is similar to that for ages 30–49. An estimated 37.6% of children aged 1–5 consume fish or shellfish during a one week period. For adults aged 30–49, 56.4% of females and 52.9% of males consume fish or shellfish in a week. Due to the survey procedures used, the Florida data will underestimate the percentage of children that consume fish and shellfish. Thus, the actual percentages for children may be higher, possibly making the trend versus age less significant.

In the Connecticut data, the percentage of the population that eats fish and shellfish is lower (47.6%) for children aged 1–5 and higher (roughly 80–90%) for other age groups. This difference is statistically significant (p < 0.0001). Among fish and shellfish consumers, adults consume significantly more fish and shellfish than children (p < 0.0001). Consumption generally increases from the younger to older age groups, with a slight decrease for the oldest age group. On a per bodyweight basis, consumption for fish consumers varies among categories. However, the differences are statistically significant (p = 0.0006 on a per capita basis and p = 0.0004 for fish and shellfish consumers). For consumers, consumption per kilogram per day has a generally decreasing trend from the youngest to the oldest age group. Of those that do consume fish and shellfish, differences among age and gender categories are significant (p < 0.0001): children in Florida aged 1–5 consume 28.98 g/day; adults aged 30–49 consume about 60 g/day (61.17 for females and 66.19 for males) (see Table 3-5). Above age 50, consumption drops off. The per capita fish and shellfish consumption is a combination of the percentage of respondents that consume fish and the amount consumed. The per capita consumption also shows significant differences (p < 0.0001) corresponding to a significant increase to age 50 followed by a modest decrease for consumers over 50. The decrease appears to be due to a decrease in the quantity consumed per day rather than a decrease in the percentage of people that consume fish and shellfish.

Because bodyweight is closely related to age, the patterns in fish and shellfish consumption in g/kg of bodyweight versus age are quite different than for consumption on a g/day basis. In Florida, differences in per capita fish and shellfish consumption per kilogram bodyweight per day were statistically significant (p < 0.0001), decreasing from 0.89 g/kg-day for children aged 1–5 to 0.37 g/kg-day for children 11–15, increasing slightly for middle aged adults and decreasing slightly to 0.41 g/kg-day for females 50 and over and 0.38 g/kg-day for males 50 and over (see Table 3-6). Similar patterns were seen for consumers of fish and shellfish (see Appendix E). Any adjustment for not collecting away-from-home fish and shellfish consumption for children will make the differences more significant.

State	Subgroup	N	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	Child 1–5	14	131	8.92	5.60	12.25	< 0.0001
	Child 6–10	22	207	14.48	9.82	19.14	
	Child 11–15	19	173	16.35	8.78	23.91	
	Female 16–29	14	113	44.94	7.85	82.03	
	Female 30–49	77	571	36.16	21.93	50.38	
	Female 50+	72	526	31.45	24.28	38.62	
	Male 16-29	10	84	16.92	11.80	22.05	
	Male 30-49	75	557	44.63	33.43	55.82	
	Male 50+	57	417	32.19	24.74	39.64	
	Unknown	9	75	9.02	-0.72	18.76	

Table 3-5. Mean consumption, consumers only, by state and age/gender (asconsumed g/day) (with 95% CIs)

State	Subgroup	N	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
FL	Child 1–5	421	428	28.98	26.53	31.44	<0.0001
	Child 6–10	376	378	30.52	27.51	33.54	
	Child 11–15	365	364	40.58	35.47	45.70	
	Female 16–29	791	739	54.62	45.97	63.28	
	Female 30–49	1,446	1,292	61.17	56.31	66.02	
	Female 50+	1,315	1,192	47.18	44.64	49.71	
	Male 16-29	785	719	72.00	60.33	85.66	
	Male 30–49	1,406	1,275	66.19	60.90	71.48	
	Male 50+	1,272	1,156	56.85	52.46	61.06	
	Unknown	389	369	41.83	34.22	49.43	
MN	Child 1–5	46	425	8.17	4.77	11.57	< 0.0001
	Child 6-10	43	265	10.76	6.09	15.43	
	Child 11–15	63	313	12.89	8.08	17.70	
	Female 16–29	44	318	38.44	-8.98	85.87	
	Female 30–49	128	686	16.31	13.58	19.04	
	Female 50+	150	810	24.53	17.89	31.18	
	Male 16-29	52	254	8.00	5.77	12.22	
	Male 30-49	115	702	21.16	15.16	27.15	
	Male 50+	154	851	20.88	16.98	24.79	
	Unknown	1	1	1.05	-	-	
ND	Child 1–5	28	28	11.91	3.20	20.62	0.0155
	Child 6-10	43	41	15.98	9.76	22.19	
	Child 11–15	56	53	20.32	11.86	28.78	
	Female 16–29	39	40	12.10	7.92	16.27	
	Female 30–49	97	103	18.08	13.76	22.40	
	Female 50+	95	108	25.87	17.75	34.00	
	Male 16-29	37	39	16.36	9.96	22.77	
	Male 30-49	90	97	18.75	15.03	22.47	
	Male 50+	80	91	24.00	17.02	32.97	
	Unknown	5	6	31.88	5.11	58.65	

Table 3-5. Mean consumption, consumers only, by state and age/gender (asconsumed g/day) (with 95% CIs) (continued)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

State	Subgroup	Ν	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	Child 1–5	26	253	0.32	0.13	0.50	0.0006
	Child 6–10	26	239	0.51	0.33	0.69	
	Child 11–15	21	193	0.27	0.13	0.41	
	Female 16–29	17	141	0.67	0.06	1.28	
	Female 30–49	85	634	0.46	0.32	0.61	
	Female 50+	77	563	0.43	0.33	0.54	
	Male 16-29	14	119	0.16	0.08	0.25	
	Male 30-49	80	594	0.47	0.37	0.57	
	Male 50+	63	461	0.35	0.27	0.42	
	Unknown	11	99	0.09	-0.03	0.21	
FL	Child 1–5	1,102	1,134	0.89	0.75	1.02	< 0.0001
	Child 6–10	938	956	0.44	0.37	0.50	
	Child 11–15	864	848	0.37	0.29	0.44	
	Female 16–29	1,537	1,477	0.44	0.35	0.52	
	Female 30–49	2,264	2,178	0.53	0.49	0.57	
	Female 50+	2,080	2,025	0.41	0.38	0.44	
	Male 16-29	1,638	1,551	0.44	0.36	0.52	
	Male 30-49	2,540	2,383	0.43	0.39	0.47	
	Male 50+	2,206	2,090	0.38	0.35	0.41	
	Unknown	198	185	0.35	0.26	0.45	
MN	Child 1–5	47	437	0.57	0.30	0.83	<0.0001
	Child 6–10	46	298	0.33	0.17	0.50	
	Child 11–15	68	337	0.22	0.15	0.29	
	Female 16–29	47	331	0.67	-0.20	1.53	
	Female 30–49	132	722	0.24	0.20	0.29	
	Female 50+	162	854	0.34	0.25	0.43	
	Male 16-29	55	275	0.10	0.06	0.14	
	Male 30-49	120	731	0.24	0.16	0.31	
	Male 50+	155	851	0.24	0.20	0.29	

Table 3-6. Mean consumption per bodyweight, general population, per capita, by state and age/gender (as-consumed g/kg-day) (with 95% CIs)

-			Weighted		Lower Conf.	Upper Conf.	_
State	Subgroup	Ν	N/1,000	Mean	Limit	Limit	<i>p</i> -value
	Unknown	5	61	0.00	-0.00	0.01	
ND	Child 1–5	30	30	0.67	0.25	1.08	0.0617
112	Child 6–10	44	42	0.51	0.28	0.75	0.0017
	Child 11–15	55	52	0.40	0.22	0.58	
	Female 16–29	42	43	0.18	0.12	0.24	
	Female 30–49	95	101	0.28	0.21	0.35	
	Female 50+	99	112	0.38	0.25	0.50	
	Male 16-29	36	38	0.22	0.13	0.31	
	Male 30-49	90	97	0.22	0.17	0.26	
	Male 50+	81	92	0.29	0.19	0.39	
	Unknown	3	3	0.11	-0.08	0.29	

Table 3-6. Mean consumption per bodyweight, general population, per capita, by state and age/gender (as-consumed g/kg-day) (with 95% CIs) (continued)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

When looking at gender alone, a slightly higher percentage of Florida females consume fish and shellfish than males (51.5% versus 49.1%, p = 0.0001). Per capita consumption of fish and shellfish is higher for males than for females (29.15 versus 26.29 g/day, p = 0.0113). However, because males generally weigh more than females, females consume slightly more fish and shellfish per kilogram bodyweight per day than males (0.50 versus 0.44 g/kg-day, p = 0.0040). These results are shown in Tables 3-7, 3-8 and 3-9.

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	Male	205	1,617	85.1	78.6	91.7	0.5786
	Female	226	1,771	83.4	77.5	89.3	
FL	Male	8,262	7,662	49.1	47.7	50.4	0.0001
	Female	8,110	7,517	51.5	50.1	52.9	
	Unknown	809	774	36.1	30.4	41.8	
MN	Male	422	2,497	95.3	91.4	99.1	0.3933
	Female	419	2,403	93.4	89.5	97.3	
ND	Male	288	306	96.3	94.1	98.6	0.1378
	Female	314	332	93.5	90.2	96.7	

Table 3-7. Percent eating fish and shellfish, per capita, by state and gender (with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

Table 3-8. Mean consumption, general population, per capita, by state a	nd
gender (as-consumed g/day with 95% CIs)	

State	Subaucon	N	Weighted	Maan	Lower Conf.	Upper Conf.	
State	Subgroup	N	N/1,000	Mean	Limit	Limit	<i>p</i> -value
СТ	Male	205	1,617	27.45	21.65	33.25	0.5193
	Female	206	1,771	25.56	19.54	31.59	
FL	Male	8,262	7,662	29.15	27.29	31.01	0.0113
	Female	8,110	7,517	26.29	24.44	28.14	
	Unknown	809	774	14.73	10.22	19.25	
MN	Male	422	2,497	16.35	13.43	19.27	0.3630
	Female	419	2,403	19.85	12.19	27.51	
ND	Male	288	306	20.21	16.02	24.40	0.1626
	Female	314	332	17.85	14.13	21.58	

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

					Lower	Upper	
			Weighted		Conf.	Conf.	
State	Subgroup	Ν	N/1,000	Mean	Limit	Limit	<i>p</i> -value
СТ	Male	201	1,581	0.39	0.31	0.46	0.2782
	Female	219	1,715	0.43	0.34	0.53	
FL	Male	7,911	7,568	0.44	0.41	0.47	0.0040
	Female	7,426	7,229	0.50	0.46	0.53	
	Unknown	30	30	0.41	0.12	0.70	
MN	Male	419	2,495	0.26	0.22	0.31	0.1897
	Female	418	2,402	0.36	0.22	0.50	
ND	Male	276	293	0.32	0.22	0.41	0.9048
	Female	299	317	0.32	0.25	0.40	

Table 3-9. Mean consumption per bodyweight, general population, percapita, by state and gender (as-consumed g/kg-day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

The estimates for other states are less precise and the patterns in the data by age are less distinct than in the Florida data, most likely due to differences in sample size. In Minnesota and North Dakota the percentage of the population that consumes fish and shell fish is high and relatively constant for all age groups, with a slight, but inconsistent increase with age. The differences among nine age and gender groups are significant in Minnesota (p < 0.0001) and marginally significant in North Dakota (p = 0.094). Per capita fish and shellfish consumption is higher in adults than children, with significant differences in Minnesota (p = 0.0001) and North Dakota (p = 0.039). The grams of fish and shellfish consumed per day generally increases from the youngest to the oldest respondents. The consumption per kilogram bodyweight generally decreases from the youngest to the oldest age groups, with significant differences among age/gender categories in Minnesota (p < 0.0001) and significant differences in North Dakota (p = 0.062 per capita, p = 0.0001 for differences in the geometric mean for consumers only). However the decrease is not as dramatic as in the Florida data.

In the Connecticut, Minnesota, and North Dakota data, a general trend line for consumption can be drawn between the youngest age groups, (1–5 and 6–10) and the older aged groups (30–49 and 50 and over). However, the consumption for intermediate aged groups, those 11–15 and 16–29, are not always consistent with the overall trend. The differences may be due to differences in the survey procedures, imprecision in the estimates, or to real patterns in the data that are not easy to generalize. One possible explanation is that young women increase their consumption of fish and shellfish at an earlier age than men who may not increase fish and

shellfish consumption until around age 30. In addition, there is a wider confidence interval for females age 16–29 compared to that of other age groups. More investigation would be required to provide additional insight into the patterns across age categories.

Across all states there were generally consistent and significant age and gender trends, with more adults reporting consumption of fish and shellfish than children and adults consuming more fish and shellfish than children on a g/day basis. The fish and shellfish consumption per kilogram bodyweight is generally higher for children than adults. However the difference is not always significant. The consumption broken out by age categories is generally consistent with this summary, with the youngest children generally having the lowest overall consumption but the highest consumption per kilogram bodyweight. There are also consistent differences between genders, with males consuming more fish and shellfish, but less on a per kilogram bodyweight basis. However, the differences are significant only in Florida.

3.3. DIFFERENCES BY RACE-ETHNICITY AND TARGETED POPULATIONS

In Connecticut, Minnesota, and North Dakota members of targeted populations were sampled separately in addition to being represented in the state's general population sample. In most cases, the populations were defined by race-ethnicity or factors closely related to race-ethnicity. As a result, this section discusses both the results from the state's general population and from the targeted populations.

In the Florida survey, 50.9% of non-Hispanic Whites (hereafter Whites) reported eating fish or shellfish in the previous week (Table 3-10). A lower percentage of non-Hispanic Black (46.2%) and Hispanic (45.0%) respondents reported eating fish and shellfish during the previous week. These differences are significant (p = 0.0341). For those that consumed fish and shellfish, the consumption rate of fish and shellfish was less for Whites than for minorities (p = 0.0726; Table 3-11). Similar patterns were observed on a per kilogram bodyweight basis (p = 0.0025; Appendix E). The higher percentage of Whites eating fish and shellfish and the lower daily consumption combine so that the per capita fish and shellfish consumption is similar for Whites, Blacks, and Hispanics.

In Connecticut, the number of minority respondents from the general population is small. However, differences among race-ethnicity groups are statistically significant (p < 0.0001) for all of the dependent variables. The general population respondents included 9 classified as Black of which only 3 reported fish or shellfish consumption (Tables 3-10 and 3-11). Thus sample sizes for Blacks are particularly small. In Connecticut, the estimated fish consumption and percentage of respondents consuming fish and shellfish is less for Blacks than other race-ethnicity groups. However, the sample size for Blacks was small in the Connecticut survey. Therefore, generalizations cannot be made with regard to this minority group. While a higher percentage of Whites consume fish and shellfish than Hispanics and other minorities, Whites consume less fish and shellfish than Hispanics and other minorities.

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	White, Non-Hispanic	380	2,968	88.0	83.2	92.8	< 0.0001
	Black, Non-Hispanic	9	66	33.5	-22.9	89.9	
	Hispanic	20	178	70.9	32.5	109.4	
	Other	20	155	54.7	19.4	90.0	
	Unknown	2	21	43.4	43.4	43.4	
FL	White, Non-Hispanic	12,957	11,887	50.9	49.6	52.3	0.0341
	Black, Non-Hispanic	1,842	1,690	46.2	42.1	50.2	
	Hispanic	1,673	1,719	45.0	40.8	49.1	
	Other	382	330	50.3	41.2	59.4	
	Unknown	327	325	42.7	33.2	52.2	
MN	White, Non-Hispanic	779	4,473	93.8	90.3	97.3	0.0010
	Black, Non-Hispanic	1	1	0.0	-	-	
	Hispanic	3	50	100.0	100.0	100.0	
	Other	19	173	100.0	100.0	100.0	
	Unknown	39	204	100.0	100.0	100.0	
ND	White, Non-Hispanic	551	585	94.8	92.6	97.0	-
	Black, Non-Hispanic	2	2	100.0	100.0	100.0	
	Other	17	16	100.0	100.0	100.0	
	Unknown	32	36	93.5	85.3	101.7	

Table 3-10. Percent eating fish and shellfish, per capita, by state and raceethnicity (with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population

State	Subgroup	N	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	White, Non-Hispanic	338	2,612	30.67	25.65	35.67	< 0.0001
	Black, Non-Hispanic	3	22	13.03	8.45	17.61	
	Hispanic	15	126	41.85	18.18	65.52	
	Other	12	85	47.01	0.39	93.63	
	Unknown	1	9	0.99	-	-	
FL	White, Non-Hispanic	6,607	6,053	53.17	50.77	55.58	0.0726
	Black, Non-Hispanic	867	780	57.53	50.59	64.47	
	Hispanic	762	773	59.17	48.01	70.33	
	Other	191	166	71.11	50.70	91.51	
	Unknown	139	139	57.92	37.09	78.76	
MN	White, Non-Hispanic	735	4,197	17.17	14.43	19.91	0.5354
	Hispanic	3	50	45.01	-10.06	100.08	
	Other	19	173	56.04	-45.60	157.68	
	Unknown	39	204	22.25	12.13	32.38	
ND	White, Non-Hispanic	521	555	20.16	15.91	24.41	0.0578
	Black, Non-Hispanic	2	2	15.72	15.03	16.41	
	Other	17	16	20.89	14.32	27.46	
	Unknown	30	33	17.37	8.07	26.66	

Table 3-11. Mean consumption, consumers only, by state and race-ethnicity(as-consumed g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

Table 3-12 and 3-13 show that anglers had higher consumption rates than the general population in Connecticut, Minnesota and North Dakota. In Connecticut, Asians, commercial fishermen, Expanded Food and Nutrition Education Program (EFNEP) and Women, Infants and Children Program (WIC) participants also had higher fish consumption rates than the state's general population. In Minnesota, new mothers had lower fish consumption rates than the state's general population. American Indians in Minnesota consumed less fish and shellfish than other groups (Table 3-12 and 3-13). No significance tests were performed to evaluate these differences due to differences in how the populations were sampled.

State	Subpopulation	Ν	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit
СТ	General	369	2,854	31.41	25.84	36.98
	Angler	257	-	49.16	40.87	57.44
	Aquaculture Student	19	-	19.33	4.23	34.42
	Asians	396	-	57.37	48.50	66.23
	Commercial Fishermen	171	-	48.78	36.47	61.08
	EFNEP Participants	60	-	59.95	18.67	101.22
	WIC Participants	557	-	45.85	38.57	53.14
FL	General	8,566	7,912	54.65	52.14	57.16
MN	General	796	4,623	19.15	14.66	23.63
	American Indians	196	-	13.20	8.80	17.60
	Anglers	1,127	-	21.68	17.90	25.46
	New Mothers	352	-	16.83	12.75	20.91
ND	General	570	606	20.01	16.28	23.75
	American Indians	78	-	26.04	11.50	40.58
	Anglers	825	-	20.57	18.32	22.81

Table 3-12. Mean consumption, consumers only, by state and targeted populations (as consumed, g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

			Weighted		Lower Conf.	Upper Conf.
State	Subpopulation	Ν	N/1,000	Mean	Limit	Limit
СТ	General	431	3388	26.46	21.30	31.62
	Angler	266	-	47.49	39.31	55.68
	Aquaculture Student	25	-	14.69	2.32	27.05
	Asians	402	-	56.51	47.73	65.29
	Commercial Fishermen	178	-	46.86	34.78	58.94
	EFNEP Participants	71	-	50.66	15.51	85.81
	WIC Participants	703	-	36.33	30.35	42.31
FL	General	17,181	15,952	27.10	25.61	28.60
MN	General	841	4,900	18.06	13.76	22.37
	American Indians	221	-	11.70	7.83	15.58
	Anglers	1,171	-	20.87	17.17	24.57
	New Mothers	415	-	14.28	10.61	17.94
ND	General	602	639	18.99	15.39	22.58
	American Indians	133	-	15.27	5.74	24.80
	Anglers	871	-	19.48	17.26	21.70

Table 3-13. Mean consumption, per capita, by state and targetedpopulations (as consumed, g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

Overall, there were often significant differences among race-ethnicity groups. The differences were not always consistent except that a higher percentage of Whites reported consuming fish or shellfish and Whites generally consumed less than minorities. The differences between the general populations and the targeted populations in each state are generally consistent with this summary.

3.4. DIFFERENCES BY EDUCATION

The Florida data show significant differences in the percentage of the population that consumed fish and shellfish among education groups (p < 0.0001). The estimates correspond to an increase in the percentage of the population that reported eating fish with an increase in education of the head of household. When the head of household had less than a high school education, 40.7% of occupants consumed fish or shellfish in a period of a week (Table 3-14). For college graduates, the percentage increased to 53.6%. Similar, though non-significant, trends were seen in the Minnesota and North Dakota percentages.

State	Subgroup	Ν	Weighted N/1,000	Percent	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	0-11 years	13	97	100.0	100.0	100.0	0.3444
	High School	89	682	85.6	73.0	98.2	
	Some College	66	504	89.3	81.3	97.3	
	College Graduate	263	2,105	81.9	75.1	88.7	
FL	0-11 years	1,744	1,523	40.7	36.2	45.3	< 0.0001
	High School	5,677	5,118	47.3	45.2	49.3	
	Some College	5,261	4,948	51.5	49.0	54.0	
	College Graduate	4,367	4,240	53.6	51.3	56.0	
	Unknown	132	123	39.4	28.5	50.3	
MN	0-11 years	46	214	86.2	70.9	101.6	0.4294
	High School	236	1,332	92.9	84.6	101.1	
	Some College	260	1,330	95.3	91.4	99.3	
	College Graduate	256	1,808	95.0	90.9	99.2	
	Unknown	43	215	99.7	99.1	100.3	
ND	0-11 years	31	35	87.6	74.1	101.1	0.1680
	High School	143	144	97.4	94.8	99.9	
	Some College	195	212	93.9	89.2	98.7	
	College Graduate	196	206	96.8	94.2	99.4	
	Unknown	37	42	87.2	77.7	96.6	

Table 3-14. Percent eating fish and shellfish, per capita, by state andeducation (with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

3.5. DIFFERENCES BY FISH AND SHELLFISH SOURCE

For those that consumed fish and shellfish, respondents were classified by the source of fish and shellfish they eat, using the categories: eats only self-caught fish, only store-bought fish, or both store-bought and self-caught fish. A second set of categories was also defined to focus on whether respondents consume self-caught fish from freshwater or estuaries (classified as exclusively, sometimes, and never). Fish consumption was then summarized for these categories

of respondents. Since the differences using just the store-bought and self-caught categories were more significant, only those results are discussed in this report.

In all four states, using consumption in g/day or g/kg-day, and using the mean or the geometric mean, fish consumption is highest for those that consume both self-caught and storebought fish and shellfish as opposed to either only self-caught or only store-bought fish and shellfish. In all cases the difference is statistically significant. As shown in Table 3-15, those that eat both caught and bought fish in Florida consume 111.97 g/day compared to 49.64 g/day for those that consume only purchased fish and shellfish. In Connecticut, those that eat both self-caught and bought fish consume 38.47 g/day compared to 29.80 g/day for those that consume only purchased fish and shellfish. In Minnesota and North Dakota these numbers are 24.30 and 23.31 g/day for consumers of bought and self-caught fish and 12.23 and 13.50 g/day for consumers of purchased fish and shellfish only. In all but Florida the number of respondents that consume only self-caught fish was relatively small. In Florida, the consumption rate for those that eat only self-caught fish and shellfish is similar to that for those that eat only store-bought fish and shellfish.

State	Subgroup	N	Weighted N/1,000	Mean	Lower Conf. Limit	Upper Conf. Limit	<i>p</i> -value
СТ	Eats Caught Only	1	9	0.99	-	-	< 0.0001
	Eats Caught and Bought	74	559	38.47	25.44	51.51	
	Eats Bought Only	294	2286	29.80	24.51	35.10	
FL	Eats Caught Only	600	493	45.59	40.35	50.83	< 0.0001
	Eats Caught and Bought	802	667	111.97	97.35	126.60	
	Eats Bought Only	7,164	6,752	49.64	47.34	51.95	
MN	Eats Caught Only	38	221	6.80	2.84	10.76	0.0001
	Eats Caught & Bought	556	2,747	24.31	17.70	30.91	
	Eats Bought Only	202	1,655	12.23	9.27	15.19	
ND	Eats Caught Only	33	36	13.31	6.08	20.55	0.0054
	Eats Caught and Bought	376	403	23.31	18.71	27.90	
	Eats Bought Only	161	167	13.50	7.88	19.12	

 Table 3-15. Mean consumption, consumers only, by state and angler status (as-consumed g/day with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

3.6. PROCEDURAL DIFFERENCES AMONG SURVEYS

Although there are multiple differences between the survey methods used for the three surveys, two differences in the Florida survey—the shorter recall period used and the exclusion of away-from-home fish and shellfish consumption—may have an important effect on the results. This section discusses the likely effect of these differences.

Differences in fish and shellfish consumption between states depend in part on the different recall periods used in the surveys. Respondents were asked how frequently they ate fish and shellfish (such as number of meals per week or month) and how much was eaten on each occasion. An individual's fish consumption is based on the product of the frequency (number of meals or servings per unit time) and the typical quantity per meal, summed over all species.

Between-state comparisons of the per capita (or population average for both consumers and non-consumers) fish and shellfish consumption are affected by the respondent's ability to recall their fish and shellfish consumption and by differences in reporting in response to different questionnaires. The respondent's ability to recall their fish and shellfish consumption may be affected by the length of the recall period (Medlin and Skinner, 1988). Even when the respondents have perfect recollection and reporting of their fish and shellfish consumption, the estimates of the proportion of respondents that report eating fish or shellfish and the consumption rate for those that report consuming fish and shellfish will be affected by the length of the recall period. Therefore, these estimates are not directly comparable between surveys.

The effect of recall period on the calculations is illustrated by the following simplified example. Assume for now that respondents have perfect recollection and reporting of their fish and shellfish consumption. If a respondent eats 112 g of salmon once every 4 weeks on a regular schedule and the recall period is 1 week, there is a 25% chance that the recall period will fall in the week when salmon is consumed. If so, the estimated consumption rate is the weight of salmon consumed divided by the length of the recall period in days, i.e., 112 g per 7 days = 16 g/day. If the recall period does not fall on a week when salmon is consumption rate is 0 g/day. For a group of respondents with similar salmon consumption patterns, 25% of respondents will be classified as eating salmon, for those that eat salmon the consumption rate is 16 g/day. The consumption rate is 0 for the 75% of respondents that did not eat salmon in the recall period. Across the targeted population, the standard deviation of the consumption rate is 6.9 g/day. The average consumption across the entire targeted population is 25% × 16 = 4 g/day.

If the recall period is 4 weeks, every respondent in the population will report eating one serving of salmon. Across the population of similar respondents, 100% of respondents will be classified as eating salmon with an average consumption rate of 4 g/day. In this example, the estimated average consumption rate is the same, regardless of the recall period. However, the

percent of respondents that reported eating salmon and the consumption rate for those that consume salmon depend on the recall period. Table 3-16 summarizes the results for this illustrative example. Although the numbers would change somewhat, the relationships would be the same if the population also included some respondents that never consume salmon.

	Recall Period		
Result	1 Week	4 Weeks	
Percentage of respondents eating salmon	25%	100%	
Salmon consumption rate for consumers (those that ate salmon during the recall period)	16 g/day	4 g/day	
Per capita salmon consumption	4 g/day	4 g/day	
Standard deviation of salmon consumption rate per capita	6.9 g/day	0 g/day	

 Table 3-16. Illustrative results for two recall periods

Although the arguments are somewhat more complicated, still assuming that respondents have perfect recollection and reporting of their fish and shellfish consumption, similar conclusions apply to the summary statistics calculated from the all of surveys. In general:

- Estimates of the percentage of the population that consume fish and shellfish depend on the recall period. Longer recall periods are associated with higher percentages of respondents consuming fish and shellfish during the recall period.
- Estimates of the fish and shellfish consumption rate (in g/day) for those that consume fish also depend on the length of the recall period. Longer recall periods are associated with lower estimates of fish and shellfish consumption rates by those that consume fish and shellfish.
- Per capita estimates of the fish and shellfish consumption rate averaged across the population do not depend on the length of the recall period. However, the precision of the per capita estimate does. Longer recall periods are associated with more precise estimates of the population average consumption.

Thus, still assuming that respondents have perfect recollection and reporting of their fish and shellfish consumption, the per capita fish consumption estimates may be compared among states with less uncertainty than the consumers only estimates. However, any comparison of (1)

the percentage of respondents that consume fish and shellfish during the recall period, or (2) the consumption rate for those that eat fish and shellfish must take into account the length of the recall period (Tran et al., 2004; Stern et al., 1996). Since the same recall period is used for all respondents within a state, comparison of groups within states has no similar problem.

The patterns cited in the bullets above can be seen in the data, although other factors also affect the differences. The estimated per capita fish consumption is similar in Florida and Connecticut, 26.9 and 27.2 g/day respectively. However, half of the Florida respondent's reported eating fish or shellfish in the 7 day recall period; whereas, approximately 88% of the Connecticut respondents reported eating fish or shellfish over a longer 1 year recall period. For those that ate fish or shellfish, the consumption was 31 g/day in Connecticut and 55 g/day in Florida. As a result, the estimates of the percentage of respondents that consumed fish and shellfish and the consumption rate for those that consumed fish or shellfish during the recall period are not directly comparable between surveys.

The simplifying assumption in the previous paragraphs may not be realistic. In particular, the following factors may also affect comparison of the fish and shellfish consumption between states:

- The surveys used different operational definitions of a serving or meal;
- The surveys used different questions to assess the quantity of fish and shellfish consumed in an average serving;
- Beside differences in the recall period, the surveys used different questions to assess the frequency of fish and shellfish consumption;
- The surveys used different methods to summarize the data and convert between uncooked and as-consumed weights (see Section 2.1);
- The methods used to aid recall, such as providing a list of possible fish species, differed among surveys; and
- With longer recall periods, respondents will have more difficulty remembering the fish and shellfish that they consumed, how often it was consumed, and quantity consumed. As a result, respondents may compensate by overestimating or underestimating their fish and shellfish consumption.

One important difference between the survey methods in Florida and those in the other states is that the Florida questionnaire procedures did not collect away-from-home consumption for household members other than the randomly selected adult respondent (RSA). As a result the fish consumption in Florida is underestimated. Using fish and shellfish consumption in raw

g/day, the mean fish and shellfish consumption for the RSA is 2.12 times the at-home consumption. Assuming this ratio holds for the as-consumed consumption rate and holds for children also, the fish and shellfish consumption for children, including the away-from-home consumption, would be 2.12 times the values shown in the tables. Since away-from-home proportion of fish and shellfish consumption for children is likely to be lower than for adults, the fish and shellfish consumption for children is likely to be between 1 and 2.12 times the values in the tables. When combining the RSA, for whom away-from-home consumption is available, and the other adults in the home, for whom away-from-home consumption was not available, the fish consumption for adults would be higher than the tabled values by a factor of 1.46.

3.7. COMPARISONS AMONG STATES

The procedural differences described in Section 3.7 make comparisons among states difficult to interpret. Therefore, the tables and discussions emphasize comparison among subgroups within states rather than comparisons among states. However, some observations can be made.

The percentages of state residents that consumed fish and shellfish during the recall period were 50% for Florida, 90% for Connecticut, 94% for Minnesota, and 95% for North Dakota (Table 3-17). The proportion of state residents that consumed fish and shellfish, as estimated from the survey data, was much lower for Florida than for the other states. This difference is due in part to the shorter recall period in the Florida survey. The Florida survey used a seven day recall period. The Minnesota and North Dakota surveys used a 1 year recall period. The recall period for the Connecticut survey was not specified, however the questionnaire response category "# times per year" for the question "How often do you eat each type of seafood?" allows for recall periods of up to a year. The proportion of respondents eating fish and shellfish in Connecticut is more comparable to the proportion in Minnesota and North Dakota. However, differences may still be due to differences in how the questions were asked.

State	Population	N	Weighted N/1000	Percent	Lower Conf. Limit	Upper Conf. Limit
СТ	General	431	3388	0.88	0.83	0.92
	Angler	266	-	0.97	0.94	0.99
	Aquaculture Student	25	-	0.76	0.56	0.96
	Asians	402	-	0.99	0.97	1.00
	Commercial Fishermen	178	-	0.97	0.94	0.99
	EFNEP Participants	71	-	0.85	0.71	0.98
	WIC Participants	703	-	0.79	0.76	0.82
FL	General	17,181	15,952	0.50	0.48	0.51
MN	General	841	4,900	0.94	0.91	0.98
	American Indians	221	-	0.89	0.82	0.96
	Anglers	1,171	-	0.96	0.95	0.98
	New Mothers	415	-	0.85	0.79	0.90
ND	General	602	639	0.95	0.93	0.97
	American Indians	133	-	0.59	0.43	0.74
	Anglers	871	-	0.95	0.93	0.97

Table 3-17. Percent eating fish and shellfish, per capita, by state andsubpopulation (with 95% CIs)

CT = Connecticut, FL = Florida, MN = Minnesota, ND = North Dakota, N = population.

For those that consumed fish and shellfish, the quantity consumed depends on the recall period. The average fish consumption for those that reported any consumption is 31.41 g/day in Connecticut, 54.65 g/day in Florida, 19.15 g/day in Minnesota, and 20.01 g/day in North Dakota (Table 3-12). These consumption rates are for the fish and shellfish as-consumed. The higher value for Florida reflects, in part, the shorter recall period.

The per capita fish and shellfish consumption rate across the entire population (those that eat fish and those that do not) is not directly affected by the length of the recall period and thus is more comparable between states. However uncertainties arise because there might be differences in the survey estimates due to how the fish consumption data were collected by the different surveys and how well the respondents remembered the fish and shellfish they ate. Each survey obtained information on the frequency and quantity using different questions. Some questions may elicit better recall or different responses than others, resulting in differences in the per capita fish and shellfish consumption between states. In general, it is difficult to say how the different data collection methodologies might affect the per capita estimates.

In Florida, the survey procedures are likely to underestimate the total fish and shellfish consumption. The Florida survey collected away-from-home fish consumption for the randomly selected adult respondent, but not for other adults in the household and not for children. As a result, the estimated per capita fish and shellfish consumption in Florida is likely to underestimate the true amount. The estimated average per capita consumption for the general population was 27.10 g/day in Florida, 26.46 g/day in Connecticut, 18.06 g/day in Minnesota, and 18.99 g/day in North Dakota (Table 3-13). The highest estimated consumption was in Florida. Given that the Florida consumption is likely to be underestimated, one might conclude that Florida residents consume as much or more fish and shellfish per capita than residents of the other three states. At the same time possible differences in how well respondents can estimate consumption over different recall periods and other differences between the surveys make any comparison more speculative.

The average per capita consumption of fish and shellfish for the U.S. population, based on the CSFII survey, is 12.83 g/day (U.S. EPA, 2002). This consumption rate is somewhat lower than the per capita values for the general population in Florida, Connecticut, Minnesota, and North Dakota shown above. Although fish and shellfish consumption data from National Health and Nutrition Examination Survey (NHANES) 2003-2006 are reported in the Exposure Factors Handbook: 2011 Edition (U.S. EPA, 2011), they are presented in g/kg-day and therefore not directly comparable. The average per capita fish and shellfish consumption from NHANES 2003–2006 for all ages combined was estimated to be 0.22 g/kg-day. The average per capita fish and shellfish intake from Florida, Connecticut, Minnesota, and North Dakota in g/kg-day can be estimated from Table 3-8 by calculating a weighted average from all age groups and genders combined. These are calculated to be 0.47 g/kg-day, 0.42 g/kg-day, 0.29 g/kg-day, and 0.33 g/kg-day for Florida, Connecticut, Minnesota, and North Dakota, respectively. These are higher than the value obtained from NHANES 2003-2006. The National Health and Nutrition Examination Survey (NHANES; CDC, 2002) survey has also collected fish consumption data. United States regional estimates based on NHANES 1999-2002 have been reported (Mahaffey et al., 2005). The average per capita 24-hour consumption estimates reported are: 20.8 g/day for the Atlantic Coast region (which includes most of Connecticut and almost half of Florida; 13.5 g/day for the Gulf Coast region (which includes the rest of Florida) and 11.5 g/day for the Midwest (which includes Minnesota and North Dakota).

Differences between states may also be associated with seasonal or year-to-year changes in fish consumption. The Minnesota and North Dakota data were collected in September and October. The data from the other surveys were collected over a year-long period. Consumption of self-caught fish is higher in summer months and lower in the winter. Although respondents in Minnesota and North Dakota were asked about fish and shellfish consumption in the last year, the timing of the survey may have affected the responses. There may also have been changes in fish and shellfish consumption across years that would affect the comparisons, since the three surveys were completed in different years. The effect of changes over time has not been assessed.

3.8. LIMITATIONS OF THE ANALYSIS

The analysis reported here consists primary of tabulated means by subgroups within states. This represents a first attempt to find factors that might identify populations that consume more fish and shellfish than the mean for the general population within each state and thus may be at greater risk from contaminants in fish and shellfish. More complicated statistical models may be used in the future.

Although the data from the three surveys discussed in this report provide a useful source of information on fish consumption, any analysis results are limited by the fact that the original data files for Connecticut and Florida had some missing and inconsistent values such that EPA could not replicate numerous statistics derived from the original study reports. Conclusions that might apply to other states outside of the four states covered by the surveys are limited due to differences among the surveys and to unknown differences between the four states and other regions of the United States.

4. REFERENCES

Anderson, S.A. (1988) Guidelines for use of dietary intake data. J. Amer. Diet. Assoc. 88(10):1258–1259.

- Balcom, N.C., Capacchione, C.M., Hirsch, D.W. (1999) Quantification of fish and seafood consumption rates for Connecticut, submitted to the CT Dept. of Environmental Protection, Contract No. CWF-332-R. CT Sea Grant Publication No. CT-SG-99-02. 187 pp.
- Barnett, V., Lewis, T. (1996) Outliers in statistical data. 3rd Ed. reprinted with corrections. Chichester, NY: John Wiley and Sons.
- Benson, S.A., Crocker, C.R., Erjavec, J., et al. (2001) Fish consumption survey: Minnesota and North Dakota, prepared by the Energy and Research Center, University of North Dakota, Grand Forks, ND.
- Blake, A.J., Guthrie, H.A., Smiciklas-Wright, H. (1989) Accuracy of food portion estimation by overweight and normal-weight subjects. J. Amer. Diet. Assoc. 89(7):962–966.
- Block, G., Hartman, C.M., Dresserr, C.M., et al. (1986) A data-based approach to diet questionnaire design and testing. Amer. J. Epidemiol. 124(3):453–469.
- Block, G. (1982) A review of validations of dietary assessment methods. Amer. J. Epidemiol. 115(6):492–504.
- Centers for Disease Control (CDC). (2002) National Health and Nutrition Examination Survey (NHANES) National Center of Health Statistics (NCHS). NHANES' web site http://www.cdc.gov/nchs/nhanes/nhanes2001-2002/nhanes01 02.htm.
- Centers for Disease Control and Prevention (CDC). (2006) National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data 2005–2006. US Department of Health and Human Services, Centers for Disease Controland Prevention: Hyattsville, MD 2006, Available at http://www.cdc.gov/nchs/nhanes/nhanes2005-2006/nhanes05_06.htm.
- Degner, R.L., Adams, C.M., Moss, S.D., et al. (1994) Per capita fish and shellfish consumption in Florida, University of Florida, Gainsville, FL.
- Dillman, D.A. (1978) Mail and telephone surveys: The total design method. New York, NY: John Wiley and Sons, Inc. 325 pp.
- Dillman, D.A. (2000) Mail and internet surveys: The tailored design method. 2nd Ed. New York, NY: John Wiley and Sons, Inc.
- Dubois, S., Boivin, J.F. (1990) Accuracy of telephone dietary recalls in elderly subjects. J. Amer. Diet. Assoc. 90(12):1680–1687.
- Hyndman, R.J., Fan, Y. (1996) Sample quantiles in statistical packages, Am. Statistician. 50(4): 361-365.
- Lohr, S.L. (1999) Sampling: design and analysis. Pacific Grove, CA: Duxbury Press.
- Mahaffey, K.R., Clickner, R.P., Phillips, L.J., Jeffries, R.A. (2005) Patterns of fish and shellfish consumption in the U.S. population. Presented to the International Society of Exposure Analysis. November 1, 2005.
- Medlin, C., Skinner, J.D. (1988) Individual dietary intake methodology: a 50-year review of progress. J. Am. Diet Assoc. 88(10):1250–1257.
- Peters, E., Houseknect, C. (1992) A review and analysis of fish/shellfish consumption survey methods and approaches. Tetra Tech. Inc., EPA Contract No. 68-C9-0013.

- Portier, K.M., Um, Y., Degner, R.L., Mack, S.K., Adams, C.M. (1995) Statistical analysis of Florida per capita fish and shellfish consumption data, Florida Department of Environmental Protection in fulfillment of contract SP332. Florida Agricultural Research Market Center Food and Resource Economic Department, Institute of Food and Agricultural Sciences, University of Florida, Gainsville, Fl. Available at http://www.fred.ifas.ufl.edu/agmarketing/pubs/1990s/Fish%20&%20Shellfish%20statistical%20analysis.pd f.
- Rogers, J.W. (2003) Estimating the variance of percentiles using replicate weights. ASA Proceedings of the Joint Statistical Meetings, 3525–3532. Alexandria, VA: American Statistical Association.
- Stern, A.H., Korn, L.R., Ruppel, B.E. (1996) Estimation of fish consumption and methylmercury intake in the New Jersey population. J. Expo Anal. Environ. Epidemiol. 6:503–525.
- Tran, N.L., Barraj, L., Smith K., Javier, A., Burke, T.A. (2004) Combining food frequency and survey data to quantify long-term dietary exposure: a methyl mercury case study. Risk Anal. 24(1):19–30.
- USDA Agricultural Research Service. (1987) Composition of foods: finfish and shellfish products: Raw, processed, prepared. Agriculture Handbook:8–15.
- USDA. (1998) Continuing survey of food intakes by individuals: 1994-96, 1998. U.S. Department of Agriculture, Agricultural Research Service.
- U.S. EPA. (1992) Consumption surveys for fish and shellfish: A review and analysis of survey methods. Office of Water, Washington, D.C. EPA/822/R-92/001.
- U.S. EPA. (1997) Mercury study report to Congress. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Office of Research and Development, Washington, D.C. EPA-452/R-97-003.
- U.S. EPA. (1998) Guidance for conducting fish and wildlife consumption surveys. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. EPA-823-B-98-007.
- U.S. EPA. (2002) Estimated per capita fish consumption in the United States. Chapter 4.1.1.1 Table 3. (http://water.epa.gov/scitech/swguidance/standards/criteria/health/upload/consumption_report.pdf).
- U.S. EPA. (2008) Child-Specific Exposure Factors Handbook (Final Report) U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-06/096F, 2008. Available at http://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=199243
- U.S. EPA. (2011) Exposure Factors Handbook 2011 Edition (Final). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/052F, 2011. Available at http://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.
- West, P.C., Fly, J.M., Marans, R., Larkin, F., Rosenblatt, D. (1993) 1991-1992 Michigan sport anglers fish consumption study. Ann Arbor, MI: Michigan Department of Natural Resources

APPENDIX A. DATABASE DEVELOPMENT

A.1. INTRODUCTION

The following sections described the processing of the data from the three studies to convert them to a common format in a combined file. The first step was to process each study's data to create SAS files with the same file organization across studies. Sections A.2, A.3, and A.4 describe the processing of the data from individual studies. Section A.5 describes how the files were combined to create one file for further analysis. Section A.6 describes how approximate sampling weights were constructed.

File names are shown in capital letters (such as HOMERH), generally without the extension. In the text, variable names are shown in Courier font (such as CNTYNAME).

Abbreviations used throughout the appendix are shown in Table A-1. The general approach was to reorganize the files to create one file with household information, a second file with information about individuals within households (excluding the household information common to all individuals in the same household), and a third file with fish consumption information for each individual (excluding information in the other files). For analysis, these files are combined to create a file for analysis. From the combined files, fish consumption quantities are totaled across species to calculate a total for each individual. These totals are then merged with the individual and household data to create a file with one record per individual for analysis. When the files are merged, individuals with no fish consumption in the fish consumption file are given a value of 0 for total fish consumption.

FL	Florida
СТ	Connecticut
MN	Minnesota
ND	North Dakota
НН	Household
FFQ	Food frequency questionnaire
RSA	Randomly selected adult (in the Florida survey)
PMP	Primary meal preparer (in the Florida survey)
MNND	Minnesota/North Dakota study

Table A-1. Abbreviations used throughout the data documentation report

A.2. FLORIDA DATA

A.2.1. Description of the Survey and the Original Data Files

A.2.1.1. Survey methodology

The Florida data were collected by telephone from a random sample of households stratified by county. The telephone survey approach was chosen because of its relatively low cost and the ease of probability sampling (Peters and Houseknecht, 1992). The telephone surveys targeted two populations, residents statewide and residents of five counties where industrial pollution from bleached kraft paper mills could result in chemically contaminated fish and shellfish. Households from all counties in Florida were sampled at the same sampling rate for the "State" sample. An additional supplemental sample of 740 households was selected in the five counties that had paper mills (Escambia, Gulf, Nassau, Putnam, and Taylor). In total, 1,000 households were interviewed in the five paper mill counties (260 from the State sample plus 740 from the supplemental sample). In the study report, the "Paper Mill" sample refers to the 1,000 households from counties with paper mills. Data collection took place from March 15, 1993 to March 13, 1994.

In each household, one randomly selected adult (RSA) was selected. The RSA was asked about his/her away-from-home fish and shellfish consumption (referred to here as just fish consumption). Then the household primary meal preparer (PMP), if available, was asked about at-home fish consumption by all family members (referred to as householders in the study report). If the PMP was not available or the RSA was the only household member, the RSA was asked about their at-home fish consumption. According to the published questionnaire, if the PMP was not available and the RSA was not the only household member, fish consumption for non-RSA household members was not collected. Therefore, the data may underestimate the inhome fish consumption for non-RSA household members. The analysis weights adjust for the lack of information for non-RSA household members in households where the PMP was not available. However the weights do not adjust for missing away-from-home fish and shellfish consumption. According to the survey report, the primary meal preparer was available in 6,617 of the 8,000 households in the general population.

A.2.1.2. Survey data files

The Florida data were received in seven files. The data in the files overlap. The files and their contents are:

- HOMERH has at-home fish consumption for the RSA for the State sample of 8,000 respondents;
- AWAYRH has away-from-home fish consumption for the RSA for the State sample of 8,000 respondents;
- HOMERC has at-home fish consumption for the RSA for the Paper Mill sample, with 1,000 respondents. The Paper Mill sample includes respondents from the State sample that lived in the counties with paper mills;
- AWAYRC has away-from-home fish consumption for the RSA for the Paper Mill sample, with 1,000 respondents;
- STHHOLD has at-home fish consumption for all household members in the State sample. This file is essentially the concatenation of HOMERH and the at-home fish consumption data for the non-RSA household members;
- COHHOLD has at-home fish consumption for all household members for the Paper Mill sample. This file is essentially the concatenation of HOMERC and at-home fish consumption data from the non-RSA household members in the paper mill counties; and
- Finally the TOTALRH file has the total fish consumption by species for each RSA in the State sample. This total is essentially the sum of the values in AWAYRH and HOMERH.

The study reports show 15,672 individuals in the State sample. However, two RSAs in the HOMERH file were not in the STHHOLD file. Thus, after combining the data from all of the files, the processed data files have 15,674 individuals in the State sample. The study report also shows 2,099 household members in the Paper Mill sample; the processed files have 2,100 household members in the Paper Mill sample.

A.2.2. Processing of the Data Files

A.2.2.1. *Demographic data*

Each of the files mentioned in Section A.2.1.2 include demographic data. However, for some individuals, the demographic data differed among files or was present in some files and not in others. Also, most of the bodyweight values for the RSA's were missing. In response to questions, Professor Ken Portier from the University of Florida, who was one of the authors of the study report and published some additional analysis of the data, provided an additional file (WTOT96.TXT) with the RSA bodyweights for the State sample. However, many of the bodyweight values for RSAs in the Paper Mill supplemental sample were still missing.

Various data files were used to attempt to replicate some of the numbers in the study report. Use of the TOTALRH file provided the closest approximation to the values of total consumption and recreationally caught consumption by species for the RSA State sample. The demographic data in the WTOT96.TXT file agreed with the corresponding data in the TOTALRH file (when the data in TOTALRH was not missing). In addition, the WTOT96.TXT demographic variables were also apparently used in the analysis performed by Professor Portier (Portier et al., 1995). As a result, the values in the WTOT96.TXT file were assumed to be the correct demographic variables for the State RSA sample.

Cases where demographic data differed between files were printed and reviewed. Differences were resolved as follows:

- Values in WTOT96.TXT were used, if present;
- Otherwise, the demographic variables were selected by taking the first non-missing value found when going through the files in the order: HOMERH, AWAYRH, HOMWRC, AWAYRC, STHHOLD, COHHOLD, and TOTALRH.

This was a somewhat arbitrary approach. However, no information was found to suggest that one value was more likely than another to be correct. Records were flagged to indicate if the demographic variables were not consistent across all files (see the variable FAMPROB).

The data from these seven files were reorganized into three files:

- FLFAMDAT with data for households (e.g., county and household income);
- FLINDDAT with data for individuals within households (e.g., sex, age, bodyweight); and
- FLFISHDAT with data on fish consumption.

In the questionnaire, sex and age were obtained for all household members from the initial questions (used to identify the RSA). Bodyweight was requested from the RSA and, for other household members, from the PMP. Bodyweight from non-RSA household members was apparently not obtained if the RSA was not the PMP and the PMP was not available. These variables were in the FLINDDAT file.

In the questionnaire, race-ethnicity was obtained from two questions. The first asked for race (White, Black, American Indian, and Asian). The second question was about Hispanic or Spanish origin or descent. The results of these two questions were combined to create a race-

ethnicity variable (White non-Hispanic, Black non-Hispanic, Hispanic, American Indian, and Asian). In the data files, the race-ethnicity variable is named Race. To minimize confusion, the race-ethnicity variable was renamed to RSARaceEthn in the processed data files. The responses to the first race question were in a variable named RSARaceResp.

Education (as years of schooling), race-ethnicity, and household income were obtained for the PMP or, if not available, for the RSA. Thus, there was some inconsistency as to who provided this information. It is reasonable to assume the household income was essentially the same regardless of who answers the question. However, the education and race-ethnicity was asked for the respondent and may be different between the RSA and PMP. The data files provide no indication of whether the race and education refers to the RSA or the PMP. In the processed data files, these values were associated with the household. This is consistent with how the results were presented in the study report. Since these variables were asked once for the household, they are considered household variables and were in the FLFAMDAT file.

In the study report, the summary tables used race-ethnicity rather than reported race (RSARaceResp). Therefore, although the RSARaceResp variable is retained in the final files, this variable was not used. In addition, there are a few inconsistencies between the RSARaceEthn and RSARaceResp variables. No attempt was made to resolve these inconsistencies.

In the original files, household variables appeared on other records for some children. In a few cases the values on the non-RSA records differed from those on the corresponding RSA records. In these cases the values for the RSA record was used.

Finally, if the sex was coded as unknown (5) it was set to female (2). This was done to (1) obtain values that were consistent with the values in the WTOT96.TXT file and conform to procedures in a program provided by Professor Portier, and (2) to get the distribution of demographic data to agree, or agree much more closely, with the values in the published report. This change affected non-RSA household members. There were no non-RSA records coded as female in the data files. The number of non-RSA records recoded from code 5 (unknown) to code 2 (female) was approximately equal to the number of non-RSA females, consistent with the assumption that these records are for females. After recoding the sex variables, there were still 812 missing values for sex (coded as -8 or -9 in the original files).

Tables A-2 through A-4 show the number of household records, individuals records, and fish consumption records for which the demographic variables differed among files and the percent of missing values in the processed files. In general, individual demographic information was more likely to be missing for the non-RSA household members. However, bodyweight was missing on 735 of 740 RSA records in the Paper Mill supplemental sample.

	Records with inco	Missing values		
Variable	Number of records	Percent	Number of records	Percent
County	13	0.15	0	0.00
Income	39	0.45	1,532	17.53
Race-Ethnicity	200	2.29	175	2.00
Education	8	0.09	99	1.13
RaceResp	2	0.02	170	1.95
Any HH demographic variable	227	2.60		

Table A-2. RSA/Household records with inconsistent and missing values (out of 8,740 records)

Table A-3. Individual records with inconsistent and missing values (out of17,213 records)

	Records with incom	Missing values		
Variable	Number of records	Percent	Number of records	Percent
Weight	16	0.09	1,814	10.54
Age	30	0.17	827	4.80
Sex	16	0.09	812	4.72
Any individual demographic variable	43	0.25		

Table A-4. Fish consumption records with inconsistent and missing values(out of 16,099 records)

	Records with inco	Missing values		
Variable	Number of records	Percent	Number of records	Percent
Cooking Method	1	0.01	6,868	42.7
Skinned before cooking	0	0.00	12,952	80.5
Number of Occasions	1	0.01	5,422	33.7
Uncooked Grams	1	0.01	0	0.0
Percent recreationally caught	16	0.10	4,338	26.9
Inconsistencies in any variable	17	0.11		

A.2.2.2. Fish consumption data

The data files received from Florida had one record per individual with separate variables for each of 62 species of fish or shellfish. The fish consumption data were processed to create a file with one record per combination of individual, species, and location (at-home or away-fromhome). The fish consumption file had 16,099 records after eliminating records for which no fish consumption was reported. As with the demographic variables, the fish consumption variables for some individuals were replicated in several files and the values in those files differed for a few records; the inconsistencies were resolved by arbitrarily selecting the first non-missing value for the individual when searching through the files in the order: HOMERH, AWAYRH, HOMWRC, AWAYRC, STHHOLD, COHHOLD, and TOTALRH. In some cases the values were missing because they were not appropriate (e.g., the survey files did not record if canned tuna was skinned before cooking). In a few cases a variable in one file was not in another. For example, the cooking method for king mackerel was not in the STHHOLD and COHHOLD files, but was in other files. As a result, the cooking method for king mackerel is missing for non-RSA household members. Variables that were in some files and missing in other files generally recorded if the fish was skinned before cooking. These missing variables were treated as if they had been present, but had contained no information.

A.2.2.3. Data file comparisons

Table A-5 illustrates how well the values in the study report can be replicated using the processed data files. This table shows the annual seafood consumption for the State and Paper Mill samples. The top portion of the table shows the consumption as calculated from the processed files. The lower half of the table shows the corresponding values from the study report. The totals generally agree within a few percent. However, the totals for shellfish are higher using the processed file. Since the subtotal for all fish or shellfish is about the same from both sources, the classification of species into finfish was based on the tables in Appendix B of the study report. There were many missing values for demographic variables in the data file that were apparently not missing when the original report was compiled. When broken down by demographic variables, most annual fish consumption estimates from the processed files were within 5% of the corresponding values in the study report. However, there were some notable exceptions. The estimates derived from the processed file for fish and shellfish consumption for Hispanics, American Indians, and Asians are much lower in the Paper Mill sample than reported in the study report.

Table A-5.	Annual seafood consumption estimates for the two samples
(kg/yr)	

		State Sa	State Sample		lill Sample
		RSAs	Householders	RSAs	Householders
Values from I	Processed Files		·	·	·
Number		8,000	15,674	1,000	2,099
Away	Finfish	6.35		6.73	
Away	Shellfish	2.49		2.98	
Away	Subtotal	8.85		9.71	
Home	Finfish	6.73	6.88	7.86	7.87
Home	Shellfish	1.22	1.21	1.62	1.83
Home	Subtotal	7.95	8.09	9.48	9.70
All	Finfish	13.09		14.58	
All	Shellfish	3.71		4.60	
All	Subtotal	16.80		19.19	
Values from S	Study Report				
Number		8,000	15,672	1,000	2,099
Away	Finfish	6.38		6.60	
Away	Shellfish	2.48		2.97	
Away	Subtotal	8.85		9.57	
Home	Finfish	6.82	6.98	7.93	8.14
Home	Shellfish	1.13	1.12	1.54	1.55
Home	Subtotal	7.95	8.10	9.47	9.69
All	Finfish	13.20		14.53	
All	Shellfish	3.60		4.51	
All	Subtotal	16.80		19.04	

The appendix to the data documentation report has tables of demographic variable frequencies by populations that can be compared to the values in the appendix of the study report. For many variables the distribution is very close (often within several respondents). However there are some notable differences. For the State RSA population:

• The processed files appeared to have classified 12 missing codes as female. These 12 individuals were classified as female in the WTOT96.TXT file, but not in other files.

• Rather than showing a missing category, the processed files had more respondents in the 65+ category.

For the Paper Mill RSA population:

- The number of American Indian and Asian respondents differed somewhat from the report. This may be because many of the inconsistencies in race-ethnicity were either American Indian or Asian classifications.
- The bodyweight distributions were very different because there were only 44 weight measurements for the Paper Mills RSAs in the files.

In general, the differences between values from the processed files and values in Appendix A of the study report are greater for all household members (Householders) than for just the RSAs. For the State householder population:

- The processed files had many more values for bodyweight than were reported in the study report.
- Differences in the number of respondents by income category were greater than for other variables.

For the Paper Mill householder population:

- The male and female rows appeared to be reversed in the report.
- The processed files had more bodyweights than were shown in the study report.

The total consumption by species for the State RSAs is shown in the Table B-1 of the study report. The numbers in this table can be calculated from the TOTALRH file. However, there were some differences between the totals from the processed files and the TOTALRH file. The processed file was derived from files other than TOTALRH and had separate information on at-home and away-from-home fish consumption. The total fish consumption (away-from-home + at-home) for each individual from the processed files differed from the TOTALRH values in the following ways:

- There were 13 fish consumption records that were in the processed files, but not in the TOTALRH file.
- There were five fish consumption amounts that were in both files, but were attributed to different respondents in different files. In all five cases, the IDs of the different

respondents differ only in the first digit (either a '1' or '9'). This pattern might be due to data entry or editing errors.

• There were five fish consumption records for which the total consumption differed.

A.2.2.4. Calculation of uncooked and as-consumed fish consumption

The Florida survey questionnaire asked for the quantity of fish eaten and the cooking method used. The reported as-consumed quantity was converted to uncooked weight (in g/week) in the original data files. The conversions used were documented in the study report and depended on type of food (several types of shellfish, other shellfish, or any finfish) and the cooking method. Assumptions were made when the cooking method was not provided. The conversions that were reported in the study report were used to convert the uncooked quantities to as-consumed quantities. Those conversions are shown in Table A-6.

	Fish Category								
Cooking Method	Salad shrimp	Clams	Blue crab	Crab meat	Imitation crab meat	Conch	Crayfish	Other misc shell fish	Finfish
Fried	0.75	0.57	0.75	0.57	0.75	0.57	0.75	0.67	0.75
Broiled	0.78	0.6	0.78	0.6	0.78	0.6	0.78	0.7	0.78
Steamed	0.79	0.62	0.79	0.62	0.78	0.62	0.79	0.72	0.78
Boiled or poached Raw	0.8 1	0.63 1	0.8 1	0.63 1	0.78 1	0.63 1	0.8 1	0.72 1	0.78 1
Microwave baked	0.8	0.66	0.8	0.66	0.87	0.66	0.8	0.75	0.87
Conventional oven	0.85	0.64	0.85	0.64	0.79	0.64	0.85	0.75	0.79
Grilled or smoked	0.78	0.6	0.78	0.6	0.78	0.6	0.78	0.7	0.78
Other	0.77	0.61	0.77	0.61	0.82	0.61	0.77	0.71	0.82

Table A-6. Factors for converting the Florida data from uncooked to asconsumed weights

Other includes: Other cooking methods, Don't Know, and missing data values.

The FLFISHDAT data file had two variables, GDayRaw and GDayCooked, with the fish and shellfish consumption in g/day as uncooked weight or cooked (as-consumed) weight, respectively. GDayRaw was calculated by dividing the quantity in the survey data files by seven to convert from weekly to daily consumption. GDayCooked is GDayRaw multiplied by the appropriate conversion factor from Table A-6. The conversion factors used were in the FLFISHDAT data file in the Conversion variable.

A.3. CONNECTICUT DATA

A.3.1. Description of the Survey and the Original Data Files

A.3.1.1. Survey methodology

The Connecticut survey data were collected from July 1996 through May 1997. Data were collected from several different populations using a combination of a mail questionnaire and personal interviews (for the Southeast Asians, food stamp recipients, and some anglers). The survey asked for the rate of fish consumption for all family members and any fish or shellfish dish. The fish consumption was reported as as-consumed (generally cooked) fish consumption (in g/day). The survey results were presented in the Connecticut study report (Balcom et al., 1999).

A.3.1.2. Data files

The data and documentation for the Connecticut data included:

- An IBM format tape with SAS data sets in SAS transport format;
- A notebook with some programs that were used for processing the files; and
- A box of SAS output.

According to the file contents and the programs in the notebook, (1) the programs in the notebook comprised a series of programs used to process the data, (2) the data files from the last program in the series (GDAY and INDIV) were not on the tape, and (3) corrections were made to the data in essentially all of the data processing steps. Based on the output in the box, (1) there were apparently other programs which were not available, and (2) the files used to create the output that went into the study report were derived from files other than INDIV and GDAY, and (3) at least one additional variable (Complete) that was used to create the reports was not in the data files (it indicated which records to keep when summarizing the data). The algorithm to create Complete was not been found in any of the programs. Table A-7 shows the variables with differences between the INDIV and GDAY files for the same household.

Variable	Question	Number of differences
EATING	Do you know fish is good for you?	1
PEOPLE	Number of people in the household	9
Multiple variables	Multiple questions	10
COUNTY	County	2
WHYNOT	Why do you not follow the advisories?	2
APPLYFIS	Do the advisories apply to the fish you eat?	1

Table A-7. Variables with differences between the INDIV and GDAY filesfor the same household (out of 827 households)

The printed program that created INDIV and GDAY was input and run using the data files from the tape. The INDIV and GDAY files were then processed to eliminate inconsistencies and, to the extent possible, to create a file from which the reported values could be derived. The INDIV file contains fish information on fish dish consumption, with one record per combination of dish with individual. The GDAY file contains total fish consumption by person. Each file also contains additional information, such as demographic information and responses to questions about fish advisories.

The variables in the data files were divided into three files:

- CTFAMDAT with household demographic data (such as household income);
- CTINDDAT with demographic data for individuals within households (such as bodyweight); and
- CTFISHDAT with fish consumption data for individuals by species.

In these files, individuals were identified by a combination of the family ID (FamID) and the individual ID (IndID).

A.3.2. Processing the Data Files

A.3.2.1. Demographic data

Both the INDIV and GDAY files have information on 827 households. However, the demographic information differed between files for some households. Cases where the family data differed between the files were printed and reviewed. Differences were resolved as follows:

- If information was missing on one record and present on another, the non-missing data was assumed to be correct.
- If the number of people in the family (as indicated by the PEOPLE variable) was inconsistent between files, the number of people in the family was set to equal the number of household members in the data files (in all cases where there were inconsistent values, at least one file had a value for PEOPLE that equaled the number of household members in the data files). Note that there might have been more people in the family than were reported because some respondents apparently lost interest in filling out the questionnaire for all family members.
- Otherwise, for three individuals, the data from the first record in the INDIV was arbitrarily selected as the correct record, assuming this record corresponded to the person filling out the questionnaire. This arbitrary choice affected the PEOPLE and COUNTY variables for two families and affected most variables for the third family.

For the family data, 25 records with inconsistent data were found.

The LIMITED variable indicated limited income families. As a result of changing the PEOPLE variable, there were two cases where the LIMITED variable (derived from PEOPLE and INCOME) was inconsistent with the PEOPLE variable. As a result, the LIMITED variable was recalculated using the algorithm found in the notebook.

The files had information on 2,133 individuals. There were discrepancies in the individual data for 12 individuals (four from the same family). Six records had differences in one variable only. In these cases the non-missing value was used. Six records had differences in multiple variables, including AGE, BFEED, fishing frequency, and the TRIM variable (Does the person trim skin and fatty meat from the fish they catch?). In all cases, the values were different on only one of several records in the INDIV file. The most common value in the INDIV file was used.

The following additional changes were made to the individual data:

• For most records, respondents who never fish have FISHYR set to 0. Therefore, some records with missing FISHYR were set to 0.

 Respondent birth date and age were inconsistent for respondents born before 1919 (possibly due to how SAS handles two digit years). The respondent age as of 9/1/1997 was recalculated from their birthday. There were 59 inconsistencies between SEX, AGE, and AGECAT, so AGECAT was recalculated also based on SEX and AGE.

A.3.2.2. Fish consumption data

The fish consumption data had many variables that could be combined and were unlikely to be used for the EPA analysis. The primary revisions to the fish consumption data were to combine multiple variables into one. The following changes were made:

- Convert months in which fish were eaten (variables: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC) to a text string. A 'J' in the first position of the text string indicates that fish were eaten in January. An 'F' in the second position of the text string indicates that fish were eaten in February, etc. Each month was indicated by one character. The order of the months and the letters used to indicate fish consumption are:
 - J January
 - F February
 - M March
 - A April
 - M Ma
 - J June
 - J July
 - A August
 - S September
 - O October
 - N November
 - D December

A value of "MAM S" indicates that the fish was eaten in March, April, May, and September. Spaces indicate that the fish was not eaten in the corresponding months.

• Convert parts eaten (variables: PARTA PARTB PARTC PARTD PARTE PARTF PARTG PARTH) to a text string. As above the parts that were eaten are noted by the position in the text string and by the letters used. The character codes, in order from left to right are:

- A Entire fish
- M Meat
- S Skin/Fin
- H Head
- B Bones
- E Eyes
- R Roe/eggs
- T Lobster Tomally
- M Crab Muster
- O Organs
- F Fat/oil
- Convert cook methods (variables: COOKA COOKB COOKC COOKD COOKE COOKF COOKG) to a text string. As above the cooking methods used are noted by the position in the text string and by the letters used. In this case, each cooking method used two character positions. The character codes, in order from left to right are:
 - Ba Baked
 - Br Broiled
 - Po Poached/boiled/steamed
 - SF Sautéed/stir fried
 - DF Deep fried
 - Gr Grilled
 - Sm Smoked
 - Mi Microwaved
 - SS Soup stock
 - Sl Salad
 - SC Soup/chowder/stew/casserole/bisque
 - Ra Raw
 - Su Sauce
- Convert parts cooked (variables: PTCA PTCB PTCC PTCD PTCE PTCG PTCH) to a text string. As above the parts cooked are noted by the position in the text string and by the letters used. The character codes, in order from left to right are:
 - A All
 - M Meat
 - S Skin/Fin

- H Head
 B Bones
 E Eyes
 R Roe/eggs
 T Lobster Tomally
 M Crab Muster
 O Organs
- F Fat/oil

In the data files, the dishes were identified by a numeric code. A file with the codes and corresponding text descriptions was created and merged the text descriptions into the file.

The fish data file has one record for each dish eaten by each individual. One record for a respondent who reported not eating fish or seafood was removed from the file So that there are would be no records in the file for respondents that do not eat fish.

A.3.2.3. *Removing incomplete cases*

The reported analysis of the Connecticut data excluded records for surveys that were incomplete. In the programs received from Connecticut, the incomplete surveys were identified by records with COMPLETE = 3 (based on discussions with Nancy Balcom at the University of Connecticut and review of the available programs). However, the COMPLETE variable used by Connecticut to process the files was not on the INDIV or GDAY files. There was also no information on how the COMPLETE variable was calculated. Data that were likely to be from incomplete surveys were identified and removed as follows. Based on the box of computer output, there were 53 records for which COMPLETE is 3 and for which values for numerous variables were all missing (LOBSTER, LOBROLL, CRAB, CRABCAKE, CLAMS, CHOWDER, STRIPS, OYSTERS, OYSTSTEW, MUSSELS, BLUEFISH, STRIPER, EEL, PORGY, BLACKFSH, TUNACAN, TUNASTK, FSHSTICK, FAKECRAB). Therefore, the records where these variables were all missing were removed. No other algorithms for identifying the cases to be removed for analysis were identified.

After processing and removing incomplete survey data, the resulting files have 810 families, 2,080 individuals, and 15,367 fish items eaten. For 18 of the fish items eaten, either the meals per year or grams per meal are missing, so the grams per year consumption cannot be calculated. For analysis, the fish consumption for these 18 individuals was set to zero. Finally, internal consistency of variables was not checked for many variables that were not used for the analysis.

Two variables, EATYR and EATWK, were unique within individual and did not differ by fish item. These variables were thus inconsistent with the documentation. Another variable, ANGTYPE (Angler type) was a character variable that had been truncated in INDIV and GDAY so as to be useless. All these variables had been left off the individual file.

A.3.2.4. Data file comparison

The following tables illustrate how well the values in the study report can be replicated using the data files.

Table A-8 compares the reported number of respondents in each population to the number calculated from the processed files. Population sizes from the processed files are within 4% of the reported values. The response frequencies for demographic variables are generally within 5%.

	Number of Households		Number of	Individuals
Population	Processed data	Report Table 5	Processed data	Report Table 5
General	206	207	433	434
Angler	341	341	524	504
Commercial	74	73	178	178
Minority	245	245	866	860
Limited Income	274	276	935	937
Women	406	420	480	493
Children	303	305	554	559
Southeast Asian	89	89	334	329
Non- South East Asian	156	156	532	531

Table A-8. Sample sizes by population from the processed files and Table 5of the study report

The study report showed the population mean and standard deviation of total fish consumption (total across all fish dishes, in g/day). The values calculated from the processed files are within 5% of the reported values. Table A-9 compares the reported mean, standard deviation, and maximum total fish consumption (in g/day) from the study report with the values calculated from the processed files.

	Cal	Calculated from the processed files			From Table 11 of the Study report			dy report
Population	Ν	Mean	Std Dev	Maximum	Ν	Mean	Std Dev	Maximum
General	433	27.7	42.6	493.6	437	27.7	42.7	494.8
Angler	524	49.5	64.2	570.5	502	51.1	66.1	586.0
Commercial	178	46.9	57.3	490.2	178	47.4	58.5	504.3
Minority	866	49.7	57.1	429.0	861	50.3	57.5	430.0
Southeast Asian	334	57.9	48.9	245.0	329	59.2	49.3	245.6
Non Southeast Asian	532	44.6	61.2	429.0	532	44.8	61.5	430.0
Limited Income	935	43.0	60.3	570.5	937	43.1	60.4	571.9
Women	480	47.2	57.8	493.6	497	46.5	57.4	494.8
Children	554	18.4	29.9	324.1	559	18.3	29.8	324.8

Table A-9. Total fish consumption (g/day) by population from the processed files and Table 11 of the Study report

A.3.2.5. Calculation of uncooked and as-consumed fish consumption

The Connecticut data files provided the quantity of fish as "cooked weight of edible fish." However, for the few items that were clearly eaten uncooked (e.g., oysters, sushi), the quantity appeared to be the uncooked weight. This weight is referred to as the as-consumed weight. The Connecticut respondents assessed the quantity of a food item by selecting a shape of the food item and a corresponding size. Connecticut collected cooking method information for only a subset of the respondents. That information was apparently not used in the conversion to as-consumed consumption. When converting the reported shape and size to the as-consumed weights, some assumptions were made, such as that certain dishes were eaten uncooked or cooked or that the reported shape corresponded to an uncooked or cooked food item.

The conversion factors used were provided in an appendix to the study report. If the respondent reported the as-consumed quantity, then no conversion was needed. Table A-10 lists the factors used to convert the Connecticut data from as-consumed to uncooked weights. If provided, the conversion factors in the report were used. In a few cases judgment was used to decide which conversion factor to use. Otherwise, the conversion factor from the EPA *Mercury Study Report to Congress* (U.S. EPA, 1997) was used. If the conversion factor did not come directly from the Connecticut study report, a comment column explained the source of the conversion factor. In some cases the conversion factors were based on a USDA publication (USDA, 1987). The conversion factor for dried shark fin was somewhat arbitrary because no basis for a conversion factor was found. The CTFISHDAT file had variables with the uncooked

and as-consumed fish consumption in g/day (GDayRaw and GDayCooked) as well as the conversion factor for that fish dish (Conversion).

Species	Code	Conversion (divide by this to get uncooked weight)	Notes*
caviar	2	0.75	EPA
combination platter	4	0.75	EPA
frozen sticks	6	0.78	(assuming pollock)
gefilte fish	7	0.75	EPA
lox	9	0.75	EPA
sardines	10	0.75	EPA
seafood salad	11	0.82	(used by FL for unknown cooking method for imitation crab)
sushi	13	1	Assume uncooked
sushimi	14	1	Assume uncooked
frozen filets	16	0.78	(assuming pollock)
clams, stuffed	17	0.5	
mackerel, canned	19	0.75	EPA
herring, canned	20	0.75	EPA
salmon croquettes	21	0.705	
salmon, canned	22	0.705	
fish cakes	23	0.75	EPA
shrimp roll/salad	24	0.79	
fish chowder, canned	25	0.75	EPA
anchovies, canned	26	0.75	EPA
shrimp soup	27	0.79	
lg & jumbo stuffed shrimp	28	0.79	
undefined	29	0.75	EPA
largemouth bass	101	0.78	
smallmouth bass	102	0.78	

Table A-10. Factors for converting the Connecticut data from as-consumedto uncooked weights

Species	Code	Conversion (divide by this to get uncooked weight)	Notes*	
striped bass	103	0.78		
unspecified bass	104	0.78		
bluefish	105	0.78		
tautog	106	0.78		
bonito	108	0.78		
bream	109	0.75	EPA	
buffalo fish	110	0.75	EPA	
bullhead	111	0.78		
carp	112	0.75	EPA	
catfish, freshwater	113	0.788		
catfish, saltwater	114	0.788		
catfish, farm raised	115	0.788		
catfish, unspecified	116	0.788		
cod	118	0.788		
crappie	119	0.75	EPA	
mahi-mahi, dolphin fish	121	0.78		
drum	123	0.75	EPA	
eel	124	0.677		
eel, unspecified	126	0.677		
flounder	127	0.721		
grouper	128	0.78		
haddock	129	0.722		
halibut	130	0.717		
hake	131	0.78		
herring	132	0.75	EPA	
mackerel	135	0.659		
lobster whole	205	0.75	EPA	
blue mussels	206	0.75	EPA	
octopus	207	0.75	EPA	
oysters, raw/cooked, unspecified	208	0.75		
scallops, unspecified	210	0.769		
scungilli/whelk	211	0.485		

 Table A-10. Factors for converting the Connecticut data from as-consumed to uncooked weights (continued)

Species	Code	Conversion (divide by this to get uncooked weight)	Notes*
shrimp, unspecified	212	0.79	
squid, cooked	213	0.822	
shellfish, other	214	0.75	EPA
crab, imitation	215	0.75	EPA
crab, Alaskan king legs	216	0.78	
crab, stone	217	0.78	(based on conversion for crab legs)
crab, dungeness	218	0.78	(based on conversion for crab legs)
crab, canned	219	0.75	EPA
rock crab	220	0.78	(based on conversion for crab legs)
squid, dried	222	0.215	78.55 g water in 100 g raw squid (USDA)
undefined	223	0.75	EPA
spot	224	0.75	EPA
whitesucker	225	0.75	EPA
sea urchin roe	226	0.75	EPA
blowfish	228	0.75	EPA
bass, calico	230	0.75	EPA
salmon, smoked	231	0.75	EPA
shad, smoked	232	0.75	EPA
fish chowder, bluefish	233	0.78	(based on bluefish, probably higher as cooked in water)
fish chowder, scup	234	0.75	EPA
fish chowder, tautog	235	0.78	(based on tautog, probably higher as cooked in water)
milkfish	237	0.75	EPA
covina, yellow	238	0.75	EPA
cod, dried	239	0.187	81.28g water in 100 g raw Pacific cod & 81.22 g water in 100 g raw Atlantic cod (USDA)
eel, raw	241	1	
salmon, raw	242	1	
squid, raw	243	1	

Table A-10. Factors for converting the Connecticut data from as-consumed to uncooked weights (continued)

Species	Code	Conversion (divide by this to get uncooked weight)	Notes*
grunt	244	0.75	EPA
doctorfish	245	0.75	EPA
snow crab	246	0.78	(based on conversion for crab legs)
sheepshead	247	0.75	EPA
sharkfin, dried	248	0.25	Bold assumption
herring, dried	249	0.284	71.52 g water in 100 g raw Pacific herring & 72.05 g water in 100 g raw Atlantic herring (USDA)
snapper, yellowtail	250	0.78	(based on conversion for snapper blues)
snapper, pink	251	0.78	(based on conversion for snapper blues)
undefined	300	0.75	EPA
clams, raw	20101	1	
clam chowder	20102	0.5	(maybe higher as cooked in water)
clam sauce	20103	0.5	(maybe higher as cooked in water)
clam strips	20104	0.425	
clams, raw/cooked unspecified	20105	0.75	
clams, undefined	20106	0.5	
clams, quohogs cooked	20107	0.5	
clam chowder/sauce unspecified	20109	0.5	(maybe higher as cooked in water)
crab cakes	20201	0.78	(based on conversion for crab legs)
crab salad	20202	0.78	(based on conversion for crab legs)
crab cake/salad	20203	0.78	(based on conversion for crab legs)
crab, undefined	20204	0.78	(based on conversion for crab legs)
lobster roll	20501	0.75	EPA
lobster salad	20502	0.75	EPA

Table A-10. Factors for converting the Connecticut data from as-consumed to uncooked weights (continued)

Species	Code	Conversion (divide by this to get uncooked weight)	Notes*
lobster tail	20503	0.75	EPA
lobster unspecified	20504	0.75	EPA
oysters, raw	20801	1	
oysters, cooked	20802	0.5	
oyster stew	20803	0.5	(maybe higher as cooked in water)
oysters, rockefeller	20805	0.5	
sea scallops	21001	0.769	
bay scallops	21002	0.769	
popcorn shrimp	21201	0.79	
small shrimp	21202	0.79	
med shrimp	21203	0.79	
large shrimp	21204	0.79	
jumbo shrimp	21205	0.79	

Table A-10. Factors for converting the Connecticut data from as-consumed to uncooked weights (continued)

* EPA = EPA Mercury Study Report to Congress (U.S. EPA, 1997).

A.4. MINNESOTA AND NORTH DAKOTA DATA

A.4.1. Description of the Survey and the Original Data Files

The Minnesota and North Dakota data were distributed (1) by mail from a stratified random sample of the general population, and (2) in person for tribal members. For mailed surveys, sampling strata were defined by lists of (1) the general populations of each state, (2) anglers, and (3) new mothers. A portion of the total sample was allocated to each stratum, with 60% of surveys going to Minnesota and 40% to North Dakota. The Minnesota portion was allocated equally between the nine county region in the northeast portion of the state and the rest of the state. The general population list came from a mailing services provider. The lists of licensed anglers were provided by the Minnesota Department of Natural Resources and the North Dakota Department of Game and Fish. The list of new mothers in Minnesota was provided by the Minnesota Department of new mothers to tribal members following a non-random procedure. Finally, there were five additional surveys in the "Add-on by project personnel" category. The data were provided in a Microsoft Access file

(MN-ND_fish consumption_97.mdb). Data collection took place in October and November of 2000.

A.4.1.1. Reformatting the data

The survey respondent was asked to provide fish consumption information for up to five household members. If there were more than five household members, data was to be provided for one or two adults and the oldest, middle, and youngest children.

The questionnaire requested demographic information and information about fish consumption for 12 different classes of fish species, divided into two groups, purchased fish and non-purchased or self-caught fish. For self-caught fish the respondent was asked for the minimum and maximum length of the fish and the locations where the fish were caught. To define location the questionnaire divided Minnesota and North Dakota into 17 areas. Different locations could be selected for each class of fish. The file included coefficients for predicting the mercury concentration in the fish from the length of the fish, the location the fish was caught, and the class of fish.

Several types of information were requested in multiple different ways. Question 3 allowed the respondent to check-off all purchased (restaurant or store-bought) fish consumed by any family member in the last year—listing 37 different species of fish. The respondent was not asked how much of these fish were eaten. Fish consumption was requested for the 12 classes of fish. Consumption was defined both in terms of general frequency of consumption (such as 1–5 times per year or 1–2 times per week) and in the number of meals in the last month. The Microsoft Access file included programmed procedures to calculate the fish consumption in grams per unit time. The frequency of consumption was used for those calculations rather than the number of meals per month. As a result, the frequency of consumption was used to calculate fish consumption in g/day.

Except for seven surveys, the survey ID (household ID) was used to identify the population from which the household was sampled and the state of residence. Charlene Crocker from the University of North Dakota, one of the authors of the Minnesota/North Dakota study report (Benson et al., 2001), provided recommendations for resolving the status of the final seven surveys. The State variable had the state of residence for each survey. In addition, for the mail questionnaires, the database had information on the state to which the survey was mailed (MailState). The respondent was also asked their state of residence (Q15State). In some cases the respondent reported state of residence was missing or reported as "Other", i.e., than Minnesota or North Dakota.

The mailing addresses included zip code. The address and zip code were used to get the county name (CntyName) from geographic databases. The county name was undefined for some respondents, primarily surveys that were distributed by the Indian tribes and not mailed.

An additional variable (Strat9) flagged the nine northeast counties in Minnesota. This variable was defined based on the available information on sample population and address. All members of the Bois Forte Tribe were assumed to live in the nine northeast counties because the tribal reservations were located there. As a result, the variable Strat9 had no missing values.

The data files have information on 1,572 households and 4,272 individuals. The data from many Microsoft Access tables were separated into five files:

- MNNDHHDat with data for the households (e.g., household income);
- MNNDIndDat with data for individuals within households (sex, age, bodyweight);
- MNNDFishDat with data on fish consumption;
- MNNDQ3 with data on fish purchased by any family member in the last year; and
- MNNDFISHLOC with information on where fish were caught.

A.4.1.2. Data file comparison

Because of how the data files were organized there were no inconsistencies between files (as was found in the Florida and Connecticut data). Demographic information in the study report could be replicated from the processed files with the exception of Income and Angler. Charlene Crocker from the University of North Dakota provided a revised summary of Income that agreed with the numbers derived from the processed files. In a few cases, the values in the tables in the report could only be replicated by assuming the table was mislabeled.

A.4.1.3. Calculation of uncooked and as-consumed fish consumption

The Minnesota and North Dakota questionnaire asked for the "usual" portion size in ounces. Pictures of the food items with associated weights were provided as a guide. The pictures showed the food on a plate, suggesting that the weight provided with each picture was the as-consumed quantity. The respondent was asked the weight of the fish, and if that weight was the cooked or raw weight. The questionnaire did not ask if the item was cooked before being eaten. The MN/ND Microsoft Access data file had programming code to calculate fish consumption. However, that code ignores the uncooked versus cooked responses. Since the Microsoft Access file had the reported values, EPA chose how to convert the reported values to uncooked or as-consumed consumption. For the purposes of converting from uncooked to as-consumed or visa versa, EPA assumed that all reported consumption was eaten cooked because the questionnaire was not specific enough to identify food items that might have been consumed uncooked. All food items were converted from uncooked to as-consumed weight by multiplying

the uncooked weight by 0.75, the value used in the *EPA Mercury Study Report to Congress* (U.S. EPA, 1997).

A.5. COMBINED DATA

A.5.1. Description of the Combined Data Files

The data from the three survey databases were combined into one database for analysis. The combined file contained variables that were common to all three databases. For example, fish consumption was available in all three databases and was also in the combined database. The variable indicating whether the respondent catches fish in fresh or salt water locations was in the Connecticut database, but not in the other files and was not included in the combined database. Although the variables may be present in all databases, in some cases the values were measured differently. As a result, some transformations were made to transform the data into similar units. For categorical data the categories may differ among databases—such as for race-ethnicity. The combined file contains the categories as recorded in the individual files. To represent income, education, and race-ethnicity, three variables (CHHIncome, CEducation, CRaceEthn) were created for the categories that were of interest to this analysis even if those variables were not available in all of the individual databases. For example, the Connecticut and Minnesota/North Dakota questionnaire had information about whether a household member was pregnant. The combined file has this information; however, it is missing for the Florida data.

There were three combined files, one for household variables, one for individual variables, and the third for fish consumption data. In general, these files correspond to the organization of the files in the individual state databases. In a few cases some transformations were needed. For example, Connecticut had the education for the head of household, Florida had education for the randomly selected adult, and Minnesota and North Dakota had education for the first two listed members, generally the adults. The individual data for the respondent (member 1) in the Minnesota and North Dakota data was judged to be the closest approximation to the education data in the other two files. In this case, the education data was moved from the individual file to the household file.

Table A-11 lists the variables in the combined files and the corresponding variables in the original files for each survey. If a cell was blank, then the individual survey file had no information for that variable. When the files were combined, the "Add-on" surveys from the Minnesota/North Dakota survey were excluded from the combined files. Table A-12 shows the number of household, individual, and fish species records coming from each of the individual files and in the combined file.

Combined File	FL	СТ	MNND
	Identif	fiers	·
Study	"FL"	"CT"	"MNND"
HHID	ID	FAMID	SurveyID
PersonID	PERSON	INDID	HMID
	Household (H	H) variables	
State	"FL"	"CT"	MailState or State
CntyName	CntyName	CntyName	CntyName
HHIncome	HHIncome	HHIncome	HHIncome
Education	RSAEduc	HHHEduc	Education[Member 1]
RaceEthn	RSARaceEthn	HHRace	RaceEthn[Member 1]
Population	"General"	Group [See text]	Population
HHSize		People	NumPeople
HHEatsCaughtFish			CaughtFish
AnyCurPregNurs			AnyCurPregNurs
	Consumption data by	person and species	
Location [Away, Home or Both]	Location	"Both"	"Both"
Species	Name Species	FishName Species	HMFish
MealPerYr	NumOccasions	MealsYr	MealsPerYear
CookGDayBought	RawGrams, PctRecCaught,	Fsource and Gday	Species, RawCook, MealPerYear, and GramsPerMeal
CookGDayCaught	and raw to cooked conversion		
RawGDayBought			
RawGDayCaught			
GramsPerMeal		Gmeal	GramsPerMeal
	Person va	riables	·
Age	Age	Age	Age
Sex	Sex	SexC	Sex
Weight	Weight	Wt	Weight
CurPregNurs		BFeedC and PregC	CurPregNurs

Table A-11. Crosswalk of variables in original and combined data files

	Combined	FL	СТ	MNND
Households	11,118	8,740	810	1,568
Individuals	23,555	17,213	2,080	4,262
Fish dishes or meals	51,653	16,099	15,367	20,187

Table A-12. Number of records in the processed data files

FL = Florida, CT – Connecticut, MNND = Minnesota/North Dakota.

The variable Study identifies the study from which the data was derived. The HHID numeric variable was used to identify households. HHID was unique within a study, but may not be unique between studies. The Study and HHID variables were in all files. The PersonID was a character variable and was used to identify individuals within households. PersonID was unique within households. These variables were used when merging files.

A.5.1.1. Demographic data

The household variables are variables that were obtained once for each household or apply to all members of the household. Location variables included the state of residence of the household (State) and the county name (CntyName).

All studies asked questions about total household income, each using a different set of questions. The income responses were in the HHIncome variable as descriptive text strings. Table A-13 shows how the income categories from the different studies were combined into a common set of income categories.

In the Minnesota/North Dakota study education was requested for the first two listed household members, the respondent and the second listed member. The combined files had the education of the respondent. The Connecticut study asked for the education of the head of household. The Florida study asked for the education of the randomly selected adult. Since the randomly selected adult may not be the head of household and the respondent (the person that filled out the questionnaire) in the Minnesota/North Dakota study was not randomly selected and might not be an adult, the measures of education level associated with the household were not completely equivalent between studies. Table A-14 shows how the education categories from the different studies were combined into a common set of education categories.

Race-ethnicity was obtained in all studies, each using a different set of questions. Since the race-ethnicity of all household members was often the same, uncertainty in defining a household race-ethnicity using the respondent in the Minnesota/North Dakota study is probably less of a problem than with education. Table A-15 shows how the race-ethnicity categories from the different studies were combined into a common set of race-ethnicity categories.

Common income category (CHHIncome)	Household income (HHIncome)
\$0-20000	Less than \$10,000
\$0-20000	\$0-4,999
\$0-20000	\$5,000–9,999
\$0-20000	\$10,000 to < \$15,000
\$0-20000	\$10,000-14,999
\$0-20000	\$15,000 to < \$20,000
\$0-20000	\$15,000-19,999
\$0-20000	\$20,000 and under
\$20000-50000	\$20,000 to < \$25,000
\$20000-50000	\$20,000-24,999
\$20000-50000	\$20,000-35,000
\$20000-50000	\$25,000 to < \$35,000
\$20000-50000	\$25,000-29,999
\$20000-50000	\$30,000-39,999
\$20000-50000	\$35,000 to < \$50,000
\$20000-50000	\$35,000 to \$50,000
\$20000-50000	\$40,000-49,999
\$50000-	\$50,000 to < \$75,000
\$50000-	\$50,000-59,999
\$50000-	\$60,000–69,999
\$50000-	\$70,000-
\$50000-	\$75,000 and over
\$50000-	Over \$50,000
No Response	
No Response	Missing
No Response	No response
No Response	Retired

 Table A-13.
 Common income categories

Common education category (CEducation)	Education
Unknown	
Unknown	No data recorded
Unknown	No response
Unknown	Unknown
1)Some High School or less	0 years
1)0-11 years	1 years
1)0-11 years	2 years
1)0-11 years	3 years
1)0-11 years	4 years
1)0-11 years	5 years
1)0-11 years	6 years
1)0-11 years	7 years
1)0-11 years	8 years
1)0-11 years	9 years
1)0-11 years	10 years
1)0-11 years	11 years
1)0-11 years	11 years or less
1)0-11 years	Grade 1 to 5
1)0-11 years	Grade 6 to 8
1)0-11 years	Some High School
2)High School	12 years
2)High School	High School/GED
2)High School	High school (12 years)
3)Some College	13 years
3)Some College	14 years
3)Some College	15 years
3)Some College	Some college
3)Some College	Some college (13–15 years)
4)College graduate	16 years
4)College graduate	17 years
4)College graduate	18 years
4)College graduate	2–4 year degree
4)College graduate	College grad. (>15 years)
4)College graduate	Post Graduate Degree

 Table A-14.
 Common education categories

Common race-ethnicity categories (CRaceEthn)	Race-ethnicity (RaceEthn)
American Indian	Amer Indian
American Indian	American Indian
Asian	Asian
Asian	Asian Indian
Asian	Cambodian
Asian	Chinese
Asian	Filipino
Asian	Hmong
Asian	Korean
Asian	Laotian
Asian	Vietnamese
Black, Non-Hispanic	African American
Black, Non-Hispanic	Black non-H
Black, Non-Hispanic	Black, Non-Hispanic
Hispanic	Central American
Hispanic	Dominican
Hispanic	Hispanic
Hispanic	Mexican
Hispanic	Puerto Rican
Hispanic	South American
Unknown	
Unknown	No response
Unknown	Other
Unknown	Unknown
White, Non-Hispanic	White
White, Non-Hispanic	White non-H
White, Non-Hispanic	White, Non-Hispanic

Table A-15. Common race-ethnicity categories

The Population variable indicated the population (in a statistical sampling sense) from which the respondents were selected. "General" refers to a random sample of residents from the state (note that the Minnesota/North Dakota study report uses this term differently in some tables). The Florida study report discussed the state sample and the Paper Mill sample. However, from a statistical point of view, these were samples of the general population with different rates of selection in different counties.

Household size (HHSize) included the number of household members. In the Connecticut study, the respondent provided information for all household members. However, sometimes the fish consumption information was not reported for some members. For this study, HHSize was the reported number of household members, not the number in the files. Similar information was not provided in the other studies. If family size is of interest, it would be possible to calculate the number of records for individuals each household as an indication of the family size.

It was also possible to identify families that ate self-caught fish from the data files. Since this variable was of interest in the EPA analysis and because it was provided in the Minnesota/North Dakota study, it was included in the combined files. This variable was missing for the Florida and Connecticut data.

The Florida study did not collect information on whether any household members were pregnant or breastfeeding, while the Connecticut study and Minnesota/North Dakota study did collect this information. In the Minnesota/North Dakota study, the question asked if any household member was pregnant or nursing. If so, the survey then asked which household member was pregnant or nursing. In most cases, when there was someone in the home that was pregnant or nursing, the specific household member was not identified. The AnyCurPregNurs variable contained the response to the question about any currently pregnant or nursing women in the household from the Minnesota/North Dakota study.

A.5.1.2. Fish consumption data

The Florida study asked separate questions regarding fish consumption at-home and away-from-home. This distinction was retained in the data files using the location variable (Location). For the Florida study, the at-home and away-from-home fish consumption were on separate records in the fish consumption data file, Location is set to either "Away" or "Home". For the other studies, Location = "Both".

The surveys collected information on fish consumption of individual fish species or classes of species. Each survey defined species differently. The surveys generally reported fish consumption by species (or a classification very similar to common names for biological species)

or by classifications similar to a dish name (e.g., crab cake). The Minnesota/North Dakota study asked about classes of species. In the combined file, the Species variable described the fish species or fish class.

Each survey asked in some way about grams of fish per meal and the number of fish meals per unit time. This information was used to calculate the fish consumption. The Florida data provided the fish consumption in grams of uncooked fish per week and the meals per week (NumOccasions). The Florida study did not keep the grams per meal data in the data file. The Connecticut data had the grams per meal, meals per year, and the grams of as-consumed fish per day. The Minnesota/North Dakota study provided the meals per year and the grams of fish per meal. The fish consumption was calculated from these variables. Note that a "meal" in general refers to one type of fish at a meal. If a respondent eats two types of fish at the same meal, these will be recorded as separate meals. Thus "meals" does not have the usual interpretation.

The information on fish consumption was used to calculate fish consumption for bought and caught fish. Each of these was also provided as uncooked weight and cooked (as-consumed) weight. The following paragraphs describe how these values were calculated.

For the Florida study, the data file provided fish consumption in grams of uncooked fish per week and the percent of the fish that were recreationally caught (the percentage was almost always 0% or 100%). The percent recreationally caught was used to divide the uncooked grams into self-caught and store-bought portions. Dividing the value by 7 (days) converted the weekly consumption to g/day. The study report also reported conversions for translating from uncooked to as-consumed weight that were used. These same conversions were used to calculate the as-consumed weights.

For the Connecticut study, the data files provided the as-consumed fish consumption in grams per day. The respondents were also asked if the fish was bought at a restaurant, store, or self-caught. Any combinations of sources could be checked. If the respondent selected two sources (such as store and caught), half of fish was assumed to come from each source. If all three sources were selected, one-third was assumed to come from each source. The Study report also provided some information on how weights were converted from uncooked to as-consumed (Balcom et al, 1999). This information was used to convert from the as-consumed weight to the uncooked weight.

The Minnesota/North Dakota survey asked for the frequency of eating fish in each class as well as the usual serving size. Another check box indicated if the weight was uncooked weight or as-consumed weight. These categories were associated with numeric values for the number of meals per year and the grams of fish per meal. All fish was assumed to be eaten cooked. A generic value from the *Mercury Study Report to Congress* (U.S. EPA, 1997) was used to convert weights from uncooked to as-consumed. The as-consumed weight was assumed to be 75% of the uncooked weight for all fish. The survey divided the fish classes into store-bought and self-caught fish. These classes were used to define the consumption of store-bought and self-caught fish.

All surveys collected data on the age, sex, and bodyweight of the respondents. The Minnesota/North Dakota study collected information on individuals that were pregnant or nursing. However, as noted above, this information may not be reliable. Nonetheless, this information was provided in the individual data file in the CurPregNurs variable. The Connecticut study asked if the household member was pregnant or breast feeding. If either of these questions was answered positively, the CurPregNurs variable was "Yes". If either was missing the CurPregNurs variable was DK, otherwise the CurPregNurs variable was "No". The CurPregNurs variable was "NA" for men.

A.6. CALCULATION OF WEIGHTS

In general, a statistical sampling weight can the thought of as the number of units (generally, people or households) in the target population "statistically represented" by a unit in the sample. In a formal sense, the weight is the inverse of the product of the probability of selection into the sample and the probability of responding to the survey. If weighting strata are defined such that the probability of selection and the probability of responding are believed to be the same for all individuals in the strata, the weights for individuals in the strata can be calculated as the population in the stratum divided by the sample size in the stratum. Typically, additional weight adjustments are then made to force agreement with certain population counts (Lohr, 1999).

Sampling weights were calculated to extrapolate the reported fish consumption for the "General" population respondents to the population in the four states for which there was data: Florida, Connecticut, Minnesota, and North Dakota.

The weights were calculated in three steps. In the first step weighting strata were defined for calculation of the initial weights. In each survey, the sample of households to be contacted was a random sample stratified by county. In most states the probability of selecting a household was the same in each county. However, in Minnesota, the probability of selecting a household was higher in the nine northeast counties and in Florida the probability of selection was higher in counties with paper mills. Without additional information on which segments of the population were more likely to respond to the survey once selected, it was assumed that every household within a county had the same probability of responding to the survey. In some counties the number of completed surveys was very small, making the sampling weight sensitive to the precise number of respondents if the county was used as the weighting strata. Having more respondents in a weighting strata helps to reduce any random variation in the weights. Having fewer respondents in a strata helps to create weights that reflect different probabilities of selection in different counties, if differences exist. However, having more variable weights will increase the variance of the estimates.

The following procedures were used to minimize variation in the weights due to a small number of respondents in some counties: In each state the counties were sorted from smallest to largest. Counties were grouped into weighting strata, starting with the smallest counties, until the number of respondents in the strata was roughly 70 or greater. The cut-off of 70 was considered reasonable to balance these two kinds of errors. The exact choice of the cutoff is not expected to have much effect on the estimates. In Minnesota, a different sampling rate was used for the nine northeast counties compared to the other counties. As a result, the counties were divided into two groups, the nine northeast counties and other counties. The weighting strata were then defined separately within these two groups of counties. In all states, the weighting strata are either individual counties or groups of small counties.

The initial weight was calculated in the second step as:

$$W_{initial} = \frac{N_{Pop}}{N_{\text{Resp}}}$$
(A-1)

where N_{Pop} is the 2000 census population in the weighting strata in which the respondent lives and $N_{\text{Re}sp}$ is the number of respondents from the weighting strata with completed surveys. This calculation assumes that households in the weighting strata are equally likely to respond to the survey regardless of other characteristics of the household, such as whether they have an answering machine. A more detailed adjustment for non-response was not possible because data on non-responding households was not available.

In the last step, the weights were adjusted, or raked, so that the total weights for selected populations equals known totals from the 2000 Census. Raking the data required classifying all respondents within each state by characteristics, such as child versus adult. Using population totals for these groups, raking adjusts the initial weights to agree with the population totals. When the weights are raked to agree with more that one set of totals (in this case, the total population in each weighting strata and the total state population for adults and children) the weights are adjusted sequentially for each set of totals until the weights converge. The raking procedure can be represented as follows:

$$W_{J} = \frac{T_{Subgroup}}{\sum_{Subgroup} W_{J-1}} W_{J-1}$$
(A-2)

where W_J is the weight after raking step J, W_{J-1} is the weight after the previous raking step $(W_{J-1} = W_{initial}$ for the first calculation), the sum is over the subgroup to which the respondent belongs, and $T_{Subgroup}$ is the population total for that subgroup. All weights were raked to agree with the Census 2000 total population for the weighting strata and for the number of adults and children in the state.

In Connecticut, Minnesota, and North Dakota, the raking had a minimal effect on the weights and the weighted estimates. In Florida, responses for children and adults other than the RSA were not included in the data unless the primary meal preparer (PMP) was present. Because the PMP was not present in 1,383 of the 8,000 households, the data under-represented the children and some adults. The raked weights corrected for the under representation of the number children and of some adults by increasing their weights relative to the RSA. As a result, the weighted survey estimates for Florida should fairly represent the characteristics of at-home consumption of fish and shellfish for all Florida residents. However, the weights cannot adjust the estimates to account for the fact that out-of-home fish and shellfish consumption was not obtained household members other than the RSA.

The weights estimate the number of individuals in the population represented by each respondent (individual with data). When calculating estimates for a state, counties with more people (and a higher weight total) contribute more to the state estimate than counties with few people. Thus the estimates do not weight the counties equally. The same weights can be used for estimates of fish and shellfish consumption by the general population within the state as for the population of fish and shellfish consumers. The weight for a consumer of fish and shellfish estimates the number of fish and shellfish consumers in the population represented by the respondent. When calculating estimates for consumers in a state, counties with more consumers contribute more to the state estimate than counties with few consumers. If counties have a different proportions of the population that eat fish and shellfish, the relative influence of each county on the state total will be different than for estimates for all of the population.

Standard statistical procedures do not calculate the correct variance (from which the standard errors and confidence intervals are derived) for weighted estimates because (1) the weights are not equal, and (2) household, not individuals, were selected using a random sample. Special procedures must be used to calculate the correct variances. To implement those procedures defined "Variance units" and replicate weights. Using these variables, the variance

of weighted estimates can be calculated using the WesVar or SUDAAN programs or other software, such as the SAS PROC SURVEYMEANS procedure. WesVar uses replicate weights to calculate the variance. The replicate weights are related to the variance units. The data files had replicate weights that can be used in WesVar or other programs. Other programs, using a method called Taylor series linearization, use the full sample weight and the variance units to approximate the variance calculated by WesVar. SUDAAN uses Taylor series linearization and can use the replicate weight for some procedures. PROC SURVEYMEANS also uses Taylor series linearization.

The variance units were defined by randomly ordering the households within each state and targeted population. Households were then sequentially numbered starting from 1 up to 50. After 50, the next household was numbered 1, etc. The numbers defined the variance units, for example, all households (and individuals in those households) that had the number 1 formed the first variance unit. Together, these variance units were used to calculate a jackknife estimate of variance. The variance estimate will have about 49 degrees of freedom.

APPENDIX B. QA/QC PROCESS

The data files collected and originally processed by others were analyzed. The documentation for the original files was sometimes inadequate or was not consistent with the contents of the data files. The reports on the original surveys did not include discussions of the QA/QC process used in the implementation and data processing of the surveys.

These files were processed as described in Appendix A. When processing the files, various QC checks were performed, including:

- Cross-tabulations of original and recoded variables to verify that the recoding was completed correctly;
- Calculation of summary statistics to compare results from different steps in the processing of the files;
- Comparing summary statistics from the processed files to published summary statistics;
- Using SAS macros for preparation of the tables to simplify some repetitive operations and minimize some coding problems;
- Recreate a subset of the tables using a completely unrelated program to check for possible errors in the SAS macros; and
- The calculations of derived variables were checked by exporting to a Microsoft Excel file the derived variables and the variables from which they were derived. The calculation of the derived variables was then checked for a stratified random subset of cases.

Any errors that were found were corrected.

APPENDIX C. CALCULATION OF PERCENTILES

Different programs use different formulas for estimating percentiles for data from a random sample. Estimating percentiles for weighted survey data based on a complex probability sample design requires selection of a formula for calculating the percentiles. The choice can affect the bias of the percentile estimate.

Hyndman and Fan (1996) provide a summary of commonly used formulas used for calculating percentiles. The various formulas fall into two general categories, discontinuous and piecewise continuous functions to approximate the population quantile function. For a continuous distribution, extreme percentiles can be outside the range of the observed data. Using a discontinuous quantile function, estimates of extreme percentiles can be very biased. Extreme percentiles cannot be estimated when using a piecewise continuous quantile function. However, for percentiles within the range of the data, the piecewise continuous functions interpolate between the observed values and can provide more reasonable estimates for intermediate percentiles.

The following formula (Equation C-1, presented by Hyndman and Fan, 1996) defines plotting points. Linear interpolation between the plotting points is used to define the piecewise continuous sample quantile function. The location of the plotting points depends on two parameters, α and β . Assume a continuous underlying variable and a piecewise-linear sample quantile function p = f(x) defined by plotting points (x_k , p_k), where x_k is the kth ordered observation,

$$p_k = \frac{k - \alpha}{n + 1 - \alpha - \beta} \tag{C-1}$$

and α and β are constants between 0 and 1. The percentile corresponding to the desired percentage P is obtained by interpolation between neighboring plotting points.

Different software programs use different α and β values. For symmetric distributions, Hyndman and Fan argue that α and β should be equal. For simple random samples they recommended setting α and β between $\frac{1}{3}$ and $\frac{3}{8}$. Unless α and β equal 1.0, there will be percentages $\langle p_1 \text{ and } \rangle p_n$ for which percentiles cannot be calculated. Some software uses the maximum (x_n) or minimum (x_1) for these percentiles. However the maximum and minimum may provide very biased estimates of the desired percentiles. Many programs set these percentiles to missing. There are no standard formulas for calculating percentiles from weighted data. Hyndman and Fan (1996) implicitly assume that there are no ties and do not discuss weighted data. Equation (C-2) is a reasonable analog of Equation (C-1) for weighted data and data with tied values. Note that if all the weights are equal, Equation (C-2) is the same as Equation (C-1).

$$x_{k} = k^{th} \text{ ordered unique value, } k = 1...n,$$

$$S_{k} = \sum_{j=1}^{k} W_{j}, W_{k} = \text{weight for observations equal to } x_{k},$$

$$p_{k} = \frac{S_{k} - W_{k}\alpha}{S_{n} + W_{k}(1 - \alpha - \beta)}.$$
(C-2)

Based on simulated weighted data, Rogers (2003) recommends setting $\alpha = \beta = 0.5$ to minimize bias, unless adequate data are available for selecting other values.

The only procedure in SAS for calculating weighted percentiles uses a discrete quantile function. The SUDAAN and WesVar programs that are designed for weighted data use a calculation procedure equivalent to setting $\alpha = 0.0$ and $\beta = 1.0$. This choice can results in biased quantile estimates for many distributions.

A SAS macro was written to calculate percentiles using Equation (C-2) with $\alpha = \beta = 0.5$.

The following example illustrates the calculation of weights and compares the results to SAS PROC Univariate. The characteristics of the calculations are easiest to illustrate using a small data set. The data used are in Table C-1

Data value	Weight
1	1
2	2
3	7
4	4
5	16

Table C-1.	Example	data

Table C-2 shows the percentiles for the example data calculated using the macro and SAS PROC Univariate.

	Percentile estim	ate calculated from
Percentage for the desired percentile	Macro	PROC Univariate
1%		1
5%	1.667	2
10%	2.222	2.5
25%	3.182	3
50%	4.30	5
75%		5
90%		5
95%		5
99%		5

 Table C-2. Percentile estimates from the macro and from PROC Univariate

 for the example data

Figure C-1 shows the assumed inverse cumulative distribution function defined by the macro and by PROC Univariate. On the horizontal axis is the percentile to be estimated (expressed as a fraction) and on the vertical axis is the estimated percentile value. For example, going up from 0.50 on the horizontal axis until hitting the line for the macro estimate and then going left from that point to the vertical axis gives an estimate of the median (50th percentile) of 4.3 using the macro. Based on the line for PROC Univariate, the estimate of the median is 5.0. The curves in Figure C-1 approximate the cumulative distribution function for the population values. Note that the macro uses a piecewise continuous function to approximate the cumulative distribution function and PROC Univariate uses a step function where the width of the step is proportional to the weight of the observation. If the percentage for the desired percentile falls exactly on the rise between steps, the estimate is the midpoint between the two steps. If $\alpha = \beta = 0.5$ then the linear interpolation from Equation (C-2) goes through the middle of each step. If the percentage for the desired percentile is close to 0% or 100%, PROC Univariate returns the minimum or maximum respectively and the macro returns a missing value.

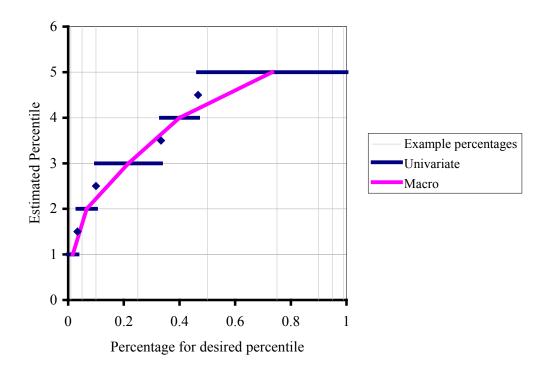


Figure C-1. Comparison of the cumulative inverse cumulative distribution function estimates from the macro and PROC Univariate.

If the values in the population (in this report, fish consumption rates) can be considered measures on a continuous scale, then (1) the true percentiles can take values other than the sampled values, (2) the extreme percentiles of the distribution can be less than the sampled minimum or greater than the sampled maximum value, and (3) the extent to which the extreme percentiles are outside the range of the observed minimum and maximum cannot be determined from the data (in this case the macro returns a missing value). On the assumption that the fish consumption rate can be considered a continuous measure, the characteristics of the estimates from the macro more closely match the characteristics of the true percentiles than do the estimates from PROC Univariate. Note that the difference between the estimates from the macro and PROC Univariate will always be less than the difference between the two closest observations that bracket the estimate from the macro. For a fixed population, larger sample sizes will be associated with smaller differences between the percentiles from the macro and PROC Univariate.

Even with a small number of observations, the macro will provide estimates of extreme percentiles if the weight for the smallest or largest observation is small. In the example data, the weight for the smallest observation is 3.33% of the total weight. In this case, the macro will

estimate percentiles for percentages as low as 1.67% (half of 3.33%). However, the weight for the highest observation is 46.67% of the total weight. As a result, the macro will not estimate percentiles for percentages greater than 73.3% (100%–half of (100%–46.67%)). The maximum observed value returned by PROC Univariate is likely to be a biased estimate for extreme upper percentiles. Likewise, the minimum observed value is likely to be a biased estimate for extreme lower percentiles.

The macro uses linear interpolation between the observed values to calculate percentiles. Linear interpolation is expected to work best when the cumulative distribution function is close to linear in the region where interpolation is used. If the cumulative distribution function is not close to linear, the percentile estimates may be slightly improved by transforming the data so that the cumulative distribution function in the transformed scale is approximately linear, calculating percentiles in the transformed scale, and then transforming the percentiles back to the original measurement scale. Percentiles were calculated using the log-transformed values because the cumulative distribution function for the log-transformed values is likely to be more linear than for the untransformed values when the data are skewed. The differences in the percentiles between using the macro with interpolation and using PROC Univariate. Table C-3 compares the example-data percentile estimates using different methods.

Percentile estimate calculated from			l from
Percentage for the desired percentile	Macro, original data	Macro, log- transformed data	PROC Univariate
5%	1.667	1.587	2
10%	2.222	2.189	2.5
25%	3.182	3.161	3
50%	4.300	4.277	5

 Table C-3. Percentile estimates from the macro and from PROC Univariate

 for the example data

APPENDIX D. GLOSSARY

Table D-1 details abbreviations used in this report.

FL	Florida
СТ	Connecticut
MN	Minnesota
ND	North Dakota
НН	Household
FFQ	Food frequency questionnaire
RSA	Randomly selected adult (in the Florida survey)
PMP	Primary meal preparer (in the Florida survey)
MNND	Minnesota/North Dakota study
CI	95% confidence interval

Table D-1. Abbreviations used throughout the data documentation report

Consumption—Unless otherwise quantified, the fish and shellfish consumption rate is given in g/day.

Consumption per kilogram bodyweight—Fish and shellfish consumption rate (g/day) divided by the respondents reported bodyweight in grams per day to calculate grams per kilogram bodyweight per day.

Consumption rate—The fish or shellfish consumption during the recall period divided by the length of the recall period. The consumption rate can also be calculated as the typical weight of fish consumed per meal divided by the number of meals per unit time (such as three meals per month). For this report, the consumption rate was converted to g/day.

General population—The general population refers to a set of respondents that were randomly selected to represent the state population. The term "General" distinguishes those respondents that are used to calculate population estimates from targeted populations.

Population—All residents within a state. In this document, "Population" associated with survey results refers to estimates of values for a state population derived from the weighted survey data. See also "General population."

Subgroup—A subset of the data defined by an analysis variable, such as a subset of respondents in an income, race-ethnicity, or gender group. Confidence intervals are calculated for respondents within subgroups. Significance tests test if the means or geometric means are the same across subgroups defined by an analysis variable.

Targeted population—A subset of the general population within a state (e.g., children, recreational anglers).

APPENDIX E. TABLES OF FISH AND SHELLFISH CONSUMPTION

Appendix E has fish and shellfish consumption tables for each state's general population using the as-consumed weight of fish and shellfish, additional tables summarizing consumption as raw weight, and tables for targeted populations. Section E.1 has a detailed overview of the tables. For the state's general population, Sections E.2 through E.8 have tables presenting mean and geometric mean fish and shellfish consumption and the percentage of respondents that reported eating fish or shellfish. Each table provides separate estimates for each state. Additional tables provide percentile estimates, a more detailed breakdown of the general population, and consumption in raw weight and raw weight per kilogram bodyweight. Section E.9 has plots showing the mean and confidence intervals for fish and shellfish consumption and the percentage of respondents that reported eating fish or shellfish. Section E.10 has tables showing the mean and geometric mean fish consumption for each state's general population and targeted populations. Section E.11 lists the species of fish consumed by the general population. Tables for the targeted populations with additional details are in Section E-12 along with tables listing the species consumed by the targeted populations.

E.1. ORGANIZATION OF THE TABLES

There are tables for each summary statistic organized into the following sections:

- Section E.2 Mean fish consumption;
- Section E.3 Mean fish consumption per kilogram bodyweight;
- Section E.4 Percentage of respondents that reported eating fish and shellfish;
- Section E.5 Mean fish consumption for respondents that consumed fish or shellfish (consumers only);
- Section E.6 Mean fish consumption per kilogram bodyweight for respondents that consumed fish or shellfish (consumers only);
- Section E.7 Geometric mean fish consumption for respondents that consumed fish or shellfish (consumers only);
- Section E.8 Geometric mean fish consumption per kilogram bodyweight for respondents that consumed fish or shellfish (consumers only);
- Section E-9 Plots of confidence intervals for the state's general population;
- Section E-10 Fish and shellfish consumption for targeted populations;

- Section E-11 Species eaten and caught; and
- Section E-12 Additional details for targeted populations.

Within each of these sections are separate tables, each using a different independent variable to define the subgroups for analysis. Each table presents summary statistics, confidence intervals, and a *p*-value to assess the significance of differences among subgroups within states. In the discussion of the results in Section 3, differences with *p*-values < 0.05 are described as statistically significant.

The tables reporting the data on fish and shellfish consumption show the state, the levels of the independent variable (the column heading is Subgroup), the number of respondents (N), the weighted population size (in thousands) represented by the respondents, (weighted N/1,000), the mean or average fish and shellfish consumption rate (as-consumed in g/day or g/kg-day), the upper and lower 95% confidence interval for the mean, and a *p*-value for assessing the statistical significance of within-state differences between the subgroup means. The confidence intervals are shown for each level of the independent variable except for race-ethnicity for which the Asian and American Indian categories were combined as "Other." Missing values of the independent variable are shown as "Unknown." The *p*-value calculations excluded the "Unknown" category.

The calculations for the confidence interval and *p*-values assume the estimates of the mean have a normal distribution. If the sample size (N) is smaller than about 100, this assumption is uncertain and the confidence interval and *p*-value are approximate. If there are relatively few respondents in a subgroup category, the confidence intervals can be imprecise. Results for these categories are left in the tables for completeness, although the results may not be useful due to the small sample sizes. If there is only one respondent, the confidence interval cannot be calculated. In a few cases with small sample sizes the normality assumption is not correct and the calculated lower confidence interval is <0 even though fish and shellfish consumption rates can never be negative. In these cases, the calculated values are presented even though they are unrealistic. A plus sign (+) between the columns for the upper confidence limit and the *p*-value indicates categories that were combined for the calculation of the *p*-value.

E.2. MEAN FISH AND SHELLFISH CONSUMPTION FOR THE STATE'S GENERAL POPULATION, AS-CONSUMED WEIGHT PER DAY

Tables described in this section (Tables E-1–E-5) present the estimated mean consumption rate of fish and shellfish (as-consumed g/day) for the general population in Connecticut, Florida, Minnesota, and North Dakota. The estimates are broken out by state and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed.

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Adult	337	2502	32.442	25.853	39.032	<.0001
	Child	83	786	9.897	6.091	13.704	
	Unknown	11	99	6.869	-2.802	16.539	
FL	Adult	13589	12339	31.052	29.253	32.851	<.0001
	Child	3592	3613	13.617	12.100	15.134	
MN	Adult	650	3614	21.252	15.786	26.718	0.0001
	Child	185	1224	9.573	7.342	11.803	
	Unknown	6	62	0.016	-0.021	0.053	
ND	Adult	430	474	20.215	16.538	23.893	0.0387
	Child	165	157	15.028	9.565	20.490	
	Unknown	7	7	23.980	1.703	46.257	

Table E-1. Mean consumption, general population, per capita, by state andadult/child (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-14	77	726	9.600	6.265	12.936	<.0001
	Female 15-44	91	689	34.496	20.707	48.284	
	Female 45+	94	694	26.670	20.539	32.801	
	Male 15-44	14	119	11.932	6.369	17.495	
	Male 45+	144	1061	36.109	28.098	44.120	
	Unknown	11	99	6.869	-2.802	16.539	
FL	Child 1-14	2751	2787	13.005	11.487	14.523	<.0001
	Female 15-44	3799	3486	30.470	27.289	33.652	
	Female 45+	2833	2553	27.750	25.710	29.790	
	Male 15-44	1783	1646	32.497	26.412	38.582	
	Male 45+	5020	4539	33.076	30.915	35.236	
	Unknown	995	941	16.388	12.419	20.356	
MN	Child 1-14	146	1017	9.556	7.052	12.059	<.0001
	Female 15-44	147	968	22.499	6.050	38.948	
	Female 45+	203	978	22.370	16.996	27.745	
	Male 15-44	63	292	8.648	5.523	11.774	
	Male 45+	276	1583	20.602	16.736	24.468	
	Unknown	6	62	0.016	-0.021	0.053	
ND	Child 1-14	121	116	15.634	9.745	21.524	0.0728
	Female 15-44	124	129	15.468	11.810	19.125	
	Female 45+	128	144	22.323	16.237	28.409	
	Male 15-44	45	47	17.781	12.024	23.537	
	Male 45+	177	196	20.924	16.509	25.339	
	Unknown	7		23.980	1.703	46.257	

Table E-2. Mean consumption, general population, per capita, by state andage/gender (5 categories) (as-consumed g/day with 95% CIs)

					Lower	Upper	
			Weighted		Conf.	Conf.	
State	Subgroup	Ν	N/1000	Mean	Limit	Limit	p-value
СТ	0-11 years	13	97	25.237	7.646	42.828	0.6465
	High School	89	682	23.778	17.407	30.150	
	Some College	66	504	34.481	18.457	50.505	
	College grad	263	2105	25.468	19.295	31.641	
FL	0-11 years	1744	1523	23.775	18.914	28.635	0.1296
	High School	5677	5118	26.277	24.179	28.375	
	Some College	5261	4948	28.233	25.340	31.127	
	College grad	4367	4240	27.998	26.156	29.839	
	Unknown	132	123	26.400	16.310	36.490	
MN	0-11 years	46	214	23.954	6.975	40.934	0.5431
	High School	236	1332	16.890	11.833	21.947	
	Some College	260	1330	22.761	10.248	35.274	
	College grad	256	1808	14.963	10.690	19.236	
	Unknown	43	215	16.509	12.264	20.754	
ND	0-11 years	31	35	13.946	6.303	21.589	0.2235
	High School	143	144	23.007	16.089	29.924	
	Some College	195	212	17.185	12.559	21.812	
	College grad	196	206	18.738	12.270	25.206	
	Unknown	37	42	19.614	7.342	31.886	

Table E-3. Mean consumption, general population, per capita, by state andeducation (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	\$ 0-20000 \$20000-50000	41 155	312 1179	23.532 32.019	13.970 18.294	33.094 45.744	0.5246
	\$50000- Unknown	219 16	1778 119	23.551 22.525	18.869 11.253	28.234 33.797	
FL	\$ 0-20000	3746	3408	26.004	22.007	30.000	0.1249
	\$20000-50000	7353	6814	28.114	25.880	30.349	
	\$50000-	3417	3250	30.601	28.187	33.015	
	Unknown	2665	2480	21.251	19.083	23.419	
MN	\$ 0-20000	89	373	28.456	15.506	41.406	0.2516
	\$20000-50000	328	1802	19.268	9.906	28.630	
	\$50000-	327	2155	16.354	12.093	20.614	
	Unknown	97	570	13.932	10.095	17.769	
ND	\$ 0-20000	53	56	24.527	9.301	39.753	0.4371
	\$20000-50000	252	268	17.542	13.218	21.866	
	\$50000-	239	251	19.215	15.597	22.834	
	Unknown	58	63	19.253	10.808	27.699	

Table E-4. Mean consumption, general population, per capita, by state andincome (as-consumed g/day with 95% CIs)

State	Cubarour	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
State	Subgroup	IN	N/1000	Meall			p-varue
СТ	White, Non-Hispanic	380	2968	26.984	22.218	31.751	<.0001
	Black, Non-Hispanic	9	66	4.362	-3.422	12.145	
	Hispanic	20	178	29.688	8.433	50.942	
	Other	20	155	25.709	-8.090	59.508	
	Unknown	2	21	0.427	0.427	0.427	
FL	White, Non-Hispanic	12957	11887	27.077	25.660	28.494	0.6051
	Black, Non-Hispanic	1842	1690	26.552	22.572	30.532	
	Hispanic	1673	1719	26.604	20.661	32.547	
	Other	382	330	35.779	24.189	47.369	
	Unknown	327	325	24.751	15.478	34.024	
MN	White, Non-Hispanic	779	4473	16.111	13.389	18.832	<.0001
	Black, Non-Hispanic	1	1	0.000			
	Hispanic	3	50	45.011	-10.06	100.08	
	Other	19	173	56.041	-45.60	157.68	
	Unknown	39	204	22.254	12.125	32.383	
ND	White, Non-Hispanic	551	585	19.111	14.972	23.250	0.1451
	Black, Non-Hispanic	2	2	15.717	15.028	16.405	
	Other	17	16	20.887	14.317	27.457	
	Unknown	32	36	16.239	6.998	25.479	

Table E-5. Mean consumption, general population, per capita, by state and race-ethnicity (as-consumed g/day with 95% CIs)

E.3. MEAN FISH AND SHELLFISH CONSUMPTION FOR THE GENERAL POPULATION, AS-CONSUMED WEIGHT PER KILOGRAM BODYWEIGHT PER DAY

Tables described in this section (Tables E-6–E-11) present the estimated mean consumption rate per kilogram bodyweight (as-consumed g/kg-day) for the general population in Connecticut, Florida, Minnesota, and North Dakota. The estimates are broken out by state and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed.

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	Adult	331	2460	0.437	0.357	0.517	0.2807
	Child	78	737	0.365	0.237	0.494	
	Unknown	11	99	0.089	-0.032	0.210	
FL	Adult	12078	11517	0.442	0.415	0.468	0.0003
	Child	3289	3310	0.557	0.497	0.617	
MN	Adult	648	3612	0.297	0.202	0.392	0.3830
	Child	184	1224	0.361	0.241	0.481	
	Unknown	5	61	0.003	-0.004	0.009	
ND	Adult	414	456	0.283	0.229	0.337	0.0577
	Child	158	151	0.443	0.259	0.627	-
	Unknown	3	3	0.107	-0.076	0.290	

Table E-6. Mean consumption per bodyweight, general population, percapita, by state and adult/child (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-5	26	253	0.317	0.133	0.501	0.0006
	Child 6-10	26	239	0.508	0.325	0.692	
	Child 11-15	21	193	0.270	0.129	0.410	
	Female 16-29	17	141	0.671	0.061	1.281	
	Female 30-49	85	634	0.463	0.316	0.611	
	Female 50+	77	563	0.434	0.332	0.536	
	Male 16-29	14	119	0.162	0.079	0.246	
	Male 30-49	80	594	0.470	0.372	0.569	
	Male 50+	63	461	0.345	0.270	0.420	
	Unknown	11	99	0.089	-0.032	0.210	
FL	Child 1- 5	1102	1134	0.885	0.752	1.019	<.0001
	Child 6-10	938	956	0.435	0.370	0.500	
	Child 11-15	864	848	0.365	0.290	0.440	
	Female 16-29	1537	1477	0.436	0.349	0.523	
	Female 30-49	2264	2178	0.529	0.489	0.570	
	Female 50+	2080	2025	0.412	0.382	0.442	
	Male 16-29	1638	1551	0.441	0.358	0.524	
	Male 30-49	2540	2383	0.428	0.386	0.469	
	Male 50+	2206	2090	0.384	0.354	0.414	
	Unknown	198	185	0.352	0.256	0.447	
MN	Child 1-5	47	437	0.568	0.304	0.832	<.0001
	Child 6-10	46	298	0.333	0.168	0.498	
	Child 11-15	68	337	0.219	0.147	0.292	
	Female 16-29	47	331	0.665	-0.200	1.530	
	Female 30-49	132	722	0.240	0.195	0.285	
	Female 50+	162	854	0.342	0.251	0.433	
	Male 16-29	55	275	0.099	0.060	0.138	
	Male 30-49	120	731	0.237	0.161	0.313	
	Male 50+	155	851	0.243	0.197	0.290	
	Unknown	5	61	0.003	-0.004	0.009	
ND	Child 1-5	30	30	0.665	0.251	1.080	0.0617
	Child 6-10	44	42	0.513	0.279	0.746	
	Child 11-15	55	52	0.397	0.217	0.576	
	Female 16-29	42	43	0.180	0.121	0.238	
	Female 30-49	95	101	0.281	0.212	0.350	
	Female 50+	99	112	0.377	0.254	0.500	
	Male 16-29	36	38	0.217	0.128	0.306	
	Male 30-49	90	97	0.215	0.169	0.261	
	Male 50+	81	92	0.288	0.187	0.389	
	Unknown	3	3	0.107	-0.076	0.290	

Table E-7. Mean consumption per bodyweight, general population, percapita, by state and age/gender (9 categories) (as-consumed g/kg-day with95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-14	72	676	0.374	0.252	0.496	0.0002
	Female 15-44	88	668	0.539	0.343	0.736	
	Female 45+	92	679	0.403	0.311	0.494	
	Male 15-44	14	119	0.162	0.079	0.246	
	Male 45+	143	1055	0.415	0.342	0.489	
	Unknown	11	99	0.089	-0.032	0.210	
FL	Child 1-14	2740	2776	0.607	0.540	0.675	<.0001
	Female 15-44	3477	3350	0.479	0.428	0.529	
	Female 45+	2487	2413	0.437	0.402	0.473	
	Male 15-44	1719	1629	0.429	0.350	0.509	
	Male 45+	4746	4473	0.407	0.381	0.434	
	Unknown	198	185	0.352	0.256	0.447	
MN	Child 1-14	145	1016	0.405	0.262	0.549	<.0001
	Female 15-44	146	968	0.376	0.065	0.687	
	Female 45+	203	978	0.335	0.255	0.414	
	Male 15-44	63	292	0.106	0.067	0.145	
	Male 45+	275	1582	0.240	0.195	0.286	
	Unknown	5	61	0.003	-0.004	0.009	
ND	Child 1-14	115	111	0.523	0.304	0.743	0.0117
	Female 15-44	118	123	0.253	0.195	0.310	
	Female 45+	124	139	0.347	0.246	0.448	
	Male 15-44	44	46	0.249	0.160	0.339	
	Male 45+	171	189	0.250	0.194	0.307	
	Unknown	3	3	0.107	-0.076	0.290	

Table E-8. Mean consumption per bodyweight, general population, per capita, by state and age/gender (5 categories) (as-consumed g/kg-day with 95% CIs)

			Weighted		Lower Conf.	Upper Conf.	_
State	Subgroup	Ν	N/1000	Mean	Limit	Limit	p-value
СТ	0-11 years	13	97	0.325	0.073	0.576	0.8676
	High School	87	667	0.378	0.264	0.491	
	Some College	62	477	0.410	0.271	0.549	
	College grad	258	2055	0.425	0.324	0.526	
FL	0-11 years	1481	1387	0.400	0.322	0.478	0.2720
	High School	4992	4722	0.464	0.422	0.506	
	Some College	4791	4650	0.488	0.431	0.546	
	College grad	4012	3979	0.471	0.439	0.502	
	Unknown	91	89	0.464	0.275	0.654	
MN	0-11 years	46	214	0.340	0.101	0.579	0.5706
	High School	234	1331	0.290	0.158	0.421	
	Some College	259	1329	0.407	0.180	0.634	
	College grad	255	1808	0.256	0.200	0.312	
	Unknown	43	215	0.242	0.177	0.307	
ND	0-11 years	29	32	0.225	0.091	0.360	0.4066
	High School	138	139	0.420	0.222	0.617	
	Some College	183	200	0.275	0.197	0.352	
	College grad	188	197	0.311	0.208	0.413	
	Unknown	37	42	0.345	0.107	0.583	

Table E-9. Mean consumption per bodyweight, general population, percapita, by state and education (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	\$ 0-20000 \$20000-50000 \$50000- Unknown	40 150 214 16	303 1137 1737 119	0.389 0.472 0.380 0.323	0.230 0.298 0.292 0.148	0.547 0.646 0.467 0.497	0.6479
FL	\$ 0-20000 \$20000-50000 \$50000- Unknown	3314 6678 3136 2239	3158 6430 3066 2172	0.473 0.480 0.514 0.354	0.401 0.438 0.471 0.315	0.545 0.523 0.558 0.393	0.4704
MN	\$ 0-20000 \$20000-50000 \$50000- Unknown	87 326 327 97	371 1801 2155 570	0.401 0.337 0.288 0.244	0.204 0.166 0.197 0.191	0.597 0.507 0.379 0.297	0.6062
ND	\$ 0-20000 \$20000-50000 \$50000- Unknown	51 235 233 56	54 251 245 60	0.517 0.272 0.307 0.415	0.035 0.200 0.252 0.189	0.999 0.344 0.361 0.642	0.3507

Table E-10. Mean consumption per bodyweight, general population, percapita, by state and income (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	White, Non-Hispanic	370	2888	0.407	0.342	0.473	<.0001
	Black, Non-Hispanic	9	66	0.050	-0.037	0.136	
	Hispanic	20	178	0.483	0.140	0.826	
	Other	19	143	0.609	-0.115	1.332	
	Unknown	2	21	0.006	0.006	0.006	
FL	White, Non-Hispanic	11607	11113	0.456	0.431	0.481	0.2214
	Black, Non-Hispanic	1603	1522	0.535	0.448	0.623	
	Hispanic	1556	1619	0.463	0.352	0.574	
	Other	327	297	0.592	0.367	0.817	
	Unknown	274	276	0.431	0.292	0.571	
MN	White, Non-Hispanic	775	4469	0.269	0.218	0.320	<.0001
	Black, Non-Hispanic	1	1	0.000		•	
	Hispanic	3	50	0.645	-0.152	1.442	
	Other	19	173	1.235	-0.590	3.060	
	Unknown	39	204	0.322	0.179	0.466	
ND	White, Non-Hispanic	528	559	0.325	0.239	0.410	0.2590
	Black, Non-Hispanic	2	2	0.250	0.216	0.284	
	Other	13	13	0.275	0.181	0.370	
	Unknown	32	36	0.296	0.080	0.512	

Table E-11. Mean consumption per bodyweight, general population, per capita, by state and race-ethnicity (as-consumed g/kg-day with 95% CIs)

E.4. PERCENTAGE OF THE GENERAL POPULATION RESPONDENTS THAT REPORTED EATING FISH AND SHELLFISH

Tables described in this section (Tables E-12 and E-13) present the estimated percentage of respondents in the general population that reported eating fish or shellfish in Connecticut, Florida, Minnesota, and North Dakota. The estimates are broken out by state and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed. The expected percentage of respondents eating fish or shellfish depends in part on the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, the percentage of respondents reporting that they ate fish or shellfish during the recall period is expected to be lower for Florida than for the other states.

State	Subgroup	N	Weighted N/1000	Percent	Conf. Limit	Conf. Limit	p-value
СТ	Adult	337	2502	89.4	85.2	93.6	<.0001
01	Child	83	786	68.9	54.7	83.1	1.0001
	Unknown	11	99	76.1	48.4	103.9	
FL	Adult	13589	12339	52.5	51.4	53.5	<.0001
	Child	3592	3613	39.8	37.1	42.5	
MN	Adult	650	3614	96.6	94.3	98.9	0.0492
	Child	185	1224	92.4	84.8	99.9	
	Unknown	6	62	1.5	-2.0	5.0	
ND	Adult	430	474	95.5	93.5	97.5	0.5587
	Child	165	157	93.9	88.5	99.3	
	Unknown	7	7	75.2	39.5	111.0	

Table E-12. Percent eating fish and shellfish, per capita, by state and adult/child (with 95% CIs)

State	Subgroup	N	Weighted N/1000	Percent	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	Child 1-14	77	726	69.2	54.3	84.2	<.0001
	Female 15-44	91	689	89.1	81.0	97.2	
	Female 45+	94	694	87.0	79.9	94.0	
	Male 15-44	14	119	70.5	48.3	92.7	
	Male 45+	144	1061	91.9	87.1	96.6	
	Unknown	11	99	76.1	48.4	103.9	
FL	Child 1-14	2751	2787	39.9	36.9	42.9	<.0001
	Female 15-44	3799	3486	52.3	50.6	54.0	
	Female 45+	2833	2553	55.9	54.0	57.9	
	Male 15-44	1783	1646	45.4	42.6	48.1	
	Male 45+	5020	4539	53.6	52.1	55.0	
	Unknown	995	941	39.2	34.3	44.1	
MN	Child 1-14	146	1017	93.3	86.4	100.1	0.0435
	Female 15-44	147	968	94.9	89.2	100.7	
	Female 45+	203	978	95.4	91.6	99.1	
	Male 15-44	63	292	92.4	78.8	106.0	
	Male 45+	276	1583	98.1	96.1	100.1	
	Unknown	6	62	1.5	-2.0	5.0	
ND	Child 1-14	121	116	93.5	88.0	99.1	0.5223
	Female 15-44	124	129	93.5	88.3	98.7	
	Female 45+	128	144	94.9	91.2	98.5	
	Male 15-44	45	47	100.0	100.0	100.0	+
	Male 45+	177	196	96.1	93.3	98.8	+
	Unknown	7	7	75.2	39.5	111.0	

Table E-13. Percent eating fish and shellfish, per capita, by state andage/gender (5 categories) (with 95% CIs)

E.5. MEAN FISH AND SHELLFISH CONSUMPTION FOR THE GENERAL POPULATION, CONSUMERS ONLY, AS-CONSUMED WEIGHT PER DAY

Tables described in this section (Tables E-14–E-18) present the estimated mean consumption rate of fish and shellfish (as-consumed g/day) for those that reported consuming fish and shellfish. The estimates are broken out by state (Connecticut, Florida, Minnesota, and North Dakota) and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed. The expected consumption rate for those that eat fish or shellfish depends in part on the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question

wording, but was not specified. As a result, the calculated consumption rate for consumers of fish and shellfish is expected to be higher for Florida than for the other states.

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Adult	302	2237	36.290	29.214	43.365	<.0001
	Child	58	542	14.369	10.231	18.508	
	Unknown	9	75	9.022	-0.715	18.760	
FL	Adult	7131	6473	59.191	56.201	62.181	<.0001
	Child	1435	1438	34.204	31.663	36.745	
MN	Adult	623	3492	21.994	16.371	27.618	0.0002
	Child	172	1131	10.365	8.024	12.706	
	Unknown	1	1	1.047	•	•	
ND	Adult	410	453	21.172	17.323	25.022	0.0498
	Child	155	147	16.001	10.303	21.699	
	Unknown	5	6	31.880	5.107	58.654	

Table E-14. Mean consumption, consumers only, by state and adult/child(as-consumed g/day with 95% CIs)

State	Subgroup	Ν	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-14	54	503	13.865	10.367	17.364	<.0001
	Female 15-44	82	614	38.702	23.801	53.603	
	Female 45+	82	604	30.671	24.209	37.133	
	Male 15-44	10	84	16.924	11.800	22.048	
	Male 45+	132	974	39.302	30.770	47.834	
	Unknown	9	75	9.022	-0.715	18.760	
FL	Child 1-14	1102	1113	32.579	30.108	35.050	<.0001
	Female 15-44	1996	1825	58.221	52.826	63.616	
	Female 45+	1588	1428	49.624	46.652	52.595	
	Male 15-44	813	747	71.620	59.401	83.838	
	Male 45+	2678	2431	61.748	58.206	65.290	
	Unknown	389	369	41.825	34.216	49.434	
MN	Child 1-14	138	948	10.247	7.583	12.911	<.0001
	Female 15-44	140	920	23.697	6.438	40.957	
	Female 45+	189	932	23.460	17.786	29.135	
	Male 15-44	59	270	9.358	6.197	12.520	
	Male 45+	269	1552	21.007	17.154	24.859	
	Unknown	1	1	1.047	•	•	
ND	Child 1-14	113	108	16.715	10.514	22.917	0.0879
	Female 15-44	116	121	16.547	12.747	20.346	
	Female 45+	121	137	23.533	16.916	30.150	
	Male 15-44	45	47	17.781	12.024	23.537	
	Male 45+	170	188	21.781	17.263	26.298	
	Unknown	5	б	31.880	5.107	58.654	

Table E-15. Mean consumption, consumers only, by state and age/gender (5categories) (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
	Bubgroup		11, 1000	mean			p varae
СТ	0-11 years	13	97	25.237	7.646	42.828	0.6934
	High School	78	584	27.778	21.950	33.606	
	Some College	60	450	38.610	21.327	55.893	
	College grad	218	1723	31.107	24.497	37.717	
FL	0-11 years	716	620	58.377	48.154	68.600	0.2546
	High School	2683	2419	55.605	51.627	59.583	
	Some College	2739	2550	54.783	49.992	59.573	
	College grad	2376	2274	52.198	49.400	54.997	
	Unknown	52	48	67.073	46.072	88.073	
MN	0-11 years	41	185	27.774	8.233	47.315	0.4751
	High School	220	1237	18.186	13.065	23.307	0.1/01
	Some College	250	1268	23.877	10.956	36.799	
	College grad	243	1719	15.743	11.295	20.190	
	Unknown	42	215	16.559	12.302	20.816	
ND	0-11 years	27	31	15.916	7.527	24.305	0.3684
	High School	139	141	23.624	16.534	30.714	
	Some College	183	199	18.295	13.611	22.980	
	College grad	189	199	19.350	12.759	25.942	
	Unknown	32	36	22.504	8.620	36.388	

Table E-16. Mean consumption, consumers only, by state and education (as-
consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	\$ 0-20000 \$20000-50000 \$50000- Unknown	36 135 186 12	270 1006 1490 87	27.124 37.523 28.100 30.695	16.491 22.601 23.137 20.059	37.756 52.444 33.063 41.330	0.5102
FL	\$ 0-20000 \$20000-50000 \$50000- Unknown	1707 3709 1960 1190	1537 3404 1844 1126	57.651 56.274 53.931 46.809	51.154 52.279 50.346 43.284	64.147 60.269 57.516 50.333	0.5398
MN	\$ 0-20000 \$20000-50000 \$50000- Unknown	79 302 321 94	339 1645 2109 530	31.261 21.111 16.707 14.994	17.285 11.055 12.417 11.327	45.238 31.166 20.998 18.660	0.1734
ND	\$ 0-20000 \$20000-50000 \$50000- Unknown	50 235 231 54	53 250 244 59	26.081 18.797 19.783 20.685	10.031 14.404 16.124 11.667	42.132 23.189 23.441 29.704	0.5251

Table E-17. Mean consumption, consumers only, by state and income (as-
consumed g/day with 95% CIs)

Table E-18. Mean consumption, consumers only, by state and gender (as-
consumed g/day with 95% CIs)

State	Subgroup	Ν	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Male Female	177 192	1377 1478	32.234 30.641	25.921 24.115	38.547 37.167	0.6219
FL	Male Female Unknown	4066 4206 294	3758 3874 279	59.424 51.011 40.828	56.160 47.944 31.163	62.687 54.077 50.494	<.0001
MN	Male Female	403 393	2379 2244	17.159 21.252	14.273 13.085	20.045 29.419	0.3173
ND	Male Female	277 293	295 311	20.980 19.095	16.718 15.132	25.243 23.059	0.2808

E.6. MEAN FISH AND SHELLFISH CONSUMPTION FOR THE GENERAL POPULATION, CONSUMERS ONLY, AS-CONSUMED WEIGHT PER KILOGRAM BODYWEIGHT PER DAY

Tables described in this section (Tables E-19–E-26) present the estimated mean consumption rate of fish and shellfish per kilogram bodyweight (as-consumed g/kg-day) for those that reported consuming fish and shellfish. The estimates are broken out by state (Connecticut, Florida, Minnesota, and North Dakota) and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed. The expected consumption rate for those that eat fish or shellfish depends in part on the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, the calculated consumption rate for fish and shellfish consumers is expected to be higher for Florida than for the other states.

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Adult	296	2195	0.490	0.404	0.575	0.8510
	Child	57	534	0.504	0.362	0.647	
	Unknown	9	75	0.117	-0.003	0.238	
FL	Adult	6425	6155	0.827	0.782	0.871	<.0001
	Child	1332	1335	1.380	1.264	1.495	
MN	Adult	621	3490	0.307	0.210	0.405	0.2862
	Child	171	1130	0.391	0.264	0.519	
	Unknown	1	1	0.178			
ND	Adult	396	437	0.295	0.238	0.352	0.0501
	Child	149	142	0.470	0.276	0.664	
	Unknown	1	1	0.341	•	•	

Table E-19. Mean consumption per bodyweight, general population, consumers only, by state and adult/child (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	Child 1-5	14	131	0.613	0.416	0.811	0.0004
	Child 6-10	22	207	0.587	0.399	0.774	
	Child 11-15	18	165	0.315	0.169	0.461	
	Female 16-29	14	113	0.839	0.098	1.580	
	Female 30-49	74	550	0.534	0.369	0.699	
	Female 50+	70	511	0.479	0.371	0.587	
	Male 16-29	10	84	0.230	0.142	0.319	
	Male 30-49	74	551	0.507	0.404	0.609	
	Male 50+	57	417	0.381	0.300	0.462	
	Unknown	9	75	0.117	-0.003	0.238	
FL	Child 1- 5	420	428	2.343	2.053	2.634	<.0001
	Child 6-10	375	377	1.103	0.980	1.225	
	Child 11-15	365	364	0.852	0.728	0.975	
	Female 16-29	753	725	0.887	0.735	1.039	
	Female 30-49	1287	1232	0.936	0.871	1.001	
	Female 50+	1171	1145	0.728	0.686	0.771	
	Male 16-29	754	714	0.958	0.796	1.120	
	Male 30-49	1334	1264	0.806	0.738	0.875	
	Male 50+	1192	1139	0.704	0.655	0.753	
	Unknown	106	102	0.643	0.496	0.789	
MN	Child 1- 5	46	425	0.583	0.315	0.852	<.0001
	Child 6-10	42	264	0.377	0.209	0.544	
	Child 11-15	63	313	0.236	0.161	0.312	
	Female 16-29	44	318	0.693	-0.205	1.590	
	Female 30-49	127	686	0.253	0.208	0.298	
	Female 50+	150	810	0.361	0.263	0.458	
	Male 16-29	52	254	0.107	0.067	0.147	
	Male 30-49	115	702	0.247	0.170	0.323	
	Male 50+	153	850	0.244	0.197	0.290	
	Unknown	1	1	0.178	•	•	
ND	Child 1- 5	28	28	0.705	0.244	1.166	0.0810
	Child 6-10	41	39	0.557	0.309	0.805	
	Child 11-15	53	50	0.409	0.226	0.591	
	Female 16-29	38	39	0.200	0.139	0.260	
	Female 30-49	93	99	0.286	0.216	0.355	
	Female 50+	92	104	0.404	0.268	0.540	
	Male 16-29	36	38	0.217	0.128	0.306	
	Male 30-49	88	95	0.220	0.173	0.267	
	Male 50+	76	86	0.306	0.200	0.412	
	Unknown	1	1	0.341			

Table E-20. Mean consumption per bodyweight, general population, consumers only, by state and age/gender (9 categories) (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-14	53	495	0.511	0.377	0.646	<.0001
	Female 15-44	79	593	0.608	0.397	0.818	
	Female 45+	80	589	0.464	0.368	0.561	
	Male 15-44	10	84	0.230	0.142	0.319	
	Male 45+	131	968	0.452	0.375	0.530	
	Unknown	9	75	0.117	-0.003	0.238	
FL	Child 1-14	1100	1112	1.517	1.385	1.649	<.0001
	Female 15-44	1835	1764	0.908	0.825	0.992	
	Female 45+	1408	1368	0.771	0.720	0.823	
	Male 15-44	782	742	0.943	0.787	1.099	
	Male 45+	2526	2403	0.758	0.714	0.802	
	Unknown	106	102	0.643	0.496	0.789	
MN	Child 1-14	137	947	0.435	0.282	0.587	<.0001
	Female 15-44	139	919	0.396	0.070	0.723	
	Female 45+	189	932	0.351	0.267	0.435	
	Male 15-44	59	270	0.115	0.075	0.154	
	Male 45+	268	1552	0.245	0.199	0.291	
	Unknown	1	1	0.178	•	•	
ND	Child 1-14	108	104	0.556	0.323	0.790	0.0108
	Female 15-44	112	117	0.266	0.205	0.326	
	Female 45+	117	131	0.367	0.257	0.477	
	Male 15-44	44	46	0.249	0.160	0.339	
	Male 45+	164	181	0.261	0.203	0.319	
	Unknown	1	1	0.341			

Table E-21. Mean consumption per bodyweight, general population, consumers only, by state and age/gender (5 categories) (as-consumed g/kg-day with 95% CIs)

	- 1		Weighted		Lower Conf.	Upper Conf.	-
State	Subgroup	Ν	N/1000	Mean	Limit	Limit	p-value
СТ	0-11 years	13	97	0.325	0.073	0.576	0.5364
	High School	76	569	0.443	0.331	0.554	
	Some College	56	424	0.462	0.311	0.613	
	College grad	217	1714	0.510	0.405	0.614	
FL	0-11 years	613	576	0.963	0.805	1.121	0.1936
	High School	2405	2291	0.956	0.885	1.028	
	Some College	2511	2430	0.934	0.838	1.030	
	College grad	2190	2157	0.868	0.815	0.921	
	Unknown	38	37	1.127	0.770	1.483	
MN	0-11 years	41	185	0.394	0.121	0.668	0.5026
	High School	219	1237	0.312	0.175	0.449	
	Some College	249	1267	0.427	0.193	0.661	
	College grad	242	1718	0.269	0.211	0.327	
	Unknown	42	215	0.243	0.178	0.308	
ND	0-11 years	25	28	0.260	0.110	0.410	0.5174
	High School	134	135	0.431	0.229	0.633	
	Some College	174	190	0.289	0.210	0.367	
	College grad	181	190	0.321	0.217	0.425	
	Unknown	32	36	0.396	0.117	0.675	

Table E-22. Mean consumption per bodyweight, general population, consumers only, by state and education (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	\$ 0-20000 \$20000-50000 \$50000- Unknown	35 133 182 12	261 994 1461 87	0.450 0.540 0.451 0.440	0.274 0.359 0.360 0.270	0.626 0.722 0.543 0.609	0.6951
FL	\$ 0-20000 \$20000-50000 \$50000- Unknown	1534 3370 1806 1047	1451 3241 1763 1035	1.030 0.953 0.895 0.743	0.914 0.876 0.827 0.685	1.146 1.030 0.963 0.801	0.1342
MN	\$ 0-20000 \$20000-50000 \$50000- Unknown	77 301 321 94	337 1644 2109 530	0.440 0.369 0.294 0.263	0.227 0.185 0.202 0.201	0.653 0.552 0.386 0.325	0.4633
ND	\$ 0-20000 \$20000-50000 \$50000- Unknown	48 221 225 52	50 236 238 56	0.551 0.289 0.316 0.448	0.042 0.215 0.260 0.202	1.060 0.363 0.372 0.694	0.4064

Table E-23. Mean consumption per bodyweight, general population,consumers only, by state and income (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	White, Non-Hispanic	331	2562	0.459	0.393	0.525	<.0001
	Black, Non-Hispanic	3	22	0.149	0.119	0.179	
	Hispanic	15	126	0.681	0.308	1.053	
	Other	12	85	1.028	0.126	1.930	
	Unknown	1	9	0.015	•	•	
FL	White, Non-Hispanic	5957	5734	0.884	0.842	0.927	0.0025
	Black, Non-Hispanic	785	736	1.107	0.968	1.246	
	Hispanic	721	742	1.009	0.810	1.209	
	Other	167	151	1.165	0.775	1.555	
	Unknown	127	127	0.940	0.697	1.183	
MN	White, Non-Hispanic	732	4194	0.287	0.235	0.339	0.5923
	Hispanic	3	50	0.645	-0.152	1.442	
	Other	19	173	1.235	-0.590	3.060	
	Unknown	39	204	0.322	0.179	0.466	
ND	White, Non-Hispanic	501	532	0.341	0.252	0.430	0.1532
	Black, Non-Hispanic	2	2	0.250	0.216	0.284	
	Other	13	13	0.275	0.181	0.370	
	Unknown	30	33	0.317	0.097	0.537	

Table E-24. Mean consumption per bodyweight, general population, consumers only, by state and race-ethnicity (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Male Female	175 187	1362 1441	0.447 0.517	0.367 0.416	0.527 0.617	0.1277
FL	Male Female Unknown	3880 3861 16	3723 3753 14	0.896 0.955 0.852	0.841 0.896 0.297	0.950 1.013 1.407	0.0623
MN	Male Female	401 392	2378 2243	0.277 0.381	0.232 0.231	0.323 0.531	0.1627
ND	Male Female	265 281	282 298	0.332 0.344	0.234 0.264	0.430 0.424	0.7750

Table E-25. Mean consumption per bodyweight, general population,consumers only, by state and gender (as-consumed g/kg-day with 95% CIs)

Table E-26. Mean consumption per bodyweight, general population, consumers only, by state and angler status (as-consumed g/kg-day with 95% CIs)

State		Subgroup	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ		Caught Only	1	9	0.015	•	•	<.0001
		Caught&Bought	70	530	0.486	0.360	0.612	
	Eats	Bought Only	291	2265	0.484	0.399	0.568	
FL	Eats	Caught Only	511	454	0.761	0.661	0.860	<.0001
	Eats	Caught&Bought	701	636	1.811	1.567	2.056	
	Eats	Bought Only	6545	6400	0.849	0.806	0.892	
MN	Eats	Caught Only	38	221	0.156	0.053	0.259	0.0103
	Eats	Caught&Bought	555	2746	0.399	0.274	0.524	
	Eats	Bought Only	200	1653	0.232	0.184	0.280	
ND	Eats	Caught Only	30	32	0.208	0.094	0.322	0.0312
	Eats	Caught&Bought	359	384	0.388	0.288	0.488	
	Eats	Bought Only	157	164	0.247	0.133	0.362	

E.7. GEOMETRIC MEAN FISH AND SHELLFISH CONSUMPTION FOR THE GENERAL POPULATION, CONSUMERS ONLY, AS-CONSUMED WEIGHT PER DAY

Tables described in this section (Tables E-27–E-33) present the estimated geometric mean consumption rate of fish and shellfish (as-consumed g/day) for those that reported consuming fish and shellfish. The estimates are broken out by state (Connecticut, Florida, Minnesota, and North Dakota) and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed. The expected consumption rate for those that eat fish or shellfish depends in part on the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, the calculated consumption rate for fish and shellfish consumers is expected to be higher for Florida than for the other states.

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Adult	302	2237	21.274	18.248	24.803	<.0001
	Child	58	542	9.839	7.121	13.593	
	Unknown	9	75	3.143	1.318	7.492	
FL	Adult	7131	6473	37.780	36.517	39.087	<.0001
	Child	1435	1438	25.093	23.459	26.840	
MN	Adult	623	3492	12.789	10.741	15.229	<.0001
	Child	172	1131	6.239	4.838	8.045	
	Unknown	1	1	1.047	•	•	
ND	Adult	410	453	12.572	10.762	14.687	0.0101
	Child	155	147	8.939	6.837	11.688	
	Unknown	5	б	24.819	10.163	60.612	

 Table E-27. Geometric mean consumption, general population, consumers only, by state and adult/child (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-5	14	131	6.635	4.183	10.522	<.0001
	Child 6-10	22	207	10.440	7.164	15.215	
	Child 11-15	19	173	10.828	6.772	17.314	
	Female 16-29	14	113	24.849	13.213	46.733	
	Female 30-49	77	571	17.869	13.360	23.898	
	Female 50+	72	526	18.294	13.705	24.420	
	Male 16-29 Male 30-49	10 75	84 557	14.888 28.423	10.779 22.689	20.563 35.607	
	Male 50-49 Male 50+	57	417	28.423	18.326	28.338	
	Unknown	9	75	3.143	1.318	7.492	
FL	Child 1-5	421	428	22.043	20.157	24.106	<.0001
	Child 6-10	376	378	23.165	20.748	25.863	
	Child 11-15	365	364	29.486	26.519	32.785	
	Female 16-29	791	739	33.011	30.565	35.651	
	Female 30-49	1446	1292	38.500	36.550	40.553	
	Female 50+	1315	1192	33.672	32.098	35.325	
	Male 16-29	785	719	40.315	37.066	43.848	
	Male 30-49	1406	1275	42.527	40.339	44.833	
	Male 50+ Unknown	1272 389	1156 369	38.282 30.154	36.021 26.559	40.684 34.235	
							0.001
MN	Child 1-5	46	425	5.104	2.860	9.107	<.0001
	Child 6-10 Child 11-15	43 63	265 313	5.743 8.324	3.579 5.326	9.216 13.010	
	Female 16-29	44	318	10.056	6.363	15.891	
	Female 30-49	128	686	11.674	9.449	14.423	
	Female 50+	150	810	14.195	11.003	18.314	
	Male 16-29	52	254	5.361	3.203	8.972	
	Male 30-49	115	702	15.045	11.805	19.174	
	Male 50+	154	851	14.156	11.565	17.327	
	Unknown	1	1	1.047	•		
ND	Child 1- 5	28	28	4.185	2.456	7.133	0.0004
	Child 6-10	43	41	9.873	7.142	13.649	
	Child 11-15	56	53	12.564	9.044	17.453	
	Female 16-29	39	40	7.880	5.798	10.709	
	Female 30-49	97	103	11.594	9.333	14.402	
	Female 50+	95	108	13.748	10.534	17.943	
	Male 16-29	37	39	9.847	6.901	14.051	
	Male 30-49	90	97	13.316	10.811	16.402	
	Male 50+	80	91	14.294	10.613	19.251	
	Unknown	5	6	24.819	10.163	60.612	

Table E-28. Geometric mean consumption, general population, consumers only, by state and age/gender (9 categories) (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	0-11 years	13	97	13.944	6.880	28.260	0.3066
	High School	78	584	15.425	10.726	22.184	
	Some College	60	450	23.309	16.390	33.148	
	College grad	218	1723	17.121	14.162	20.698	
FL	0-11 years	716	620	37.689	33.549	42.340	0.3940
	High School	2683	2419	35.233	33.416	37.149	
	Some College	2739	2550	34.348	32.680	36.101	
	College grad	2376	2274	34.758	33.126	36.470	
	Unknown	52	48	50.745	38.708	66.524	
MN	0-11 years	41	185	16.164	9.938	26.292	0.2394
	High School	220	1237	11.554	8.802	15.166	
	Some College	250	1268	11.066	8.051	15.209	
	College grad	243	1719	9.237	6.913	12.342	
	Unknown	42	215	13.472	9.926	18.286	
ND	0-11 years	27	31	10.797	7.334	15.894	0.5899
	High School	139	141	13.564	10.147	18.132	
	Some College	183	199	11.188	8.655	14.461	
	College grad	189	199	11.001	8.093	14.955	
	Unknown	32	36	11.676	7.019	19.424	

Table E-29. Geometric mean consumption, general population, consumersonly, by state and education (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	\$ 0-20000 \$20000-50000 \$50000- Unknown	36 135 186 12	270 1006 1490 87	16.716 18.587 16.538 25.127	11.067 13.904 13.017 16.802	25.250 24.847 21.012 37.579	0.8365
FL	\$ 0-20000 \$20000-50000 \$50000- Unknown	1707 3709 1960 1190	1537 3404 1844 1126	35.746 35.950 34.825 32.078	33.297 34.169 32.981 29.831	38.375 37.824 36.772 34.494	0.6722
MN	\$ 0-20000 \$20000-50000 \$50000- Unknown	79 302 321 94	339 1645 2109 530	19.157 10.490 9.880 10.983	13.388 7.792 7.578 8.077	27.412 14.122 12.880 14.935	0.0118
ND	\$ 0-20000 \$20000-50000 \$50000- Unknown	50 235 231 54	53 250 244 59	13.705 10.038 12.933 12.235	8.438 8.137 10.719 8.071	22.258 12.383 15.604 18.547	0.0517

Table E-30. Geometric mean consumption, general population, consumersonly, by state and income (as-consumed g/day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
CT	White, Non-Hispanic Black, Non-Hispanic Hispanic Other Unknown	338 3 15 12 1	2612 22 126 85 9	17.458 12.500 20.972 20.267 0.985	14.907 8.391 11.899 9.586	20.446 18.619 36.966 42.848	<.0001
FL	White, Non-Hispanic Black, Non-Hispanic Hispanic Other Unknown	6607 867 762 191 139	6053 780 773 166 139	34.492 38.820 34.600 42.005 35.615	33.325 35.598 31.337 35.562 29.410	35.701 42.334 38.203 49.615 43.129	0.0082
MN	White, Non-Hispanic Hispanic Other Unknown	735 3 19 39	4197 50 173 204	10.263 30.013 13.301 17.168	8.596 9.260 5.454 11.802	12.253 97.272 32.436 24.974	0.0319
ND	White, Non-Hispanic Black, Non-Hispanic Other Unknown	521 2 17 30	555 2 16 33	11.576 15.709 13.933 11.568	9.775 15.032 9.008 6.589	13.709 16.417 21.552 20.308	0.0036

Table E-31. Geometric mean consumption, general population, consumersonly, by state and race-ethnicity (as-consumed g/day with 95% CIs)

Table E-32. Geometric mean consumption, general population, consumersonly, by state and gender (as-consumed g/day with 95% CIs)

State	Subgroup	Ν	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Male Female	177 192	1377 1478	19.202 16.002	15.832 13.392	23.291 19.120	0.0771
FL	Male Female Unknown	4066 4206 294	3758 3874 279	37.609 33.187 29.474	36.250 31.872 25.206	39.018 34.556 34.465	<.0001
MN	Male Female	403 393	2379 2244	10.494 10.974	8.801 8.996	12.513 13.389	0.6470
ND	Male Female	277 293	295 311	12.826 10.624	10.706 9.129	15.367 12.363	0.0103

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Eats Caught Only Eats Caught&Bought Eats Bought Only	1 74 294	9 559 2286	0.985 23.413 16.453	17.888 13.853	30.646 19.540	<.0001
FL	Eats Caught Only Eats Caught&Bought Eats Bought Only	600 802 7164	493 667 6752	30.625 77.649 32.743	27.371 72.359 31.584	34.267 83.326 33.946	<.0001
MN	Eats Caught Only Eats Caught&Bought Eats Bought Only	38 556 202	221 2747 1655	3.996 14.987 7.021	1.759 12.827 5.267	9.077 17.511 9.359	<.0001
ND	Eats Caught Only Eats Caught&Bought Eats Bought Only	33 376 161	36 403 167	8.437 15.345 6.414	5.757 13.176 4.784	12.364 17.872 8.599	<.0001

Table E-33. Geometric mean consumption, general population, consumersonly, by state and angler status (as-consumed g/day with 95% CIs)

E.8. GEOMETRIC MEAN FISH AND SHELLFISH CONSUMPTION FOR THE GENERAL POPULATION, CONSUMERS ONLY, AS-CONSUMED WEIGHT PER KILOGRAM BODYWEIGHT PER DAY

Tables described in this section (Tables E-34–E-41) present the estimated geometric mean consumption rate of fish and shellfish per kilogram bodyweight (as-consumed g/kg-day) for those that reported consuming fish and shellfish. The estimates are broken out by state (Connecticut, Florida, Minnesota, and North Dakota) and categorical level of the independent variable, in separate tables defined by the independent variables: adult versus child, two classifications of age and gender combinations, education, income, race-ethnicity, gender, and type of fish consumed. The expected consumption rate for those that eat fish or shellfish depends in part on the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, the calculated consumption rate for those that consumed fish or shellfish is expected to be higher for Florida than for the other states.

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Adult Child Unknown	296 57 9	2195 534 75	0.292 0.348 0.047	0.250 0.244 0.024	0.340 0.496 0.092	0.3222
FL	Adult Child	6425 1332	6155 1335	0.530 0.870	0.513 0.810	0.547 0.935	<.0001
MN	Adult Child Unknown	621 171 1	3490 1130 1	0.168 0.211 0.178	0.141 0.157	0.200 0.284	0.1801
ND	Adult Child Unknown	396 149 1	437 142 1	0.169 0.253 0.341	0.144 0.198	0.198 0.323	0.0013

Table E-34. Geometric mean consumption per bodyweight, general population, consumers only, by state and adult/child (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-5	14	131	0.450	0.288	0.703	0.0233
	Child 6-10	22	207	0.423	0.283	0.633	
	Child 11-15	18	165	0.221	0.139	0.351	
	Female 16-29	14	113	0.437	0.226	0.845	
	Female 30-49	74	550	0.281	0.209	0.377	
	Female 50+	70	511	0.279	0.209	0.372	
	Male 16-29	10	84	0.191	0.130	0.280	
	Male 30-49	74	551	0.333	0.267	0.415	
	Male 50+	57	417	0.270	0.216	0.337	
	Unknown	9	75	0.047	0.024	0.092	
FL	Child 1-5	420	428	1.625	1.453	1.818	<.0001
	Child 6-10	375	377	0.808	0.721	0.905	
	Child 11-15	365	364	0.594	0.536	0.657	
	Female 16-29	753	725	0.542	0.502	0.585	
	Female 30-49	1287	1232	0.601	0.570	0.634	
	Female 50+	1171	1145	0.517	0.492	0.544	
	Male 16-29	754	714	0.530	0.488	0.575	
	Male 30-49	1334	1264	0.519	0.492	0.547	
	Male 50+	1192	1139	0.475	0.448	0.503	
	Unknown	106	102	0.472	0.394	0.565	
MN	Child 1- 5	46	425	0.344	0.186	0.638	0.0101
	Child 6-10	42	264	0.202	0.126	0.323	
	Child 11-15	63	313	0.153	0.098	0.238	
	Female 16-29	44	318	0.158	0.097	0.258	
	Female 30-49	127	686	0.177	0.142	0.222	
	Female 50+	150	810	0.205	0.158	0.266	
	Male 16-29	52	254	0.063	0.035	0.113	
	Male 30-49	115	702	0.171	0.133	0.219	
	Male 50+	153	850	0.166	0.134	0.205	
	Unknown	1	1	0.178	•	•	
ND	Child 1-5	28	28	0.272	0.161	0.461	0.0001
	Child 6-10	41	39	0.353	0.256	0.487	
	Child 11-15	53	50	0.243	0.173	0.342	
	Female 16-29	38	39	0.135	0.099	0.184	
	Female 30-49	93	99	0.183	0.146	0.229	
	Female 50+	92	104	0.203	0.153	0.270	
	Male 16-29	36	38	0.129	0.089	0.186	
	Male 30-49	88	95	0.154	0.125	0.191	
	Male 50+	76	86	0.166	0.121	0.228	
	Unknown	1	1	0.341		•	

Table E-35. Geometric mean consumption per bodyweight, general population, consumers only, by State and age/gender (9 categories) (as-consumed g/kg-day with 95% CIs)

State	Subgroup	Ν	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Child 1-14 53		495	0.357	0.254	0.501	0.1133
	Female 15-44 79		593	0.318	0.240	0.421	
	Female 45+	80	589	0.263	0.199	0.349	
	Male 15-44	10	84	0.191	0.130	0.280	
	Male 45+	131	968	0.304	0.258	0.359	
	Unknown	9	75	0.047	0.024	0.092	
FL	Child 1-14	1100	1112	0.974	0.902	1.053	<.0001
	Female 15-44	1835	1764	0.576	0.547	0.606	
	Female 45+ 1408		1368	0.533	0.506	0.562	
	Male 15-44	782	742	0.525	0.485	0.569	
	Male 45+	2526	2403	0.498	0.475	0.521	
	Unknown	106	102	0.472	0.394	0.565	
MN	Child 1-14	137	947	0.240	0.165	0.350	0.0017
	Female 15-44	139	919	0.164	0.131	0.206	
	Female 45+	189	932	0.204	0.162	0.257	
	Male 15-44	59	270	0.068	0.038	0.120	
	Male 45+	268	1552	0.168	0.142	0.199	
	Unknown	1	1	0.178			
ND	Child 1-14	108	104	0.301	0.225	0.404	<.0001
	Female 15-44	112	117	0.172	0.140	0.210	
	Female 45+	117	131	0.189	0.150	0.240	
	Male 15-44	44	46	0.139	0.101	0.191	
	Male 45+	164	181	0.160	0.131	0.195	
	Unknown	1	1	0.341			

Table E-36. Geometric mean consumption per bodyweight, generalpopulation, consumers only, by state and age/gender (5 categories) (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	0-11 years	13	97	0.175	0.087	0.349	0.4268
	High School	76	569	0.259	0.182	0.369	
	Some College	56	424	0.313	0.227	0.431	
	College grad	217	1714	0.299	0.238	0.377	
FL	0-11 years	613	576	0.611	0.545	0.685	0.6419
	High School	2405	2291	0.585	0.551	0.621	
	Some College	2511	2430	0.574	0.543	0.607	
	College grad	2190	2157	0.566	0.539	0.594	
	Unknown	38	37	0.852	0.621	1.168	
MN	0-11 years	41	185	0.229	0.142	0.369	0.6016
	High School	219	1237	0.173	0.124	0.241	
	Some College	249	1267	0.193	0.142	0.263	
	College grad	242	1718	0.164	0.129	0.209	
	Unknown	42	215	0.189	0.134	0.268	
ND	0-11 years	25	28	0.160	0.102	0.251	0.4063
	High School	134	135	0.225	0.165	0.307	
	Some College	174	190	0.176	0.135	0.230	
	College grad	181	190	0.181	0.138	0.237	
	Unknown	32	36	0.172	0.091	0.325	

Table E-37. Geometric mean consumption per bodyweight, general population, consumers only, by state and education (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value 0.9251
CT	\$ 0-20000 \$20000-50000 \$50000- Unknown	35 133 182 12	261 994 1461 87	0.264 0.296 0.283 0.347	0.166 0.218 0.217 0.221	0.418 0.401 0.368 0.547	
FL	\$ 0-20000 \$20000-50000 \$50000- Unknown	1534 3370 1806 1047	1451 3241 1763 1035	0.608 0.596 0.569 0.509	0.562 0.563 0.533 0.470	0.657 0.630 0.607 0.551	0.3966
MN	\$ 0-20000 7 \$20000-50000 30 \$50000- 32 Unknown 94		337 1644 2109 530	0.243 0.183 0.163 0.186	0.166 0.140 0.126 0.137	0.356 0.240 0.211 0.254	0.2493
ND	\$ 0-20000 \$20000-50000 \$50000- Unknown	48 221 225 52	50 236 238 56	0.213 0.157 0.212 0.201	0.114 0.126 0.175 0.124	0.399 0.196 0.257 0.325	0.0563

Table E-38. Geometric mean consumption per bodyweight, generalpopulation, consumers only, by state and income (as-consumed g/kg-day with95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	White, Non-Hispanic	331	2562	0.283	0.236	0.339	<.0001
	Black, Non-Hispanic	3	22	0.147	0.118	0.182	
	Hispanic	15	126	0.393	0.217	0.710	
	Other	12	85	0.472	0.177	1.255	
	Unknown	1	9	0.015	•	•	
FL	White, Non-Hispanic	5957	5734	0.559	0.541	0.578	<.0001
	Black, Non-Hispanic	785	736	0.712	0.644	0.787	
	Hispanic	721	742	0.592	0.530	0.660	
	Other	167	151	0.691	0.584	0.816	
	Unknown	127	127	0.607	0.490	0.752	
MN	White, Non-Hispanic	732	4194	0.168	0.139	0.202	0.1082
	Hispanic	3	50	0.421	0.127	1.400	
	Other	19	173	0.376	0.159	0.888	
	Unknown	39	204	0.240	0.160	0.361	
ND	White, Non-Hispanic	501	532	0.186	0.156	0.223	0.0204
	Black, Non-Hispanic	2	2	0.249	0.217	0.284	
	Other	13	13	0.202	0.126	0.324	
	Unknown	30	33	0.186	0.097	0.357	

Table E-39. Geometric mean consumption per bodyweight, generalpopulation, consumers only, by state and race-ethnicity (as-consumed g/kg-day with 95% CIs)

State	Subgroup	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit	p-value
СТ	Male Female	175 187	1362 1441	0.286 0.289	0.231 0.237	0.354 0.352	0.9195
FL	Male Female Unknown	3880 3861 16	3723 3753 14	0.555 0.604 0.503	0.534 0.578 0.224	0.577 0.631 1.128	0.0002
MN	Male Female	401 392	2378 2243	0.164 0.194	0.140 0.160	0.192 0.233	0.0632
ND	Male Female	265 281	282 298	0.184 0.189	0.153 0.162	0.222 0.222	0.7060

Table E-40. Geometric mean consumption per bodyweight, generalpopulation, consumers only, by state and gender (as-consumed g/kg-day with95% CIs)

				Weighted	Geometric	Lower Conf.	Upper Conf.	
State		Subgroup	Ν	N/1000	Mean	Limit	Limit	p-value
СТ	Eats	Caught Only	1	9	0.015	•		<.0001
	Eats	Caught&Bought	70	530	0.330	0.252	0.430	
	Eats	Bought Only	291	2265	0.282	0.229	0.345	
FL	Eats	Caught Only	511	454	0.501	0.443	0.566	<.0001
	Eats	Caught&Bought	701	636	1.249	1.155	1.351	
	Eats	Bought Only	6545	6400	0.542	0.521	0.563	
MN	Eats	Caught Only	38	221	0.086	0.034	0.214	<.0001
	Eats	Caught&Bought	555	2746	0.236	0.201	0.278	
	Eats	Bought Only	200	1653	0.122	0.098	0.151	
ND	Eats	Caught Only	30	32	0.132	0.086	0.201	<.0001
	Eats	Caught&Bought	359	384	0.242	0.207	0.283	
	Eats	Bought Only	157	164	0.110	0.080	0.150	
ND	Eats	Caught Only	30		0.132	0.086	0.201	<.0001
	Eats	Caught&Bought	359		0.242	0.207	0.283	
	Eats	Bought Only	157		0.110	0.080	0.150	

Table E-41. Geometric mean consumption per bodyweight, general population, consumers only, by state and angler status (as-consumed g/kg-day with 95% CIs)

E.9. PLOTS OF CONFIDENCE INTERVALS FOR THE GENERAL POPULATION

Figures E-1 through E-20 show confidence intervals for selected estimates for each state's general population. There are separate figures for each combination of state and independent variable (per capita consumption, per capita consumption per bodyweight, percent of respondents eating fish or shellfish, consumption for consumers only, and consumption per bodyweight for consumers only).

Each figure shows the independent variable on the vertical axis and the categorical dependent variables on the horizontal axis. For each level of each variable, the figure shows the mean as a dot and the 95% confidence interval using a line going vertically through the dot. In a few cases there was only one observation in a category and no confidence interval could be calculated. These cases are indicated by a dot with an open center.

The plots using the same summary statistic all have the same range on the vertical axis to facilitate rough comparisons among states. However, the expected percentage of respondents that report eating fish or shellfish during the recall period and the consumption rate for those that eat fish or shellfish depends in part on the length of the recall period used by the surveys. In

Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, in Florida the percentage of respondents that consume fish and shellfish is expected to be lower and the consumption rate for them is expected to be higher than for the other states.

The confidence intervals give the reader a visual indication of the precision of the means and facilitate comparisons of the means between levels of the variable. The values plotted can be found in the tables in Sections E.2 through E.6 along with a *p*-value for evaluating the significance of differences between levels. In general, longer confidence intervals are associated with more variable intake data or fewer respondents. In a few cases there is only one respondent for a level. In this case, an open dot is used and no confidence interval is shown. The confidence interval calculations assume the mean estimates have a normal distribution. If the sample size (N) is smaller than about 100, this assumption is uncertain and the confidence interval and *p*-value are approximate. If there are relatively few respondents in a subgroup category, the confidence intervals can be imprecise. Results for these categories are shown in the plots for completeness, although the results may not be useful due to the small sample sizes. In a few cases with small sample sizes the normality assumption is not correct and the calculated lower confidence interval for mean consumption is <0 or the confidence limits for the percentage of respondents consuming fish and shellfish go outside the range from 0% to 100%. In these cases, the line connecting the confidence limits may be truncated at the edge of the plot.

Figures E-1 through E-5 show means and confidence intervals for Connecticut. Figures E-6 through E-10 show means and confidence intervals for Florida. Figures E-11 through E-15 show means and confidence intervals for Minnesota. Figures E-16 through E-20 show means and confidence intervals for North Dakota.

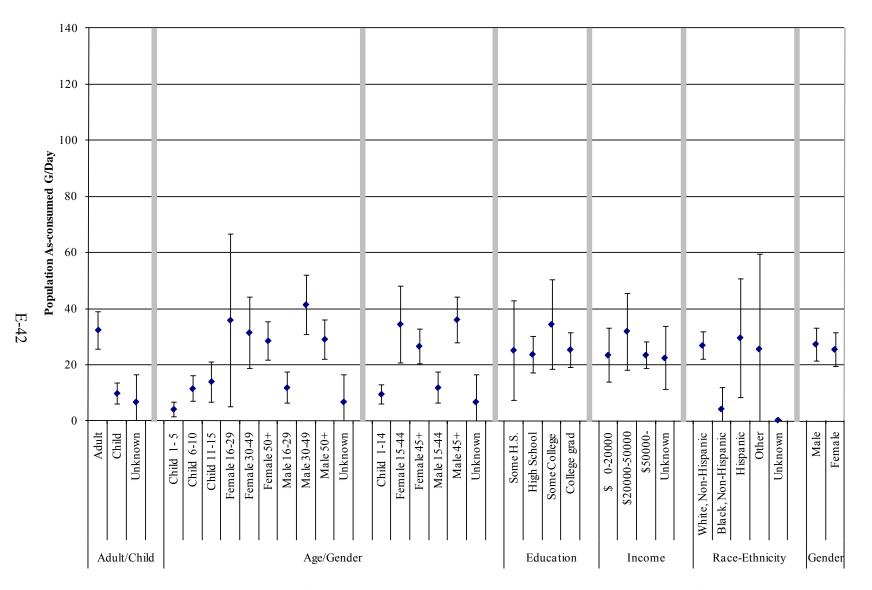


Figure E-1. Mean consumption, Connecticut general population, per capita, with 95% confidence intervals.

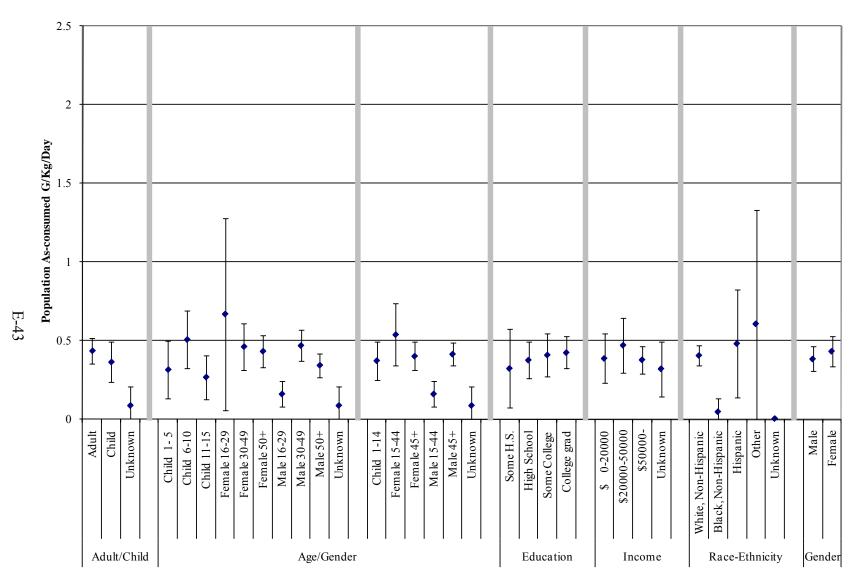


Figure E-2. Mean consumption per bodyweight, Connecticut general population, per capita, with 95% confidence intervals.

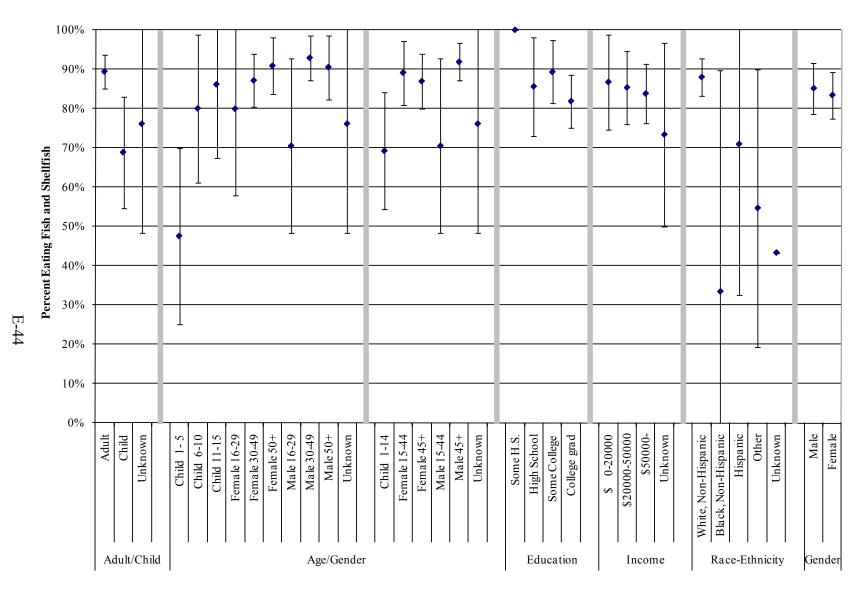


Figure E-3. Percent eating fish and shellfish during a year period, Connecticut general population, per capita, with 95% confidence intervals.

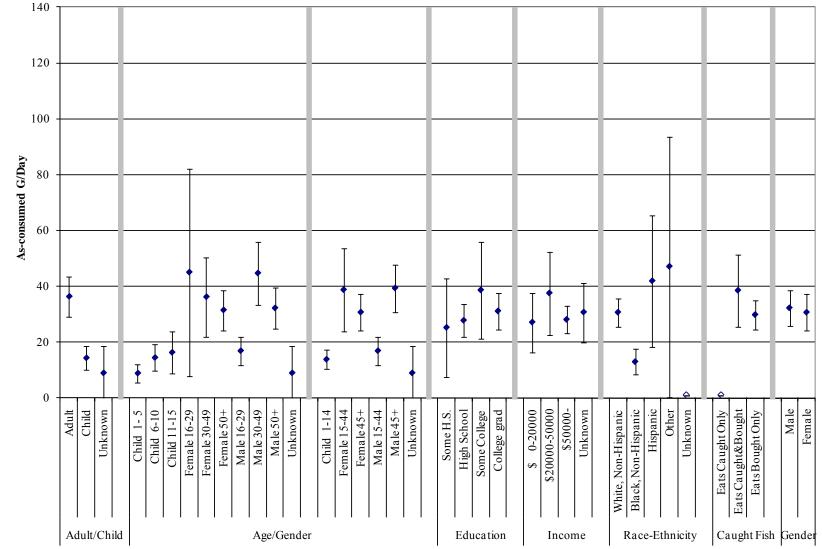


Figure E-4. Mean consumption, Connecticut general population, consumers only, with 95% confidence intervals.

E-45

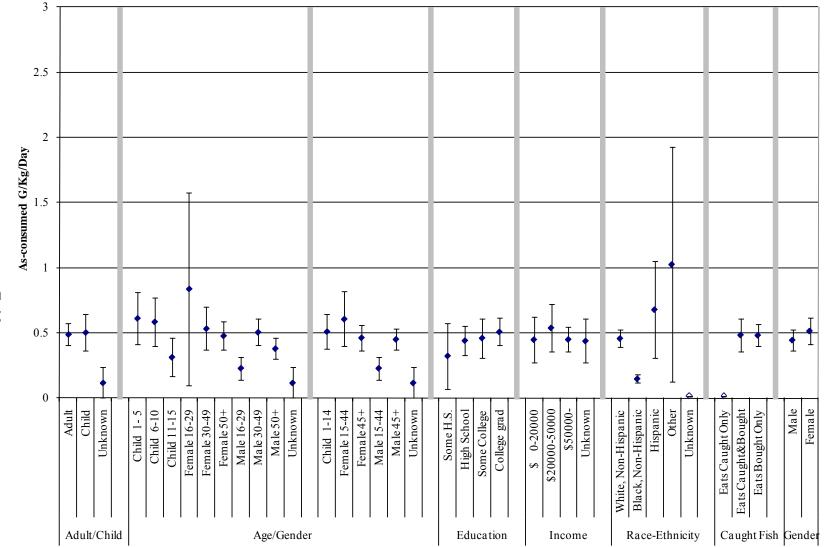


Figure E-5. Mean consumption per bodyweight, Connecticut general population, consumers only, with 95% confidence intervals.

E-46

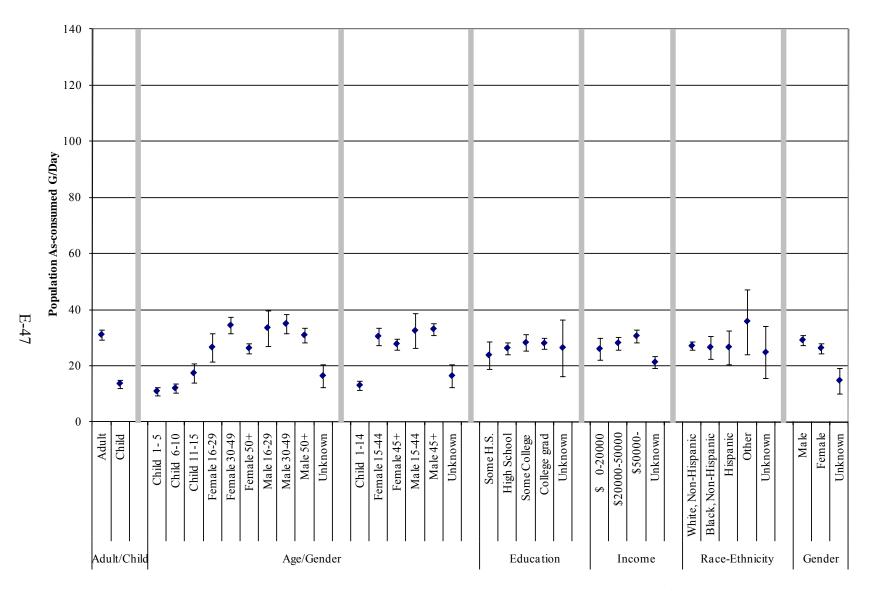


Figure E-6. Mean consumption, Florida general population, per capita, with 95% confidence intervals.

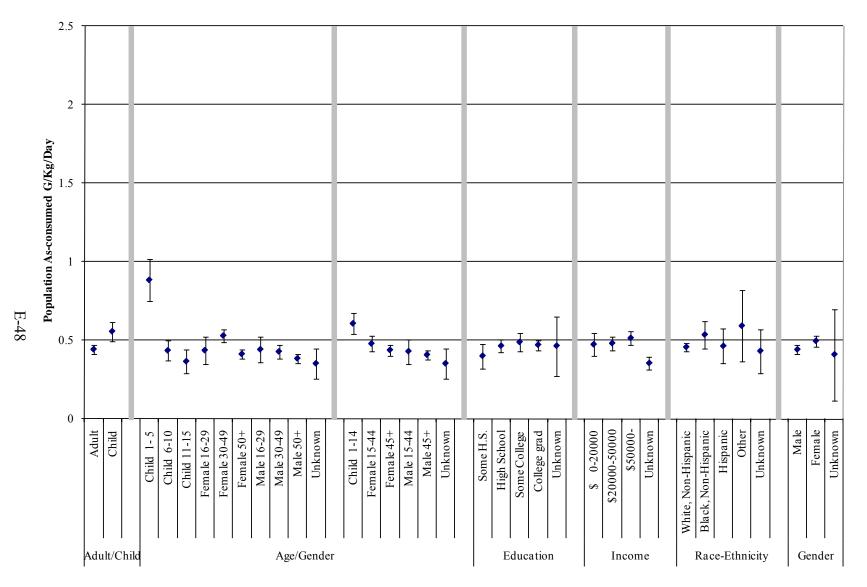


Figure E-7. Mean consumption per bodyweight, Florida general population, per capita, with 95% confidence intervals.

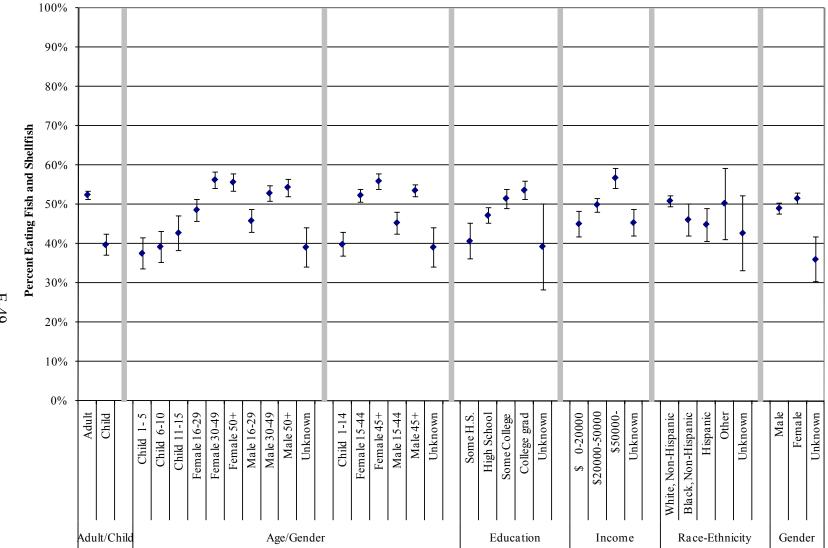


Figure E-8. Percent eating fish and shellfish during a 7-day period, Florida general population, per capita, with 95% confidence intervals.

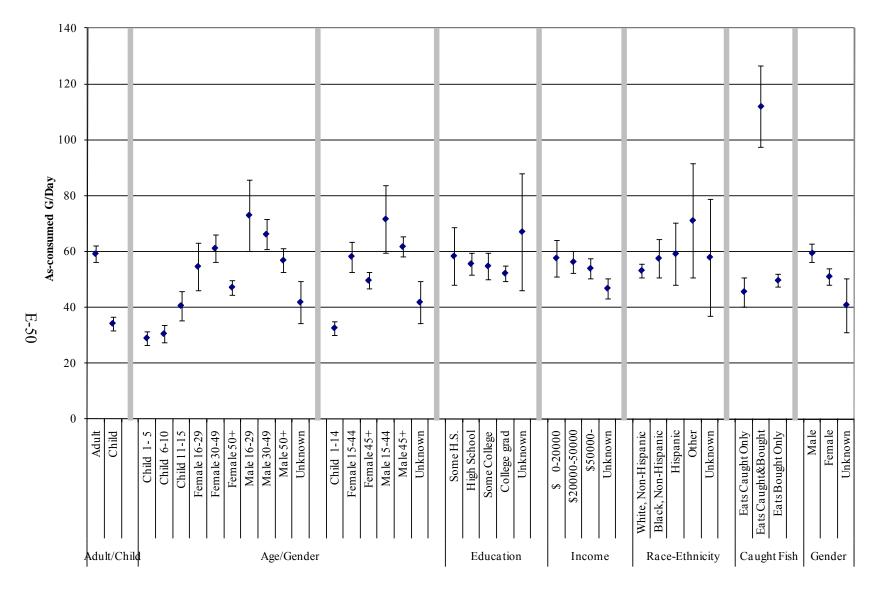


Figure E-9. Mean consumption, Florida general population, consumers only, with 95% confidence intervals.

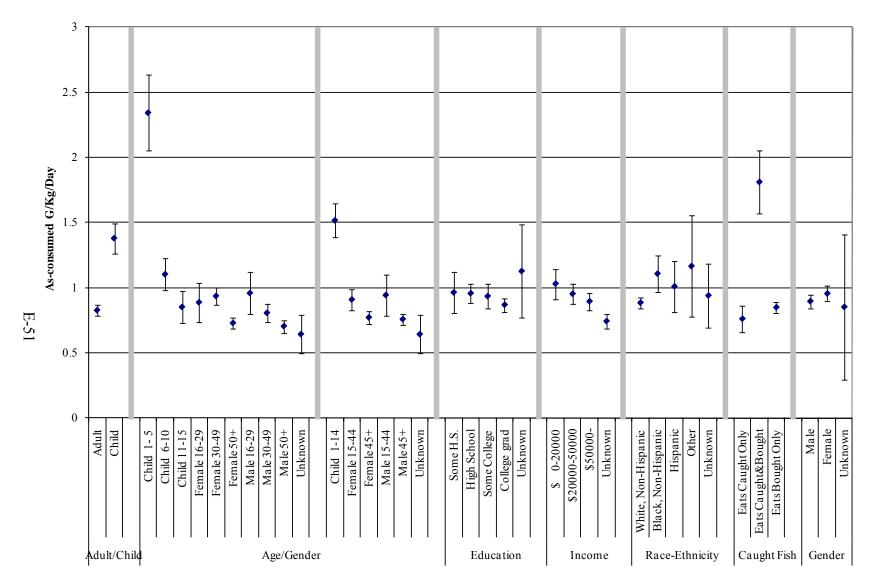


Figure E-10. Mean consumption per bodyweight, Florida general population, consumers only, with 95% confidence intervals.

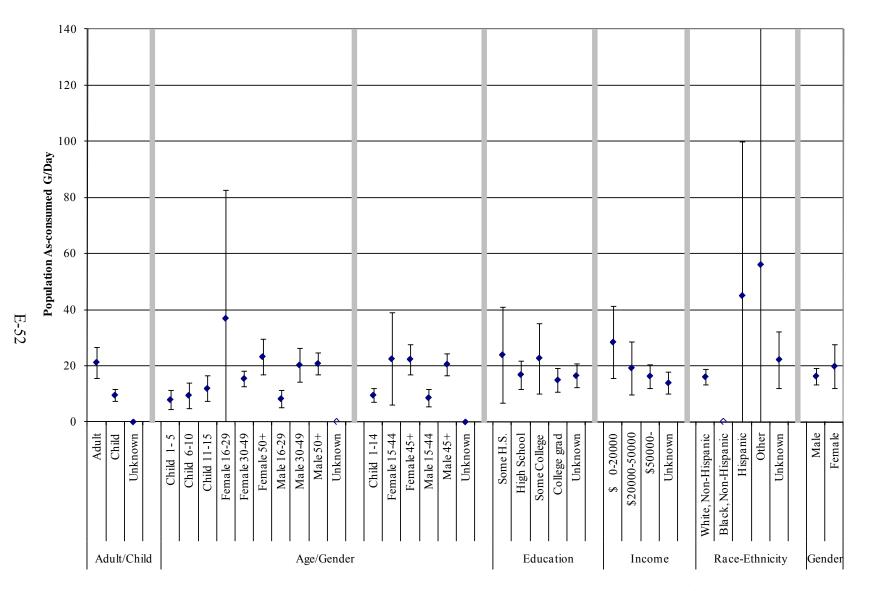


Figure E-11. Mean consumption, Minnesota general population, per capita, with 95% confidence intervals.

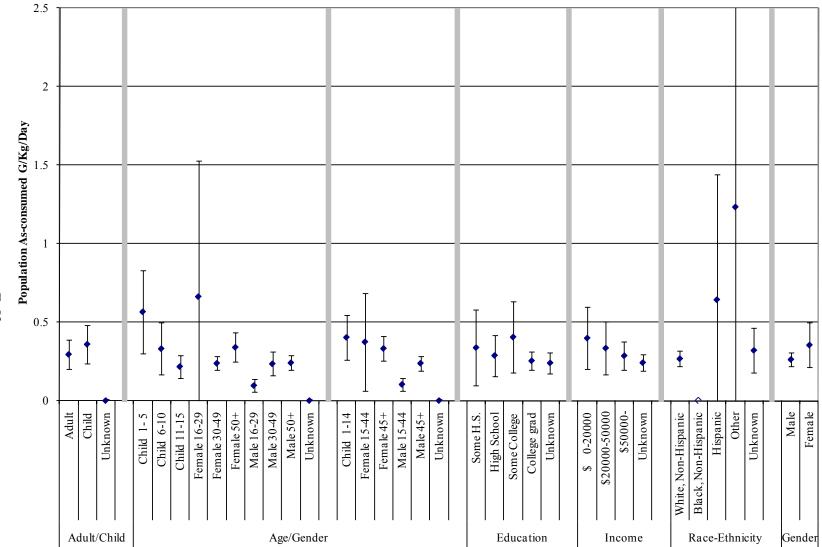


Figure E-12. Mean consumption per bodyweight, Minnesota general population, per capita, with 95% confidence intervals.

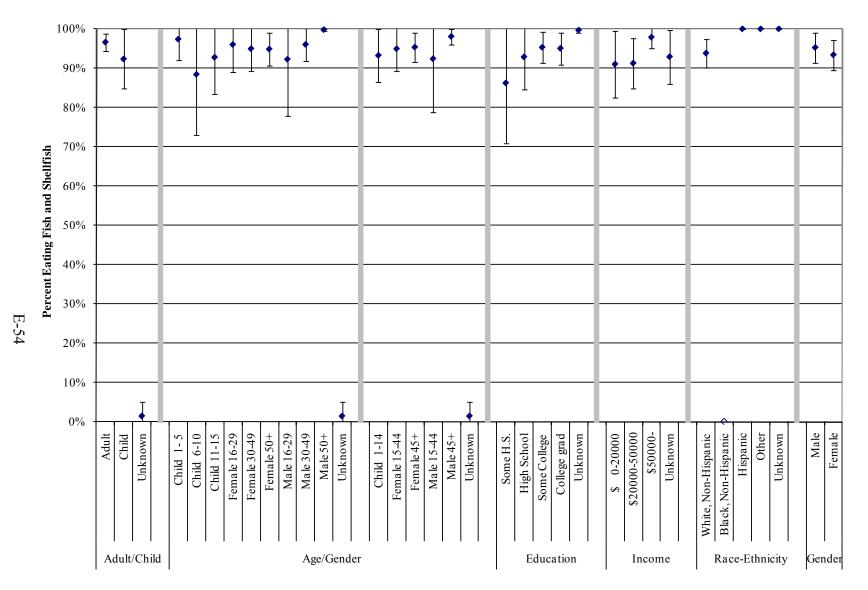


Figure E-13. Percent eating fish and shellfish during a roughly year-long period, Minnesota general population, per capita, with 95% confidence intervals.

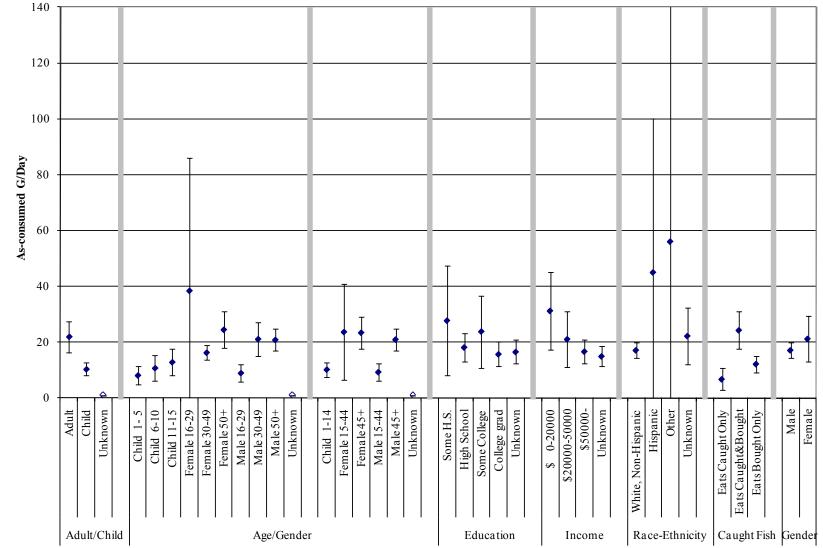


Figure E-14. Mean consumption, Minnesota general population, consumers only, with 95% confidence intervals.

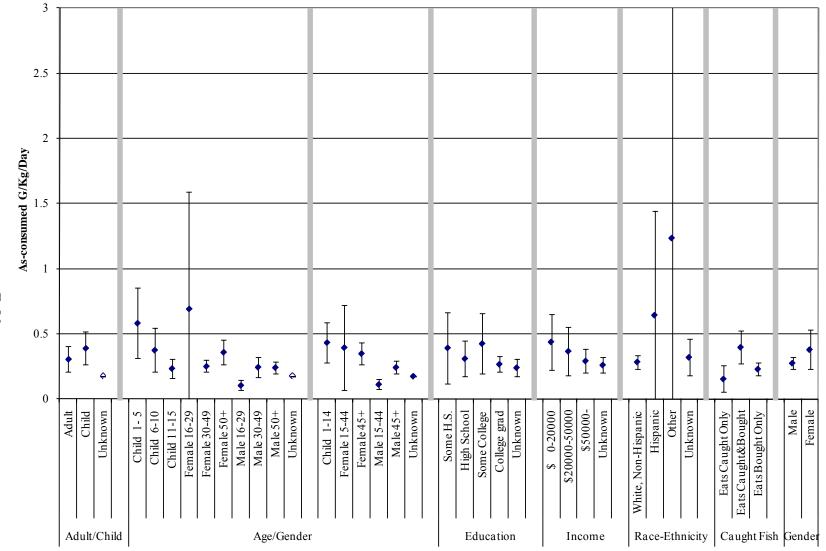


Figure E-15. Mean consumption per bodyweight, Minnesota general population, consumers only, with 95% confidence intervals.

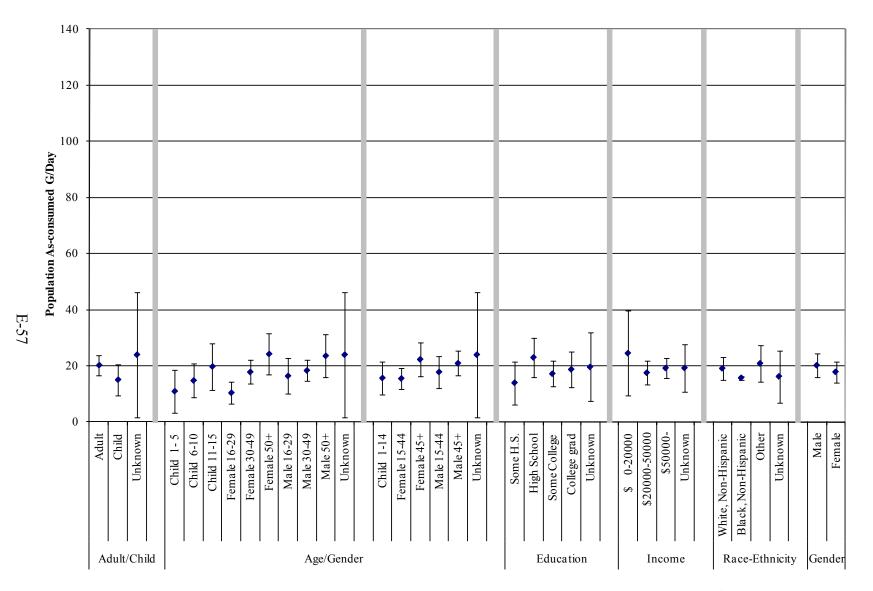


Figure E-16. Mean consumption, North Dakota general population, per capita, with 95% confidence intervals.

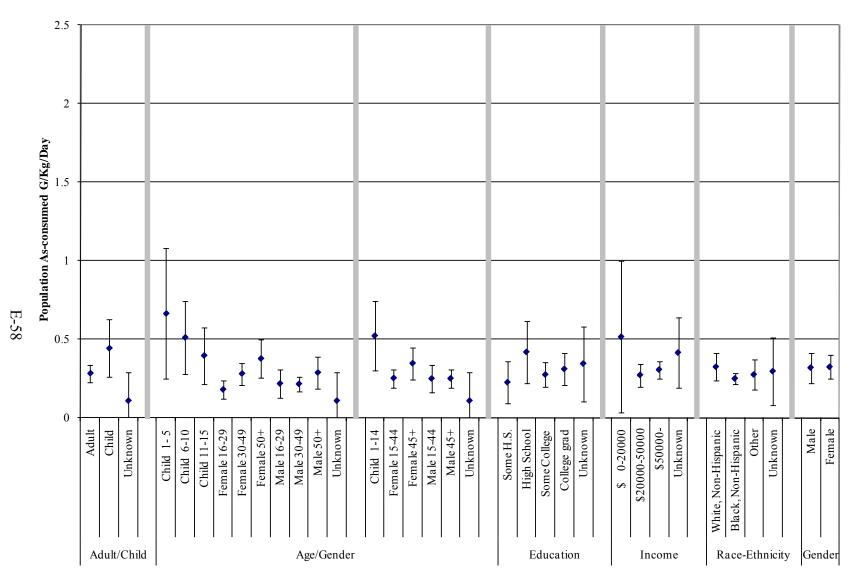


Figure E-17. Mean consumption per bodyweight, North Dakota general population, per capita, with 95% confidence intervals.

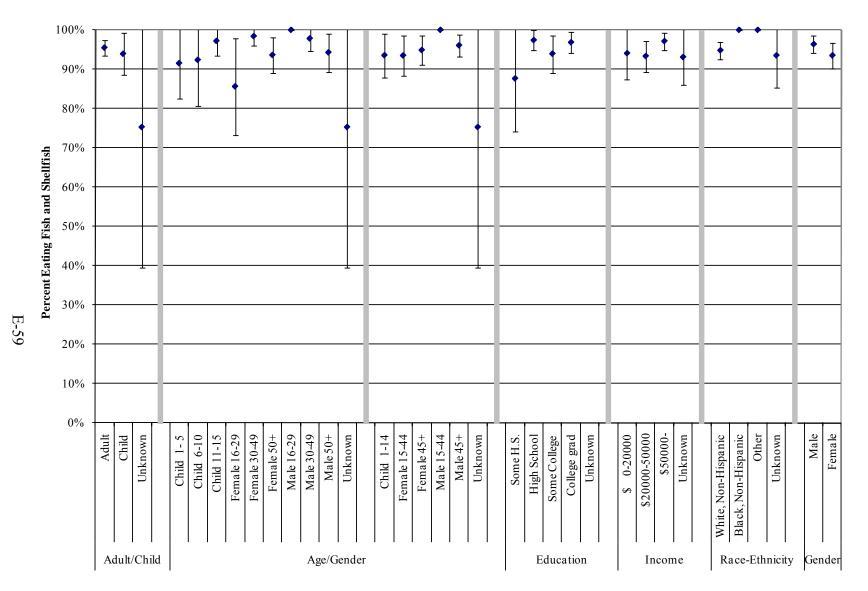


Figure E-18. Percent eating fish and shellfish during a roughly year-long period, North Dakota general population, per capita, with 95% confidence intervals.

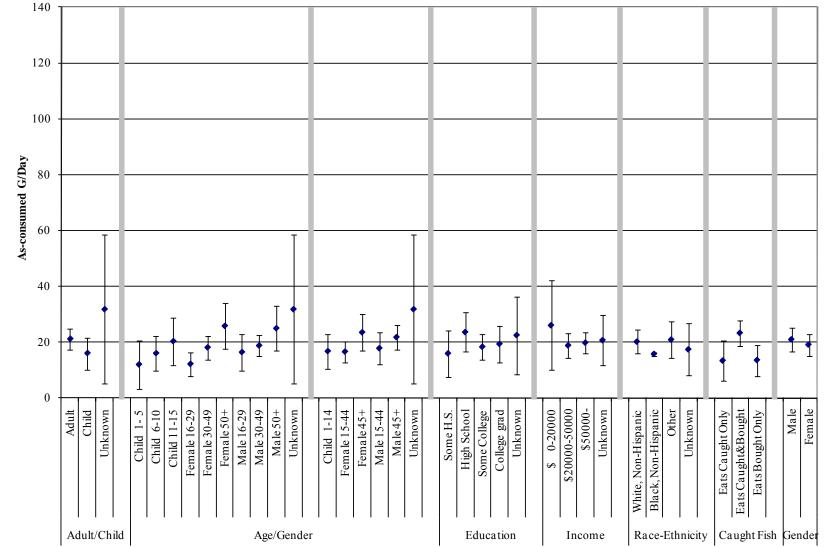


Figure E-19. Mean consumption, North Dakota general population, consumers only, with 95% confidence intervals.

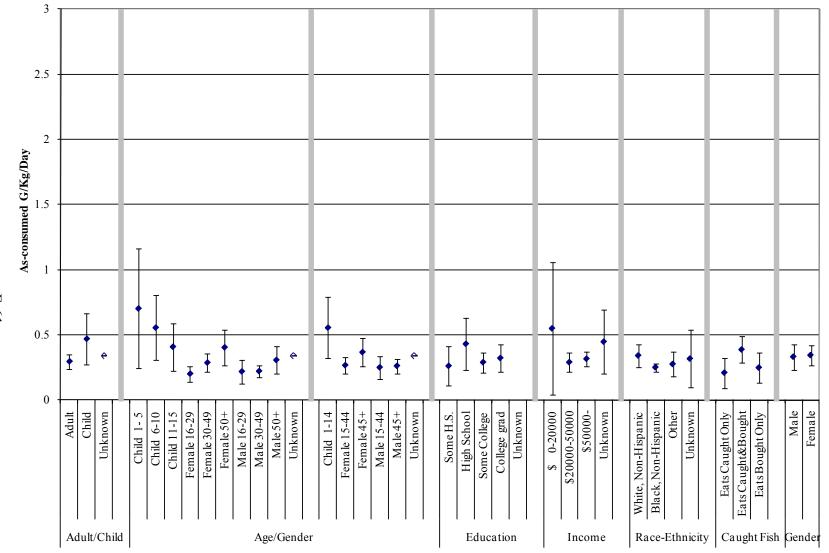


Figure E-20. Mean consumption per bodyweight, North Dakota general population, consumers only, with 95% confidence intervals.

E.10. FISH AND SHELLFISH CONSUMPTION FOR TARGETED POPULATIONS

Tables E-42 through E-45 summarize fish and shellfish consumption for the general population and for targeted populations within each state, tabulating values for the following summary statistics:

- Mean consumption of fish and shellfish per capita (as-consumed g/day);
- Mean consumption per kilogram bodyweight per capita (as-consumed g/kg-day);
- Percentage of respondents that reported eating fish and shellfish;
- Mean consumption for those than consume fish and shellfish (as-consumed g/day);
- Mean consumption per kilogram bodyweight for those than consume fish and shellfish (as-consumed g/kg-day);
- Geometric mean consumption for those than consume fish and shellfish (as-consumed g/day);
- Geometric mean consumption per kilogram bodyweight for those than consume fish and shellfish (as-consumed g/kg-day);

The expected percentage of respondents that report eating fish or shellfish during the recall period and the consumption rate for those that eat fish or shellfish depends in part on the length of the recall period used by the surveys. In Florida the recall period was 7 days. In Minnesota and North Dakota the recall period was 1 year. In Connecticut the recall period was roughly a year based on the question wording, but was not specified. As a result, for Florida the percentage of respondents that consume fish and shellfish is expected to be lower and the consumption rate for them is expected to be higher than for the other states.

The tables show the state, the targeted population, the number of respondents (N), the weighted population size (in thousands) represented by the respondents in the general population (Weighted N/1,000), the mean (either the arithmetic or geometric mean fish and shellfish consumption rate or the percentage consuming fish and shellfish), and the upper and lower 95% confidence limit. Because the respondents for the general population in each state were selected using a stratified random sample of all households in the state, the calculations for the general population are weighted to estimate the mean for the each states' general population. Unweighted means are calculated for the targeted populations because either, (1) there is inadequate information to determine appropriate weights, or (2) the respondents were selected

using a simple random sample, in which case weights (if they could be calculated) would not make a difference.

The tables include 95% confidence intervals. In general longer confidence intervals are associated with more variable intake data or fewer respondents. The confidence interval calculations assume the mean estimates have a normal distribution. If the sample size (N) is smaller than about 100, this assumption is uncertain and the confidence interval and *p*-value are approximate. If there are relatively few respondents in a subgroup category, the confidence intervals can be imprecise.

State	Subpopulation	N	Weighted N/1000	Mean	Lower Conf. Limit	Upper Conf. Limit
СТ	General	420	3296	0.410	0.335	0.486
	Angler	250		0.640	0.532	0.747
	Aquaculture Student	25		0.224	0.035	0.414
	Asians	396		1.153	0.974	1.331
	Commercial Fisherme	173		0.650	0.506	0.795
	EFNEP Participants	67		0.995	0.253	1.738
	WIC Participants	699		0.801	0.655	0.947
FL	General	15367	14827	0.467	0.440	0.495
MN	General	837	4897	0.309	0.232	0.387
	American Indians	216		0.212	0.147	0.276
	Anglers	1152		0.306	0.254	0.358
	New Mothers	401	•	0.325	0.239	0.410
ND	General	575	610	0.322	0.248	0.396
	American Indians	106	•	0.352	0.089	0.615
	Anglers	854		0.323	0.280	0.365

Table E-42. Mean consumption per bodyweight, per capita, by state and subpopulation (as-consumed g/kg-day with 95% CIs)

Table E-43. Mean consumption per bodyweight, consumers only, by state
and subpopulation (as-consumed g/kg-day with 95% CIs)

			Weighted		Lower Conf.	Upper Conf.
State	Subpopulation	N	N/1000	Mean	Limit	Limit
СТ	General	362	2804	0.483	0.404	0.561
	Angler	244		0.655	0.548	0.763
	Aquaculture Student	19		0.295	0.067	0.524
	Asians	393	•	1.161	0.981	1.342
	Commercial Fisherme	166		0.678	0.532	0.824
	EFNEP Participants	58		1.149	0.309	1.989
	WIC Participants	553		1.013	0.839	1.186
FL	General	7757	7490	0.925	0.878	0.972
MN	General	793	4621	0.328	0.247	0.409
	American Indians	192	•	0.238	0.167	0.309
	Anglers	1109		0.317	0.264	0.370
	New Mothers	341		0.382	0.286	0.477
ND	General	546	580	0.338	0.260	0.416
	American Indians	64		0.583	0.192	0.974
	Anglers	808		0.341	0.297	0.385

		N	Weighted	Geometric	Lower Conf.	Upper Conf.
State	Subpopulation	N	N/1000	Mean	Limit	Limit
СТ	General	369	2854	17.472	14.952	20.418
	Angler	257		27.364	22.598	33.134
	Aquaculture Student	19		7.563	2.136	26.772
	Asians	396		38.441	30.593	48.302
	Commercial Fisherme	171		27.687	21.322	35.952
	EFNEP Participants	60		26.291	13.760	50.233
	WIC Participants	557	•	24.012	20.126	28.648
FL	General	8566	7912	35.071	33.922	36.260
MN	General	796	4623	10.724	9.138	12.586
	American Indians	196		7.192	5.369	9.634
	Anglers	1127		12.472	11.282	13.789
	New Mothers	352	•	8.246	6.813	9.979
ND	General	570	606	11.644	10.004	13.553
	American Indians	78		9.773	5.105	18.709
	Anglers	825		12.641	11.591	13.787

Table E-44. Geometric mean consumption, consumers only, by state and subpopulation (as-consumed g/day with 95% CIs)

State	Subpopulation	N	Weighted N/1000	Geometric Mean	Lower Conf. Limit	Upper Conf. Limit
СТ	General	362	2804	0.287	0.240	0.344
	Angler	244		0.385	0.321	0.462
	Aquaculture Student	19		0.127	0.042	0.389
	Asians	393		0.832	0.663	1.045
	Commercial Fisherme	166		0.416	0.325	0.533
	EFNEP Participants	58		0.479	0.246	0.935
	WIC Participants	553	•	0.552	0.463	0.658
FL	General	7757	7490	0.579	0.559	0.600
MN	General	793	4621	0.178	0.153	0.206
	American Indians	192		0.127	0.095	0.169
	Anglers	1109		0.188	0.170	0.207
	New Mothers	341	•	0.192	0.159	0.232
ND	General	546	580	0.187	0.160	0.219
	American Indians	64		0.196	0.100	0.382
	Anglers	808		0.197	0.180	0.217

Table E-45. Geometric mean consumption per bodyweight, consumers only,by state and subpopulation (as-consumed g/kg-day with 95% CIs)

E.11. SPECIES EATEN AND CAUGHT

Tables E-46–E-49 present consumption statistics by species categories using asconsumed grams of fish or shellfish per day. Each survey categorized the species differently. The categories in the Connecticut data files (corresponding roughly to seafood dishes) were recoded to species categories. The categories in the Florida data were left unchanged. However, note that there is some repetition in the Florida data in that there are separate records for tuna and tuna salad. In the Minnesota/North Dakota survey respondents were asked about five classifications of purchased fish and shellfish and seven classifications of self-caught fish. The data are summarized using these classifications.

The species tables list the habitat of the species (freshwater versus marine or estuarine), the species name or category, the number of records (N), the percent of total consumption that is in that species category, the average fish or shellfish consumption in as-consumed in g/day for those that consumed the species, the number of records reporting caught fish quantities, the percent of total caught fish consumption in that species category, and the mean consumption of caught fish or shellfish for those that caught and consumed the species.

Habitat	Species or class of fish	Ν	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Catfish	32	0.8	2.89	1	0.4	1.41
Freshwater	Bass	50	0.8	1.68	26	14.2	1.57
Freshwater	Trout	48	0.7	1.74	15	12.8	2.64
Freshwater	Sunfish	5	0.2	6.30	3	8.4	10.20
Freshwater	Tilapia	8	0.2	2.18	0		
Freshwater	Bullhead	2	0.0	1.45	2	0.8	1.45
Freshwater	Walleye	2	0.0	0.88	2	0.6	0.88
Freshwater	Snails	1	0.0	0.48	0		
Marine	Tuna	417	34.0	9.28	12	7.4	1.83
Marine	Shrimp	210	14.0	7.63	2	3.1	5.58
Marine	Clams	506	6.9	1.56	11	2.4	0.68
Marine	Scallops	127	6.0	5.45	0		
Marine	Lobster	365	4.3	1.37	б	3.2	1.91
Marine	Crab	236	4.0	1.98	б	1.6	0.70
Marine	Flounder	100	3.6	4.09	8	3.4	1.16
Marine	Unspecified Fish	170	3.4	2.27	0	•	
Marine	Swordfish	108	3.4	3.51	0		
Marine	Cod	85	3.1	4.34	0	•	
Marine	Salmon	109	3.1	3.34	1	0.1	0.22
Marine	Sardines	14	1.6	14.64	0		
Marine	Shad	б	1.5	30.16	0		
Marine	Sole	56	1.2	2.21	1	0.9	3.30
Marine	Haddock	35	1.1	3.72	0	•	
Marine	Scrod	28	0.8	3.55	0		
Marine	Bluefish	76	0.7	1.09	20	6.9	1.05
Marine	Oysters	88	0.5	0.64	1	0.3	0.86
Marine	Perch	16	0.4	3.37	4	11.0	9.41
Marine	Porgy	17	0.4	2.61	5	3.6	2.09
Marine	Snapper	15	0.4	2.92	0	•	•
Marine	Mussels	56	0.4	0.74	1	1.9	4.61

Table E-46. Total and caught fish consumption for the Connecticut general population (weighted, as-consumed g/day)

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Marine	Pollock	13	0.4	3.16	0		
Marine	Whiting	12	0.3	3.04	2	0.7	1.28
Marine	Tautog	19	0.3	1.73	14	10.1	2.14
Marine	Turbot	3	0.2	8.53	0	•	
Marine	Grouper	8	0.2	3.02	0	•	•
Marine	Herring	8	0.2	3.10	0	•	
Marine	Halibut	21	0.2	1.04	0	•	•
Marine	Shark	15	0.1	0.98	1	1.5	4.40
Marine	Eel	8	0.1	1.34	2	3.0	4.40
Marine	Sea Trout	2	0.1	5.07	0	•	
Marine	Orange Roughy	7	0.1	1.08	0		
Marine	Milkfish	4	0.1	1.95	0	•	
Marine	Mackerel	7	0.1	1.05	2	0.6	1.17
Marine	Monkfish	7	0.1	0.91	0	•	
Marine	Sea bass	2	0.1	4.05	0	•	•
Marine	Anchovies	17	0.0	0.30	0	•	
Marine	Scungilli	3	0.0	1.64	0	•	
Marine	Whitefish	б	0.0	0.58	4	1.0	0.66
Marine	Dolphinfish	б	0.0	0.56	0	•	•
Marine	Bonito	1	0.0	2.91	0		
Marine	Butterfirsh	1	0.0	2.57	0	•	•
Marine	Bream	1	0.0	0.59	0	•	
Marine	Smelt	2	0.0	0.29	0	•	•
Marine	Caviar	5	0.0	0.05	0		

Table E-46. Total and caught fish consumption for the Connecticut general population (weighted, as-consumedg/day) (continued)

Table E-47. Total and caught fish consumption for the Florida general population (weig	hted, as-consumed
g/day)	

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Freshwater catfish	597	4.9	42.85	126	7.0	53.81
Freshwater	Panfish	273	1.8	34.42	69	4.1	49.77
Freshwater	Largemouth bass	107	0.8	39.16	107	5.5	39.16
Freshwater	Other freshwater finfish	39	0.2	26.54	2	0.0	19.12
Freshwater	Freshwater crayfish	25	0.1	24.12	0		
Freshwater	Sunshine bass	13	0.1	29.33	5	0.2	38.80
Freshwater	Panfish roe	3	0.0	34.29	0		
Freshwater	Largemouth bass roe	1	0.0	21.65	1	0.0	21.65
Marine	Canned tuna	2888	23.9	37.80	0		
Marine	Shrimp	2895	7.2	11.88	271	4.2	12.54
Marine	Flounder	819	6.6	38.46	139	6.9	35.29
Marine	Grouper	832	6.5	35.53	176	9.2	34.80
Marine	Snapper	663	5.8	38.76	158	13.0	51.58
Marine	Breaded fish fillets	485	3.9	38.59	0		
Marine	Fish sticks	391	3.7	42.13	0		
Marine	Salmon	618	3.5	25.34	13	0.5	21.27
Marine	Mullet	402	3.3	50.37	154	9.1	52.54
Marine	Dolphin	360	3.0	35.63	82	5.7	42.72
Marine	Fresh tuna	219	1.8	38.38	33	4.3	87.44
Marine	Clams	289	1.6	25.37	10	0.4	25.62
Marine	Seatrout	221	1.6	36.88	85	5.0	40.41
Marine	Stone crab claws	148	1.5	47.00	29	3.4	81.33
Marine	Oysters	366	1.5	23.58	48	1.6	29.01
Marine	Other marine finfish	301	1.5	22.08	25	1.3	33.20
Marine	Sardines	241	1.4	26.61	0		
Marine	Mackerel	156	1.3	42.21	50	3.2	47.19
Marine	Cod	230	1.2	22.41	8	0.2	16.13
Marine	Crab meat	349	1.1	15.30	20	0.4	13.16
Marine	Immitation crab meat	218	1.0	19.76	0		
Marine	Shark	110	0.9	38.55	54	3.0	41.71
Marine	Unknown finfish	111	0.8	34.04	19	0.8	33.48

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Marine	Swordfish	112	0.8	30.04	8	0.4	31.67
Marine	Red drum	115	0.8	33.14	115	5.5	33.14
Marine	Scallops	398	0.7	8.51	28	0.7	16.46
Marine	Blue crab	126	0.6	24.19	0		
Marine	Whole lobster	152	0.6	17.60	28	0.8	18.48
Marine	Lobster tails	155	0.6	15.94	29	0.6	12.68
Marine	Orange Roughy	93	0.4	19.97	0		
Marine	King Mackerel	55	0.4	27.37	4	0.1	21.17
Marine	Whitefish	80	0.3	21.19	5	0.1	18.14
Marine	Conch	50	0.3	27.94	5	0.4	48.36
Marine	Mussels	44	0.3	29.35	0	•	•
Marine	Other fresh frozen shellfish	38	0.3	29.89	0		
Marine	Salad shrimp	69	0.2	15.07	2	0.0	23.51
Marine	Sheepshead	33	0.2	26.36	б	0.2	25.96
Marine	Snook	30	0.2	26.51	7	0.3	29.52
Marine	Mullet roe	23	0.2	41.10	10	0.8	49.87
Marine	Haddock	33	0.2	19.75	3	0.1	12.94
Marine	Bluefish	16	0.1	24.03	б	0.2	24.61
Marine	Pompano	11	0.1	33.22	2	0.1	21.65
Marine	Saltwater catfish	14	0.1	27.44	3	0.1	20.84
Marine	Amberjack	25	0.1	20.27	19	0.3	16.11
Marine	Sea bass	17	0.1	23.04	5	0.1	16.27
Marine	Halibut	16	0.1	16.17	0		
Marine	Processed shellfish	2	0.0	57.96	0		
Marine	Unknown shellfish	10	0.0	17.47	0		
Marine	Seatrout roe	6	0.0	26.01	3	0.1	26.14
Marine	Other fresh/frozen finfish	3	0.0	22.48	0		
Marine	Other processed finfish	3	0.0	17.76	0		

Table E-47. Total and caught fish consumption for the Florida general population (weighted, as-consumed g/day) (continued)

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Panfish	447	13.6	4.84	447	38.5	4.84
Freshwater	Walleye or Sauger	498	8.2	3.21	498	23.3	3.21
Freshwater	Northern pike or Muskie	275	4.2	3.05	275	11.9	3.05
Freshwater	Salmon or Lake trout	206	4.1	4.76	206	11.6	4.76
Freshwater	Bass	125	1.9	2.48	125	5.4	2.48
Freshwater	Other non-purchased fish	71	1.9	3.87	71	5.4	3.87
Freshwater	Stream trout	53	1.4	5.30	53	3.9	5.30
Marine	Canned tuna	657	21.3	5.10	0		
Marine	Other purchased fish	559	14.5	3.93	0		
Marine	Breaded fish, fish sticks	524	13.3	3.99	0		
Marine	Shellfish	560	13.2	3.54	0		
Marine	Swordfish & Shark	102	2.4	2.82	0		

Table E-48. Total and caught fish consumption for the Minnesota general population (weighted, as-consumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Freshwater	Walleye or Sauger	369	13.2	4.08	369	40.8	4.08
Freshwater	Panfish	274	10.1	4.05	274	31.2	4.05
Freshwater	Northern pike or Muskie	230	5.5	2.69	230	17.0	2.69
Freshwater	Salmon or Lake trout	105	1.5	1.68	105	4.8	1.68
Freshwater	Other non-purchased fish	36	1.0	3.17	36	3.2	3.17
Freshwater	Bass	62	0.8	1.39	62	2.4	1.39
Freshwater	Stream trout	14	0.2	1.72	14	0.6	1.72
Marine	Canned tuna	472	20.8	5.07	0		
Marine	Other purchased fish	389	16.5	4.82	0		
Marine	Breaded fish, fish sticks	375	15.5	4.68	0		
Marine	Shellfish	423	12.2	3.28	0		
Marine	Swordfish & Shark	58	2.6	5.01	0		

Table E-49. Total and caught fish consumption for the North Dakota general population (weighted, asconsumed g/day)

E.12. ADDITIONAL DETAILS FOR TARGETED POPULATIONS

Tables E-50 through E-181 summarize fish and shellfish consumption by various dependent variables. Tables E-182 to E-192 have lists of species consumed, tabled by targeted populations.

There are separate tables for fish and shellfish consumption per capita and for those individuals that reported consuming fish or shellfish (consumers only). The tables tabulate the fish and shellfish consumption rate (either as g/day or g/kg-day bodyweight). There are separate tables for fish and shellfish consumption in as-consumed weight per day and raw or uncooked weight per day. In the table titles, the word "Consumption" is used to stand for the fish and shellfish consumption rate. Within each table the fish and shellfish consumption is broken out by the independent variables.

Tables with summaries using per capita, or estimates for the sampled populations, show the following statistics (column headers are in parentheses):

- State abbreviation (State);
- Independent variables;
- Sample size (SampN);
- Weighted sample size for the general population in thousands (PopN/1,000);
- Arithmetic mean (Pop Arith Mean);
- Geometric mean (Pop Geom Mean), this is missing in all cases;
- Percent of respondents in the row that reported eating fish or shellfish (Percent Eating Fish);
- Minimum (Min);
- Percentiles, the 5th, 25th, 50th, 75th, 90th, 95th, and 99th percentiles (Pop Q5, Pop Q10, Pop Q25, Pop Q50, Pop Q75, Pop Q90, Pop Q95, and Pop Q99); and
- Maximum (Max).

Since some respondents did not report fish or shellfish consumption during the recall period, the consumption rate is zero for some respondents. As a result, the minimum consumption rate is generally 0. Because the geometric mean cannot be calculated for the population when individuals do not report consuming fish or shellfish, the population geometric mean is missing in all cases. This column is retained so the tables per capita and consumers only

have the same format. Tables with summaries for those that consumed fish or shellfish in the recall period, consumers only, show the following statistics (column headers are in parentheses):

- State abbreviation (State);
- Independent variables;
- Sample size for consumers (SampNC);
- Weighted number of fish and shellfish consumers in the general population in thousands (WtdNC/1,000);
- Arithmetic mean (Arith Mean);
- Geometric mean (Geom Mean);
- Percent of respondents in the row that reported eating fish or shellfish (Percent Eating Fish), this value is 100% in the tables for consumers only;
- Minimum (Min);
- Percentiles, the 5th, 25th, 50th, 75th, 90th, 95th, and 99th percentiles (Q5, Q10, Q25, Q50, Q75, Q90, Q95, and Q99); and
- Maximum (Max).

In the tables for consumers only, for the respondents in each row the percentage eating fish is 100%. This column is retained so the tables per capita and consumers only have the same format.

Tables E-182 to E-192 have lists of species eaten, classified by the following targeted populations:

- Table 182, Connecticut recreational anglers;
- Table 183, Connecticut aquaculture students;
- Table 184, Connecticut Asian students;
- Table 185, Connecticut Commercial fishermen
- Table 186, Connecticut EFNEP participants;
- Table 187, Connecticut WIC participants;
- Table 188, Minnesota American Indians;
- Table 189, Minnesota recreational anglers;

- Table 190, Minnesota families with new mothers;
- Table 191, North Dakota American Indians; and
- Table 192, North Dakota recreational anglers.

These tables present consumption statistics by species categories using as-consumed grams of fish or shellfish per day. Each survey categorized the species differently. The categories in the Connecticut data files (corresponding roughly to seafood dishes) were recoded to species categories. The categories in the Florida data were left unchanged. However, note that there is some repetition in the Florida data in that there are separate records for tuna and tuna salad. I n the Minnesota/North Dakota survey respondents were asked about five classifications of purchased fish and shellfish and seven classifications of self-caught fish. The data are summarized using these classifications.

The species tables list the habitat of the species (freshwater versus marine or estuarine), the species name or category, the number of records (N), the percent of total consumption that is in that species category (Percent of Total), the average fish or shellfish consumption in asconsumed g/ day for those that consumed the species (Mean g/day), the number of records reporting caught fish quantities (N Eating Caught Fish), the percent of total caught fish consumption in that species category (Percent of Total Caught), and the mean consumption of caught fish or shellfish for those that caught and consumed the species (Mean g/day of Caught Fish).

State	Household Income	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Рор Q95	Pop Q99	Max
СТ	\$ 0-20000	41	312	23.5		86.8	0.00	0	0	6	15	27	53	82	172	172
	\$20000-50000	155	1179	32.0	•	85.3	0.00	0	0	4	17	35	69	122	341	494
	\$50000-	219	1778	23.6		83.8	0.00	0	0	4	14	32	66	74	116	143
	Unknown	16	119	22.5		73.4	0.00	0	0	0	22	37	41	65		83
	All	431	3388	26.5	•	84.2	0.00	0	0	5	15	33	66	85	169	494
FL	\$ 0-20000	3746	3408	26.0		45.1	0.00	0	0	0	0	33	65	108	228	2339
	\$20000-50000	7353	6814	28.1		50.0	0.00	0	0	0	0	37	74	108	236	1508
	\$50000-	3417	3250	30.6		56.7	0.00	0	0	0	13	42	78	114	263	1308
	Unknown	2665	2480	21.3		45.4	0.00	0	0	0	0	27	65	91	175	639
	All	17181	15952	27.1	•	49.6	0.00	0	0	0	0	36	71	108	228	2339
MN	\$ 0-20000	89	373	28.5		91.0	0.00	0	2	8	14	27	90	111		140
	\$20000-50000	328	1802	19.3		91.3	0.00	0	1	4	11	20	39	54	108	489
	\$50000-	327	2155	16.4		97.9	0.00	1	2	5	11	19	33	48	97	167
	Unknown	97	570	13.9		92.9	0.00	0	1	5	13	16	31	35	59	59
	All	841	4900	18.1	•	94.4	0.00	0	1	5	11	20	39	54	103	489
ND	\$ 0-20000	53	56	24.5		94.0	0.00	0	2	7	12	19	89	110	169	177
	\$20000-50000	252	268	17.5		93.3	0.00	0	1	4	9	19	52	65	116	176
	\$50000-	239	251	19.2		97.1	0.00	2	3	7	13	25	40	58	94	126
	Unknown	58	63	19.3		93.1	0.00	0	2	5	12	25	34	41	221	240
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

Table E-50. Consumption, per capita, by state and income (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Household Income	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	\$ 0-20000	36	270	27.1	16.7	100	0.66	2	б	9	17	30	57	86		172
	\$20000-50000	135	1006	37.5	18.6	100	0.34	2	4	9	21	42	75	124	353	494
	\$50000-	186	1490	28.1	16.5	100	0.26	2	3	9	19	39	67	80	122	143
	Unknown	12	87	30.7	25.1	100	5.53	7	10	14	32	38	45	68		83
	All	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	\$ 0-20000	1707	1537	57.7	35.7	100	0.69	7	12	22	38	65	114	172	313	2339
	\$20000-50000	3709	3404	56.3	35.9	100	0.35	8	12	22	37	65	108	160	347	1508
	\$50000-	1960	1844	53.9	34.8	100	0.17	7	11	20	36	65	108	151	340	1308
	Unknown	1190	1126	46.8	32.1	100	0.34	6	11	20	33	56	95	143	237	639
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	\$ 0-20000	79	339	31.3	19.2	100	0.58	5	8	10	18	36	95	114		140
	\$20000-50000	302	1645	21.1	10.5	100	0.58	1	2	б	12	21	39	55	120	489
	\$50000-	321	2109	16.7	9.9	100	0.58	1	2	5	11	19	33	50	97	167
	Unknown	94	530	15.0	11.0	100	1.02	2	4	7	13	18	33	35	59	59
	All	796	4623	19.1	10.7	100	0.58	1	2	б	12	20	39	56	105	489
ND	\$ 0-20000	50	53	26.1	13.7	100	1.16	2	5	7	12	19	90	108	166	177
	\$20000-50000	235	250	18.8	10.0	100	0.58	1	2	4	10	21	53	67	119	176
	\$50000-	231	244	19.8	12.9	100	0.87	2	4	7	13	25	41	59	94	126
	Unknown	54	59	20.7	12.2	100	0.58	2	3	б	12	25	35	41	213	240
	All	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

 Table E-51. Consumption, consumers only, by state and income (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

ate	Race Ethnicity	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
Т	White, Non-Hispanic	380	2968	27.0		88.0	0.00	0	0	б	17	36	66	80	158	494
	Black, Non-Hispanic	9	66	4.4	•	33.5	0.00	0	0	0	0	10	16	•		16
	Hispanic	20	178	29.7	•	70.9	0.00	0	0	0	8	24	110	136		186
	Asian	20	155	25.7	•	54.7	0.00	0	0	0	5	22	27	164		349
	Unknown	2	21	0.4	•	43.4	0.00	0	0	0	0	1		•		1
	All	431	3388	26.5	•	84.2	0.00	0	0	5	15	33	66	85	169	494
L	White, Non-Hispanic	12957	11887	27.1		50.9	0.00	0	0	0	5	36	71	108	228	1508
	Black, Non-Hispanic	1842	1690	26.6		46.2	0.00	0	0	0	0	37	71	108	213	1308
	Hispanic	1673	1719	26.6		45.0	0.00	0	0	0	0	32	66	108	227	2339
	Asian	260	216	33.6		50.1	0.00	0	0	0	5	40	74	120	322	1191
	American Indian	122	114	40.0		50.8	0.00	0	0	0	4	47	99	173	440	449
	Unknown	327	325	24.8	•	42.7	0.00	0	0	0	0	28	64	86	217	1213
	All	17181	15952	27.1		49.6	0.00	0	0	0	0	36	71	108	228	2339
N	White, Non-Hispanic	779	4473	16.1		93.8	0.00	0	1	4	11	20	37	52	97	167
	Black, Non-Hispanic	1	1	0.0												
	Hispanic	3	50	45.0	•	100	15.9			16	17	81				103
	Asian	7	94	9.8	•	100	4.87	8	8	9	10					10
	American Indian	12	78	111.5		100	4.01			5	10	78				489
	Unknown	39	204	22.3		100	2.33	8	8	10	17	21	55	62		78
	All	841	4900	18.1	•	94.4	0.00	0	1	5	11	20	39	54	103	489
D	White, Non-Hispanic	551	585	19.1		94.8	0.00	0	2	5	11	22	45	70	124	240
	Black, Non-Hispanic	2	2	15.7		100	15.1			15	16					16
	Asian	4	3	12.9		100	3.14			3	13	23				23
	American Indian	13	13	23.0	•	100	0.58	1	8	14	22	25	47	•		65
	Unknown	32	36	16.2		93.5	0.00	0	3	5	8	28	38	48	•	53
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

Table E-52. Consumption, per capita, by state and race-ethnicity (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Maita New Hispania	338	2612	30.7	17.5	100	0.26	2	4	9	20	39	67	86	160	494
CI	White, Non-Hispanic Black, Non-Hispanic	338	2012	30.7 13.0	17.5 12.5	100	0.26	2		9 10	20 14	39 16			100	494 16
	Hispanic	15	126	13.0 41.8	12.5 21.0	100	8.24 3.11	•	6	8	14	10 62	112	149	•	186
	Asian	12	85	41.0 47.0	21.0	100	3.11	4	6	0 11	21	02 27	120	254	•	349
	Unknown	12	85 9	47.0	20.3	100	3.27	-	0	ΤT		27	120		•	349
	All	⊥ 369	9 2854		17.5		0.99	2	4	9	20	39	68	94	178	⊥ 494
	All	369	2854	31.4	1/.5	100	0.26	2	4	9	20	39	68	94	1/8	494
FL	White, Non-Hispanic	6607	6053	53.2	34.5	100	0.17	7	12	21	36	63	108	153	302	1508
	Black, Non-Hispanic	867	780	57.5	38.8	100	0.34	11	17	22	41	65	110	161	314	1308
	Hispanic	762	773	59.2	34.6	100	1.60	8	10	18	36	64	114	169	437	2339
	Asian	128	108	67.1	39.9	100	5.41	10	13	22	40	67	120	208	656	1191
	American Indian	63	58	78.7	46.3	100	3.25	б	14	22	47	86	173	305	448	449
	Unknown	139	139	57.9	35.6	100	2.40	б	16	22	35	62	96	150	507	1213
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	White, Non-Hispanic	735	4197	17.2	10.3	100	0.58	1	2	б	12	21	39	53	98	167
	Black, Non-Hispanic		•			100										
	Hispanic	3	50	45.0	30.0	100	15.9			16	17	59				103
	Asian	7	94	9.8	9.8	100	4.87	8	9	9	10					10
	American Indian	12	78	111.5	19.1	100	4.01			5	10	27				489
	Unknown	39	204	22.3	17.2	100	2.33	8	8	10	17	21	55	62		78
	All	796	4623	19.1	10.7	100	0.58	1	2	б	12	20	39	56	105	489
ND	White, Non-Hispanic	521	555	20.2	11.6	100	0.58	2	3	6	12	24	46	77	125	240
	Black, Non-Hispanic	2	2	15.7	15.7	100	15.1			15	16					16
	Asian	4	3	12.9	8.4	100	3.14			3	8	23	•			23
	American Indian	13	13	23.0	15.9	100	0.58	1	б	14	22	25	38			65
	Unknown	30	33	17.4	11.6	100	3.11	4	4	5	8	28	39	48		53
	All	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

Table E-53. Consumption, consumers only, by state and race-ethnicity (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Race Ethnicity	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	
CT	Adult	White, Non-Hispanic	302	2236	32.4	•	92.1	0.00	0	1	9	21	44	70	92	165	494
		Black, Non-Hispanic	5	34	8.4		64.5	0.00	0	0	0	9	15	•	•		16
		Hispanic	13	103	47.0		82.5	0.00	0	0	8	22	79	122	173		186
		Asian	16	119	30.4		51.0	0.00	0	0	0	3	24	72	235		349
		Unknown	1	9	1.0	•	100	0.99	•	•	•	•	•				1
СТ	Child	White, Non-Hispanic	67	633	11.1		75.4	0.00	0	0	1	7	15	27	50	63	66
		Black, Non-Hispanic	4	32	0.0				•	•			•	•	•		
		Hispanic	7	74	5.7		54.9	0.00	0	0	0	3	12	17	•		18
		Asian	4	36	10.0		66.9	0.00	0	0	0	11	16				21
		Unknown	1	12	0.0	•			•	•	•	•	•				
СТ	Unknown	White, Non-Hispanic	11	99	6.9		76.1	0.00	0	0	0	1	6	30	31		32
FL	Adult	White, Non-Hispanic	L0502	9460	30.6		53.7	0.00	0	0	0	10	43	84	121	249	1508
		Black, Non-Hispanic	1229	1080	32.5		50.4	0.00	0	0	0	5	43	88	123	264	1308
		Hispanic	1283	1280	31.2	•	46.8	0.00	0	0	0	0	39	79	124	306	2339
		Asian	211	171	40.4		55.3	0.00	0	0	0	14	46	88	143	445	1191
		American Indian	103	95	41.6		47.6	0.00	0	0	0	0	47	121	204	443	449
		Unknown	261	252	29.5		45.2	0.00	0	0	0	0	39	67	103	246	1213
FL	Child	White, Non-Hispanic	2455	2427	13.3		40.3	0.00	0	0	0	0	18	42	57	107	501
		Black, Non-Hispanic	613	610	16.0		38.6	0.00	0	0	0	0	24	47	70	159	810
		Hispanic	390	440	13.1		39.6	0.00	0	0	0	0	18	41	56	150	280
		Asian	49	45	7.4		29.9	0.00	0	0	0	0	10	34	44		47
		American Indian	19	19	31.9		67.3	0.00	0	0	0	24	62	76			85
		Unknown	66	73	8.4		34.1	0.00	0	0	0	0	20	31	39		46

Table E-54. Consumption, per capita, by state, adult/child and race-ethnicity (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

	Adult		Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Рор	Рор	Рор	Рор	Pop	Рор	Pop	Pop	
State	Child	Race Ethnicity	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
٩N	Adult	White, Non-Hispanic	604	3298	18.7	•	96.3	0.00	1	2	7	13	23	41	58	100	167
		Black, Non-Hispanic	1	1	0.0		•										
		Hispanic	3	50	45.0		100	15.9			16	17	81				103
		Asian	4	35	9.7		100	4.87	8	8	9	10					10
		American Indian	10	57	152.3		100	5.41		б	10	18	274				489
		Unknown	28	173	23.1	•	100	2.33	8	8	10	14	24	59	66	•	78
N	Child	White, Non-Hispanic	169	1113	9.4		91.6	0.00	0	1	2	6	13	20	32	51	109
		Asian	3	59	9.9		100	9.90									10
		American Indian	2	22	4.0		100	4.01									4
		Unknown	11	31	17.8	-	100	2.33	3	9	15	18	18	21	35	•	42
N	Unknown	White, Non-Hispanic	6	62	0.0		1.5	0.00	0	0	0	0	0	0	0	1	1
D	Adult	White, Non-Hispanic	389	430	20.5		95.6	0.00	1	2	б	12	23	46	83	127	240
		Black, Non-Hispanic	2	2	15.7		100	15.1			15	16					16
		Asian	4	3	12.9		100	3.14			3	13	23				23
		American Indian	8	8	28.4		100	12.7		13	21	24	25	61			65
		Unknown	27	30	15.8	•	92.4	0.00	0	3	5	8	27	40	50	•	53
D	Child	White, Non-Hispanic	155	147	14.9		93.5	0.00	0	1	3	9	16	33	59		97
		American Indian	5	5	13.5		100	0.58			7	16	21				22
		Unknown	5	5	19.0	•	100	3.98	•	•	9	27	28	•		•	28
D	Unknown	White, Non-Hispanic	7	7	24.0		75.2	0.00	0	0	5	18	38				60

Table E-54. Consumption, per capita, by state, adult/child and race-ethnicity (as-consumed g/day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

tate	Adult Child	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99) Max
СТ	Adult	White, Non-Hispanic	278	2060	35.2	21.2	100	0.26	2	6	12	23	45		95	168	
		Black, Non-Hispanic	3	22	13.0	12.5	100	8.24	•	•	10	14	16	-	•	•	16
		Hispanic	11	85	56.9	32.7	100	7.56	•	8	10	27	98	130	177	•	186
		Asian	9	61	59.6	23.3	100	3.27	•	4	10	23	28	175	•	•	349
		Unknown	1	9	1.0	1.0	100	0.99	•	•	•	•	•	•	•	-	1
СТ	Child	White, Non-Hispanic	51	477	14.7	9.8	100	0.63	2	3	б	10	18	30	51	64	66
		Black, Non-Hispanic			•	•	100								•		
		Hispanic	4	41	10.4	8.3	100	3.11			5	9	16		•		18
		Asian	3	24	14.9	14.2	100	10.0			11	14	18		•		21
		Unknown	•	•	•	•	100	•	•	•	•	•	•	•	•		•
СТ	Unknown	White, Non-Hispanic	9	75	9.0	3.1	100	0.31	0	1	1	3	11	30			32
FL	Adult	White, Non-Hispanic	5620	5076	57.1	36.9	100	0.17	8	12	22	39	65	116	165	318	1508
		Black, Non-Hispanic	625	545	64.6	42.5	100	0.34	12	17	22	43	73	123	174	354	1308
		Hispanic	605	599	66.8	38.9	100	1.60	8	11	22	43	70	130	173	507	2339
		Asian	114	95	73.0	43.8	100	5.41	12	15	23	43	69	137	216	728	1191
		American Indian	51	45	87.4	49.3	100	5.41	б	14	21	47	99	215	352		449
		Unknown	116	114	65.2	39.9	100	2.40	10	17	22	43	65	107	168	608	1213
7L	Child	White, Non-Hispanic	987	978	32.9	24.1	100	1.01	5	9	18	23	42	67	89	164	501
		Black, Non-Hispanic	242	236	41.3	31.6	100	1.62	9	17	22	34	47	72	105	174	810
		Hispanic	157	174	33.1	23.2	100	3.09	6	8	12	23	41	63	74	185	280
		Asian	14	13	24.6	20.4	100	5.92	б	9	13	19	40	46	47		47
		American Indian	12	13	47.4	37.1	100	3.25	5	16	24	45	66	83			85
		Unknown	23	25	24.7	21.1	100	4.06	5	6	20	23	34	43	45		46

Table E-55. Consumption, consumers only, by state, adult/child, and race-ethnicity (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-55. Consumption, consumers only, by state, adult/child, and race-ethnicity (as-con	sumed g/day)
(continued)	

	Adult		Gamma	WtdNC/	Arith	Geem	Percent Eating										
tate	Child	Race Ethnicity	Samp NC	1000	Mean	Geom Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Adult	White, Non-Hispanic	578	3177	19.4	12.2	100	0.58	2	4	7	13	23	42	59	100	167
	maare	Black, Non-Hispanic					100		-							100	107
		Hispanic	3	50	45.0	30.0	100	15.9			16	17	59				103
		Asian	4	35	9.7	9.7	100	4.87	8	8	- 0	10					10
		American Indian	10	57	152.3	34.6	100	5.41		6	10	18	91				489
		Unknown	28	173	23.1	17.4	100	2.33	8	8	10	14	24	58	65		78
MN	Child	White, Non-Hispanic	156	1019	10.3	6.0	100	0.58	1	1	2	8	14	20	33	52	109
		Asian	3	59	9.9	9.9	100	9.90									10
		American Indian	2	22	4.0	4.0	100	4.01									4
		Unknown	11	31	17.8	15.7	100	2.33	3	9	15	18	18	20	35		42
MIN	Unknown	White, Non-Hispanic	1	1	1.0	1.0	100	1.05									1
ND	Adult	White, Non-Hispanic	371	411	21.4	12.5	100	0.58	2	3	7	12	25	47	84	127	240
		Black, Non-Hispanic	2	2	15.7	15.7	100	15.1			15	16					16
		Asian	4	3	12.9	8.4	100	3.14			3	8	23				23
		American Indian	8	8	28.4	24.9	100	12.7		13	20	24	25	56			65
		Unknown	25	28	17.1	11.2	100	3.11	4	4	5	8	28	41	49	•	53
ND	Child	White, Non-Hispanic	145	138	16.0	8.9	100	0.58	2	2	4	9	19	34	59		97
		American Indian	5	5	13.5	7.3	100	0.58			4	16	21				22
		Unknown	5	5	19.0	13.6	100	3.98	•	•	7	27	28		•		28
ND	Unknown	White, Non-Hispanic	5	6	31.9	24.8	100	8.91			14	23	45				60

FL consumption excludes away-from-home consumption by children < 18.

State	Gender	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
ĊΤ	Male	205	1617	27.4		85.1	0.00	0	0	б	17	35	70	92	158	311
	Female	226	1771	25.6	•	83.4	0.00	0	0	3	14	33	58	74	185	494
	All	431	3388	26.5	•	84.2	0.00	0	0	5	15	33	66	85	169	494
Ľ	Male	8262	7662	29.1		49.1	0.00	0	0	0	0	39	76	119	250	2339
	Female	8110	7517	26.3		51.5	0.00	0	0	0	5	36	69	102	208	1358
	Unknown	809	774	14.7		36.1	0.00	0	0	0	0	19	45	69	177	284
	All	17181	15952	27.1	•	49.6	0.00	0	0	0	0	36	71	108	228	2339
ÍN	Male	422	2497	16.3		95.3	0.00	0	1	5	11	20	34	53	97	167
	Female	419	2403	19.8		93.4	0.00	0	1	4	12	20	40	60	134	489
	All	841	4900	18.1	•	94.4	0.00	0	1	5	11	20	39	54	103	489
ND	Male	288	306	20.2		96.3	0.00	1	3	б	13	25	46	71	120	130
	Female	314	332	17.9		93.5	0.00	0	2	4	10	20	43	61	127	240
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

 Table E-56.
 Consumption, per capita, by state and gender (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

		Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Gender	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Male	177	1377	32.2	19.2	100	0.63	2	5	11	20	40	72	109	160	311
	Female	192	1478	30.6	16.0	100	0.26	1	3	8	19	39	65	86	227	494
	All	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	Male	4066	3758	59.4	37.6	100	0.34	8	12	22	40	65	120	173	359	2339
	Female	4206	3874	51.0	33.2	100	0.17	7	11	20	34	61	100	144	279	1358
	Unknown	294	279	40.8	29.5	100	3.25	10	16	18	24	46	84	140	211	284
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	Male	403	2379	17.2	10.5	100	0.58	1	2	7	12	20	37	54	97	167
	Female	393	2244	21.3	11.0	100	0.58	1	2	6	12	21	41	61	137	489
	All	796	4623	19.1	10.7	100	0.58	1	2	6	12	20	39	56	105	489
ND	Male	277	295	21.0	12.8	100	0.87	2	3	7	14	25	48	78	119	130
	Female	293	311	19.1	10.6	100	0.58	2	3	б	11	22	45	63	133	240
	All	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

 Table E-57. Consumption, consumers only, by state and gender (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Adult	Male	156	1158	34.2		90.4	0.00	0	2	11	22	44	75	110	161	311
		Female	181	1344	30.9		88.6	0.00	0	0	6	20	40	66	93	278	494
СТ	Child	Male	43	403	11.0		71.1	0.00	0	0	0	6	15	26	51	66	66
		Female	40	384	8.8	•	66.6	0.00	0	0	0	б	14	21	30	•	51
СТ	Unknown	Male	б	55	6.3		78.7	0.00	0	0	0	1	4	28		-	32
		Female	5	44	7.6	•	72.9	0.00	0	0	0	2	12	•	•		29
FL	Adult	Male	6589	5975	33.5		51.8	0.00	0	0	0	7	43	87	133	290	2339
		Female	6507	5908	29.7	•	54.4	0.00	0	0	0	10	42	79	109	221	1358
		Unknown	493	456	16.8	•	36.3	0.00	0	0	0	0	22	48	77	178	284
FL	Child	Male	1673	1687	13.7		39.3	0.00	0	0	0	0	22	45	63	113	239
		Female	1603	1609	13.9	•	41.2	0.00	0	0	0	0	21	42	61	111	810
		Unknown	316	317	11.7	•	35.7	0.00	0	0	0	0	19	27	49	131	200
MN	Adult	Male	319	1787	19.3		97.7	0.00	1	3	8	13	24	47	59	98	167
		Female	331	1827	23.2	•	95.6	0.00	1	2	6	13	22	46	72	225	489
MN	Child	Male	98	669	9.6		94.6	0.00	0	1	2	7	13	20	34	57	109
		Female	87	556	9.5	•	89.6	0.00	0	0	2	7	14	20	25	41	109
MN	Unknown	Male	5	42	0.0		2.2	0.00	0	0	0	0	0	0	0		1
		Female	1	20	0.0	•	•	•	•	•	•	•	•	•	•		•
ND	Adult	Male	200	222	20.6		96.5	0.00	1	3	7	14	25	43	84	126	130
		Female	230	253	19.9	•	94.6	0.00	0	2	6	11	23	46	66	165	240
ND	Child	Male	83	79	19.0		97.9	0.00	1	3	5	11	24	55	67		97
		Female	82	78	11.0	•	89.9	0.00	0	0	2	6	12	26	33	96	97
ND	Unknown	Male	5	5	21.4		64.5	0.00	0	0	0	19	31				60
		Female	2	2	30.0		100	8.91				30	55		•	•	60

Table E-58. Consumption, per capita, by state, adult/child and gender (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Adult	Male	141	1047	37.8	25.0	100	1.72	б	9	14	23	46	81	114	170	311
		Female	161	1190	34.9	18.5	100	0.26	1	4	9	23	45	67	96	298	494
СТ	Child	Male	31	286	15.5	9.9	100	0.63	2	3	5	10	19	35	53		66
		Female	27	256	13.1	9.7	100	1.34	3	3	б	10	17	26	34	•	51
СТ	Unknown	Male	5	44	8.0	2.6	100	0.68			1	2	б				32
		Female	4	32	10.4	4.0	100	0.31	•	0	1	4	14	•	•	•	29
FL	Adult	Male	3405	3096	64.7	40.7	100	0.34	9	14	22	43	71	130	187	398	2339
		Female	3545	3212	54.6	35.5	100	0.17	7	11	22	37	65	108	152	305	1358
		Unknown	181	166	46.2	32.6	100	4.27	10	16	19	24	53	107	165	255	284
FL	Child	Male	661	663	34.9	26.1	100	1.22	б	9	18	24	45	68	94	160	239
		Female	661	662	33.7	24.1	100	1.01	5	8	17	23	41	67	85	175	810
		Unknown	113	113	32.9	25.5	100	3.25	10	17	18	22	33	68	85	187	200
MN	Adult	Male	310	1746	19.7	13.1	100	0.58	2	4	9	13	24	47	59	98	167
		Female	313	1746	24.3	12.5	100	0.58	1	3	7	13	23	47	76	186	489
MN	Child	Male	92	633	10.1	5.7	100	0.58	1	1	2	8	13	20	35	55	109
		Female	80	498	10.6	7.0	100	0.58	1	2	4	10	14	20	26	41	109
MN	Unknown	Male	1	1	1.0	1.0	100	1.05	•							•	1
		Female	•	•	•	•	100	•	•	•	•	•	•	•	•	•	•
ND	Adult	Male	193	214	21.4	13.2	100	1.05	2	3	7	14	26	44	84	126	130
		Female	217	239	21.0	12.0	100	0.58	2	3	6	12	23	49	70	169	240
ND	Child	Male	81	77	19.4	11.4	100	0.87	2	3	6	11	24	55	67	•	97
		Female	74	70	12.2	6.9	100	0.58	1	2	3	9	13	27	37	96	97
ND	Unknown	Male	3	3	33.2	29.1	100	18.8			19	24	43				60
		Female	2	2	30.0	19.6	100	8.91	•			19	49				60

Table E-59. Consumption, consumers only, by state, adult/child and gender (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Respondent	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
tate	Education	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	0-11 years	13	97	25.2		100	1.59	2	4	8	14	28	82	95		96
	High School	89	682	23.8	-	85.6	0.00	0	0	3	14	39	66	74	104	122
	Some College	66	504	34.5	-	89.3	0.00	0	0	9	22	39	67	125	285	311
	College grad	263	2105	25.5		81.9	0.00	0	0	3	14	29	58	87	171	494
FL	0-11 years	1744	1523	23.8		40.7	0.00	0	0	0	0	25	65	101	212	1213
	High School	5677	5118	26.3	-	47.3	0.00	0	0	0	0	34	68	107	240	2339
	Some College	5261	4948	28.2	-	51.5	0.00	0	0	0	5	36	71	108	218	1484
	College grad	4367	4240	28.0	-	53.6	0.00	0	0	0	9	41	73	108	218	1308
	Unknown	132	123	26.4		39.4	0.00	0	0	0	0	35	88	150	191	238
MN	0-11 years	46	214	24.0		86.2	0.00	0	0	7	13	21	85	111		119
	High School	236	1332	16.9	-	92.9	0.00	0	1	6	11	20	34	59	101	140
	Some College	260	1330	22.8		95.3	0.00	1	1	5	11	22	46	55	305	489
	College grad	256	1808	15.0	•	95.0	0.00	0	1	4	11	18	32	50	94	107
	Unknown	43	215	16.5	•	99.7	0.00	2	7	9	14	19	32	37	42	45
ND	0-11 years	31	35	13.9		87.6	0.00	0	0	5	7	13	36	55		83
	High School	143	144	23.0		97.4	0.00	2	2	7	13	26	60	90	130	177
	Some College	195	212	17.2		93.9	0.00	0	2	4	11	24	41	59	88	121
	College grad	196	206	18.7		96.8	0.00	1	2	5	11	19	48	87	115	176
	Unknown	37	42	19.6		87.2	0.00	0	0	4	8	27	37	53	•	240

 Table E-60.
 Consumption, per capita, by state and education (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Respondent Education	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	0-11 years	13	97	25.2	13.9	100	1.59	2	4	8	14	28	81	95	•	96
	High School	78	584	27.8	15.4	100	0.63	2	2	7	18	44	67	74	103	122
	Some College	60	450	38.6	23.3	100	0.66	б	7	12	23	45	70	133	283	311
	College grad	218	1723	31.1	17.1	100	0.26	2	4	9	19	36	67	96	187	494
FL	0-11 years	716	620	58.4	37.7	100	1.23	11	16	22	40	65	113	173	314	1213
	High School	2683	2419	55.6	35.2	100	0.82	7	11	22	36	64	109	168	364	2339
	Some College	2739	2550	54.8	34.3	100	0.69	6	12	19	35	64	108	152	349	1484
	College grad	2376	2274	52.2	34.8	100	0.17	7	11	22	37	65	108	148	290	130
	Unknown	52	48	67.1	50.7	100	13.2	17	19	31	47	88	161	175	234	23
MN	0-11 years	41	185	27.8	16.2	100	0.58	3	6	10	13	26	95	111		119
	High School	220	1237	18.2	11.6	100	1.02	2	4	7	12	20	37	60	103	14
	Some College	250	1268	23.9	11.1	100	0.58	1	2	5	11	23	47	55	263	489
	College grad	243	1719	15.7	9.2	100	0.58	1	2	5	12	18	32	50	92	10
	Unknown	42	215	16.6	13.5	100	1.05	2	8	9	15	19	32	36	42	4
ND	0-11 years	27	31	15.9	10.8	100	2.23	4	5	6	8	19	37	52		83
	High School	139	141	23.6	13.6	100	0.58	2	3	7	14	27	60	91	130	17
	Some College	183	199	18.3	11.2	100	0.58	2	3	6	12	25	41	59	89	12
	College grad	189	199	19.4	11.0	100	0.58	2	3	6	12	20	49	87	114	17
	Unknown	32	36	22.5	11.7	100	2.62	3	3	5	9	28	39	56		24

 Table E-61. Consumption, consumers only, by state and education (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Мах
CT	Child 1- 5	28	274	4.2		47.6	0.00	0	0	0	0	7	13	19		25
	Child 6-10	28	259	11.6		80.0	0.00	0	0	2	8	19	26	35		50
	Child 11-15	22	201	14.1		86.1	0.00	0	0	3	10	17	35	58	•	66
	Female 16-29	17	141	35.9	•	79.9	0.00	0	0	5	18	37	61	200		349
	Female 30-49	88	656	31.5		87.1	0.00	0	0	6	18	39	66	84	376	494
	Female 50+	79	579	28.6		90.9	0.00	0	1	6	21	43	64	94	151	172
	Male 16-29	14	119	11.9		70.5	0.00	0	0	0	11	20	28	30		31
	Male 30-49	81	600	41.5		92.9	0.00	0	2	14	24	56	101	127	265	31
	Male 50+	63	461	29.1		90.5	0.00	0	2	10	20	38	69	84	157	161
	Unknown	11	99	6.9		76.1	0.00	0	0	0	1	6	30	31	•	32
FL	Child 1-5	1107	1138	10.9		37.6	0.00	0	0	0	0	18	40	47	78	232
	Child 6-10	943	962	12.0		39.3	0.00	0	0	0	0	19	41	54	87	170
	Child 11-15	865	849	17.4		42.8	0.00	0	0	0	0	23	47	70	147	503
	Female 16-29	1636	1518	26.6		48.7	0.00	0	0	0	0	32	65	108	250	1193
	Female 30-49	2546	2296	34.4	-	56.3	0.00	0	0	0	12	43	87	125	262	1358
	Female 50+	2367	2142	26.3		55.7	0.00	0	0	0	12	40	74	100	173	36
	Male 16-29	1702	1567	33.5		45.9	0.00	0	0	0	0	36	87	130	337	233
	Male 30-49	2673	2411	35.0		52.9	0.00	0	0	0	9	43	93	147	298	1484
	Male 50+	2347	2127	30.9		54.4	0.00	0	0	0	12	43	83	118	254	150
	Unknown	995	941	16.4		39.2	0.00	0	0	0	0	22	47	71	177	30

Table E-62. Consumption, per capita, by state and age-gender category (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

		<i></i>		Pop	Pop	Percent	-	-	-	-	-	-	-	-	-	
~	Age-Gender	Samp	PopN/	Arith	Geom	Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
State	Category	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	47	437	8.0		97.4	0.00	0	1	2	6	11	17	20	61	109
	Child 6-10	47	299	9.5		88.4	0.00	0	0	1	6	12	20	42	67	109
	Child 11-15	68	337	12.0		92.8	0.00	0	1	3	13	16	28	39	45	68
	Female 16-29	47	331	36.9		96.0	0.00	1	1	4	9	17	37	241		489
	Female 30-49	133	723	15.5		95.0	0.00	0	1	б	14	20	32	39	61	107
	Female 50+	162	854	23.3		94.9	0.00	0	2	7	13	25	55	86	132	140
	Male 16-29	55	275	8.3		92.3	0.00	0	1	2	5	11	18	29	38	59
	Male 30-49	120	731	20.3		96.0	0.00	2	4	9	14	26	34	59	104	167
	Male 50+	156	852	20.8		99.8	0.00	3	4	9	14	24	50	59	94	108
	Unknown	б	62	0.0	•	1.5	0.00	0	0	0	0	0	0	0	1	1
ND	Child 1-5	31	30	10.9		91.5	0.00	0	0	1	3	7	28	86		97
	Child 6-10	46	44	14.8		92.4	0.00	0	2	4	9	18	27	62		97
	Child 11-15	58	54	19.7		97.2	0.00	2	3	6	12	25	54	66		97
	Female 16-29	45	47	10.4		85.6	0.00	0	0	3	6	14	21	33		65
	Female 30-49	99	105	17.8		98.4	0.00	2	3	6	12	23	41	59	99	177
	Female 50+	102	116	24.2		93.6	0.00	0	2	6	12	24	63	91	196	240
	Male 16-29	37	39	16.4		100	1.16	2	3	6	10	17	34	51		130
	Male 30-49	92	99	18.3		97.8	0.00	2	3	7	15	23	35	60	85	87
	Male 50+	85	97	23.6		94.3	0.00	0	2	6	15	28	53	93	127	127
	Unknown	7	7	24.0		75.2	0.00	0	0	5	18	38				60

Table E-62. Consumption, per capita, by state and age-gender category (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Child 1-5	14	131	8.9	6.6	100	0.63	1	3	5	8	12	20	23		25
	Child 6-10	22	207	14.5	10.4	100	1.34	2	4	б	10	22	28	38		50
	Child 11-15	19	173	16.3	10.8	100	1.96	2	3	б	13	17	39	58		66
	Female 16-29	14	113	44.9	24.8	100	3.27	4	7	16	22	48	66	164		349
	Female 30-49	77	571	36.2	17.9	100	0.26	1	3	9	23	45	66	91	342	494
	Female 50+	72	526	31.5	18.3	100	0.66	1	5	10	23	45	71	95	148	172
	Male 16-29	10	84	16.9	14.9	100	6.35	6	7	11	16	24	29	31		31
	Male 30-49	75	557	44.6	28.4	100	1.72	5	10	15	27	63	109	130	247	311
	Male 50+	57	417	32.2	22.8	100	1.82	7	9	13	22	43	70	85	158	161
	Unknown	9	75	9.0	3.1	100	0.31	0	1	1	3	11	30			32
FL	Child 1-5	421	428	29.0	22.0	100	1.22	4	8	18	23	40	53	69	107	232
	Child 6-10	376	378	30.5	23.2	100	1.01	6	8	17	23	41	63	72	114	170
	Child 11-15	365	364	40.6	29.5	100	1.62	7	11	18	32	47	75	104	182	501
	Female 16-29	791	739	54.6	33.0	100	1.71	6	10	18	33	62	108	157	318	1191
	Female 30-49	1446	1292	61.2	38.5	100	1.54	8	12	22	43	69	113	168	406	1358
	Female 50+	1315	1192	47.2	33.7	100	0.17	7	12	22	35	63	95	136	207	366
	Male 16-29	785	719	73.0	40.3	100	0.35	8	12	22	41	71	138	204	703	2339
	Male 30-49	1406	1275	66.2	42.5	100	1.15	9	14	22	43	78	143	195	348	1484
	Male 50+	1272	1156	56.9	38.3	100	0.34	9	13	22	43	65	113	158	345	1508
	Unknown	389	369	41.8	30.2	100	1.50	9	16	19	24	47	85	134	211	304

Table E-63. Consumption, consumers only, by state and age-gender category (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating										
tate	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	46	425	8.2	5.1	100	0.58	1	1	2	6	12	17	20	41	109
	Child 6-10	43	265	10.8	5.7	100	0.58	1	1	2	9	13	22	44	70	109
	Child 11-15	63	313	12.9	8.3	100	1.02	1	2	4	13	16	31	39	45	68
	Female 16-29	44	318	38.4	10.1	100	1.05	1	2	5	10	17	41	163		489
	Female 30-49	128	686	16.3	11.7	100	0.58	1	4	8	14	21	32	40	61	107
	Female 50+	150	810	24.5	14.2	100	0.58	2	4	8	13	27	59	87	130	140
	Male 16-29	52	254	9.0	5.4	100	1.05	1	1	2	5	11	19	30	38	59
	Male 30-49	115	702	21.2	15.0	100	1.16	3	7	10	15	27	35	61	102	167
	Male 50+	154	851	20.9	14.2	100	0.58	4	4	9	14	24	50	59	92	108
	Unknown	1	1	1.0	1.0	100	1.05	•	•	•	•	•	•	•	•	1
ND	Child 1-5	28	28	11.9	4.2	100	0.58	1	1	2	3	9	30	92		97
	Child 6-10	43	41	16.0	9.9	100	1.40	2	3	4	9	22	28	63		97
	Child 11-15	56	53	20.3	12.6	100	1.02	2	3	б	12	26	55	64		97
	Female 16-29	39	40	12.1	7.9	100	1.16	2	2	4	8	14	22	37		65
	Female 30-49	97	103	18.1	11.6	100	1.57	2	3	7	12	24	41	59	80	177
	Female 50+	95	108	25.9	13.7	100	0.58	2	3	7	12	25	70	92	192	240
	Male 16-29	37	39	16.4	9.8	100	1.16	2	3	6	10	17	34	48		130
	Male 30-49	90	97	18.8	13.3	100	1.05	3	4	8	15	24	36	60	85	87
	Male 50+	80	91	25.0	14.3	100	1.05	2	3	7	15	30	57	94	126	127
	Unknown	5	6	31.9	24.8	100	8.91			14	23	45				60

Table E-63. Consumption, consumers only, by state and age-gender category (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Child 1-14	77	726	9.6	•	69.2	0.00	0	0	0	6	14	24	31	61	66
	Female 15-44	91	689	34.5		89.1	0.00	0	0	7	20	40	66	80	425	494
	Female 45+	94	694	26.7		87.0	0.00	0	0	5	18	41	63	95	142	172
	Male 15-44	14	119	11.9		70.5	0.00	0	0	0	11	20	28	30	•	31
	Male 45+	144	1061	36.1		91.9	0.00	0	2	12	22	45	80	113	176	311
	Unknown	11	99	6.9	•	76.1	0.00	0	0	0	1	6	30	31	•	32
FL	Child 1-14	2751	2787	13.0		39.9	0.00	0	0	0	0	19	43	54	102	501
	Female 15-44	3799	3486	30.5		52.3	0.00	0	0	0	7	41	81	114	250	1358
	Female 45+	2833	2553	27.8		55.9	0.00	0	0	0	12	43	76	104	195	606
	Male 15-44	1783	1646	32.5	•	45.4	0.00	0	0	0	0	35	83	130	325	2339
	Male 45+	5020	4539	33.1		53.6	0.00	0	0	0	11	43	87	132	260	1508
	Unknown	995	941	16.4		39.2	0.00	0	0	0	0	22	47	71	177	304
MN	Child 1-14	146	1017	9.6		93.3	0.00	0	1	2	7	13	20	33	53	109
	Female 15-44	147	968	22.5	-	94.9	0.00	0	1	5	12	19	32	41	429	489
	Female 45+	203	978	22.4		95.4	0.00	1	2	7	13	24	53	82	129	140
	Male 15-44	63	292	8.6		92.4	0.00	0	1	2	5	12	18	29	40	59
	Male 45+	276	1583	20.6		98.1	0.00	2	4	9	14	25	48	59	99	167
	Unknown	6	62	0.0	•	1.5	0.00	0	0	0	0	0	0	0	1	1
ND	Child 1-14	121	116	15.6		93.5	0.00	0	1	3	9	21	34	59		97
	Female 15-44	124	129	15.5	•	93.5	0.00	0	2	4	10	20	30	59	87	17
	Female 45+	128	144	22.3		94.9	0.00	0	2	б	11	24	53	87	176	240
	Male 15-44	45	47	17.8		100	1.16	2	3	б	11	18	34	66	129	13
	Male 45+	177	196	20.9		96.1	0.00	1	3	7	15	25	43	84	121	12
	Unknown	7	7	24.0		75.2	0.00	0	0	5	18	38				6

Table E-64. Consumption, per capita, by state and age-gender category (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating										
tate	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-14	54	503	13.9	9.6	100	0.63	2	3	б	10	17	27	44	63	66
	Female 15-44	82	614	38.7	19.7	100	0.26	2	3	11	23	46	66	87	419	494
	Female 45+	82	604	30.7	17.2	100	0.34	1	4	8	22	45	70	96	142	172
	Male 15-44	10	84	16.9	14.9	100	6.35	б	7	11	16	24	29	31		31
	Male 45+	132	974	39.3	25.9	100	1.72	7	9	14	24	47	83	119	178	311
	Unknown	9	75	9.0	3.1	100	0.31	0	1	1	3	11	30		•	32
FL	Child 1-14	1102	1113	32.6	24.2	100	1.01	5	8	18	23	43	64	75	134	501
	Female 15-44	1996	1825	58.2	36.0	100	1.54	7	11	22	38	65	111	164	364	1358
	Female 45+	1588	1428	49.6	34.6	100	0.17	8	12	22	36	65	96	141	236	606
	Male 15-44	813	747	71.6	39.7	100	0.35	8	12	22	40	71	136	199	669	2339
	Male 45+	2678	2431	61.7	40.5	100	0.34	9	14	22	43	71	130	182	348	1508
	Unknown	389	369	41.8	30.2	100	1.50	9	16	19	24	47	85	134	211	304
MN	Child 1-14	138	948	10.2	6.0	100	0.58	1	1	2	9	13	20	33	53	109
	Female 15-44	140	920	23.7	10.8	100	0.58	1	2	б	13	19	32	41	400	489
	Female 45+	189	932	23.5	13.9	100	0.58	2	4	8	14	26	54	83	127	140
	Male 15-44	59	270	9.4	5.7	100	1.05	1	1	2	б	12	19	30	41	59
	Male 45+	269	1552	21.0	14.6	100	0.58	3	5	9	14	26	48	59	98	167
	Unknown	1	1	1.0	1.0	100	1.05	•		•		•		•		1
ND	Child 1-14	113	108	16.7	8.8	100	0.58	1	2	4	9	23	37	62		97
	Female 15-44	116	121	16.5	10.5	100	1.16	2	3	5	11	20	36	60	78	177
	Female 45+	121	137	23.5	12.7	100	0.58	2	3	6	12	25	54	88	179	240
	Male 15-44	45	47	17.8	10.4	100	1.16	2	3	6	11	18	34	63	127	130
	Male 45+	170	188	21.8	13.8	100	1.05	3	3	7	15	26	45	85	121	127
	Unknown	5	6	31.9	24.8	100	8.91			14	23	45		•		60

 Table E-65. Consumption, consumers only, by state and age-gender category (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Bought or Caught Acquisition Method	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Bought	431	3388	25.8		84.0	0.00	0	0	5	14	33	59	83	168	494
	Caught	431	3388	0.7	-	16.8	0.00	0	0	0	0	0	1	2	14	37
	All	431	3388	26.5	•	84.2	0.00	0	0	5	15	33	66	85	169	494
FL	Bought	17181	15952	23.4		46.5	0.00	0	0	0	0	30	65	95	210	2317
	Caught	17181	15952	3.7		7.3	0.00	0	0	0	0	0	0	22	87	1315
	All	17181	15952	27.1		49.6	0.00	0	0	0	0	36	71	108	228	2339
MN	Bought	841	4900	11.7		89.8	0.00	0	0	2	7	13	29	45	87	136
	Caught	841	4900	6.4		60.6	0.00	0	0	0	1	6	14	19	70	396
	All	841	4900	18.1		94.4	0.00	0	1	5	11	20	39	54	103	489
ND	Bought	602	639	12.9		89.3	0.00	0	0	3	б	14	30	53	95	173
	Caught	602	639	6.1		68.7	0.00	0	0	0	2	7	15	27	46	127
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

Table E-66. Consumption, per capita, by state and acquisition method (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught					Percent										
	Acquisition	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Bought	368	2845	30.7	17.1	100	0.26	2	4	9	19	39	66	92	178	494
	Caught	75	568	3.9	1.4	100	0.04	0	0	0	1	4	13	14	33	37
	All	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	Bought	7966	7419	50.3	32.9	100	0.17	7	11	18	34	57	100	142	278	2317
	Caught	1402	1160	51.1	31.8	100	1.03	б	10	22	32	53	108	147	273	1315
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	Bought	758	4402	13.0	7.4	100	0.44	1	2	4	8	14	30	47	89	136
	Caught	594	2968	10.5	4.7	100	0.58	1	1	2	4	10	18	28	90	396
	All	796	4623	19.1	10.7	100	0.58	1	2	б	12	20	39	56	105	489
ND	Bought	537	570	14.4	7.5	100	0.44	1	2	3	7	16	35	58	103	173
	Caught	409	439	8.9	4.7	100	0.58	1	1	2	4	10	23	32	53	127
	All	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

Table E-67. Consumption, consumers only, by state and acquisition method (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

tate	Bought or Caught Acquisition Method	Household Income	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Рор Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Bought	\$ 0-200	00 41	312	22.9		86.8	0.00	0	0	6	15	27	53	82	172	172
01	Dougine	\$20000-500		1179	31.0		84.6	0.00	0	0	4	16	35	66	122	341	494
		\$50000-	219	1778	23.1		83.8	0.00	0	0	4	13	32	57	73	116	143
		Unknown	16	119	22.5		73.4	0.00	0	0	0	22	37	40	65		83
СТ	Caught	\$ 0-200	00 41	312	0.6		13.6	0.00	0	0	0	0	0	1	7		11
		\$20000-500	00 155	1179	1.0	•	17.5	0.00	0	0	0	0	0	1	4	28	37
		\$50000-	219	1778	0.5		17.6	0.00	0	0	0	0	0	1	2	14	16
		Unknown	16	119	0.1		6.2	0.00	0	0	0	0	0	0	1	•	1
FL	Bought	\$ 0-200	00 3746	3408	22.5		41.7	0.00	0	0	0	0	24	62	95	204	2317
		\$20000-500	00 7353	6814	23.8	•	46.8	0.00	0	0	0	0	31	65	95	211	1508
		\$50000-	3417	3250	26.6	•	53.5	0.00	0	0	0	8	36	71	104	226	1308
		Unknown	2665	2480	19.2	•	43.1	0.00	0	0	0	0	24	58	87	173	450
FL	Caught	\$ 0-200	00 3746	3408	3.5		6.6	0.00	0	0	0	0	0	0	21	85	1119
		\$20000-500	00 7353	6814	4.3		7.8	0.00	0	0	0	0	0	0	23	98	1315
		\$50000-	3417	3250	4.0	•	8.2	0.00	0	0	0	0	0	0	23	87	1126
		Unknown	2665	2480	2.1		5.4	0.00	0	0	0	0	0	0	9	47	639

Table E-68. Consumption, per capita, by state acquisition method, and income (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught				Pop	Pop	Percent										
	Acquisition	Household	Samp	PopN/	Arith	Geom	Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
State	Method	Income	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$ 0-20000	89	373	18.2		90.8	0.00	0	1	б	10	17	41	77		136
		\$20000-50000	328	1802	10.6		84.4	0.00	0	0	2	б	12	26	47	71	92
		\$50000-	327	2155	11.5		93.9	0.00	0	1	2	7	14	25	44	87	96
		Unknown	97	570	11.5	•	91.3	0.00	0	1	4	11	13	29	31	55	56
MN	Caught	\$ 0-20000	89	373	10.3		70.0	0.00	0	0	0	3	11	25	72		86
		\$20000-50000	328	1802	8.7		65.9	0.00	0	0	0	2	б	14	24	103	396
		\$50000-	327	2155	4.8		55.5	0.00	0	0	0	1	7	14	18	38	163
		Unknown	97	570	2.4	•	56.7	0.00	0	0	0	1	3	7	9	22	37
ND	Bought	\$ 0-20000	53	56	18.3		83.9	0.00	0	0	4	9	14	75	90	130	133
		\$20000-50000	252	268	13.0		89.6	0.00	0	0	2	б	14	30	59	98	173
		\$50000-	239	251	11.7		90.9	0.00	0	0	3	б	15	30	46	68	122
		Unknown	58	63	12.2	•	86.2	0.00	0	0	2	б	19	21	35	134	140
ND	Caught	\$ 0-20000	53	56	6.2		56.0	0.00	0	0	0	1	7	10	16	121	127
		\$20000-50000	252	268	4.6		59.6	0.00	0	0	0	1	5	12	18	60	88
		\$50000-	239	251	7.6		76.7	0.00	0	0	1	3	10	25	28	47	55
		Unknown	58	63	7.0		86.4	0.00	0	0	2	4	10	13	18	91	99

Table E-68. Consumption, per capita, by state acquisition method, and income (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught						Percent										
	Acquisition	Household	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$ 0-20000	36	270	26.4	16.2	100	0.66	2	б	9	16	27	57	86		172
		\$20000-50000	134	997	36.7	18.4	100	0.34	2	4	9	20	40	69	124	354	494
		\$50000-	186	1490	27.5	16.2	100	0.26	2	3	8	19	39	66	80	122	143
		Unknown	12	87	30.6	25.1	100	5.53	7	10	14	32	38	44	68		83
СТ	Caught	\$ 0-20000	5	42	4.7	2.1	100	0.40			1	4	9	11			11
		\$20000-50000	30	206	5.7	2.0	100	0.18	0	0	1	2	5	16	28		37
		\$50000-	39	312	2.7	1.1	100	0.04	0	0	0	1	2	10	14		16
		Unknown	1	7	0.9	0.9	100	0.90		•		•	•	•			1
FL	Bought	\$ 0-20000	1572	1422	53.8	33.6	100	0.69	7	11	19	35	60	108	160	300	2317
		\$20000-50000	3441	3191	50.9	33.3	100	0.34	8	12	18	34	58	99	135	281	1508
		\$50000-	1830	1737	49.8	32.8	100	0.17	б	11	18	34	57	100	138	314	1308
		Unknown	1123	1069	44.5	30.6	100	0.34	6	10	18	31	53	95	135	237	450
FL	Caught	\$ 0-20000	289	224	53.8	34.3	100	1.23	8	12	22	38	61	108	158	287	1119
		\$20000-50000	656	534	54.7	33.4	100	1.03	6	11	22	32	65	118	160	362	1315
		\$50000-	301	268	48.2	29.3	100	1.22	б	7	16	32	51	95	143	255	1126
		Unknown	156	134	38.6	27.0	100	1.60	8	9	21	24	43	65	93	202	639

Table E-69. Consumption, consumers only, by state, acquisition method, and income (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught							Percent										
	Acquisition Method	House		Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Eating Fish	Min	05	010	0.05	050	075	000	005	000	Max
tate	Method	TUGO	lle	INC	1000	Mean	Mean	FISH	MTU	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$	0-20000	78	338	20.0	11.6	100	0.44	2	3	7	10	18	45	83		136
		\$2000	0-50000	285	1521	12.6	7.2	100	0.44	1	2	4	7	13	31	50	73	92
		\$5000	0 - 0 -	312	2023	12.3	6.8	100	0.58	1	2	3	7	15	30	46	85	96
		Unkno	own	83	520	12.6	8.5	100	0.44	1	1	б	12	14	29	32	55	56
MN	Caught	\$	0-20000	56	261	14.7	6.1	100	0.58	1	1	2	4	15	47	77		86
		\$2000	0-50000	233	1189	13.1	4.7	100	0.58	1	1	2	4	9	17	28	212	396
		\$5000	0 - 0 -	235	1195	8.7	5.1	100	0.58	1	1	2	5	11	18	26	54	163
		Unkno	own	70	323	4.2	2.6	100	0.58	•	1	1	3	7	8	13	31	37
ND	Bought	\$	0-20000	45	47	21.8	11.8	100	1.75	3	3	6	10	18	78	93	130	133
		\$2000	0-50000	226	240	14.5	7.2	100	0.58	1	2	3	7	15	34	65	103	173
		\$5000	0 - 0 -	216	228	12.8	7.2	100	0.44	1	2	3	7	15	31	46	69	122
		Unkno	own	50	54	14.2	7.5	100	0.58	1	2	3	8	20	22	39	137	140
ND	Caught	\$	0-20000	29	32	11.1	5.5	100	0.58	1	1	3	6	10	15	38		127
		\$2000	0-50000	152	160	7.7	3.9	100	0.58	1	1	2	4	8	15	32	63	88
		\$5000	0 - 0 (179	193	9.8	5.4	100	0.58	1	1	3	5	14	27	34	48	55
		Unkno	own	49	55	8.1	4.9	100	0.58	1	2	2	5	10	14	18	92	99

Table E-69. Consumption, consumers only, by state, acquisition method, and income (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Maz
СТ	Freshwater	431	3388	0.9		36.3	0.00	0	0	0	0	1	2	4	11	32
	Estuarine	431	3388	7.3		75.3	0.00	0	0	0	2	7	16	26	77	265
	Marine	431	3388	18.2		84.0	0.00	0	0	2	11	23	45	56	140	282
	All	431	3388	26.5		84.2	0.00	0	0	5	15	33	66	85	169	494
FL	Freshwater	17181	15952	2.5		9.0	0.00	0	0	0	0	0	0	17	56	433
	Estuarine	17181	15952	6.2	-	26.0	0.00	0	0	0	0	3	21	34	82	119
	Marine	17181	15952	18.4		39.5	0.00	0	0	0	0	22	47	79	173	233
	All	17181	15952	27.1	•	49.6	0.00	0	0	0	0	36	71	108	228	2339
MN	Freshwater	841	4900	6.4		60.6	0.00	0	0	0	1	6	14	19	70	390
	Estuarine	841	4900	1.2	-	67.5	0.00	0	0	0	1	1	2	5	14	2
	Marine	841	4900	10.5	-	89.8	0.00	0	0	2	б	12	27	40	75	13
	All	841	4900	18.1		94.4	0.00	0	1	5	11	20	39	54	103	48
ND	Freshwater	602	639	6.1		68.7	0.00	0	0	0	2	7	15	27	46	12
	Estuarine	602	639	1.2		70.6	0.00	0	0	0	1	1	2	б	9	3
	Marine	602	639	11.7		89.3	0.00	0	0	2	5	13	25	47	95	17
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	24

Table E-70. Consumption, per capita, by state and habitat (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Freshwater	161	1230	2.5	1.1	100	0.03	0	0	0	1	3	5	7	28	32
	Estuarine	333	2550	9.7	3.5	100	0.01	0	1	1	4	9	21	36	94	265
	Marine	368	2846	21.7	11.7	100	0.06	1	2	7	13	27	49	61	154	282
	All	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	Freshwater	1609	1443	27.9	17.6	100	1.80	4	6	7	22	36	65	87	173	433
	Estuarine	4624	4145	24.0	14.9	100	0.04	4	5	8	15	27	48	68	146	1199
	Marine	6681	6303	46.4	29.4	100	0.04	6	9	18	28	48	87	130	260	2339
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	Freshwater	594	2968	10.5	4.7	100	0.58	1	1	2	4	10	18	28	90	396
	Estuarine	560	3309	1.8	1.0	100	0.22	0	0	1	1	2	4	б	16	24
	Marine	758	4402	11.7	6.6	100	0.29	1	2	3	7	13	29	46	77	136
	All	796	4623	19.1	10.7	100	0.58	1	2	6	12	20	39	56	105	489
ND	Freshwater	409	439	8.9	4.7	100	0.58	1	1	2	4	10	23	32	53	127
	Estuarine	422	451	1.6	0.9	100	0.22	0	0	0	1	2	5	6	12	32
	Marine	537	570	13.1	6.5	100	0.29	1	2	3	б	14	29	54	100	172
	All	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

 Table E-71. Consumption, consumers only, by state and habitat (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Finfish or Shellfish Type	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Рор Q99	Max
CT	Shellfish	431	3388	9.3		73.9	0.00	0	0	0	4	9	21	37	108	285
	Finfish	431	3388	16.5		82.0	0.00	0	0	1	8	22	41	55	135	224
	All	431	3388	26.5		84.2	0.00	0	0	5	15	33	66	85	169	494
FL	Shellfish	17181	15952	4.5		20.6	0.00	0	0	0	0	0	15	28	65	361
	Finfish	17181	15952	22.6		41.1	0.00	0	0	0	0	24	65	94	210	2339
	All	17181	15952	27.1	•	49.6	0.00	0	0	0	0	36	71	108	228	2339
MN	Shellfish	841	4900	2.4		67.5	0.00	0	0	0	1	3	5	10	29	48
	Finfish	841	4900	15.7		94.0	0.00	0	1	4	9	17	37	52	100	461
	All	841	4900	18.1	•	94.4	0.00	0	1	5	11	20	39	54	103	489
ND	Shellfish	602	639	2.3		70.6	0.00	0	0	0	1	3	5	11	19	64
	Finfish	602	639	16.7		94.1	0.00	0	1	4	10	20	38	60	102	228
	All	602	639	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

 Table E-72. Consumption, per capita, by state and fish/shellfish type (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Finfish or Shellfish	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Туре	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Shellfish	326	2502	12.6	5.3	100	0.01	1	1	2	б	12	28	47	118	285
	Finfish	360	2777	20.1	9.8	100	0.06	1	1	5	12	25	46	56	152	224
	All	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	Shellfish	3633	3289	22.0	14.2	100	0.09	3	5	8	14	27	46	65	127	361
	Finfish	7061	6549	55.0	37.6	100	4.44	12	17	22	38	65	108	152	325	2339
	All	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	Shellfish	560	3309	3.5	1.9	100	0.44	0	1	1	1	4	8	12	32	48
	Finfish	794	4606	16.7	8.8	100	0.58	1	1	5	9	18	38	52	101	461
	All	796	4623	19.1	10.7	100	0.58	1	2	6	12	20	39	56	105	489
ND	Shellfish	422	451	3.3	1.9	100	0.44	0	1	1	2	4	9	12	23	64
	Finfish	565	601	17.7	9.8	100	0.44	1	2	5	10	20	41	63	107	228
	All	570	606	20.0	11.6	100	0.58	2	3	б	12	24	46	68	123	240

 Table E-73. Consumption, consumers only, by state and fish/shellfish type (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Type of Percent Fish/Shellfish Samp WtdNC/ Arith Geom Eating State Eaten NC Mean Mean Fish Min Q10 Q25 Q50 Q75 Q90 Q95 Q99 Max Eats Caught Only 1.0 1.0 0.99 СТ . • • • • • • Eats Caught&Bought 38.5 23.4 2.86 Eats Bought Only 29.8 16.5 0.26 All Fish Consumers 17.5 31.4 0.26 FL Eats Caught Only 45.6 30.6 1.03 б Eats Caught&Bought 112.0 77.6 5.57 Eats Bought Only 49.6 32.7 0.17 All Fish Consumers 54.6 35.1 0.17 MN Eats Caught Only 6.8 4.0 1.16 Eats Caught&Bought 24.3 15.0 1.02 Eats Bought Only 12.2 7.0 0.58 All Fish Consumers 19.1 10.7 0.58 Eats Caught Only ND 13.3 8.4 1.16 . Eats Caught&Bought 23.3 15.3 1.60 Eats Bought Only 13.5 6.4 0.58 All Fish Consumers 20.0 11.6 0.58

Table E-74. Consumption, consumers only, by state and type of fish consumed (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Eats Freshwater/					Percent										
	Estuarine Caught	Samp	WtdNC/	Arith	Geom	Eating										
State	Fish	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Sometimes	53	408	34.0	20.6	100	0.99	3	5	9	23	62	76	94	113	113
	Never	316	2446	31.0	17.0	100	0.26	2	3	9	20	39	66	94	191	494
	All Fish Consumers	369	2854	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
FL	Exclusively	288	205	41.8	25.7	100	1.03	4	6	12	24	47	95	142	217	217
	Sometimes	539	424	106.4	72.2	100	3.75	20	28	43	69	120	202	305	522	1484
	Never	7739	7282	52.0	33.9	100	0.17	7	12	20	36	61	103	149	295	2339
	All Fish Consumers	8566	7912	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
MN	Exclusively	38	221	6.8	4.0	100	1.16		1	1	4	12	19	19	19	41
	Sometimes	556	2747	24.3	15.0	100	1.02	4	5	8	14	27	50	74	127	489
	Never	202	1655	12.2	7.0	100	0.58	1	1	3	10	16	23	41	67	109
	All Fish Consumers	796	4623	19.1	10.7	100	0.58	1	2	б	12	20	39	56	105	489
ND	Exclusively	33	36	13.3	8.4	100	1.16	1	2	6	8	15	22	25		127
	Sometimes	376	403	23.3	15.3	100	1.60	4	5	8	15	27	53	83	127	240
	Never	161	167	13.5	6.4	100	0.58	1	2	3	б	14	34	65	94	121
	All Fish Consumers	570	606	20.0	11.6	100	0.58	2	3	6	12	24	46	68	123	240

Table E-75. Consumption, consumers only, by state and fresh/estuarine fish consumption (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Household Income	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	\$ 0-20000	41	312	31.4		86.8	0.00	0	0	9	21	37	69	107	229	230
	\$20000-50000	155	1179	43.2	•	85.3	0.00	0	0	6	23	47	93	163	445	651
	\$50000-	219	1778	32.4	•	83.8	0.00	0	0	5	21	44	87	101	179	187
	Unknown	16	119	31.2	•	73.4	0.00	0	0	0	28	51	58	89		113
	All	431	3388	36.1		84.2	0.00	0	0	7	21	46	90	113	227	651
FL	\$ 0-20000	3746	3408	32.3		45.1	0.00	0	0	0	0	43	84	136	280	2605
	\$20000-50000	7353	6814	35.4		50.0	0.00	0	0	0	0	46	94	139	294	1679
	\$50000-	3417	3250	38.7		56.7	0.00	0	0	0	17	53	100	147	345	1676
	Unknown	2665	2480	26.8		45.4	0.00	0	0	0	0	34	79	115	225	780
	All	17181	15952	34.1	•	49.6	0.00	0	0	0	0	43	89	137	288	2605
MN	\$ 0-20000	89	373	37.9		91.0	0.00	0	3	11	18	36	120	149		187
	\$20000-50000	328	1802	25.7		91.3	0.00	0	1	5	14	26	52	72	144	651
	\$50000-	327	2155	21.8		97.9	0.00	1	2	б	14	25	44	64	129	222
	Unknown	97	570	18.6		92.9	0.00	0	2	7	17	22	42	47	78	78
	All	841	4900	24.1	•	94.4	0.00	0	2	б	15	26	52	73	138	651
ND	\$ 0-20000	53	56	32.7		94.0	0.00	0	2	9	15	25	119	147	225	236
	\$20000-50000	252	268	23.4		93.3	0.00	0	2	5	12	26	70	86	155	234
	\$50000-	239	251	25.6		97.1	0.00	2	4	9	17	33	54	78	125	168
	Unknown	58	63	25.7		93.1	0.00	0	2	б	15	33	46	55	294	320
	All	602	639	25.3		94.9	0.00	0	2	7	15	30	59	86	163	320

Table E-76. Fish consumption, per capita, by state and income (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

	Household	Samp	WtdNC/	Arith	Geom	Percent Eating										
tate	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	\$ 0-20000	36	270	36.2	22.6	100	0.88	2	8	12	23	40	76	111		230
	\$20000-50000	135	1006	50.6	25.9	100	0.46	3	б	13	29	58	100	165	460	651
	\$50000-	186	1490	38.7	23.0	100	0.42	3	5	12	26	55	92	109	180	187
	Unknown	12	87	42.5	34.9	100	7.75	9	13	20	44	53	63	94		113
	All	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651
FL	\$ 0-20000	1707	1537	71.5	45.2	100	1.11	9	16	26	48	79	144	212	401	2605
	\$20000-50000	3709	3404	70.9	45.6	100	0.57	11	16	26	46	81	139	203	433	1679
	\$50000-	1960	1844	68.3	44.5	100	0.28	9	15	25	43	80	137	194	439	1676
	Unknown	1190	1126	59.0	40.9	100	0.56	9	14	25	42	69	120	177	291	780
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	\$ 0-20000	79	339	41.7	25.5	100	0.78	6	10	13	23	48	127	152		187
	\$20000-50000	302	1645	28.1	14.0	100	0.78	2	2	8	15	27	53	73	161	651
	\$50000-	321	2109	22.3	13.2	100	0.78	1	2	6	14	25	44	66	129	222
	Unknown	94	530	20.0	14.6	100	1.36	3	б	9	17	24	44	47	78	78
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	\$ 0-20000	50	53	34.8	18.3	100	1.55	2	7	9	16	26	120	144	222	236
	\$20000-50000	235	250	25.1	13.4	100	0.78	2	3	6	13	28	71	89	159	234
	\$50000-	231	244	26.4	17.2	100	1.16	3	5	9	18	33	54	78	125	168
	Unknown	54	59	27.6	16.3	100	0.78	3	4	9	16	34	47	55	284	320
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

 Table E-77. Fish consumption, consumers only, by state and income (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

ate	Race Ethnicity	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	White, Non-Hispanic	380	2968	36.8		88.0	0.00	0	0	9	23	48	89	108	216	651
	Black, Non-Hispanic	9	66	5.9	•	33.5	0.00	0	0	0	0	13	21	•		22
	Hispanic	20	178	41.1	•	70.9	0.00	0	0	0	11	34	151	202		236
	Asian	20	155	34.1		54.7	0.00	0	0	0	7	31	37	214		453
	Unknown	2	21	0.9		43.4	0.00	0	0	0	0	2				2
	All	431	3388	36.1		84.2	0.00	0	0	7	21	46	90	113	227	651
7L	White, Non-Hispanic	12957	11887	34.1		50.9	0.00	0	0	0	7	44	91	137	284	1770
	Black, Non-Hispanic	1842	1690	33.6	•	46.2	0.00	0	0	0	0	47	87	139	273	1676
	Hispanic	1673	1719	33.1		45.0	0.00	0	0	0	0	41	85	136	291	2605
	Asian	260	216	42.2		50.1	0.00	0	0	0	б	53	94	161	401	1455
	American Indian	122	114	49.7		50.8	0.00	0	0	0	5	58	125	229	539	554
	Unknown	327	325	30.2	•	42.7	0.00	0	0	0	0	37	83	115	267	1232
	All	17181	15952	34.1		49.6	0.00	0	0	0	0	43	89	137	288	2605
ΊN	White, Non-Hispanic	779	4473	21.5		93.8	0.00	0	2	6	15	26	49	69	130	222
	Black, Non-Hispanic	1	1	0.0												
	Hispanic	3	50	60.0		100	21.3			21	22	108				137
	Asian	7	94	13.1		100	6.50	11	11	12	13					13
	American Indian	12	78	148.7		100	5.35			б	14	104				651
	Unknown	39	204	29.7		100	3.11	10	11	14	22	28	74	82		104
	All	841	4900	24.1		94.4	0.00	0	2	б	15	26	52	73	138	651
JD	White, Non-Hispanic	551	585	25.5		94.8	0.00	0	2	7	15	30	59	93	165	320
	Black, Non-Hispanic	2	2	21.0		100	20.2			20	21					22
	Asian	4	3	17.2		100	4.19			4	17	30				30
	American Indian	13	13	30.7		100	0.78	1	11	18	29	33	62			87
	Unknown	32	36	21.7		93.5	0.00	0	5	6	10	37	50	64		71
	A11	602	639	25.3	•	94.9	0.00	0	2	7	15	30	59	86	163	320

Table E-78. Fish consumption, per capita, by state and race-ethnicity (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	White, Non-Hispanic	338	2612	41.8	24.2	100	0.42	3	б	13	28	55	92	115	221	651
	Black, Non-Hispanic	3	22	17.8	17.0	100	11.0			13	20	21				22
	Hispanic	15	126	58.0	28.7	100	4.30	4	8	10	23	89	177	213		236
	Asian	12	85	62.3	27.5	100	4.28	5	8	14	28	36	155	330		453
	Unknown	1	9	2.0	2.0	100	1.97									2
	All	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651
FL	White, Non-Hispanic	6607	6053	67.0	43.9	100	0.28	9	15	25	43	79	136	195	383	1770
	Black, Non-Hispanic	867	780	72.8	49.4	100	0.56	14	21	29	51	87	144	202	411	1676
	Hispanic	762	773	73.5	43.9	100	2.29	11	13	22	44	77	142	205	558	2605
	Asian	128	108	84.4	50.7	100	5.41	14	17	28	53	84	161	262	818	1455
	American Indian	63	58	97.8	58.2	100	4.57	7	18	28	58	107	228	379	553	554
	Unknown	139	139	70.7	45.1	100	3.43	9	19	27	49	76	118	182	653	1232
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	White, Non-Hispanic	735	4197	22.9	13.7	100	0.78	2	2	7	16	27	52	71	130	222
	Black, Non-Hispanic			•	•	100	•	•								
	Hispanic	3	50	60.0	40.0	100	21.3	•		21	22	79				137
	Asian	7	94	13.1	13.1	100	6.50	11	11	12	13					13
	American Indian	12	78	148.7	25.5	100	5.35			6	14	35				651
	Unknown	39	204	29.7	22.9	100	3.11	10	11	14	22	28	74	82		104
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	White, Non-Hispanic	521	555	26.9	15.4	100	0.78	2	4	8	15	32	61	102	166	320
	Black, Non-Hispanic	2	2	21.0	20.9	100	20.2	•		20	21	•	•			22
	Asian	4	3	17.2	11.2	100	4.19	•		4	11	30				30
	American Indian	13	13	30.7	21.2	100	0.78	1	8	18	29	33	51			87
	Unknown	30	33	23.2	15.4	100	4.14	5	5	б	11	38	51	63		71
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

Table E-79. Fish consumption, consumers only, by state and race-ethnicity (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Race Ethnicity	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	
CT	Adult	White, Non-Hispanic	302	2236	44.1	•	92.1	0.00	0	2	13	29	59	96	123	225	651
		Black, Non-Hispanic	5	34	11.5		64.5	0.00	0	0	0	13	21		•	•	22
		Hispanic	13	103	65.2	•	82.5	0.00	0	0	10	30	113	193	227		236
		Asian	16	119	40.4		51.0	0.00	0	0	0	4	35	94	305		453
		Unknown	1	9	2.0	•	100	1.97	•	•	•	•	•	•	•	•	2
СТ	Child	White, Non-Hispanic	67	633	15.2		75.4	0.00	0	0	1	10	22	35	67	85	90
		Black, Non-Hispanic	4	32	0.0			•	•	•		•	•	•	•		
		Hispanic	7	74	7.6		54.9	0.00	0	0	0	4	16	23			24
		Asian	4	36	13.2		66.9	0.00	0	0	0	15	22				28
		Unknown	1	12	0.0	•		•	•	•	•	•					
СТ	Unknowr	White, Non-Hispanic	11	99	9.5		76.1	0.00	0	0	0	2	8	41	43	•	44
FL	Adult	White, Non-Hispanic	10502	9460	38.6		53.7	0.00	0	0	0	14	53	105	152	303	1770
		Black, Non-Hispanic	1229	1080	41.4	•	50.4	0.00	0	0	0	5	57	114	158	327	1676
		Hispanic	1283	1280	38.8	•	46.8	0.00	0	0	0	0	48	100	154	403	2605
		Asian	211	171	50.8	•	55.3	0.00	0	0	0	19	58	110	184	558	1455
		American Indian	103	95	51.9		47.6	0.00	0	0	0	0	58	146	245	544	554
		Unknown	261	252	35.9		45.2	0.00	0	0	0	0	50	85	121	310	1232
FL	Child	White, Non-Hispanic	2455	2427	16.5		40.3	0.00	0	0	0	0	23	55	75	133	611
		Black, Non-Hispanic	613	610	19.8	•	38.6	0.00	0	0	0	0	29	58	87	194	990
		Hispanic	390	440	16.4		39.6	0.00	0	0	0	0	22	51	74	206	342
		Asian	49	45	9.3		29.9	0.00	0	0	0	0	14	42	55		58
		American Indian	19	19	38.6		67.3	0.00	0	0	0	30	71	96			104
		Unknown	66	73	10.6		34.1	0.00	0	0	0	0	24	38	52		56

Table E-80. Fish consumption, per capita, by state, adult/child and race-ethnicity (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Race Ethnicity	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	Adult	White, Non-Hispanic	604	3298	24.9		96.3	0.00	1	2	9	17	30	55	77	133	222
IVIIN	Aduit	Black, Non-Hispanic	1	3290 1	24.9	•			T	2				55	//	133	
		Hispanic	⊥ 3	50	60.0	•	100	21.3	•	•	21	22	108	•	•	•	137
		Asian	4	35	13.0	•	100	21.3 6.50	10	11	12	13		•	•	•	13
		Asian American Indian	4 10	35 57	203.0	•	100	6.50 7.21		8	12	13 24	365	•	•	•	651
						•			•					•	•	•	
		Unknown	28	173	30.7	•	100	3.11	11	11	13	18	33	78	88	•	104
MN	Child	White, Non-Hispanic	169	1113	12.6		91.6	0.00	0	1	2	9	18	27	43	68	145
		Asian	3	59	13.2		100	13.2									13
		American Indian	2	22	5.4		100	5.35									5
		Unknown	11	31	23.7		100	3.11	4	12	20	24	25	28	47		56
MN	Unknown	White, Non-Hispanic	б	62	0.0		1.5	0.00	0	0	0	0	0	0	0	1	1
ND	Adult	White, Non-Hispanic	389	430	27.3		95.6	0.00	1	3	8	16	31	61	111	169	320
		Black, Non-Hispanic	2	2	21.0		100	20.2			20	21					22
		Asian	4	3	17.2		100	4.19			4	17	30				30
		American Indian	8	8	37.9		100	17.0		18	27	32	34	81			87
		Unknown	27	30	21.0		92.4	0.00	0	4	6	10	36	54	66		71
ND	Child	White, Non-Hispanic	155	147	19.9		93.5	0.00	0	2	5	11	22	44	79		130
_		American Indian	5	5	18.0		100	0.78		-	9	21	29				29
		Unknown	5	5	25.4		100	5.31			12	36	38				38
ND	Unknown	White, Non-Hispanic	7	7	32.0		75.2	0.00	0	0	7	23	51				79

Table E-80. Fish consumption, per capita, by state, adult/child and race-ethnicity (uncooked g/day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

tate	Adult Child	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99) Max
СТ	Adult	White, Non-Hispanic	278	2060	47.9	29.4	100	0.46	3	9	17	32	60	97	124	227	7 651
		Black, Non-Hispanic	3	22	17.8	17.0	100	11.0			13	20	21				. 22
		Hispanic	11	85	79.1	45.1	100	10.1		10	14	38	132	200	230		. 236
		Asian	9	61	79.1	31.9	100	4.28		б	13	35	37	227			. 453
		Unknown	1	9	2.0	2.0	100	1.97	•	•	•			•			. 2
СТ	Child	White, Non-Hispanic	51	477	20.2	13.7	100	0.83	3	4	7	16	25	40	68	87	7 90
		Black, Non-Hispanic					100										
		Hispanic	4	41	13.8	11.2	100	4.30			6	13	21				. 24
		Asian	3	24	19.7	18.8	100	13.3			15	18	24	•			. 28
		Unknown	•			•	100		•	•				•			
СТ	Unknowr	n White, Non-Hispanic	9	75	12.5	4.3	100	0.42	0	1	1	4	16	42			. 44
FL	Adult	White, Non-Hispanic	5620	5076	72.0	47.2	100	0.28	11	17	26	49	83	147	209	408	1770
		Black, Non-Hispanic	625	545	82.1	54.5	100	0.56	16	22	29	56	97	157	225	507	1676
		Hispanic	605	599	82.9	49.4	100	2.29	11	14	26	53	87	159	212	616	2605
		Asian	114	95	91.9	55.8	100	5.41	16	20	28	55	91	171	274	904	1455
		American Indian	51	45	109.1	62.3	100	5.41	8	18	27	58	125	247	429		554
		Unknown	116	114	79.3	50.6	100	3.43	14	20	28	55	84	127	190	746	1232
FL	Child	White, Non-Hispanic	987	978	40.9	30.1	100	1.43	7	11	21	28	54	82	108	187	611
		Black, Non-Hispanic	242	236	51.2	39.3	100	2.29	11	21	28	42	58	87	129	240	990
		Hispanic	157	174	41.4	29.3	100	4.29	8	11	16	27	51	77	90	250	342
		Asian	14	13	31.0	25.6	100	7.22	8	13	16	24	51	56	57		58
		American Indian	12	13	57.4	45.5	100	4.57	б	20	29	55	83	102			104
		Unknown	23	25	31.1	26.6	100	5.71	7	7	24	27	43	54	55		56

Table E-81. Fish consumption, consumers only, by state, adult/child, and race-ethnicity (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-81. Fish consumption, consumers only, by state, adult/child, and race-ethnicity (uncooked g/day)(continued)

							Percent										
	Adult		Samp	WtdNC/	Arith	Geom	Eating										
State	Child	Race Ethnicity	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Adult	White, Non-Hispanic	578	3177	25.8	16.3	100	0.78	2	5	10	18	31	56	78	133	222
		Black, Non-Hispanic		•			100	•	•								
		Hispanic	3	50	60.0	40.0	100	21.3	•	•	21	22	79	•			137
		Asian	4	35	13.0	12.9	100	6.50	11	11	12	13					13
		American Indian	10	57	203.0	46.1	100	7.21		8	13	24	122				651
		Unknown	28	173	30.7	23.3	100	3.11	11	11	13	18	32	78	87	•	104
MN	Child	White, Non-Hispanic	156	1019	13.7	7.9	100	0.78	1	2	3	10	18	27	44	69	145
		Asian	3	59	13.2	13.2	100	13.2									13
		American Indian	2	22	5.4	5.4	100	5.35									5
		Unknown	11	31	23.7	20.9	100	3.11	4	11	20	24	24	27	47		56
MN	Unknown	White, Non-Hispanic	1	1	1.4	1.4	100	1.40			•						1
ND	Adult	White, Non-Hispanic	371	411	28.5	16.7	100	0.78	2	4	9	17	33	62	111	169	320
		Black, Non-Hispanic	2	2	21.0	20.9	100	20.2			20	21					22
		Asian	4	3	17.2	11.2	100	4.19			4	11	30				30
		American Indian	8	8	37.9	33.2	100	17.0		18	27	32	34	75			87
		Unknown	25	28	22.8	15.0	100	4.14	5	5	б	11	38	55	66	•	71
ND	Child	White, Non-Hispanic	145	138	21.3	11.8	100	0.78	2	3	5	12	25	45	79		130
		American Indian	5	5	18.0	9.7	100	0.78			5	21	29				29
		Unknown	5	5	25.4	18.1	100	5.31	•	•	9	36	37	•			38
ND	Unknown	White, Non-Hispanic	5	б	42.5	33.1	100	11.9			19	31	60				79

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

0 + - + -	Caralan	0N	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	M
State	Gender	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Male	205	1617	37.6		85.1	0.00	0	0	8	23	48	96	125	216	411
	Female	226	1771	34.7	•	83.4	0.00	0	0	4	19	46	78	100	235	651
	All	431	3388	36.1		84.2	0.00	0	0	7	21	46	90	113	227	651
FL	Male	8262	7662	36.7		49.1	0.00	0	0	0	0	49	99	148	315	2605
	Female	8110	7517	33.1	-	51.5	0.00	0	0	0	7	43	87	128	260	1770
	Unknown	809	774	18.3		36.1	0.00	0	0	0	0	24	56	86	216	346
	All	17181	15952	34.1	•	49.6	0.00	0	0	0	0	43	89	137	288	2605
MN	Male	422	2497	21.8		95.3	0.00	1	2	7	15	26	46	71	129	222
	Female	419	2403	26.5	-	93.4	0.00	0	2	б	16	26	54	80	179	651
	All	841	4900	24.1		94.4	0.00	0	2	6	15	26	52	73	138	651
ND	Male	288	306	27.0		96.3	0.00	1	4	8	17	33	61	95	159	174
	Female	314	332	23.8		93.5	0.00	0	2	5	13	27	57	82	169	320
	All	602	639	25.3		94.9	0.00	0	2	7	15	30	59	86	163	320

Table E-82. Fish consumption, per capita, by state and gender (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Gender	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Male	177	1377	44.1	26.7	100	0.83	3	7	15	29	56	99	141	219	411
	Female	192	1478	41.6	22.2	100	0.42	2	4	11	25	53	86	114	290	651
	All	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651
FL	Male	4066	3758	74.8	47.9	100	0.56	11	17	27	50	84	149	221	451	2605
	Female	4206	3874	64.2	42.2	100	0.28	9	14	23	43	76	126	182	349	1770
	Unknown	294	279	50.8	37.0	100	4.57	14	21	22	29	58	102	172	257	346
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	Male	403	2379	22.9	14.0	100	0.78	2	2	9	16	27	49	72	129	222
	Female	393	2244	28.3	14.6	100	0.78	2	3	7	17	27	54	81	183	651
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	Male	277	295	28.0	17.1	100	1.16	3	5	9	18	34	64	104	159	174
	Female	293	311	25.5	14.2	100	0.78	2	3	7	14	29	59	84	178	320
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

 Table E-83. Fish consumption, consumers only, by state and gender (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Adult	Male	156	1158	46.8		90.4	0.00	0	3	15	30	59	105	156	222	411
		Female	181	1344	41.9	•	88.6	0.00	0	0	9	26	56	88	120	358	651
СТ	Child	Male	43	403	15.0		71.1	0.00	0	0	0	7	21	34	68	90	90
		Female	40	384	12.1		66.6	0.00	0	0	0	9	19	28	40	•	68
СТ	Unknown	Male	6	55	8.6		78.7	0.00	0	0	1	1	5	39			44
		Female	5	44	10.6	•	72.9	0.00	0	0	0	3	17	•	•	•	40
FL	Adult	Male	6589	5975	42.2	•	51.8	0.00	0	0	0	9	55	111	171	367	2605
		Female	6507	5908	37.4	•	54.4	0.00	0	0	0	14	52	100	141	277	1770
		Unknown	493	456	20.9	•	36.3	0.00	0	0	0	0	27	61	95	217	346
FL	Child	Male	1673	1687	17.0		39.3	0.00	0	0	0	0	27	55	77	137	296
		Female	1603	1609	17.3	•	41.2	0.00	0	0	0	0	26	54	77	138	990
		Unknown	316	317	14.6	•	35.7	0.00	0	0	0	0	24	36	63	162	244
MN	Adult	Male	319	1787	25.7		97.7	0.00	2	4	11	18	32	63	78	131	222
		Female	331	1827	30.9	•	95.6	0.00	1	2	8	17	29	61	96	300	651
MN	Child	Male	98	669	12.8		94.6	0.00	0	1	2	10	17	26	46	76	145
		Female	87	556	12.7	•	89.6	0.00	0	0	3	9	18	27	34	55	145
MN	Unknown	Male	5	42	0.0		2.2	0.00	0	0	0	0	0	0	0		1
		Female	1	20	0.0	•	•	·	•	•	•	•	•	•	•		•
ND	Adult	Male	200	222	27.5		96.5	0.00	2	4	9	18	34	57	111	168	174
		Female	230	253	26.5	•	94.6	0.00	0	2	8	15	30	61	88	219	320
ND	Child	Male	83	79	25.4		97.9	0.00	1	4	7	15	32	73	90		130
		Female	82	78	14.6	•	89.9	0.00	0	0	3	8	15	35	44	128	130
ND	Unknown	Male	5	5	28.5		64.5	0.00	0	0	0	25	42				79
		Female	2	2	40.0	•	100	11.9			•	40	74		•		79

Table E-84. Fish consumption, per capita, by state, adult/child and gender (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Adult	Male	141	1047	51.8	34.7	100	2.58	9	12	20	34	61	110	164	233	411
		Female	161	1190	47.3	25.6	100	0.46	2	5	13	30	60	91	123	385	651
СТ	Child	Male	31	286	21.1	13.8	100	0.83	3	4	7	15	27	46	71		90
		Female	27	256	18.1	13.6	100	1.77	3	5	9	16	23	35	47	•	68
СТ	Unknown	Male	5	44	11.0	3.6	100	0.91			1	3	8		•		44
		Female	4	32	14.5	5.5	100	0.42	•	0	2	6	20	•	•	•	40
FL	Adult	Male	3405	3096	81.5	52.0	100	0.56	12	18	28	55	91	168	239	489	2605
		Female	3545	3212	68.7	45.2	100	0.28	10	15	26	46	82	136	194	387	1770
		Unknown	181	166	57.6	41.2	100	5.41	14	20	23	33	65	130	183	311	346
FL	Child	Male	661	663	43.4	32.6	100	1.71	7	11	22	29	55	84	111	195	296
		Female	661	662	41.9	30.1	100	1.43	7	11	21	29	51	82	104	230	990
		Unknown	113	113	40.9	31.7	100	4.57	12	20	22	27	47	86	104	228	244
MN	Adult	Male	310	1746	26.3	17.5	100	0.78	2	6	12	18	32	63	78	131	222
		Female	313	1746	32.4	16.6	100	0.78	2	5	9	18	30	62	101	249	651
MN	Child	Male	92	633	13.5	7.6	100	0.78	1	1	3	10	17	26	46	74	145
		Female	80	498	14.2	9.3	100	0.78	1	2	5	13	19	27	34	55	145
MN	Unknown	Male	1	1	1.4	1.4	100	1.40									1
		Female		•	•	•	100			•	•	•	•	•	•	•	•
ND	Adult	Male	193	214	28.5	17.6	100	1.40	3	5	9	19	34	59	112	168	174
		Female	217	239	28.0	16.0	100	0.78	2	4	8	16	31	66	93	226	320
ND	Child	Male	81	77	25.9	15.1	100	1.16	3	4	8	15	33	74	90		130
		Female	74	70	16.3	9.1	100	0.78	2	3	5	11	17	36	49	128	130
ND	Unknown	Male	3	3	44.2	38.8	100	25.1			26	32	57				79
		Female	2	2	40.0	26.2	100	11.9				25	65				79

Table E-85. Fish consumption, consumers only, by state, adult/child and gender (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Respondent Education	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	0-11 years	13	97	33.1		100	2.11	2	6	10	18	38	107	119	•	120
	High School	89	682	32.5		85.6	0.00	0	0	4	20	53	90	102	141	163
	Some College	66	504	46.9	•	89.3	0.00	0	0	12	30	55	97	165	378	411
	College grad	263	2105	34.8	•	81.9	0.00	0	0	4	20	40	78	117	229	651
FL	0-11 years	1744	1523	29.7		40.7	0.00	0	0	0	0	33	85	132	259	1373
	High School	5677	5118	33.2		47.3	0.00	0	0	0	0	43	86	135	300	2605
	Some College	5261	4948	35.2	•	51.5	0.00	0	0	0	7	45	89	137	275	1628
	College grad	4367	4240	35.5		53.6	0.00	0	0	0	12	50	99	139	275	167
	Unknown	132	123	32.8	•	39.4	0.00	0	0	0	0	49	116	171	238	26
MN	0-11 years	46	214	31.9		86.2	0.00	0	0	9	17	28	114	148		158
	High School	236	1332	22.5	-	92.9	0.00	0	2	7	15	26	45	79	135	18
	Some College	260	1330	30.3		95.3	0.00	1	2	6	14	30	61	73	407	651
	College grad	256	1808	20.0	-	95.0	0.00	1	1	5	14	24	42	66	126	143
	Unknown	43	215	22.0		99.7	0.00	3	10	13	19	26	42	49	56	59
ND	0-11 years	31	35	18.6		87.6	0.00	0	0	7	10	17	48	73		111
	High School	143	144	30.7		97.4	0.00	2	3	9	17	35	80	120	173	23
	Some College	195	212	22.9		93.9	0.00	0	2	6	15	33	54	79	117	16
	College grad	196	206	25.0		96.8	0.00	1	3	6	15	26	64	116	154	23
	Unknown	37	42	26.2		87.2	0.00	0	0	5	10	36	49	71		32

Table E-86. Fish consumption, per capita, by state and education (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Respondent Education	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	0-11 years	13	97	33.1	18.9	100	2.11	2	5	10	18	38	105	119		120
	High School	78	584	37.9	21.6	100	0.83	3	4	10	24	59	92	105	141	163
	Some College	60	450	52.5	32.1	100	0.88	9	10	17	31	59	98	176	375	411
	College grad	218	1723	42.4	23.7	100	0.42	3	6	13	26	48	90	133	237	651
FL	0-11 years	716	620	73.0	47.5	100	1.71	14	21	26	49	84	140	215	399	1373
	High School	2683	2419	70.2	44.8	100	1.14	10	14	27	43	79	139	217	457	2605
	Some College	2739	2550	68.4	43.6	100	1.11	9	16	24	43	79	136	196	432	1628
	College grad	2376	2274	66.1	44.3	100	0.28	10	14	26	46	80	136	188	366	1676
	Unknown	52	48	83.5	66.0	100	16.9	23	28	42	61	116	181	204	264	267
MN	0-11 years	41	185	37.0	21.6	100	0.78	5	8	14	17	35	127	147		158
	High School	220	1237	24.2	15.4	100	1.36	2	5	9	17	26	50	80	137	187
	Some College	250	1268	31.8	14.8	100	0.78	2	2	7	15	30	62	73	351	651
	College grad	243	1719	21.0	12.3	100	0.78	1	2	б	16	25	43	67	123	143
	Unknown	42	215	22.1	18.0	100	1.40	3	10	13	19	26	42	48	56	59
ND	0-11 years	27	31	21.2	14.4	100	2.98	б	7	8	11	25	50	69		111
	High School	139	141	31.5	18.1	100	0.78	3	4	10	19	36	80	121	173	236
	Some College	183	199	24.4	14.9	100	0.78	2	4	8	16	33	55	79	118	162
	College grad	189	199	25.8	14.7	100	0.78	2	4	8	16	27	65	116	152	234
	Unknown	32	36	30.0	15.6	100	3.49	4	5	6	12	37	52	75		32

 Table E-87. Fish consumption, consumers only, by state and education (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Маз
CT	Child 1-5	28	274	5.7		47.6	0.00	0	0	0	0	10	18	26		34
	Child 6-10	28	259	16.0		80.0	0.00	0	0	3	11	25	35	48	•	67
	Child 11-15	22	201	19.3		86.1	0.00	0	0	б	14	23	46	78	•	90
	Female 16-29	17	141	47.2		79.9	0.00	0	0	7	24	49	81	261	•	453
	Female 30-49	88	656	43.1		87.1	0.00	0	0	8	24	55	90	113	493	651
	Female 50+	79	579	38.6		90.9	0.00	0	1	9	29	58	89	121	201	230
	Male 16-29	14	119	16.6		70.5	0.00	0	0	0	16	27	37	42	•	4
	Male 30-49	81	600	56.6		92.9	0.00	0	3	19	35	75	133	173	355	41
	Male 50+	63	461	40.1	•	90.5	0.00	0	2	15	28	51	93	115	207	21
	Unknown	11	99	9.5	•	76.1	0.00	0	0	0	2	8	41	43	•	4
FL	Child 1-5	1107	1138	13.5		37.6	0.00	0	0	0	0	22	49	58	102	28
	Child 6-10	943	962	14.9		39.3	0.00	0	0	0	0	22	51	68	107	23
	Child 11-15	865	849	21.7		42.8	0.00	0	0	0	0	29	59	87	181	61
	Female 16-29	1636	1518	33.5		48.7	0.00	0	0	0	0	42	85	137	315	145
	Female 30-49	2546	2296	43.4		56.3	0.00	0	0	0	17	55	113	158	345	177
	Female 50+	2367	2142	33.0		55.7	0.00	0	0	0	16	49	92	126	222	45
	Male 16-29	1702	1567	41.8		45.9	0.00	0	0	0	0	44	108	169	474	260
	Male 30-49	2673	2411	44.2		52.9	0.00	0	0	0	14	56	116	186	387	1628
	Male 50+	2347	2127	39.1		54.4	0.00	0	0	0	17	55	104	147	332	154
	Unknown	995	941	20.5		39.2	0.00	0	0	0	0	27	59	87	217	38

Table E-88. Fish consumption, per capita, by state and age-gender category (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Age-Gender	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
State	Category	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	47	437	10.6	•	97.4	0.00	0	1	3	9	15	22	26	81	145
	Child 6-10	47	299	12.7		88.4	0.00	0	0	2	8	17	27	57	90	145
	Child 11-15	68	337	15.9		92.8	0.00	0	1	4	17	21	38	52	60	90
	Female 16-29	47	331	49.2		96.0	0.00	1	2	6	12	23	50	322		651
	Female 30-49	133	723	20.6	•	95.0	0.00	0	2	8	18	27	43	53	81	143
	Female 50+	162	854	31.0		94.9	0.00	0	2	9	17	34	73	114	176	187
	Male 16-29	55	275	11.1		92.3	0.00	0	1	2	б	15	24	39	51	79
	Male 30-49	120	731	27.1		96.0	0.00	2	5	12	19	35	46	79	138	222
	Male 50+	156	852	27.8		99.8	0.00	4	6	12	18	32	67	78	125	144
	Unknown	б	62	0.0	•	1.5	0.00	0	0	0	0	0	0	0	1	1
ND	Child 1-5	31	30	14.5		91.5	0.00	0	1	2	4	10	38	115		130
	Child 6-10	46	44	19.7		92.4	0.00	0	2	5	12	25	37	83		130
	Child 11-15	58	54	26.3		97.2	0.00	2	4	8	16	34	72	88		130
	Female 16-29	45	47	13.8		85.6	0.00	0	0	4	8	18	28	44		87
	Female 30-49	99	105	23.7		98.4	0.00	2	4	8	16	31	54	78	131	236
	Female 50+	102	116	32.3		93.6	0.00	0	2	8	16	32	84	121	261	320
	Male 16-29	37	39	21.8		100	1.55	2	4	8	13	23	46	67		174
	Male 30-49	92	99	24.5		97.8	0.00	3	5	10	20	31	47	79	113	116
	Male 50+	85	97	31.4		94.3	0.00	0	3	8	20	37	70	124	169	170
	Unknown	7	7	32.0		75.2	0.00	0	0	7	23	51				79

Table E-88. Fish consumption, per capita, by state and age-gender category (uncooked g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-5	14	131	12.0	9.0	100	0.83	1	3	б	10	15	26	31	•	34
	Child 6-10	22	207	20.0	14.6	100	1.77	3	б	8	16	30	38	51		67
	Child 11-15	19	173	22.4	15.4	100	2.68	3	5	8	18	23	52	78		90
	Female 16-29	14	113	59.1	33.1	100	4.28	6	10	22	29	61	86	214		453
	Female 30-49	77	571	49.4	25.1	100	0.46	2	5	13	30	60	91	125	445	651
	Female 50+	72	526	42.5	25.1	100	0.88	2	8	13	31	60	96	122	196	230
	Male 16-29	10	84	23.5	20.9	100	8.71	9	9	15	22	32	39	43		44
	Male 30-49	75	557	60.9	39.4	100	2.58	7	13	22	38	85	141	176	334	411
	Male 50+	57	417	44.2	31.9	100	2.61	10	12	20	32	58	95	118	208	213
	Unknown	9	75	12.5	4.3	100	0.42	0	1	1	4	16	42		•	44
FL	Child 1-5	421	428	36.0	27.5	100	1.71	6	9	21	27	49	71	86	131	283
	Child 6-10	376	378	37.8	28.9	100	1.43	7	11	20	28	51	76	92	140	239
	Child 11-15	365	364	50.7	37.0	100	2.29	9	14	22	38	58	100	133	233	611
	Female 16-29	791	739	68.8	42.3	100	2.29	9	14	22	43	76	140	195	437	1455
	Female 30-49	1446	1292	77.1	49.1	100	2.14	11	16	27	51	88	148	215	549	1770
	Female 50+	1315	1192	59.3	42.7	100	0.28	10	16	26	43	77	121	173	257	459
	Male 16-29	785	719	91.0	51.4	100	0.57	11	17	27	53	90	173	256	801	2605
	Male 30-49	1406	1275	83.6	54.4	100	1.71	12	20	28	55	99	179	249	460	1628
	Male 50+	1272	1156	71.9	48.8	100	0.56	12	18	27	53	83	143	200	429	1545
	Unknown	389	369	52.4	38.0	100	2.14	13	21	23	29	59	103	168	257	387

Table E-89. Fish consumption, consumers only, by state and age-gender category (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating										
state	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	46	425	10.9	6.8	100	0.78	1	1	3	9	16	22	26	55	145
	Child 6-10	43	265	14.3	7.7	100	0.78	1	2	2	11	17	29	58	93	145
	Child 11-15	63	313	17.2	11.1	100	1.36	2	2	5	17	22	42	52	60	90
	Female 16-29	44	318	51.3	13.4	100	1.40	2	2	б	13	23	54	218		651
	Female 30-49	128	686	21.7	15.6	100	0.78	2	5	10	19	27	43	53	81	143
	Female 50+	150	810	32.7	18.9	100	0.78	2	5	11	18	36	79	116	173	187
	Male 16-29	52	254	12.0	7.1	100	1.40	1	2	2	7	15	26	40	51	79
	Male 30-49	115	702	28.2	20.1	100	1.55	4	9	13	20	36	46	81	136	222
	Male 50+	154	851	27.8	18.9	100	0.78	5	б	12	18	32	67	78	123	144
	Unknown	1	1	1.4	1.4	100	1.40	•							•	1
ND	Child 1-5	28	28	15.9	5.6	100	0.78	1	1	3	5	11	40	123		130
	Child 6-10	43	41	21.3	13.2	100	1.86	3	4	6	12	30	37	84		130
	Child 11-15	56	53	27.1	16.8	100	1.36	3	4	9	16	35	73	85		130
	Female 16-29	39	40	16.1	10.5	100	1.55	3	3	5	11	18	29	50		87
	Female 30-49	97	103	24.1	15.5	100	2.10	2	4	9	16	32	54	78	106	236
	Female 50+	95	108	34.5	18.3	100	0.78	3	5	9	17	34	93	123	257	320
	Male 16-29	37	39	21.8	13.1	100	1.55	2	4	8	13	23	46	64	•	174
	Male 30-49	90	97	25.0	17.8	100	1.40	4	5	10	21	32	48	80	113	116
	Male 50+	80	91	33.3	19.1	100	1.40	3	4	9	20	40	76	125	169	170
	Unknown	5	6	42.5	33.1	100	11.9			19	31	60				79

Table E-89. Fish consumption, consumers only, by state and age-gender category (uncooked g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Рор Q95	Pop Q99	Max
СТ	Child 1-14	77	726	13.1		69.2	0.00	0	0	0	9	19	32	41	84	90
	Female 15-44	91	689	46.8		89.1	0.00	0	0	10	26	56	89	107	558	651
	Female 45+	94	694	36.1		87.0	0.00	0	0	8	24	56	86	121	189	230
	Male 15-44	14	119	16.6		70.5	0.00	0	0	0	16	27	37	42		44
	Male 45+	144	1061	49.4		91.9	0.00	0	3	17	32	60	109	164	239	411
	Unknown	11	99	9.5		76.1	0.00	0	0	0	2	8	41	43	•	44
FL	Child 1-14	2751	2787	16.2		39.9	0.00	0	0	0	0	25	54	72	127	611
	Female 15-44	3799	3486	38.4		52.3	0.00	0	0	0	9	50	104	147	304	1770
	Female 45+	2833	2553	34.8		55.9	0.00	0	0	0	17	51	96	130	256	678
	Male 15-44	1783	1646	40.5		45.4	0.00	0	0	0	0	43	106	162	432	2605
	Male 45+	5020	4539	41.8		53.6	0.00	0	0	0	14	56	112	171	345	1628
	Unknown	995	941	20.5	•	39.2	0.00	0	0	0	0	27	59	87	217	387
MN	Child 1-14	146	1017	12.7		93.3	0.00	0	1	2	9	17	26	44	71	145
	Female 15-44	147	968	30.0		94.9	0.00	0	2	7	16	25	43	55	572	651
	Female 45+	203	978	29.8		95.4	0.00	1	3	9	18	32	71	109	172	187
	Male 15-44	63	292	11.5		92.4	0.00	0	1	2	7	16	24	39	54	79
	Male 45+	276	1583	27.5		98.1	0.00	3	б	12	18	33	64	79	132	222
	Unknown	б	62	0.0		1.5	0.00	0	0	0	0	0	0	0	1	1
ND	Child 1-14	121	116	20.8		93.5	0.00	0	1	5	11	29	46	79		130
	Female 15-44	124	129	20.6	•	93.5	0.00	0	3	5	14	27	40	79	115	236
	Female 45+	128	144	29.8		94.9	0.00	0	2	8	15	32	71	116	235	320
	Male 15-44	45	47	23.7		100	1.55	3	4	8	14	24	46	88	172	174
	Male 45+	177	196	27.9		96.1	0.00	1	4	9	20	34	57	113	161	170
	Unknown	7	7	32.0		75.2	0.00	0	0	7	23	51				79

Table E-90. Fish consumption, per capita, by state and age-gender category (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

		-			~	Percent										
State	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Eating Fish	Min	Q5	010	025	050	075	090	095	099	Max
Juic	category	NC	1000	hean	nean	1 1 511	MIII	25	QIU	Q25	Q30	Q75	Q90	Q75	277	hax
СТ	Child 1-14	54	503	19.0	13.3	100	0.83	3	4	8	14	23	37	59	87	90
	Female 15-44	82	614	52.5	27.6	100	0.52	3	5	15	30	61	90	120	549	651
	Female 45+	82	604	41.5	23.6	100	0.46	2	5	12	30	59	95	124	188	230
	Male 15-44	10	84	23.5	20.9	100	8.71	9	9	15	22	32	39	43		44
	Male 45+	132	974	53.8	36.0	100	2.58	9	12	20	34	62	113	165	243	411
	Unknown	9	75	12.5	4.3	100	0.42	0	1	1	4	16	42		•	44
FL	Child 1-14	1102	1113	40.5	30.2	100	1.43	7	11	21	28	54	79	100	164	611
	Female 15-44	1996	1825	73.4	46.0	100	2.14	10	14	26	47	83	144	203	468	1770
	Female 45+	1588	1428	62.3	43.9	100	0.28	11	16	26	43	78	124	176	293	678
	Male 15-44	813	747	89.3	50.6	100	0.57	11	17	27	52	88	172	250	719	2605
	Male 45+	2678	2431	78.0	51.7	100	0.56	12	18	28	54	90	164	231	437	1628
	Unknown	389	369	52.4	38.0	100	2.14	13	21	23	29	59	103	168	257	387
MN	Child 1-14	138	948	13.7	8.0	100	0.78	1	2	3	12	17	27	44	71	145
	Female 15-44	140	920	31.6	14.4	100	0.78	2	2	8	17	26	43	55	533	651
	Female 45+	189	932	31.3	18.6	100	0.78	2	5	11	18	34	72	110	169	187
	Male 15-44	59	270	12.5	7.5	100	1.40	2	2	2	8	16	26	40	55	79
	Male 45+	269	1552	28.0	19.4	100	0.78	5	7	13	19	34	64	79	131	222
	Unknown	1	1	1.4	1.4	100	1.40	•	•		•	•	•	•	•	1
ND	Child 1-14	113	108	22.3	11.7	100	0.78	2	3	5	12	31	50	82		130
	Female 15-44	116	121	22.1	14.1	100	1.55	3	4	7	15	27	47	79	104	236
	Female 45+	121	137	31.4	16.9	100	0.78	2	4	8	16	33	72	117	239	320
	Male 15-44	45	47	23.7	13.9	100	1.55	3	4	8	14	24	46	84	170	174
	Male 45+	170	188	29.0	18.4	100	1.40	4	5	10	20	35	60	114	161	170
	Unknown	5	б	42.5	33.1	100	11.9			19	31	60				79

Table E-91. Fish consumption, consumers only, by state and age-gender category (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

State	Bought or Caught Acquisition Method	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Bought	431	3388	35.2		84.0	0.00	0	0	7	21	44	79	110	227	651
	Caught	431	3388	0.9	-	16.8	0.00	0	0	0	0	0	1	3	18	51
	All	431	3388	36.1	•	84.2	0.00	0	0	7	21	46	90	113	227	651
FL	Bought	17181	15952	29.3		46.5	0.00	0	0	0	0	38	81	121	260	2576
	Caught	17181	15952	4.7		7.3	0.00	0	0	0	0	0	0	28	111	1458
	All	17181	15952	34.1		49.6	0.00	0	0	0	0	43	89	137	288	2605
MN	Bought	841	4900	15.6		89.8	0.00	0	0	3	9	18	39	60	116	181
	Caught	841	4900	8.5		60.6	0.00	0	0	0	2	8	19	25	94	528
	All	841	4900	24.1		94.4	0.00	0	2	б	15	26	52	73	138	651
ND	Bought	602	639	17.1		89.3	0.00	0	0	3	8	19	40	70	127	230
	Caught	602	639	8.2		68.7	0.00	0	0	0	3	9	20	36	62	170
	All	602	639	25.3	•	94.9	0.00	0	2	7	15	30	59	86	163	320

Table E-92. Fish consumption, per capita, by state and acquisition method (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught					Percent										
	Acquisition	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	368	2845	41.9	23.8	100	0.42	3	6	12	26	54	90	119	232	651
	Caught	75	568	5.2	1.9	100	0.05	0	0	1	2	6	17	19	45	51
	All	369	2854	42.8	24.2	100	0.42	3	б	13	27	54	93	123	232	651
FL	Bought	7966	7419	63.1	41.7	100	0.28	9	14	23	43	73	125	177	346	2576
	Caught	1402	1160	65.2	41.0	100	1.43	9	14	27	42	70	139	197	347	1458
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	Bought	758	4402	17.4	9.9	100	0.58	1	2	5	11	19	41	63	118	181
	Caught	594	2968	14.0	6.2	100	0.78	1	2	3	б	13	24	37	120	528
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	Bought	537	570	19.2	10.0	100	0.58	2	3	4	10	22	46	78	138	230
	Caught	409	439	11.9	6.3	100	0.78	1	2	3	б	14	30	43	71	170
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

Table E-93. Fish consumption, consumers only, by state and acquisition method (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught				Pop	Рор	Percent										
	Acquisition	Household	Samp	PopN/	Arith	Geom	Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
State	Method	Income	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$ 0-2000	0 41	312	30.5	•	86.8	0.00	0	0	9	21	36	69	107	229	230
		\$20000-5000	0 155	1179	41.9	•	84.6	0.00	0	0	6	22	46	88	163	445	651
		\$50000-	219	1778	31.8	•	83.8	0.00	0	0	5	21	44	78	101	179	186
		Unknown	16	119	31.1		73.4	0.00	0	0	0	28	51	57	89	•	113
СТ	Caught	\$ 0-2000	0 41	312	0.9		13.6	0.00	0	0	0	0	0	1	9		16
		\$20000-5000	0 155	1179	1.3		17.5	0.00	0	0	0	0	0	2	6	37	51
		\$50000-	219	1778	0.6		17.6	0.00	0	0	0	0	0	1	2	17	21
		Unknown	16	119	0.1	•	6.2	0.00	0	0	0	0	0	0	1	•	1
FL	Bought	\$ 0-2000	0 3746	3408	27.7		41.7	0.00	0	0	0	0	29	76	116	258	2576
		\$20000-5000	0 7353	6814	30.0		46.8	0.00	0	0	0	0	39	82	121	262	1679
		\$50000-	3417	3250	33.8	•	53.5	0.00	0	0	0	11	43	90	132	284	1676
		Unknown	2665	2480	24.1		43.1	0.00	0	0	0	0	29	69	110	222	603
FL	Caught	\$ 0-2000	0 3746	3408	4.6		6.6	0.00	0	0	0	0	0	0	27	109	1458
		\$20000-5000	0 7353	6814	5.5		7.8	0.00	0	0	0	0	0	0	29	123	1422
		\$50000-	3417	3250	5.0		8.2	0.00	0	0	0	0	0	0	29	112	1126
		Unknown	2665	2480	2.7		5.4	0.00	0	0	0	0	0	0	12	58	780

Table E-94. Fish consumption, per capita, by state acquisition method, and income (uncooked g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Bought or Caught Acquisition Method	Hou Inc	sehold ome	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Рор Q95	Pop Q99	Max
MN	Bought	\$	0-20000	89	373	24.2	•	90.8	0.00	0	1	8	13	23	55	103	•	181
		\$20	000-50000	328	1802	14.1	•	84.4	0.00	0	0	2	8	16	34	63	95	123
		\$50	000-	327	2155	15.4		93.9	0.00	0	1	3	9	19	34	59	116	127
		Unk	nown	97	570	15.4	•	91.3	0.00	0	1	5	15	18	39	42	73	75
MN	Caught	\$	0-20000	89	373	13.7		70.0	0.00	0	0	0	4	15	33	96		114
		\$20	000-50000	328	1802	11.6		65.9	0.00	0	0	0	3	8	19	32	138	528
		\$50	000-	327	2155	6.4		55.5	0.00	0	0	0	2	9	19	24	50	217
		Unk	nown	97	570	3.2	•	56.7	0.00	0	0	0	1	4	9	12	29	50
ND	Bought	\$	0-20000	53	56	24.4		83.9	0.00	0	0	5	11	18	100	121	173	177
		\$20	000-50000	252	268	17.3		89.6	0.00	0	0	3	8	19	40	79	131	230
		\$50	000-	239	251	15.5		90.9	0.00	0	1	4	8	19	40	61	91	163
		Unk	nown	58	63	16.3	•	86.2	0.00	0	0	3	8	25	29	47	179	187
ND	Caught	\$	0-20000	53	56	8.3		56.0	0.00	0	0	0	2	10	14	22	162	170
	-	\$20	000-50000	252	268	6.1		59.6	0.00	0	0	0	2	б	17	24	80	117
		\$50	000-	239	251	10.1		76.7	0.00	0	0	1	4	13	33	38	63	73
		Unk:	nown	58	63	9.4		86.4	0.00	0	0	3	6	13	17	24	121	132

Table E-94. Fish consumption, per capita, by state acquisition method, and income (uncooked g/day)(continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught						Percent										
	Acquisition	Household	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$ 0-2000	0 36	270	35.2	21.9	100	0.88	2	8	12	22	37	76	111	•	230
		\$20000-5000	0 134	997	49.5	25.5	100	0.46	3	б	13	28	57	92	165	461	651
		\$50000-	186	1490	38.0	22.5	100	0.42	3	4	12	26	55	88	109	180	186
		Unknown	12	87	42.4	34.9	100	7.75	9	13	20	44	53	62	93		113
СТ	Caught	\$ 0-2000	0 5	42	6.5	2.8	100	0.51			1	5	12	16			16
		\$20000-5000	0 30	206	7.6	2.7	100	0.23	0	0	1	2	7	20	38		51
		\$50000-	39	312	3.5	1.4	100	0.05	0	0	1	1	3	13	18		21
		Unknown	1	7	1.2	1.2	100	1.24		•	•	•				•	1
FL	Bought	\$ 0-2000	0 1572	1422	66.3	42.3	100	1.11	9	14	24	43	74	132	196	346	2576
		\$20000-5000	0 3441	3191	64.0	42.3	100	0.56	11	16	23	43	74	125	175	342	1679
		\$50000-	1830	1737	63.2	41.9	100	0.28	9	14	23	43	73	127	173	396	1676
		Unknown	1123	1069	56.0	39.0	100	0.56	9	14	22	39	65	116	163	291	603
FL	Caught	\$ 0-2000	0 289	224	69.9	44.6	100	1.71	11	14	27	48	82	144	205	422	1458
		\$20000-5000	0 656	534	69.5	43.0	100	1.43	7	14	28	42	82	150	203	445	1422
		\$50000-	301	268	60.4	37.7	100	1.71	8	10	23	42	64	119	182	336	1126
		Unknown	156	134	49.6	35.1	100	2.29	11	14	28	29	55	83	136	261	780

Table E-95.	Fish consumption,	, consumers only, k	by state, acquisition	method, and income	(uncooked g/day)
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FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or																
	Caught						Percent										
	Acquisition	Household	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$ 0-20000	78	338	26.7	15.5	100	0.58	3	4	9	14	24	60	111		181
		\$20000-50000	285	1521	16.7	9.7	100	0.58	2	2	5	10	18	42	66	98	123
		\$50000-	312	2023	16.4	9.1	100	0.78	1	2	4	9	19	39	61	114	127
		Unknown	83	520	16.8	11.4	100	0.58	2	2	7	15	18	39	43	74	75
MN	Caught	\$ 0-20000	56	261	19.6	8.2	100	0.78	1	2	3	5	20	62	103		114
		\$20000-50000	233	1189	17.5	6.3	100	0.78	1	2	3	6	12	23	38	282	528
		\$50000-	235	1195	11.6	6.8	100	0.78	1	2	3	7	14	24	35	72	217
		Unknown	70	323	5.6	3.4	100	0.78		1	2	3	9	11	17	41	50
ND	Bought	\$ 0-20000	45	47	29.1	15.7	100	2.33	3	5	8	13	24	104	124	173	177
		\$20000-50000	226	240	19.3	9.5	100	0.78	2	2	4	9	21	45	86	137	230
		\$50000-	216	228	17.1	9.6	100	0.58	2	3	4	9	21	42	62	91	163
		Unknown	50	54	18.9	9.9	100	0.78	1	2	4	11	26	30	53	183	187
ND	Caught	\$ 0-20000	29	32	14.8	7.4	100	0.78	1	2	4	8	13	19	51		170
		\$20000-50000	152	160	10.2	5.2	100	0.78	1	1	2	5	11	20	43	84	117
		\$50000-	179	193	13.1	7.2	100	0.78	1	2	4	6	18	36	45	64	73
		Unknown	49	55	10.8	6.5	100	0.78	2	3	3	6	14	18	25	123	132

Table E-95. Fish consumption, consumers only, by state, acquisition method, and income (uncooked g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Maz
CT	Freshwater	431	3388	1.2		36.3	0.00	0	0	0	0	1	3	6	15	41
	Estuarine	431	3388	10.2	-	75.3	0.00	0	0	0	3	10	22	35	99	34
	Marine	431	3388	24.7		84.0	0.00	0	0	4	14	31	60	79	186	36
	All	431	3388	36.1	•	84.2	0.00	0	0	7	21	46	90	113	227	651
FL	Freshwater	17181	15952	3.2		9.0	0.00	0	0	0	0	0	0	22	69	57
	Estuarine	17181	15952	8.3		26.0	0.00	0	0	0	0	4	28	46	108	154
	Marine	17181	15952	22.5		39.5	0.00	0	0	0	0	27	59	97	220	260
	All	17181	15952	34.1	•	49.6	0.00	0	0	0	0	43	89	137	288	260
MN	Freshwater	841	4900	8.5		60.6	0.00	0	0	0	2	8	19	25	94	52
	Estuarine	841	4900	1.6	-	67.5	0.00	0	0	0	1	2	3	6	19	3
	Marine	841	4900	14.0	-	89.8	0.00	0	0	3	8	16	37	54	100	18
	All	841	4900	24.1	•	94.4	0.00	0	2	6	15	26	52	73	138	65
ND	Freshwater	602	639	8.2		68.7	0.00	0	0	0	3	9	20	36	62	17
	Estuarine	602	639	1.5		70.6	0.00	0	0	0	1	2	3	8	12	4
	Marine	602	639	15.6		89.3	0.00	0	0	3	7	17	33	63	126	22
	All	602	639	25.3	-	94.9	0.00	0	2	7	15	30	59	86	163	32

Table E-96. Fish consumption, per capita, by state and habitat (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Freshwater	161	1230	3.3	1.5	100	0.04	0	0	1	2	4	7	10	37	41
	Estuarine	333	2550	13.5	5.3	100	0.01	1	1	2	6	13	28	57	121	347
	Marine	368	2846	29.4	16.1	100	0.09	2	3	9	18	36	65	82	205	365
	All	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651
FL	Freshwater	1609	1443	35.4	22.1	100	2.20	6	7	9	26	44	83	115	225	577
	Estuarine	4624	4145	32.1	20.3	100	0.07	5	7	10	21	37	64	90	191	1543
	Marine	6681	6303	57.1	36.6	100	0.07	7	12	22	36	60	111	162	329	2605
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	Freshwater	594	2968	14.0	6.2	100	0.78	1	2	3	6	13	24	37	120	528
	Estuarine	560	3309	2.4	1.3	100	0.29	0	0	1	1	3	5	8	22	32
	Marine	758	4402	15.6	8.8	100	0.39	1	2	4	9	17	39	62	102	181
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	Freshwater	409	439	11.9	6.3	100	0.78	1	2	3	6	14	30	43	71	170
	Estuarine	422	451	2.2	1.2	100	0.29	0	0	1	1	3	6	8	15	42
	Marine	537	570	17.5	8.7	100	0.39	1	2	4	9	19	38	72	133	229
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

Table E-97. Fish consumption, consumers only, by state and habitat (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Finfish or Shellfish Type	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Рор Q90	Pop Q95	Pop Q99	Max
СТ	Shellfish	431	3388	13.2	•	73.9	0.00	0	0	0	5	14	30	50	142	370
	Finfish	431	3388	22.0	•	82.0	0.00	0	0	2	11	30	55	73	180	288
	All	431	3388	36.1		84.2	0.00	0	0	7	21	46	90	113	227	651
FL	Shellfish	17181	15952	6.5		20.6	0.00	0	0	0	0	0	21	39	93	514
	Finfish	17181	15952	27.6		41.1	0.00	0	0	0	0	29	77	115	259	2605
	All	17181	15952	34.1	•	49.6	0.00	0	0	0	0	43	89	137	288	2605
MN	Shellfish	841	4900	3.2		67.5	0.00	0	0	0	1	4	7	13	39	64
	Finfish	841	4900	20.9		94.0	0.00	0	1	5	12	23	50	69	133	615
	All	841	4900	24.1		94.4	0.00	0	2	б	15	26	52	73	138	651
ND	Shellfish	602	639	3.1		70.6	0.00	0	0	0	1	3	б	15	25	85
	Finfish	602	639	22.2		94.1	0.00	0	2	5	13	26	51	81	135	304
	All	602	639	25.3		94.9	0.00	0	2	7	15	30	59	86	163	320

Table E-98. Fish consumption, per capita, by state and fish/shellfish type (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Finfish or Shellfish Type	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
СТ	Shellfish	326	2502	17.9	8.0	100	0.02	1	2	4	9	18	39	61	159	370	
	Finfish	360	2777	26.8	13.1	100	0.08	1	2	6	17	35	62	75	203	288	
	All	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651	
FL	Shellfish	3633	3289	31.3	20.2	100	0.14	5	7	11	20	39	65	92	181	514	
	Finfish	7061	6549	67.3	46.1	100	5.41	16	22	27	43	76	130	188	403	2605	
	All	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605	
MN	Shellfish	560	3309	4.7	2.6	100	0.58	1	1	1	2	6	11	16	43	64	
	Finfish	794	4606	22.2	11.8	100	0.78	1	2	7	13	24	50	70	135	615	
	All	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651	
ND	Shellfish	422	451	4.4	2.5	100	0.58	1	1	1	2	5	12	16	31	85	
	Finfish	565	601	23.6	13.1	100	0.58	2	3	7	14	27	55	84	142	304	
	All	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320	

Table E-99. Fish consumption, consumers only, by state and fish/shellfish type (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-100. Fish consumption, consumers only, by state and type of fish consumed (uncooked g/day)

	Type of					Percent										
	Fish/Shellfish	Samp	WtdNC/	Arith	Geom	Eating										
State	Eaten	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Eats Caught Only	1	9	2.0	2.0	100	1.97	•								2
	Eats Caught&Bought	74	559	52.7	32.2	100	3.71	7	9	14	31	78	106	162	329	411
	Eats Bought Only	294	2286	40.5	22.9	100	0.42	3	4	13	26	52	90	116	231	651
	All Fish Consumers	369	2854	42.8	24.2	100	0.42	3	б	13	27	54	93	123	232	651
FL	Eats Caught Only	600	493	58.3	39.5	100	1.43	7	13	27	43	60	120	179	280	780
	Eats Caught&Bought	802	667	141.4	99.0	100	7.43	33	40	57	91	166	250	396	849	2605
	Eats Bought Only	7164	6752	62.3	41.6	100	0.28	9	14	23	43	72	123	173	333	1679
	All Fish Consumers	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	Eats Caught Only	38	221	9.1	5.3	100	1.55		2	2	5	16	25	25	26	54
	Eats Caught&Bought	556	2747	32.4	20.0	100	1.36	5	б	11	19	36	67	98	170	651
	Eats Bought Only	202	1655	16.3	9.4	100	0.78	1	2	4	13	21	30	55	90	145
	All Fish Consumers	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	Eats Caught Only	33	36	17.8	11.2	100	1.55	2	3	8	11	20	30	33		170
	Eats Caught&Bought	376	403	31.1	20.5	100	2.14	5	6	11	20	37	71	111	169	320
	Eats Bought Only	161	167	18.0	8.6	100	0.78	1	2	3	8	19	45	87	126	162
	All Fish Consumers	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

FL consumption excludes away-from-home consumption by children < 18.

	Eats															
	Freshwater/					Percent										
	Estuarine Caught	Samp	WtdNC/	Arith	Geom	Eating										
State	Fish	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Sometimes	53	408	47.2	28.8	100	1.97	5	7	12	31	82	101	126	185	187
	Never	316	2446	42.1	23.6	100	0.42	3	6	13	27	53	92	121	242	651
	All Fish Consumers	369	2854	42.8	24.2	100	0.42	3	6	13	27	54	93	123	232	651
FL	Exclusively	288	205	53.7	33.7	100	1.43	б	9	18	34	58	121	174	289	289
	Sometimes	539	424	136.6	93.3	100	5.36	27	36	55	87	156	257	402	680	1770
	Never	7739	7282	65.2	43.0	100	0.28	10	16	25	43	76	129	185	366	2605
	All Fish Consumers	8566	7912	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	Exclusively	38	221	9.1	5.3	100	1.55		2	2	5	16	25	25	26	54
	Sometimes	556	2747	32.4	20.0	100	1.36	5	б	11	19	36	67	98	170	651
	Never	202	1655	16.3	9.4	100	0.78	1	2	4	13	21	30	55	90	145
	All Fish Consumers	796	4623	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
ND	Exclusively	33	36	17.8	11.2	100	1.55	2	3	8	11	20	30	33		170
	Sometimes	376	403	31.1	20.5	100	2.14	5	6	11	20	37	71	111	169	320
	Never	161	167	18.0	8.6	100	0.78	1	2	3	8	19	45	87	126	162
	All Fish Consumers	570	606	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

Table E-101. Fish consumption, consumers only, by state and fresh/estuarine fish consumption (uncooked g/day)

FL consumption excludes away-from-home consumption by children < 18.

	Household		PopN/	Pop Arith	Pop Geom	Percent Eating	Рор	Pop	Pop	Pop	Рор	Pop	Pop	Рор	Pop		
State	Income	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
СТ	\$ 0-20000	40	303	0.389		86.4	0.00	0.00	0.00	0.08	0.26	0.49	0.96	1.45	•	2.71	
	\$20000-50000	150	1137	0.472		87.4	0.00	0.00	0.00	0.10	0.28	0.58	1.04	1.43	4.20	6.99	
	\$50000-	214	1737	0.380		84.1	0.00	0.00	0.00	0.07	0.24	0.52	0.99	1.27	1.93	2.11	
	Unknown	16	119	0.323		73.4	0.00	0.00	0.00	0.00	0.30	0.50	0.75	1.00		1.14	
	All	420	3296	0.410		85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99	
FL	\$ 0-20000	3314	3158	0.473		45.9	0.00	0.00	0.00	0.00	0.00	0.56	1.21	2.11	4.52	34.37	
	\$20000-50000	6678	6430	0.480		50.4	0.00	0.00	0.00	0.00	0.06	0.60	1.28	1.92	4.01	24.77	
	\$50000-	3136	3066	0.514		57.5	0.00	0.00	0.00	0.00	0.21	0.65	1.38	1.99	4.35	14.41	
	Unknown	2239	2172	0.354		47.6	0.00	0.00	0.00	0.00	0.00	0.48	1.09	1.57	2.78	6.71	
	All	15367	14827	0.467		50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37	
MN	\$ 0-20000	87	371	0.401		91.0	0.00	0.00	0.03	0.11	0.20	0.33	1.20	1.61	3.84	8.00	
	\$20000-50000	326	1801	0.337		91.3	0.00	0.00	0.01	0.08	0.17	0.34	0.62	0.90	1.65	9.21	
	\$50000-	327	2155	0.288		97.9	0.00	0.01	0.03	0.07	0.18	0.33	0.62	1.09	1.78	2.40	
	Unknown	97	570	0.244		92.9	0.00	0.00	0.03	0.08	0.21	0.32	0.56	0.68	1.38	1.94	
	All	837	4897	0.309	•	94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21	
ND	\$ 0-20000	51	54	0.517		93.7	0.00	0.00	0.02	0.09	0.17	0.26	1.79	2.55		4.29	
	\$20000-50000	235	251	0.272		94.2	0.00	0.00	0.02	0.06	0.14	0.28	0.70	1.13	1.94	2.15	
	\$50000-	233	245	0.307		97.1	0.00	0.03	0.05	0.11	0.22	0.38	0.63	1.02	1.42	1.54	
	Unknown	56	60	0.415		92.7	0.00	0.00	0.04	0.07	0.18	0.40	0.79	1.21	6.12	6.75	
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75	

 Table E-102. Fish consumption per kg, per capita, by state and income (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Househ Income		Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
СТ		-20000	35	261	0.45	0.26	100	0.01	0.02	0.08	0.13	0.32	0.55	1.13	1.47		2.71	
		-50000	133	994	0.54	0.30	100	0.01	0.03	0.07	0.15	0.33	0.67	1.12	1.45	4.49	6.99	
	\$50000		182	1461	0.45	0.28	100	0.01	0.03	0.07	0.17	0.30	0.65	1.06	1.31	1.95	2.11	
	Unknow	m	12	87	0.44	0.35	100	0.09	0.09	0.10	0.20	0.41	0.56	0.84	1.03	•	1.14	
	All		362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99	
FL	\$ 0	-20000	1534	1451	1.03	0.61	100	0.01	0.12	0.19	0.31	0.61	1.10	2.22	2.99	7.46	34.37	
	\$20000	-50000	3370	3241	0.95	0.60	100	0.00	0.13	0.19	0.33	0.60	1.10	1.91	2.78	5.98	24.77	
	\$50000	-	1806	1763	0.89	0.57	100	0.00	0.11	0.17	0.32	0.56	1.08	1.87	2.73	5.17	14.41	
	Unknow	m	1047	1035	0.74	0.51	100	0.01	0.11	0.17	0.28	0.51	0.95	1.61	2.09	3.54	6.71	
	All		7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37	
MN	\$ 0	-20000	77	337	0.44	0.24	100	0.01	0.05	0.09	0.12	0.20	0.35	1.30	1.63	3.06	8.00	
	\$20000	-50000	301	1644	0.37	0.18	100	0.01	0.02	0.05	0.10	0.18	0.37	0.65	0.96	1.84	9.21	
	\$50000	-	321	2109	0.29	0.16	100	0.01	0.02	0.03	0.08	0.19	0.33	0.62	1.10	1.78	2.40	
	Unknow	m	94	530	0.26	0.19	100	0.01	0.03	0.05	0.09	0.23	0.33	0.57	0.69	1.04	1.94	
	All		793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21	
ND	\$ 0	-20000	48	50	0.55	0.21	100	0.01	0.02	0.07	0.11	0.19	0.28	1.80	2.62		4.29	
	\$20000	-50000	221	236	0.29	0.16	100	0.01	0.03	0.04	0.08	0.15	0.29	0.73	1.17	1.95	2.15	
	\$50000	-	225	238	0.32	0.21	100	0.01	0.03	0.06	0.12	0.23	0.38	0.64	1.04	1.42	1.54	
	Unknow	m	52	56	0.45	0.20	100	0.02	0.04	0.05	0.09	0.20	0.43	0.82	1.28	5.86	6.75	
	All		546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75	

Table E-103. Fish consumption per kg, consumers only, by state and income (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

tate	Race Ethnicity	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	White, Non-Hispanic	370	2888	0.407		88.7	0.00	0.00	0.00	0.10	0.27	0.57	0.98	1.27	2.01	4.53
	Black, Non-Hispanic	9	66	0.050	•	33.5	0.00	0.00	0.00	0.00	0.00	0.13	0.17	•	•	0.18
	Hispanic	20	178	0.483	•	70.9	0.00	0.00	0.00	0.00	0.21	0.50	1.53	2.29	•	2.93
	Asian	19	143	0.609	•	59.2	0.00	0.00	0.00	0.00	0.14	0.53	1.33	3.80		6.99
	Unknown	2	21	0.006	•	43.4	0.00	0.00	0.00	0.00	0.00	0.01		•		0.01
	All	420	3296	0.410	•	85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
FL	White, Non-Hispanic	11607	11113	0.456		51.6	0.00	0.00	0.00	0.00	0.09	0.58	1.24	1.84	3.79	23.38
	Black, Non-Hispanic	1603	1522	0.535		48.3	0.00	0.00	0.00	0.00	0.00	0.70	1.49	2.24	5.03	14.41
	Hispanic	1556	1619	0.463		45.9	0.00	0.00	0.00	0.00	0.00	0.54	1.20	1.96	4.06	34.37
	Asian	223	199	0.576		49.5	0.00	0.00	0.00	0.00	0.00	0.67	1.33	1.78	5.31	24.77
	American Indian	104	98	0.625		53.4	0.00	0.00	0.00	0.00	0.15	0.70	1.95	3.61	4.96	4.97
	Unknown	274	276	0.431		45.9	0.00	0.00	0.00	0.00	0.00	0.58	1.17	1.71	3.63	12.15
	All	15367	14827	0.467		50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	White, Non-Hispanic	775	4469	0.269		93.8	0.00	0.00	0.02	0.07	0.17	0.33	0.59	0.90	1.64	8.00
	Black, Non-Hispanic	1	1	0.000		•	•						•	•		
	Hispanic	3	50	0.645		100	0.19			0.21	0.27	1.18				1.48
	Asian	7	94	0.534		100	0.09	0.11	0.13	0.19	0.47	0.84				1.09
	American Indian	12	78	2.078		100	0.07		0.09	0.11	0.16	1.38				9.21
	Unknown	39	204	0.322		100	0.02	0.09	0.10	0.12	0.24	0.34	0.79	1.02	1.67	1.94
	All	837	4897	0.309	•	94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
ND	White, Non-Hispanic	528	559	0.325		95.1	0.00	0.01	0.03	0.08	0.18	0.33	0.72	1.21	2.22	6.75
	Black, Non-Hispanic	2	2	0.250		100	0.23				0.25	0.27				0.28
	Asian	4	3	0.198		100	0.04	•		0.05	0.18	0.34				0.38
	American Indian	9	9	0.303		100	0.05		0.08	0.16	0.25	0.33	0.69			0.80
	Unknown	32	36	0.296		93.5	0.00	0.00	0.05	0.06	0.13	0.43	0.71	0.94		1.68
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

Table E-104. Fish consumption per kg, per capita, by state and race-ethnicity (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

te Race E	thnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
	Non-Hispanic	331	2562	0.46	0.28	100	0.01	0.03	0.07	0.16	0.32	0.62	1.05	1.31	2.08	4.53
Black,	Non-Hispanic	3	22	0.15	0.15	100	0.12		•	0.13	0.15	0.17		•	•	0.18
Hispan	ic	15	126	0.68	0.39	100	0.08	0.09	0.12	0.18	0.30	0.98	1.86	2.47	•	2.93
Asian		12	85	1.03	0.47	100	0.05	0.06	0.09	0.24	0.48	1.03	1.95	4.78		6.99
Unknow	m	1	9	0.01	0.01	100	0.01							•		0.01
All		362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
White,	Non-Hispanic	5957	5734	0.88	0.56	100	0.00	0.11	0.18	0.31	0.56	1.03	1.82	2.61	5.26	23.38
Black,	Non-Hispanic	785	736	1.11	0.71	100	0.03	0.16	0.23	0.37	0.73	1.30	2.27	3.21	5.92	14.41
Hispan	ic	721	742	1.01	0.59	100	0.02	0.11	0.17	0.31	0.60	1.12	2.08	2.81	6.95	34.37
Asian		110	99	1.16	0.69	100	0.10	0.21	0.27	0.35	0.67	1.18	1.78	3.29	11.34	24.77
Americ	an Indian	57	52	1.17	0.69	100	0.06	0.13	0.21	0.31	0.69	1.27	3.13	4.70	4.97	4.97
Unknow	m	127	127	0.94	0.61	100	0.04	0.12	0.19	0.33	0.67	1.08	1.73	2.43	6.83	12.15
All		7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
White,	Non-Hispanic	732	4194	0.29	0.17	100	0.01	0.02	0.04	0.09	0.19	0.33	0.60	0.98	1.65	8.00
Black,	Non-Hispanic					100								•		
Hispan	ic	3	50	0.65	0.42	100	0.19			0.21	0.27	0.88				1.48
Asian		7	94	0.53	0.41	100	0.09	0.12	0.13	0.19	0.46	0.80				1.09
Americ	an Indian	12	78	2.08	0.34	100	0.07		0.09	0.11	0.15	0.37	•	•		9.21
Unknow	m	39	204	0.32	0.24	100	0.02	0.09	0.10	0.12	0.24	0.34	0.79	1.01	1.37	1.94
All		793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
White,	Non-Hispanic	501	532	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.34	0.74	1.23	2.25	6.75
Black,	Non-Hispanic	2	2	0.25	0.25	100	0.23		•		0.25	0.27		•		0.28
Asian		4	3	0.20	0.13	100	0.04		•	0.05	0.14	0.34		•		0.38
Americ	an Indian	9	9	0.30	0.24	100	0.05		0.08	0.16	0.25	0.33	0.61			0.80
Unknow	m	30	33	0.32	0.19	100	0.04	0.05	0.05	0.07	0.16	0.44	0.73	0.95		1.68
All		546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-105. Fish consumption per kg, consumers only, by state and race-ethnicity (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-106. Fish consumption per kg, per capita, by state, adult/child and race-ethnicity (as-consumed g/kg-day)

State	Adult Child		-	p PopN, 1000	Pop / Arith Mean	Pop Geom Mean	Percer Eating Fish		Pop Q5	Pop Q10	-	-	Pop Q75	Pop Q90	Pop Q95		-
СТ	Adult	White, Non-Hispani	c 29	6 2194	4 0.425	•	92.0	0.00	0.00	0.02	0.13	0.29	0.58	0.94	1.29	2.1	5 4.53
		Black, Non-Hispani	C	5 34	4 0.096		64.5	0.00	0.00	0.00	0.00	0.12	0.16	•			0.18
		Hispanic	1	3 103	3 0.732		82.5	0.00	0.00	0.00	0.10	0.31	1.12	2.11	2.76		2.93
		Asian	1	6 119	9 0.531		51.0	0.00	0.00	0.00	0.00	0.05	0.32	0.88	4.23		6.99
		Unknown		1 9	9 0.015	•	100	0.01	•	•	•	•	•	•	•	•	0.01
СТ	Child	White, Non-Hispani	c 6	3 595	5 0.395		78.8	0.00	0.00	0.00	0.06	0.24	0.57	1.12	1.23	1.5	8 1.59
		Black, Non-Hispani	C	4 32	2 0.000						•	•					
		Hispanic			4 0.137		54.9	0.00	0.00	0.00	0.00	0.15	0.26	0.33			0.35
		Asian		3 24	4 0.997		100	0.55	•		0.65	0.93	1.37				1.51
		Unknown		1 12	2 0.000	•	•	•	•	•	•	•	•	•	•	•	•
СТ	Unknow	n White, Non-Hispani	c 1	1 99	9 0.089		76.1	0.00	0.00	0.00	0.01	0.02	0.08	0.37	0.45	•	0.45
FL	Adult	White, Non-Hispanic	9325	8851 (0.435		54.5	0.00 0	.00 0	.00 0	.00 0	.15 0	.57	1.15 1	1.69	3.44	23.38
		Black, Non-Hispanic	1072	999 (0.452		51.7	0.00 0	.00 0	.00 0	.00 0	.11 0	.62	1.27 1	1.79	4.19	14.41
		Hispanic	1189	1203 (0.450		47.8	0.00 0	.00 0	.00 0	.00 0	.00 0	.53	1.15 1	1.70	3.26	34.37
		Asian	177	158 (0.678		54.6	0.00 0	.00 0	.00 0	.00 0	.26 0	.71 1	1.46 1	1.98	6.70	24.77
		American Indian	89	83 (0.527		52.6	0.00 0	.00 0	.00 0	.00 0	.12 0	.69	1.33 2	2.50	4.90	4.97
		Unknown	226	223 (0.421	•	47.9	0.00 0	.00 0	.00 0	.00 0	.00 0	.56	1.06 1	1.49	4.12	12.15
FL	Child	White, Non-Hispanic	2282	2262 (0.540		40.1	0.00 0	.00 0	.00 0	.00 0	.00 0	.62	1.66 2	2.56	6.32	14.63
		Black, Non-Hispanic	531	523 (0.695		42.0	0.00 0	.00 0	.00 0	.00 0	.00 0	.95 2	2.17 3	3.08	5.76	12.77
		Hispanic	367	416 (0.499		40.3	0.00 0	.00 0	.00 0	.00 0	.00 0	.57	1.53 2	2.69	5.13	9.49
		Asian	46	42 (0.190		30.2	0.00 0	.00 0	.00 0	.00 0	.00 0	.33 ().75 (0.97	1.58	1.96
		American Indian	15	15 1	1.183		58.1	0.00 0	.00 0	.00 0	.00 0	.37 2	.38 4	4.29 4	4.81		4.96
		Unknown	48	53 (0.475		37.6	0.00 0	.00 0	.00 0	.00 0	.00 0	.86	1.75 2	2.11	3.73	3.82

FL consumption excludes away-from-home consumption by children < 18.

Table E-106. Fish consumption per kg, per capita, by state, adult/child and race-ethnicity (as-consumed g/kg-day) (continued)

	م. اب		Com	Dem N/	Pop	Pop	Percent	Der	Der	Der	Dec	Der	Der	Der	Dec	Der	
State	Adult Child	Race Ethnicity	-	-	Arith Mean	Geom Mean	Eating Fish	Pop Min	Pop 05	Pop 010	-	Pop 050	Рор 075	Pop 090	Pop 095	Pop 099	Max
State	CIIIIa	Race Ethnicity	IN	1000	Meall	Meall	FISH	MTII	QS	QIU	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Adult	White, Non-Hispanic	602	3296	0.248		96.3	0.00	0.01	0.02	0.09	0.17	0.31	0.55	0.81	1.48	1.88
		Black, Non-Hispanic	1	1	0.000	•		•					•	•		•	
		Hispanic	3	50	0.645		100	0.19			0.21	0.27	1.18				1.48
		Asian	4	35	0.164		100	0.09	0.09	0.10	0.13	0.16	0.20				0.20
		American Indian	10	57	2.816		100	0.07		0.08	0.12	0.24	5.12				9.21
		Unknown	28	173	0.319	•	100	0.02	0.09	0.10	0.11	0.22	0.35	0.85	1.03	•	1.07
MN	Child	White, Non-Hispanic	168	1112	0.346		91.6	0.00	0.00	0.01	0.06	0.21	0.47	0.75	1.15	2.32	8.00
		Asian	3	59	0.752		100	0.44			0.51	0.73	1.00				1.09
		American Indian	2	22	0.129		100	0.11			0.11	0.13	0.15				0.15
		Unknown	11	31	0.339	•	100	0.03	0.06	0.23	0.28	0.30	0.32	0.39	0.71	•	1.94
MN	Unknown	White, Non-Hispanic	5	61	0.003		1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
ND	Adult	White, Non-Hispanic	375	414	0.288		95.9	0.00	0.01	0.03	0.08	0.16	0.31	0.62	1.11	1.97	4.23
		Black, Non-Hispanic	2	2	0.250		100	0.23	•	•	•	0.25	0.27				0.28
		Asian	4	3	0.198		100	0.04			0.05	0.18	0.34				0.38
		American Indian	6	6	0.348		100	0.14		0.14	0.19	0.24	0.44				0.80
		Unknown	27	30	0.211	•	92.4	0.00	0.00	0.05	0.06	0.10	0.39	0.54	0.65	•	0.69
ND	Child	White, Non-Hispanic	150	143	0.435		94.0	0.00	0.00	0.05	0.10	0.22	0.41	1.04	1.43	4.96	6.75
		American Indian	3	3	0.208		100	0.05			0.09	0.26	0.31				0.32
		Unknown	5	5	0.810	•	100	0.18	•	0.18	0.24	0.85	1.19		•		1.68
ND	Unknown	White, Non-Hispanic	3	3	0.107		31.5	0.00	0.00	0.00	0.00	0.00	0.28				0.34

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-107. Fish consumption per kg, consumers only, by state, adult/child, and race-ethnicity (as-consumed g/kg-day)

State	Adult Child	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean		Percent Eating Fish	: Min	Q5	010	025	050	075	090	095	099	Max		
June	011110		110	1000	mean	moun	1 1 0 11		20	Q-0	220	200	Q, 5	2,00	220	2	mair		
СТ	Adult	White, Non-Hispanic	272	2017	0.46	0.29	100	0.01	0.03	0.08	0.16	0.32	0.62	0.99	1.32	2.17	4.53		
		Black, Non-Hispanic	3	22	0.15	0.15	100	0.12			0.13	0.15	0.17		•	•	0.18		
		Hispanic	11	85	0.89	0.50	100	0.08	0.08	0.10	0.17	0.55	1.31	2.22	2.82		2.93		
		Asian	9	61	1.04	0.36	100	0.05	•	0.07	0.16	0.32	0.50	2.46	•	•	6.99		
		Unknown	1	9	0.01	0.01	100	0.01	•		•		•				0.01		
СТ	Child	White, Non-Hispanic	50	469	0.50	0.34	100	0.04	0.06	0.08	0.19	0.34	0.69	1.13	1.31	1.58	1.59		
		Black, Non-Hispanic					100												
		Hispanic	4	41	0.25	0.24	100	0.16			0.19	0.25	0.31				0.35		
		Asian	3	24	1.00	0.92	100	0.55			0.65	0.93	1.30				1.51		
		Unknown		•	•		100	•		•	•			•	•	•	•		
СТ	Unknown	White, Non-Hispanic	9	75	0.12	0.05	100	0.01	0.01	0.01	0.02	0.04	0.14	0.39	•		0.45		
FL	Adult	White, Non-Hispanic	5042	2 482	70.	80	0.52	100	0.0	0.1	11 0	.17	0.29	0.52	0.93	1.63	2.30	4.16	23.38
		Black, Non-Hispanic	55	7 51	60.	87	0.59	100	0.03	3 O.I	15 0	.21	0.32	0.59	1.08	1.74	2.32	4.96	14.41
		Hispanic	57	1 57	50.	94	0.55	100	0.03	2 0.1	11 0	.16	0.30	0.56	1.01	1.74	2.53	7.35	34.37
		Asian	9'	7 8	61.	24	0.72	100	0.10	0.1	20 0	.27	0.37	0.67	1.20	1.86	3.46	13.27	24.77
		American Indian	4	94	4 1.	00	0.62	100	0.0	5 0.3	12 0	.22	0.28	0.69	1.02	2.37	4.14		4.97
		Unknown	109	9 10	70.	88	0.56	100	0.04	£ 0.1	13 0	.20	0.32	0.58	0.95	1.50	2.34	7.65	12.15
FL	Child	White, Non-Hispanic	91	5 90	71.	35	0.84	100	0.04	£ 0.1	16 0	.26	0.44	0.84	1.66	2.83	3.70	8.74	14.63
		Black, Non-Hispanic	22	8 22	0 1.	65	1.13	100	0.0	5 0.1	25 0	.37	0.67	1.12	2.07	3.22	4.93	10.77	12.77
		Hispanic	15	0 16	8 1.	24	0.76	100	0.0	5 0.1	13 0	.20	0.38	0.72	1.53	2.79	3.79	6.60	9.49
		Asian	1	3 1	30.	63	0.55	100	0.20	0.1	25 0	.33	0.34	0.51	0.83	1.13	1.35	1.66	1.90
		American Indian	;	В	82.	03	1.19	100	0.14	ι.	0	.24	0.50	1.31	3.44	4.63			4.9
		Unknown	18	8 2	0 1.	26	0.90	100	0.0	9 0.1	10 0	.13	0.82	1.08	1.77	2.29	2.94		3.8

FL consumption excludes away-from-home consumption by children < 18.

Table E-107. Fish consumption per kg, consumers only, by state, adult/child, and race-ethnicity (as-consumedg/kg-day) (continued)

							Percent										
	Adult		Samp	WtdNC/	Arith	Geom	Eating										
tate	Child	Race Ethnicity	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Adult	White, Non-Hispanic	576	3175	0.26	0.16	100	0.01	0.02	0.04	0.10	0.18	0.32	0.55	0.81	1.49	1.88
		Black, Non-Hispanic	•			•	100	•			•	•					•
		Hispanic	3	50	0.65	0.42	100	0.19			0.21	0.27	0.88				1.48
		Asian	4	35	0.16	0.16	100	0.09	0.09	0.11	0.13	0.16	0.20				0.20
		American Indian	10	57	2.82	0.50	100	0.07		0.08	0.12	0.24	1.46				9.21
		Unknown	28	173	0.32	0.23	100	0.02	0.09	0.10	0.11	0.22	0.35	0.84	1.01	•	1.07
MN	Child	White, Non-Hispanic	155	1018	0.38	0.20	100	0.01	0.03	0.04	0.08	0.23	0.53	0.84	1.31	2.33	8.00
		Asian	3	59	0.75	0.70	100	0.44			0.51	0.73	0.97				1.09
		American Indian	2	22	0.13	0.13	100	0.11			0.11	0.13	0.15				0.15
		Unknown	11	31	0.34	0.28	100	0.03	0.06	0.22	0.28	0.30	0.32	0.38	0.70	•	1.94
MN	Unknown	White, Non-Hispanic	1	1	0.18	0.18	100	0.18							•		0.18
ND	Adult	White, Non-Hispanic	359	397	0.30	0.17	100	0.01	0.03	0.04	0.09	0.17	0.33	0.64	1.14	1.99	4.23
		Black, Non-Hispanic	2	2	0.25	0.25	100	0.23				0.25	0.27				0.28
		Asian	4	3	0.20	0.13	100	0.04			0.05	0.14	0.34				0.38
		American Indian	6	б	0.35	0.29	100	0.14		0.14	0.19	0.24	0.40				0.80
		Unknown	25	28	0.23	0.15	100	0.04	0.05	0.05	0.07	0.10	0.40	0.55	0.65	•	0.69
ND	Child	White, Non-Hispanic	141	134	0.46	0.25	100	0.02	0.05	0.06	0.12	0.23	0.45	1.05	1.47	4.71	6.75
		American Indian	3	3	0.21	0.16	100	0.05			0.07	0.24	0.31				0.32
		Unknown	5	5	0.81	0.60	100	0.18	•	0.18	0.24	0.85	1.11	•	•	•	1.68
ND	Unknown	White, Non-Hispanic	1	1	0.34	0.34	100	0.34									0.34

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

			PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Рор	Рор	Рор	Pop	Pop	Pop	
State	Gender	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Male	201	1581	0.385		86.2	0.00	0.00	0.00	0.10	0.24	0.53	1.05	1.34	1.80	2.21
	Female	219	1715	0.434	-	84.0	0.00	0.00	0.00	0.07	0.28	0.57	0.95	1.30	2.96	6.99
	All	420	3296	0.410	•	85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
FL	Male	7911	7568	0.441		49.2	0.00	0.00	0.00	0.00	0.00	0.55	1.22	1.84	3.73	34.37
	Female	7426	7229	0.496		51.9	0.00	0.00	0.00	0.00	0.10	0.64	1.32	1.98	4.18	24.77
	Unknown	30	30	0.409		48.0	0.00	0.00	0.00	0.00	0.00	0.61	1.41	2.38		2.68
	All	15367	14827	0.467		50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	Male	419	2495	0.264		95.3	0.00	0.01	0.02	0.08	0.16	0.33	0.58	1.06	1.51	8.00
	Female	418	2402	0.356		93.4	0.00	0.00	0.02	0.08	0.21	0.36	0.65	1.10	1.87	9.21
	All	837	4897	0.309		94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
ND	Male	276	293	0.319		96.2	0.00	0.01	0.04	0.08	0.19	0.33	0.68	1.20	1.87	4.29
	Female	299	317	0.324		94.2	0.00	0.00	0.03	0.08	0.17	0.33	0.73	1.16	2.26	6.75
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

 Table E-108. Fish consumption per kg, per capita, by state and gender (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

		Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Gender	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Male	175	1362	0.45	0.29	100	0.01	0.04	0.08	0.17	0.29	0.58	1.11	1.40	1.91	2.21
	Female	187	1441	0.52	0.29	100	0.01	0.03	0.05	0.16	0.34	0.68	1.03	1.35	3.38	6.99
	All	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Male	3880	3723	0.90	0.56	100	0.00	0.12	0.18	0.30	0.55	1.03	1.85	2.65	5.66	34.37
	Female	3861	3753	0.95	0.60	100	0.00	0.12	0.19	0.33	0.62	1.11	1.94	2.78	6.04	24.77
	Unknown	16	14	0.85	0.50	100	0.09	0.09	0.12	0.18	0.69	1.19	2.37	2.61		2.68
	All	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Male	401	2378	0.28	0.16	100	0.01	0.02	0.04	0.09	0.17	0.33	0.62	1.07	1.52	8.00
	Female	392	2243	0.38	0.19	100	0.01	0.02	0.05	0.10	0.22	0.38	0.70	1.22	1.88	9.21
	All	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Male	265	282	0.33	0.18	100	0.01	0.03	0.04	0.09	0.20	0.34	0.74	1.22	1.88	4.29
	Female	281	298	0.34	0.19	100	0.01	0.03	0.05	0.10	0.18	0.35	0.74	1.20	2.31	6.75
	All	546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-109. Fish consumption per kg, consumers only, by state and gender (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Рор Q99	Max
СТ	Adult	Male	155	1152	0.395		90.3	0.00	0.00	0.02	0.13	0.25	0.52	1.00	1.31	2.09	2.21
		Female	176	1308	0.474		88.3	0.00	0.00	0.00	0.09	0.30	0.63	0.98	1.34	3.83	6.99
СТ	Child	Male	40	373			74.6	0.00	0.00	0.00	0.00		0.57	1.16	1.41		1.59
		Female	38	364	0.330		70.2	0.00	0.00	0.00	0.00	0.20	0.45	0.94	1.13	•	1.51
СТ	Unknown		б	55			78.7	0.00	0.00	0.00				0.28			0.32
		Female	5	44	0.120	•	72.9	0.00	0.00	0.00	0.00	0.04	0.18	•	•	•	0.45
FL	Adult	Male	6244	5887	0.419		52.0	0.00	0.00	0.00	0.00	0.09	0.53	1.10	1.66	3.44	34.37
		Female	5828	5626	0.466	•	54.9	0.00	0.00	0.00	0.00	0.16	0.64	1.23	1.77	3.60	24.77
		Unknown	6	5	0.347	•	60.2	0.00	0.00	0.00	0.00	0.20	0.73	0.90	1.54	2.04	2.11
FL	Child	Male	1667	1681			39.4	0.00	0.00	0.00				1.68	2.39		14.63
		Female	1598	1603	0.601	•	41.3	0.00	0.00	0.00	0.00		0.67	1.76	2.89	6.35	14.03
		Unknown	24	25	0.421		45.6	0.00	0.00	0.00	0.00	0.00	0.41	1.67	2.46	•	2.68
MN	Adult	Male	318	1786	0.225		97.7	0.00	0.02	0.03	0.09	0.16	0.27	0.48	0.64	1.33	1.88
		Female	330	1826	0.368	•	95.6	0.00	0.01	0.02	0.09	0.20	0.33	0.65	1.13	3.67	9.21
MN	Child	Male	97	668	0.387		94.6	0.00	0.00	0.03	0.06	0.23	0.56	1.07	1.13	2.40	8.00
		Female	87	556	0.330		89.6	0.00	0.00	0.00	0.08	0.23	0.47	0.65	1.10	1.86	5.34
MN	Unknown	Male	4	41	0.004		2.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.18
		Female	1	20	0.000	•	•	•	•	•	•	•	•	•	•	•	•
ND	Adult	Male	194	215	0.248		96.4	0.00	0.01	0.03	0.07	0.16	0.29	0.54	0.85	1.78	1.92
		Female	220	241	0.314	•	95.3	0.00	0.01	0.03	0.08	0.16	0.34	0.72	1.16	2.14	4.23
ND	Child	Male	79	76	0.529		97.8	0.00	0.05	0.06	0.15	0.27	0.59	1.21	1.57	•	4.29
		Female	79	75	0.357	•	90.8	0.00	0.00	0.04	0.07	0.20	0.30	0.74	1.31	4.91	6.75
ND	Unknown	Male	3	3	0.107		31.5	0.00	0.00	0.00	0.00	0.00	0.28	•	•	•	0.34

Table E-110. Fish consumption per kg, per capita, by state, adult/child and gender (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-111. Fish consumption per kg, consumers only, by state, adult/child and gender (as-consumed g/kg-day)

	م] بر م		Com	WE AND (7	Gaar	Percent										
State	Adult Child	Gender	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Adult	Male	140	1041	0.44	0.29	100	0.02	0.07	0.10	0.17	0.28	0.56	1.04	1.39	2.12	2.21
		Female	156	1154	0.54	0.29	100	0.01				0.36		1.04	1.38	4.01	6.99
CT	Child	Male	30	278	0.54	0.35	100	0.04	0.05	0.07	0.17	0.45	0.67	1.25	1.50		1.59
		Female	27	256	0.47	0.34	100	0.05	0.08	0.16	0.19	0.32	0.78	1.05	1.13		1.51
СТ	Unknown	Male	5	44	0.08	0.04	100	0.01		0.01	0.02	0.03	0.05				0.32
		Female	4	32	0.16	0.07	100	0.01	•	0.01	0.03	0.07	0.21	•	•	•	0.45
FL	Adult	Male	3221	3061	0.81	0.51	100	0.00	0.11	0.17	0.28	0.51	0.91	1.64	2.32	4.71	34.37
		Female	3200	3091	0.85	0.56	100	0.00	0.11	0.18				1.69	2.35	4.38	24.77
		Unknown	4	3	0.58	0.48	100	0.20		•	0.30	0.73	0.74	0.97	1.24	1.97	2.11
FL	Child	Male	659	662	1.31	0.86	100	0.06					1.71	2.69	3.55		14.63
		Female	661	662	1.45	0.89	100	0.04					1.74	3.12	4.70	10.47	
		Unknown	12	11	0.92	0.51	100	0.09	•	0.11	0.14	0.64	1.44	2.46	•	•	2.68
MN	Child	Male	91	632	0.41	0.20	100	0.01	0.03	0.04	0.07	0.24	0.57	1.08	1.17	2.47	8.00
		Female	80	498	0.37	0.22	100	0.01	0.03	0.06	0.09	0.26	0.51	0.67	1.31	1.86	5.34
MN	Unknown	Male	1	1	0.18	0.18	100	0.18									0.18
		Female	•	•	·	•	100	•	•	•	•	•	·	•		•	
ND	Adult	Male	187	207	0.26	0.15	100	0.01	0.02	0.04	0.08	0.17	0.30	0.54	0.88	1.78	1.92
		Female	209	230	0.33	0.18	100	0.01	0.03	0.05	0.10	0.17	0.37	0.73	1.18	2.15	4.23
ND	Child	Male	77	74	0.54	0.30	100		0.05	0.08	0.16	0.29		1.22	1.59	•	4.29
		Female	72	68	0.39	0.21	100	0.04	0.05	0.06	0.08	0.21	0.33	0.75	1.45	4.07	6.75
ND	Unknown	Male	1	1	0.34	0.34	100	0.34						•			0.34

FL consumption excludes away-from-home consumption by children < 18.

	Descalent	Com	Dem NI (Pop	Pop	Percent	Der	Der	Der	Dec	Der	Der	Der	Der	Der		
.	Respondent	Samp	PopN/	Arith	Geom	Eating	Pop										
State	Education	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
СТ	0-11 years	13	97	0.325	•	100	0.03	0.03	0.05	0.08	0.15	0.39	1.04	1.39	•	1.42	
	High School	87	667	0.378	•	85.3	0.00	0.00	0.00	0.05	0.22	0.58	1.00	1.14	1.55	1.59	
	Some College	62	477	0.410		88.7	0.00	0.00	0.00	0.14	0.30	0.51	0.80	1.41	2.59	2.71	
	College grad	258	2055	0.425		83.4	0.00	0.00	0.00	0.08	0.25	0.53	1.03	1.32	2.57	6.99	
FL	0-11 years	1481	1387	0.400		41.5	0.00	0.00	0.00	0.00	0.00	0.48	1.16	1.69	3.76	19.86	
	High School	4992	4722	0.464	•	48.5	0.00	0.00	0.00	0.00	0.00	0.56	1.26	1.96	4.12	34.37	
	Some College	4791	4650	0.488		52.3	0.00	0.00	0.00	0.00	0.11	0.61	1.30	1.98	3.92	24.77	
	College grad	4012	3979	0.471		54.2	0.00	0.00	0.00	0.00	0.15	0.63	1.30	1.85	3.97	14.41	
	Unknown	91	89	0.464	•	41.2	0.00	0.00	0.00	0.00	0.00	0.65	1.57	2.61	2.75	2.75	
MN	0-11 years	46	214	0.340		86.2	0.00	0.00	0.00	0.10	0.19	0.28	1.23	1.56		1.64	
	High School	234	1331	0.290		92.9	0.00	0.00	0.02	0.08	0.17	0.33	0.65	1.11	2.02	2.40	
	Some College	259	1329	0.407		95.3	0.00	0.01	0.03	0.07	0.20	0.46	0.65	0.95	8.53	9.21	
	College grad	255	1808	0.256		95.0	0.00	0.01	0.02	0.08	0.17	0.31	0.57	1.05	1.36	1.68	
	Unknown	43	215	0.242	•	99.7	0.00	0.03	0.09	0.11	0.23	0.31	0.41	0.51	0.74	1.94	
ND	0-11 years	29	32	0.225		86.6	0.00	0.00	0.00	0.07	0.11	0.24	0.65	0.86		1.36	
	High School	138	139	0.420	•	97.3	0.00	0.02	0.04	0.10	0.20	0.48	0.89	1.56	3.91	4.29	
	Some College	183	200	0.275	•	95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.63	0.99	1.59	2.06	
	College grad	188	197	0.311		96.7	0.00	0.01	0.04	0.09	0.18	0.30	0.69	1.26	1.87	6.75	
	Unknown	37	42	0.345		87.2	0.00	0.00	0.00	0.05	0.10	0.40	0.73	1.32		4.23	

 Table E-112. Fish consumption per kg, per capita, by state and education (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

	Respondent	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Education	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	0-11 years	13	97	0.32	0.17	100	0.03	0.03	0.05	0.08	0.15	0.39	0.97	1.37		1.42
	High School	76	569	0.44	0.26	100	0.01	0.03	0.05	0.13	0.27	0.75	1.04	1.15	1.56	1.59
	Some College	56	424	0.46	0.31	100	0.01	0.06	0.10	0.22	0.34	0.55	0.85	1.43	2.57	2.71
	College grad	217	1714	0.51	0.30	100	0.01	0.03	0.08	0.17	0.33	0.65	1.12	1.39	2.95	6.99
FL	0-11 years	613	576	0.96	0.61	100	0.01	0.16	0.22	0.33	0.60	1.12	1.86	2.81	6.73	19.86
	High School	2405	2291	0.96	0.59	100	0.01	0.11	0.18	0.32	0.58	1.09	1.98	2.83	6.36	34.37
	Some College	2511	2430	0.93	0.57	100	0.01	0.11	0.18	0.31	0.58	1.06	1.91	2.70	5.75	24.77
	College grad	2190	2157	0.87	0.57	100	0.00	0.11	0.19	0.32	0.57		1.79	2.47	4.92	14.41
	Unknown	38	37	1.13	0.85	100	0.17	0.22	0.25	0.54	0.85	1.50	2.69	2.74	•	2.75
MN	0-11 years	41	185	0.39	0.23	100	0.01	0.05	0.07	0.12	0.20	0.33	1.37	1.56		1.64
	High School	219	1237	0.31	0.17	100	0.01	0.02	0.04	0.09	0.18	0.33	0.68	1.13	2.00	2.40
	Some College	249	1267	0.43	0.19	100	0.01	0.03	0.04	0.09	0.22	0.47	0.65	0.98	8.50	9.21
	College grad	242	1718	0.27	0.16	100	0.01	0.02	0.04	0.09	0.19	0.32	0.58	1.05	1.36	1.68
	Unknown	42	215	0.24	0.19	100	0.01	0.03	0.09	0.11	0.23	0.31	0.41	0.50	0.74	1.94
ND	0-11 years	25	28	0.26	0.16	100	0.03	0.06	0.07	0.08	0.12	0.28	0.73	0.90		1.36
	High School	134	135	0.43	0.23	100	0.01	0.04	0.05	0.11	0.20	0.50	0.98	1.62	3.75	4.29
	Some College	174	190	0.29	0.18	100	0.01	0.03	0.05	0.08	0.20	0.34	0.65	1.02	1.61	2.06
	College grad	181	190	0.32	0.18	100	0.01	0.03	0.05	0.10	0.19	0.31	0.72	1.30	1.86	6.75
	Unknown	32	36	0.40	0.17	100	0.03	0.04	0.04	0.06	0.13	0.43	0.84	1.43	•	4.23

Table E-113. Fish consumption per kg, consumers only, by state and education (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
								2-	2	2	2	2	2	2	2	
СТ	Child 1-5	26	253	0.317	•	51.7	0.00	0.00	0.00	0.00	0.05	0.58	0.95	1.47		1.59
	Child 6-10	26	239	0.508	•	86.7	0.00	0.00	0.00	0.17	0.35	0.89	1.13	1.29		1.53
	Child 11-15	21	193	0.270	•	85.6	0.00	0.00	0.00	0.07	0.19	0.36	0.52	0.89		1.32
	Female 16-29	17	141	0.671		79.9	0.00	0.00	0.00	0.08	0.31	0.71	1.06	4.02		6.99
	Female 30-49	85	634	0.463		86.7	0.00	0.00	0.00	0.08	0.28	0.62	1.00	1.36	3.97	4.53
	Female 50+	77	563	0.434		90.6	0.00	0.00	0.01	0.09	0.33	0.65	0.96	1.33	2.41	2.71
	Male 16-29	14	119	0.162		70.5	0.00	0.00	0.00	0.00	0.14	0.24	0.41	0.53		0.58
	Male 30-49	80	594	0.470		92.8	0.00	0.00	0.03	0.15	0.29	0.66	1.13	1.44	2.18	2.21
	Male 50+	63	461	0.345		90.5	0.00	0.00	0.02	0.12	0.22	0.46	0.86	1.11	1.43	1.43
	Unknown	11	99	0.089	•	76.1	0.00	0.00	0.00	0.01	0.02	0.08	0.37	0.45	•	0.45
FL	Child 1-5	1102	1134	0.885		37.8	0.00	0.00	0.00	0.00	0.00	1.30	2.75	3.97	8.37	14.63
	Child 6-10	938	956	0.435		39.4	0.00	0.00	0.00	0.00	0.00	0.65	1.37	2.03	3.22	9.36
	Child 11-15	864	848	0.365		42.9	0.00	0.00	0.00	0.00	0.00	0.50	1.02	1.44	3.04	11.04
	Female 16-29	1537	1477	0.436		49.1	0.00	0.00	0.00	0.00	0.00	0.54	1.10	1.75	3.64	24.77
	Female 30-49	2264	2178	0.529		56.6	0.00	0.00	0.00	0.00	0.20	0.71	1.38	1.98	4.15	19.86
	Female 50+	2080	2025	0.412		56.5	0.00	0.00	0.00	0.00	0.20	0.60	1.14	1.62	2.78	7.41
	Male 16-29	1638	1551	0.441		46.1	0.00	0.00	0.00	0.00	0.00	0.47	1.11	1.72	4.28	34.37
	Male 30-49	2540	2383	0.428		53.0	0.00	0.00	0.00	0.00	0.11	0.55	1.17	1.77	3.41	23.38
	Male 50+	2206	2090	0.384		54.5	0.00	0.00	0.00	0.00	0.15	0.53	0.98	1.46	3.25	13.71
	Unknown	198	185	0.352		54.7	0.00	0.00	0.00	0.00	0.20	0.53	0.88	1.22	3.26	4.54

Table E-114. Fish consumption per kg, per capita, by state and age-gender category (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-114. Fish consumption per kg, per capita, by state and age-gender category (as-consumed g/kg-day)(continued)

				Pop	Pop	Percent										
	Age-Gender	Samp	PopN/	Arith	Geom	Eating	Pop									
State	Category	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	47	437	0.568		97.4	0.00	0.03	0.05	0.11	0.45	0.73	1.09	1.74	4.48	8.00
	Child 6-10	46	298	0.333		88.4	0.00	0.00	0.00	0.05	0.21	0.43	0.82	1.34	1.68	5.34
	Child 11-15	68	337	0.219		92.8	0.00	0.00	0.02	0.06	0.19	0.31	0.54	0.59	0.79	1.48
	Female 16-29	47	331	0.665		96.0	0.00	0.01	0.02	0.07	0.15	0.28	0.61	4.48		9.21
	Female 30-49	132	722	0.240		95.0	0.00	0.00	0.02	0.09	0.22	0.31	0.50	0.58	0.99	1.32
	Female 50+	162	854	0.342		94.9	0.00	0.00	0.03	0.10	0.21	0.38	0.90	1.35	1.75	1.87
	Male 16-29	55	275	0.099		92.3	0.00	0.00	0.01	0.02	0.07	0.13	0.26	0.33	0.40	0.74
	Male 30-49	120	731	0.237		96.0	0.00	0.02	0.04	0.10	0.16	0.30	0.42	0.64	1.48	1.88
	Male 50+	155	851	0.243		99.8	0.00	0.03	0.05	0.11	0.19	0.28	0.53	0.68	1.18	1.25
	Unknown	5	61	0.003	•	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
ND	Child 1-5	30	30	0.665		94.4	0.00	0.00	0.04	0.09	0.22	0.57	1.56	3.83		6.75
	Child 6-10	44	42	0.513		92.0	0.00	0.00	0.07	0.18	0.29	0.57	1.14	1.49		4.29
	Child 11-15	55	52	0.397		97.1	0.00	0.05	0.06	0.10	0.21	0.52	1.01	1.24		2.26
	Female 16-29	42	43	0.180		89.9	0.00	0.00	0.00	0.05	0.11	0.25	0.39	0.63		0.80
	Female 30-49	95	101	0.281		98.3	0.00	0.03	0.04	0.10	0.18	0.35	0.55	0.86	1.73	2.60
	Female 50+	99	112	0.377		93.4	0.00	0.00	0.02	0.09	0.16	0.38	0.99	1.47	2.89	4.23
	Male 16-29	36	38	0.217		100	0.01	0.02	0.04	0.07	0.13	0.23	0.45	0.56		1.92
	Male 30-49	90	97	0.215		97.8	0.00	0.02	0.04	0.08	0.18	0.26	0.45	0.54	1.21	1.30
	Male 50+	81	92	0.288		94.0	0.00	0.00	0.01	0.07	0.18	0.33	0.67	1.16	1.79	1.81
	Unknown	3	3	0.107		31.5	0.00	0.00	0.00	0.00	0.00	0.28				0.34

FL consumption excludes away-from-home consumption by children < 18.

Table E-115. Fish consumption per kg, consumers only, by state and age-gender category (as-consumed g/kg-day)

State	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-5	14	131	0.61	0.45	100	0.05	0.07	0.16	0.26	0.55	0.83	1.42	1.56	•	1.59
	Child 6-10	22	207	0.59	0.42	100	0.05	0.09	0.14	0.23	0.47	0.96	1.15	1.30	•	1.53
	Child 11-15	18	165	0.32	0.22	100	0.04	0.06	0.07	0.14	0.19	0.38	0.52	0.84	•	1.32
	Female 16-29	14	113	0.84	0.44	100	0.05	0.07	0.11	0.30	0.35	0.87	1.12	3.10	•	6.99
	Female 30-49	74	550	0.53	0.28	100	0.01	0.02	0.05	0.15	0.34	0.67	1.12	1.48	3.91	4.53
	Female 50+	70	511	0.48	0.28	100	0.01	0.02	0.05	0.13	0.37	0.72	1.03	1.36	2.35	2.71
	Male 16-29	10	84	0.23	0.19	100	0.06	0.06	0.08	0.13	0.21	0.25	0.47	0.56	•	0.58
	Male 30-49	74	551	0.51	0.33	100	0.02	0.05	0.11	0.18	0.35	0.70	1.15	1.46	2.18	2.21
	Male 50+	57	417	0.38	0.27	100	0.02	0.07	0.10	0.17	0.26	0.50	0.93	1.12	1.43	1.43
	Unknown	9	75	0.12	0.05	100	0.01	0.01	0.01	0.02	0.04	0.14	0.39	•	•	0.45
FL	Child 1-5	420	428	2.34	1.63	100	0.08	0.28	0.50	1.03	1.74	2.80	4.67	6.80	12.77	14.63
	Child 6-10	375	377	1.10	0.81	100	0.04	0.18	0.28	0.52	0.81	1.38	2.23	2.97	5.17	9.36
	Child 11-15	365	364	0.85	0.59	100	0.04	0.13	0.20	0.36	0.63	0.99	1.62	2.16	4.96	11.04
	Female 16-29	753	725	0.89	0.54	100	0.03	0.11	0.16	0.31	0.55	0.95	1.77	2.42	4.73	24.77
	Female 30-49	1287	1232	0.94	0.60	100	0.02	0.12	0.18	0.33	0.63	1.10	1.86	2.68	6.14	19.86
	Female 50+	1171	1145	0.73	0.52	100	0.00	0.11	0.19	0.31	0.52	0.94	1.52	2.05	3.18	7.41
	Male 16-29	754	714	0.96	0.53	100	0.00	0.11	0.16	0.28	0.52	0.99	1.77	2.65	9.49	34.37
	Male 30-49	1334	1264	0.81	0.52	100	0.01	0.10	0.17	0.28	0.53	0.95	1.69	2.44	4.00	23.38
	Male 50+	1192	1139	0.70	0.47	100	0.01	0.10	0.17	0.27	0.50	0.84	1.41	1.93	3.99	13.71
	Unknown	106	102	0.64	0.47	100	0.02	0.14	0.21	0.29	0.49	0.74	1.15	1.55	4.22	4.54

FL consumption excludes away-from-home consumption by children < 18.

Table E-115. Fish consumption per kg, consumers only, by state and age-gender category (as-consumed g/kg-day) (continued)

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	46	425	0.58	0.34	100	0.03	0.04	0.07	0.15	0.46	0.73	1.10	1.75	3.02	8.00
	Child 6-10	42	264	0.38	0.20	100	0.03	0.03	0.05	0.07	0.25	0.47	1.01	1.36	1.81	5.34
	Child 11-15	63	313	0.24	0.15	100	0.01	0.02	0.03	0.06	0.21	0.32	0.55	0.59	0.82	1.48
	Female 16-29	44	318	0.69	0.16	100	0.02	0.02	0.02	0.08	0.16	0.29	0.66	2.95		9.21
	Female 30-49	127	686	0.25	0.18	100	0.01	0.02	0.04	0.10	0.23	0.32	0.51	0.58	0.99	1.32
	Female 50+	150	810	0.36	0.21	100	0.01	0.03	0.05	0.11	0.22	0.38	0.93	1.37	1.75	1.87
	Male 16-29	52	254	0.11	0.06	100	0.01	0.01	0.02	0.02	0.08	0.14	0.27	0.33	0.40	0.74
	Male 30-49	115	702	0.25	0.17	100	0.01	0.03	0.07	0.11	0.17	0.30	0.42	0.64	1.42	1.88
	Male 50+	153	850	0.24	0.17	100	0.01	0.03	0.05	0.11	0.19	0.28	0.53	0.68	1.17	1.25
	Unknown	1	1	0.18	0.18	100	0.18	•	•		•				•	0.18
ND	Child 1-5	28	28	0.70	0.27	100	0.04	0.04	0.05	0.12	0.23	0.68	1.58	3.82		6.75
	Child 6-10	41	39	0.56	0.35	100	0.06	0.08	0.11	0.21	0.30	0.66	1.17	1.51		4.29
	Child 11-15	53	50	0.41	0.24	100	0.02	0.05	0.06	0.12	0.22	0.54	1.04	1.26		2.26
	Female 16-29	38	39	0.20	0.13	100	0.03	0.03	0.04	0.06	0.15	0.26	0.41	0.67		0.80
	Female 30-49	93	99	0.29	0.18	100	0.02	0.03	0.05	0.10	0.18	0.36	0.56	0.87	1.52	2.60
	Female 50+	92	104	0.40	0.20	100	0.01	0.03	0.06	0.10	0.17	0.52	1.14	1.52	2.69	4.23
	Male 16-29	36	38	0.22	0.13	100	0.01	0.02	0.04	0.07	0.13	0.23	0.45	0.56		1.92
	Male 30-49	88	95	0.22	0.15	100	0.01	0.03	0.05	0.08	0.18	0.26	0.45	0.54	1.18	1.30
	Male 50+	76	86	0.31	0.17	100	0.01	0.02	0.04	0.08	0.19	0.33	0.74	1.20	1.79	1.81
	Unknown	1	1	0.34	0.34	100	0.34									0.34

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Рор Q99	Max
СТ	Child 1-14	72	676	0.374	•	73.1	0.00	0.00	0.00	0.00	0.22	0.55	1.07	1.28	1.57	1.59
	Female 15-44	88	668	0.539		88.8	0.00	0.00	0.00	0.11	0.30	0.64	1.06	1.49	5.67	6.99
	Female 45+	92	679	0.403		86.7	0.00	0.00	0.00	0.08	0.27	0.58	0.89	1.28	2.28	2.71
	Male 15-44	14	119	0.162		70.5	0.00	0.00	0.00	0.00	0.14	0.24	0.41	0.53	•	0.58
	Male 45+	143	1055	0.415		91.8	0.00	0.00	0.03	0.14	0.25	0.54	1.03	1.39	2.12	2.21
	Unknown	11	99	0.089	•	76.1	0.00	0.00	0.00	0.01	0.02	0.08	0.37	0.45	•	0.45
FL	Child 1-14	2740	2776	0.607		40.0	0.00	0.00	0.00	0.00	0.00	0.74	1.84	2.80	6.34	14.63
	Female 15-44	3477	3350	0.479		52.7	0.00	0.00	0.00	0.00	0.11	0.63	1.27	1.84	3.77	24.77
	Female 45+	2487	2413	0.437		56.7	0.00	0.00	0.00	0.00	0.21	0.63	1.16	1.65	3.08	11.14
	Male 15-44	1719	1629	0.429		45.5	0.00	0.00	0.00	0.00	0.00	0.47	1.10	1.70	4.19	34.37
	Male 45+	4746	4473	0.407		53.7	0.00	0.00	0.00	0.00	0.14	0.55	1.09	1.63	3.34	23.38
	Unknown	198	185	0.352	•	54.7	0.00	0.00	0.00	0.00	0.20	0.53	0.88	1.22	3.26	4.54
MN	Child 1-14	145	1016	0.405		93.3	0.00	0.00	0.03	0.07	0.26	0.57	1.06	1.33	2.34	8.00
	Female 15-44	146	968	0.376		94.9	0.00	0.00	0.02	0.08	0.19	0.31	0.50	0.63	8.43	9.21
	Female 45+	203	978	0.335		95.4	0.00	0.01	0.03	0.09	0.21	0.37	0.89	1.33	1.71	1.87
	Male 15-44	63	292	0.106		92.4	0.00	0.00	0.01	0.02	0.07	0.14	0.26	0.33	0.44	0.74
	Male 45+	275	1582	0.240		98.1	0.00	0.02	0.05	0.11	0.17	0.29	0.49	0.66	1.34	1.88
	Unknown	5	61	0.003	•	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
ND	Child 1-14	115	111	0.523	•	94.1	0.00	0.00	0.05	0.12	0.27	0.60	1.19	1.58	5.51	6.75
	Female 15-44	118	123	0.253		95.1	0.00	0.02	0.04	0.07	0.17	0.32	0.54	0.78	1.41	2.60
	Female 45+	124	139	0.347	•	94.7	0.00	0.00	0.03	0.09	0.15	0.38	0.82	1.37	2.29	4.23
	Male 15-44	44	46	0.249	•	100	0.01	0.02	0.04	0.08	0.13	0.23	0.50	0.90	1.91	1.92
	Male 45+	171	189	0.250		95.9	0.00	0.01	0.03	0.07	0.18	0.30	0.54	0.88	1.71	1.81
	Unknown	3	3	0.107		31.5	0.00	0.00	0.00	0.00	0.00	0.28				0.34

Table E-116. Fish consumption per kg, per capita, by state and age-gender category (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-117. Fish consumption per kg, consumers only, by state and age-gender category (as-consumed g/kg-day)

State	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-14	53	495	0.51	0.36	100	0.04	0.06	0.11	0.19	0.35	0.69	1.13	1.44	1.58	1.59
	Female 15-44	79	593	0.61	0.32	100	0.01	0.03	0.06	0.18	0.34	0.68	1.12	1.65	5.51	6.99
	Female 45+	80	589	0.46	0.26	100	0.01	0.02	0.05	0.13	0.36	0.69	1.03	1.33	2.25	2.71
	Male 15-44	10	84	0.23	0.19	100	0.06	0.06	0.08	0.13	0.21	0.25	0.47	0.56		0.58
	Male 45+	131	968	0.45	0.30	100	0.02	0.07	0.10	0.17	0.29	0.58	1.09	1.40	2.12	2.21
	Unknown	9	75	0.12	0.05	100	0.01	0.01	0.01	0.02	0.04	0.14	0.39	•	•	0.45
FL	Child 1-14	1100	1112	1.52	0.97	100	0.04	0.19	0.29	0.52	0.99	1.84	3.12	4.56	9.46	14.63
	Female 15-44	1835	1764	0.91	0.58	100	0.02	0.11	0.17	0.32	0.59	1.06	1.80	2.53	4.85	24.77
	Female 45+	1408	1368	0.77	0.53	100	0.00	0.12	0.19	0.31	0.54	0.95	1.57	2.14	3.72	11.14
	Male 15-44	782	742	0.94	0.53	100	0.00	0.11	0.16	0.28	0.52	0.98	1.74	2.55	9.17	34.37
	Male 45+	2526	2403	0.76	0.50	100	0.01	0.10	0.17	0.28	0.51	0.89	1.58	2.24	4.00	23.38
	Unknown	106	102	0.64	0.47	100	0.02	0.14	0.21	0.29	0.49	0.74	1.15	1.55	4.22	4.54
MN	Child 1-14	137	947	0.43	0.24	100	0.01	0.03	0.05	0.09	0.31	0.58	1.07	1.42	2.35	8.00
	Female 15-44	139	919	0.40	0.16	100	0.01	0.02	0.03	0.09	0.20	0.32	0.50	0.64	7.78	9.21
	Female 45+	189	932	0.35	0.20	100	0.01	0.03	0.05	0.10	0.22	0.38	0.89	1.33	1.71	1.87
	Male 15-44	59	270	0.11	0.07	100	0.01	0.01	0.02	0.02	0.09	0.16	0.27	0.33	0.46	0.74
	Male 45+	268	1552	0.25	0.17	100	0.01	0.03	0.06	0.11	0.17	0.29	0.49	0.67	1.34	1.88
	Unknown	1	1	0.18	0.18	100	0.18	•	•	•	•		•	•	•	0.18
ND	Child 1-14	108	104	0.56	0.30	100	0.02	0.06	0.08	0.17	0.28	0.63	1.21	1.61	5.09	6.75
	Female 15-44	112	117	0.27	0.17	100	0.03	0.04	0.05	0.08	0.18	0.33	0.54	0.80	1.37	2.60
	Female 45+	117	131	0.37	0.19	100	0.01	0.03	0.04	0.10	0.17	0.43	0.84	1.38	2.30	4.23
	Male 15-44	44	46	0.25	0.14	100	0.01	0.02	0.04	0.08	0.13	0.23	0.50	0.74	1.91	1.92
	Male 45+	164	181	0.26	0.16	100	0.01	0.03	0.04	0.08	0.18	0.30	0.54	0.91	1.71	1.81
	Unknown	1	1	0.34	0.34	100	0.34	•	•		•					0.34

FL consumption excludes away-from-home consumption by children < 18.

State	Bought or Caught Acquisition Method	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Рор Q75	Рор Q90	Рор Q95	Рор Q99	Max
СТ	Bought	420	3296	0.402	•	84.8	0.00	0.00	0.00	0.08	0.25	0.55	0.96	1.30	2.18	6.99
	Caught	420	3296	0.008		16.3	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.17	0.51
	All	420	3296	0.410	•	85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
FL	Bought	15367	14827	0.407		47.5	0.00	0.00	0.00	0.00	0.00	0.51	1.12	1.70	3.56	34.05
	Caught	15367	14827	0.061		7.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	1.51	20.70
	All	15367	14827	0.467	•	50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	Bought	837	4897	0.200		89.9	0.00	0.00	0.00	0.04	0.10	0.23	0.51	0.76	1.34	8.00
	Caught	837	4897	0.110		60.6	0.00	0.00	0.00	0.00	0.03	0.09	0.22	0.37	1.19	7.47
	All	837	4897	0.309	•	94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
ND	Bought	575	610	0.228		89.9	0.00	0.00	0.00	0.04	0.10	0.22	0.52	0.93	2.05	6.75
	Caught	575	610	0.094		68.3	0.00	0.00	0.00	0.00	0.04	0.10	0.24	0.40	0.74	1.81
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

 Table E-118. Fish consumption per kg, per capita, by state and acquisition method (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught Acquisition	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Method	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Bought	361	2795	0.47	0.28	100	0.01	0.03	0.07	0.15	0.31	0.62	1.05	1.38	2.41	6.99
	Caught	71	539	0.05	0.02	100	0.00	0.00	0.00	0.01	0.02	0.05	0.13	0.18	0.49	0.51
	All	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Bought	7246	7036	0.86	0.54	100	0.00	0.11	0.17	0.30	0.54	0.99	1.77	2.55	5.01	34.05
	Caught	1212	1090	0.83	0.51	100	0.02	0.10	0.15	0.30	0.52	0.95	1.74	2.36	4.75	20.70
	All	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Bought	755	4400	0.22	0.12	100	0.01	0.02	0.03	0.06	0.12	0.25	0.55	0.83	1.44	8.00
	Caught	593	2968	0.18	0.08	100	0.01	0.01	0.02	0.03	0.07	0.17	0.30	0.57	1.26	7.47
	All	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Bought	516	548	0.25	0.12	100	0.01	0.02	0.03	0.05	0.12	0.24	0.61	1.02	2.06	6.75
	Caught	389	416	0.14	0.07	100	0.00	0.01	0.02	0.03	0.07	0.17	0.34	0.46	0.80	1.81
	All	546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-119. Fish consumption per kg, consumers only, by state and acquisition method (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-120. Fish consumption per kg, per capita, by state acquisition method, and income (as-consumed g/kg-day)

	Bought or Caught Acquisition	Hou	sehold	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Рор	Рор	Рор	Рор	Рор	Рор	Pop	Pop	Рор	
State	Method	Inc	ome	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$	0-20000	40	303	0.383	•	86.4	0.00	0.00	0.00	0.08	0.26	0.49	0.96	1.45		2.71
		\$20	000-50000	150	1137	0.458		86.6	0.00	0.00	0.00	0.10	0.27	0.58	0.93	1.42	4.20	6.99
		\$50	000-	214	1737	0.375		84.1	0.00	0.00	0.00	0.07	0.24	0.52	0.99	1.27	1.93	2.11
		Unk	nown	16	119	0.322	•	73.4	0.00	0.00	0.00	0.00	0.30	0.50	0.75	1.00	•	1.14
СТ	Caught	\$	0-20000	40	303	0.006		11.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05		0.14
		\$20	000-50000	150	1137	0.014		18.1	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.44	0.51
		\$50	000-	214	1737	0.005		16.8	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.11	0.19
		Unk:	nown	16	119	0.001		6.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	•	0.01
FL	Bought	\$	0-20000	3314	3158	0.414		42.5	0.00	0.00	0.00	0.00	0.00	0.45	1.10	1.84	3.71	34.05
		\$20	000-50000	6678	6430	0.411		47.4	0.00	0.00	0.00	0.00	0.00	0.52	1.11	1.68	3.63	24.77
		\$50	000-	3136	3066	0.451		54.2	0.00	0.00	0.00	0.00	0.14	0.58	1.27	1.79	3.79	14.41
		Unk	nown	2239	2172	0.322	•	45.3	0.00	0.00	0.00	0.00	0.00	0.42	0.99	1.45	2.78	6.37
FL	Caught	\$	0-20000	3314	3158	0.060		6.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.45	12.34
	-	\$20	000-50000	6678	6430	0.070		7.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	1.61	20.70
		\$50	000-	3136	3066	0.064		8.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	1.57	11.28
		Unk	nown	2239	2172	0.032		5.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.87	6.71

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or																	
	Caught					Pop	Pop	Percent										
	Acquisition	Hou	sehold	Samp	PopN/	Arith	Geom	Eating	Pop									
State	Method	Inc	ome	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$	0-20000	87	371	0.264	•	90.7	0.00	0.00	0.02	0.06	0.12	0.24	0.61	1.06	3.82	8.00
		\$20	000-50000	326	1801	0.184		84.4	0.00	0.00	0.00	0.03	0.10	0.20	0.45	0.58	1.58	1.74
		\$50	000-	327	2155	0.200		93.9	0.00	0.00	0.02	0.04	0.10	0.23	0.55	0.86	1.28	1.82
		Unk	nown	97	570	0.206		91.3	0.00	0.00	0.01	0.05	0.18	0.27	0.54	0.65	•	0.86
MN	Caught	\$	0-20000	87	371	0.137		70.4	0.00	0.00	0.00	0.00	0.03	0.13	0.28	1.00		1.23
		\$20	000-50000	326	1801	0.153		66.0	0.00	0.00	0.00	0.00	0.04	0.10	0.25	0.36	1.25	7.47
		\$50	000-	327	2155	0.087		55.5	0.00	0.00	0.00	0.00	0.02	0.09	0.24	0.39	1.10	1.84
		Unk	nown	97	570	0.038	•	56.7	0.00	0.00	0.00	0.00	0.02	0.03	0.12	0.14	0.43	1.41
ND	Bought	\$	0-20000	51	54	0.414		88.0	0.00	0.00	0.00	0.07	0.12	0.24	1.34	2.03		3.87
		\$20	000-50000	235	251	0.206		90.6	0.00	0.00	0.01	0.04	0.09	0.21	0.48	1.01	1.80	2.11
		\$50	000-	233	245	0.191		90.7	0.00	0.00	0.01	0.04	0.10	0.22	0.48	0.77	1.23	1.39
		Unk	nown	56	60	0.304	•	85.5	0.00	0.00	0.00	0.03	0.10	0.25	0.66	0.91	5.68	6.75
ND	Caught	\$	0-20000	51	54	0.102		53.9	0.00	0.00	0.00	0.00	0.01	0.08	0.23	0.45	1.76	1.81
		\$20	000-50000	235	251	0.066		59.4	0.00	0.00	0.00	0.00	0.02	0.07	0.18	0.30	0.77	1.19
		\$50	000-	233	245	0.115		76.2	0.00	0.00	0.00	0.01	0.06	0.15	0.34	0.46	0.70	0.80
		Unk	nown	56	60	0.112	•	85.7	0.00	0.00	0.00	0.03	0.05	0.14	0.22	0.23	1.64	1.75

Table E-120. Fish consumption per kg, per capita, by state acquisition method, and income (as-consumed g/kg-day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught	Heree	bald	0	ME ANG (Juith	Gaam	Percent										
State	Acquisition Method	House Incom		Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$	0-20000	35	261	0.44	0.26	100	0.01	0.02	0.08	0.13	0.30	0.55	1.13	1.47	•	2.71
		\$2000	0-50000	132	985	0.53	0.29	100	0.01	0.03	0.07	0.14	0.32	0.65	1.03	1.46	4.52	6.99
		\$5000	0 -	182	1461	0.45	0.28	100	0.01	0.03	0.06	0.16	0.30	0.65	1.04	1.29	1.94	2.11
		Unkno	wn	12	87	0.44	0.35	100	0.09	0.09	0.10	0.20	0.41	0.56	0.84	1.03	•	1.14
СТ	Caught	\$	0-20000	4	33	0.05	0.02	100	0.00			0.00	0.01	0.10				0.14
		\$2000	0-50000	30	206	0.08	0.03	100	0.00	0.00	0.00	0.01	0.02	0.07	0.23	0.46		0.51
		\$5000	0 -	36	292	0.03	0.01	100	0.00	0.00	0.00	0.01	0.02	0.03	0.08	0.11		0.19
		Unkno	wn	1	7	0.01	0.01	100	0.01	•	•	•	•	•	•	•	•	0.01
FL	Bought	\$	0-20000	1418	1342	0.97	0.57	100	0.01	0.11	0.19	0.30	0.58	1.04	2.10	2.78	7.17	34.05
		\$2000	0-50000	3141	3047	0.87	0.55	100	0.00	0.13	0.18	0.30	0.56	0.98	1.74	2.50	5.27	24.77
		\$5000	0 -	1695	1662	0.83	0.54	100	0.00	0.11	0.16	0.30	0.53	1.01	1.75	2.54	4.63	14.41
		Unkno	wn	992	984	0.71	0.49	100	0.01	0.11	0.16	0.27	0.48	0.90	1.55	2.06	3.39	6.37
FL	Caught	\$	0-20000	246	213	0.89	0.57	100	0.02	0.13	0.19	0.32	0.60	1.00	1.94	2.77	5.15	12.34
		\$2000	0-50000	563	500	0.90	0.54	100	0.02	0.10	0.15	0.31	0.53	1.04	1.79	2.38	4.76	20.70
		\$5000	0 -	274	258	0.76	0.47	100	0.02	0.08	0.11	0.28	0.49	0.87	1.63	2.42	4.61	11.28
		Unkno	wn	129	119	0.58	0.41	100	0.02	0.12	0.16	0.27	0.41	0.67	1.07	1.52	2.74	6.71

Table E-121. Fish consumption per kg, consumers only, by state, acquisition method, and income (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught						Percent										
	Acquisition	Household	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$ 0-20000	76	337	0.29	0.15	100	0.01	0.03	0.04	0.08	0.13	0.24	0.64	1.08	3.02	8.00
		\$20000-50000	284	1520	0.22	0.12	100	0.01	0.02	0.03	0.06	0.13	0.25	0.47	0.74	1.61	1.74
		\$50000-	312	2023	0.21	0.11	100	0.01	0.02	0.03	0.05	0.11	0.24	0.57	0.97	1.28	1.82
		Unknown	83	520	0.23	0.14	100	0.01	0.02	0.02	0.08	0.20	0.29	0.54	0.65	•	0.86
MN	Caught	\$ 0-20000	56	261	0.19	0.08	100	0.01	0.02	0.02	0.03	0.05	0.16	0.49	1.09		1.23
		\$20000-50000	232	1188	0.23	0.08	100	0.01	0.02	0.02	0.04	0.08	0.18	0.30	0.46	3.55	7.47
		\$50000-	235	1195	0.16	0.08	100	0.01	0.01	0.02	0.04	0.08	0.18	0.37	0.65	1.21	1.84
		Unknown	70	323	0.07	0.04	100	0.01	0.01	0.02	0.02	0.03	0.10	0.14	0.16	0.51	1.41
ND	Bought	\$ 0-20000	45	47	0.47	0.18	100	0.02	0.03	0.05	0.08	0.14	0.25	1.54	2.22		3.87
		\$20000-50000	213	227	0.23	0.11	100	0.01	0.02	0.03	0.05	0.11	0.23	0.52	1.03	1.83	2.11
		\$50000-	210	222	0.21	0.12	100	0.01	0.02	0.03	0.05	0.11	0.23	0.48	0.79	1.23	1.39
		Unknown	48	52	0.35	0.13	100	0.01	0.02	0.03	0.04	0.14	0.29	0.70	1.08	5.32	6.75
ND	Caught	\$ 0-20000	27	29	0.19	0.08	100	0.01	0.01	0.01	0.03	0.08	0.19	0.42	0.64		1.81
		\$20000-50000	142	149	0.11	0.06	100	0.00	0.01	0.02	0.03	0.05	0.11	0.25	0.40	0.87	1.19
		\$50000-	173	187	0.15	0.09	100	0.00	0.01	0.02	0.04	0.08	0.22	0.38	0.53	0.70	0.80
		Unknown	47	52	0.13	0.07	100	0.01	0.03	0.03	0.04	0.06	0.15	0.23	0.24	1.75	1.75

Table E-121. Fish consumption per kg, consumers only, by state, acquisition method, and income (as-consumedg/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

			PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Pop	Pop	Рор	Рор	Рор	Рор	
State	Habitat	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Freshwater	420	3296	0.014		36.4	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.07	0.27	0.52
	Estuarine	420	3296	0.104	•	76.0	0.00	0.00	0.00	0.00	0.04	0.11	0.23	0.43	1.13	2.93
	Marine	420	3296	0.292	•	84.8	0.00	0.00	0.00	0.05	0.17	0.40	0.67	0.97	1.58	5.66
	All	420	3296	0.410	•	85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
FL	Freshwater	15367	14827	0.042		9.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	1.02	6.27
	Estuarine	15367	14827	0.099	•	26.5	0.00	0.00	0.00	0.00	0.00	0.06	0.32	0.54	1.30	13.22
	Marine	15367	14827	0.326	•	40.3	0.00	0.00	0.00	0.00	0.00	0.37	0.90	1.43	3.21	34.37
	All	15367	14827	0.467	•	50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	Freshwater	837	4897	0.110		60.6	0.00	0.00	0.00	0.00	0.03	0.09	0.22	0.37	1.19	7.47
	Estuarine	837	4897	0.021	•	67.5	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.09	0.26	1.33
	Marine	837	4897	0.178	•	89.9	0.00	0.00	0.00	0.03	0.09	0.20	0.46	0.68	1.30	6.67
	All	837	4897	0.309	-	94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
ND	Freshwater	575	610	0.094		68.3	0.00	0.00	0.00	0.00	0.04	0.10	0.24	0.40	0.74	1.81
	Estuarine	575	610	0.019	•	71.3	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.08	0.23	0.57
	Marine	575	610	0.209	•	89.9	0.00	0.00	0.00	0.03	0.09	0.21	0.45	0.80	1.98	6.75
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

Table E-122. Fish consumption per kg, per capita, by state and habitat (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Freshwater	157	1201	0.04	0.02	100	0.00	0.00	0.00	0.01	0.02	0.04	0.07	0.15	0.37	0.52
	Estuarine	327	2506	0.14	0.06	100	0.00	0.01	0.01	0.03	0.06	0.14	0.30	0.51	1.14	2.93
	Marine	361	2796	0.34	0.19	100	0.00	0.02	0.04	0.11	0.23	0.45	0.78	1.09	1.60	5.66
	All	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Freshwater	1426	1346	0.47	0.28	100	0.02	0.06	0.07	0.11	0.30	0.60	1.09	1.51	2.54	6.27
	Estuarine	4124	3932	0.37	0.23	100	0.00	0.05	0.07	0.11	0.23	0.44	0.80	1.14	2.24	13.22
	Marine	6124	5981	0.81	0.49	100	0.00	0.09	0.15	0.28	0.50	0.89	1.64	2.40	4.98	34.37
	All	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Freshwater	593	2968	0.18	0.08	100	0.01	0.01	0.02	0.03	0.07	0.17	0.30	0.57	1.26	7.47
	Estuarine	559	3308	0.03	0.01	100	0.00	0.00	0.00	0.01	0.01	0.03	0.07	0.12	0.27	1.33
	Marine	755	4400	0.20	0.11	100	0.01	0.02	0.02	0.05	0.10	0.22	0.50	0.73	1.35	6.67
	All	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Freshwater	389	416	0.14	0.07	100	0.00	0.01	0.02	0.03	0.07	0.17	0.34	0.46	0.80	1.81
	Estuarine	407	435	0.03	0.01	100	0.00	0.00	0.00	0.01	0.01	0.03	0.06	0.10	0.25	0.57
	Marine	516	548	0.23	0.11	100	0.01	0.02	0.02	0.05	0.10	0.22	0.54	0.86	2.04	6.75
	All	546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-123. Fish consumption per kg, consumers only, by state and habitat (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-124. Fish consumption per kg, per capita, by state and fish/shellfish type (as-consumed g/kg-day)

	Finfish or		Devil	Pop	Pop	Percent	Deer	Deer	Deer	Dere	Deer	Dava	Deer	Deer	Dava	
	Shellfish		PopN/	Arith	Geom	Eating	Pop									
State	Туре	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Shellfish	420	3296	0.133	•	74.6	0.00	0.00	0.00	0.00	0.06	0.15	0.30	0.55	1.19	2.93
	Finfish	420	3296	0.266		82.7	0.00	0.00	0.00	0.02	0.14	0.36	0.69	0.95	1.57	4.49
	All	420	3296	0.410		85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
FL	Shellfish	15367	14827	0.074		21.1	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.43	1.06	9.36
	Finfish	15367	14827	0.393		41.9	0.00	0.00	0.00	0.00	0.00	0.48	1.10	1.67	3.69	34.37
	All	15367	14827	0.467	•	50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	Shellfish	837	4897	0.043		67.5	0.00	0.00	0.00	0.00	0.01	0.04	0.10	0.18	0.51	2.67
	Finfish	837	4897	0.267		94.0	0.00	0.00	0.01	0.06	0.15	0.31	0.57	0.83	1.59	8.69
	All	837	4897	0.309		94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
ND	Shellfish	575	610	0.039		71.3	0.00	0.00	0.00	0.00	0.02	0.04	0.09	0.15	0.46	1.13
	Finfish	575	610	0.283		94.3	0.00	0.00	0.02	0.07	0.14	0.29	0.63	1.01	2.05	6.75
	All	575	610	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Finfish or					Percent										
	Shellfish	Samp	WtdNC/	Arith	Geom	Eating										
State	Туре	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Shellfish	320	2458	0.18	0.08	100	0.00	0.01	0.02	0.04	0.09	0.18	0.37	0.68	1.36	2.93
	Finfish	353	2727	0.32	0.16	100	0.00	0.01	0.02	0.08	0.20	0.40	0.77	1.08	1.70	4.49
	All	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Shellfish	3260	3132	0.35	0.22	100	0.00	0.05	0.07	0.11	0.21	0.41	0.74	1.02	2.58	9.36
	Finfish	6428	6209	0.94	0.63	100	0.05	0.19	0.24	0.34	0.60	1.06	1.85	2.72	5.81	34.37
	All	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Shellfish	559	3308	0.06	0.03	100	0.00	0.01	0.01	0.01	0.02	0.06	0.14	0.24	0.53	2.67
	Finfish	791	4603	0.28	0.15	100	0.01	0.02	0.03	0.07	0.16	0.32	0.57	0.86	1.60	8.69
	All	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Shellfish	407	435	0.05	0.03	100	0.00	0.01	0.01	0.01	0.02	0.06	0.13	0.21	0.50	1.13
	Finfish	407 541	575	0.05	0.03	100	0.00	0.01	0.01	0.01	0.02	0.00	0.13	1.08	2.08	6.75
	All	541 546	580	0.30	0.18	100	0.00	0.02	0.04	0.08	0.18	0.31	0.87	1.08	2.08	6.75

Table E-125. Fish consumption per kg, consumers only, by state and fish/shellfish type (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-126. Fish consumption per kg, consumers only, by state and type of fish consumed (as-consumed g/kg-day)

	Type of					Percent										
	Fish/Shellfish	Samp	WtdNC/	Arith	Geom	Eating										
State	Eaten	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Eats Caught Only	1	9	0.01	0.01	100	0.01							•		0.01
	Eats Caught&Bought	70	530	0.49	0.33	100	0.05	0.08	0.10	0.17	0.34	0.75	1.10	1.33	2.14	2.21
	Eats Bought Only	291	2265	0.48	0.28	100	0.01	0.03	0.06	0.16	0.32	0.61	1.06	1.39	2.75	6.99
	All Fish Consumers	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Eats Caught Only	511	454	0.76	0.50	100	0.02	0.09	0.15	0.30	0.50	0.90	1.67	2.34	4.02	7.38
	Eats Caught&Bought	701	636	1.81	1.25	100	0.07	0.38	0.50	0.76	1.15	1.95	3.35	5.09	11.35	34.37
	Eats Bought Only	6545	6400	0.85	0.54	100	0.00	0.11	0.18	0.30	0.54	0.98	1.75	2.49	4.92	24.77
	All Fish Consumers	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Eats Caught Only	38	221	0.16	0.09	100	0.01	0.02	0.02	0.03	0.08	0.25	0.37	0.51		0.57
	Eats Caught&Bought	555	2746	0.40	0.24	100	0.01	0.06	0.08	0.11	0.23	0.42	0.70	1.32	2.28	9.21
	Eats Bought Only	200	1653	0.23	0.12	100	0.01	0.01	0.02	0.05	0.14	0.26	0.56	0.91	1.24	8.00
	All Fish Consumers	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Eats Caught Only	30	32	0.21	0.13	100	0.01	0.03	0.05	0.09	0.14	0.22	0.33	0.51		1.81
	Eats Caught&Bought	359	384	0.39	0.24	100	0.03	0.06	0.07	0.13	0.23	0.43	0.82	1.25	2.49	4.29
	Eats Bought Only	157	164	0.25	0.11	100	0.01	0.02	0.03	0.05	0.10	0.24	0.53	0.97	1.95	6.75
	All Fish Consumers	546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

FL consumption excludes away-from-home consumption by children < 18.

	Eats Freshwater/					Percent										
	Estuarine Caught	Samp	WtdNC/	Arith	Geom	Eating										
State	Fish	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Sometimes	50	388	0.46	0.30	100	0.01	0.06	0.09	0.17	0.29	0.73	1.10	1.25	1.96	1.99
	Never	312	2416	0.49	0.29	100	0.01	0.03	0.07	0.16	0.32	0.62	1.06	1.41	2.71	6.99
	All Fish Consumers	362	2804	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
FL	Exclusively	235	189	0.71	0.42	100	0.02	0.06	0.10	0.25	0.42	0.88	1.60	2.16	3.72	7.38
	Sometimes	458	404	1.73	1.16	100	0.05	0.32	0.43	0.69	1.10	1.93	3.44	4.96	10.51	23.38
	Never	7064	6896	0.88	0.56	100	0.00	0.12	0.18	0.31	0.56	1.02	1.81	2.60	5.15	34.37
	All Fish Consumers	7757	7490	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	Exclusively	38	221	0.16	0.09	100	0.01	0.02	0.02	0.03	0.08	0.25	0.37	0.51		0.57
	Sometimes	555	2746	0.40	0.24	100	0.01	0.06	0.08	0.11	0.23	0.42	0.70	1.32	2.28	9.21
	Never	200	1653	0.23	0.12	100	0.01	0.01	0.02	0.05	0.14	0.26	0.56	0.91	1.24	8.00
	All Fish Consumers	793	4621	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
ND	Exclusively	30	32	0.21	0.13	100	0.01	0.03	0.05	0.09	0.14	0.22	0.33	0.51		1.81
	Sometimes	359	384	0.39	0.24	100	0.03	0.06	0.07	0.13	0.23	0.43	0.82	1.25	2.49	4.29
	Never	157	164	0.25	0.11	100	0.01	0.02	0.03	0.05	0.10	0.24	0.53	0.97	1.95	6.75
	All Fish Consumers	546	580	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-127. Fish consumption per kg, consumers only, by state and fresh/estuarine fish consumption (asconsumed g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

	Household		PopN/	Pop Arith	Pop Geom	Percent Eating	Pop									
tate	Income	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	\$ 0-20000	40	303	0.520	•	86.4	0.00	0.00	0.00	0.13	0.34	0.65	1.28	1.86		3.62
	\$20000-50000	150	1137	0.638		87.4	0.00	0.00	0.00	0.15	0.39	0.78	1.40	1.93	5.51	9.08
	\$50000-	214	1737	0.524		84.1	0.00	0.00	0.00	0.09	0.34	0.72	1.37	1.69	2.62	3.30
	Unknown	16	119	0.446		73.4	0.00	0.00	0.00	0.00	0.42	0.69	1.02	1.36		1.55
	All	420	3296	0.560	•	85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	\$ 0-20000	3314	3158	0.588		45.9	0.00	0.00	0.00	0.00	0.00	0.70	1.55	2.61	5.50	38.29
	\$20000-50000	6678	6430	0.605		50.4	0.00	0.00	0.00	0.00	0.08	0.76	1.61	2.42	5.03	30.27
	\$50000-	3136	3066	0.648		57.5	0.00	0.00	0.00	0.00	0.27	0.82	1.77	2.53	5.46	18.48
	Unknown	2239	2172	0.445		47.6	0.00	0.00	0.00	0.00	0.00	0.60	1.36	1.99	3.58	8.18
	All	15367	14827	0.587	•	50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	\$ 0-20000	87	371	0.534		91.0	0.00	0.00	0.04	0.14	0.27	0.44	1.60	2.14	5.13	10.67
	\$20000-50000	326	1801	0.449		91.3	0.00	0.00	0.02	0.11	0.23	0.45	0.83	1.20	2.20	12.27
	\$50000-	327	2155	0.384		97.9	0.00	0.02	0.04	0.10	0.24	0.44	0.82	1.46	2.38	3.20
	Unknown	97	570	0.326		92.9	0.00	0.00	0.04	0.11	0.29	0.43	0.74	0.91	1.84	2.59
	All	837	4897	0.412	•	94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	\$ 0-20000	51	54	0.689		93.7	0.00	0.00	0.03	0.12	0.23	0.35	2.39	3.40		5.72
	\$20000-50000	235	251	0.363		94.2	0.00	0.00	0.03	0.09	0.18	0.37	0.93	1.51	2.59	2.87
	\$50000-	233	245	0.409		97.1	0.00	0.04	0.06	0.14	0.30	0.51	0.84	1.36	1.90	2.06
	Unknown	56	60	0.554		92.7	0.00	0.00	0.05	0.09	0.24	0.54	1.05	1.62	8.16	9.00
	All	575	610	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

Table E-128. Fish consumption per kg, per capita, by state and income (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Household Income	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
СТ	\$ 0-2000		261	0.60	0.36	100	0.01	0.03	0.10	0.18	0.43	0.75	1.53	1.90		3.62	
	\$20000-5000		994	0.73	0.41	100	0.01	0.05	0.12	0.21	0.46	0.88	1.55	1.98	5.92	9.08	
	\$50000-	182	1461	0.62	0.39	100	0.01	0.05	0.09	0.24	0.41	0.91	1.49	1.75	2.64	3.30	
	Unknown	12	87	0.61	0.48	100	0.12	0.12	0.13	0.29	0.57	0.78	1.14	1.41	•	1.55	
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08	
FL	\$ 0-2000	0 1534	1451	1.28	0.77	100	0.01	0.16	0.25	0.39	0.77	1.39	2.77	3.66	9.10	38.29	
	\$20000-5000	0 3370	3241	1.20	0.76	100	0.01	0.18	0.25	0.40	0.75	1.38	2.41	3.45	7.59	30.27	
	\$50000-	1806	1763	1.13	0.73	100	0.00	0.15	0.22	0.40	0.71	1.37	2.39	3.37	6.34	18.48	
	Unknown	1047	1035	0.93	0.65	100	0.02	0.15	0.23	0.36	0.64	1.16	2.06	2.52	4.35	8.18	
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29	
MN	\$ 0-2000	0 77	337	0.59	0.32	100	0.01	0.07	0.12	0.15	0.27	0.46	1.73	2.17	4.08	10.67	
	\$20000-5000	00 301	1644	0.49	0.24	100	0.01	0.03	0.07	0.13	0.24	0.49	0.86	1.28	2.45	12.27	
	\$50000-	321	2109	0.39	0.22	100	0.01	0.03	0.04	0.11	0.25	0.44	0.83	1.46	2.38	3.20	
	Unknown	94	530	0.35	0.25	100	0.02	0.05	0.07	0.12	0.30	0.44	0.76	0.92	1.39	2.59	
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27	
ND	\$ 0-2000	00 48	50	0.74	0.28	100	0.02	0.03	0.09	0.14	0.25	0.37	2.40	3.49		5.72	
	\$20000-5000	0 221	236	0.39	0.21	100	0.01	0.03	0.05	0.10	0.20	0.39	0.97	1.55	2.60	2.87	
	\$50000-	225	238	0.42	0.28	100	0.02	0.04	0.08	0.16	0.31	0.51	0.85	1.39	1.90	2.06	
	Unknown	52	56	0.60	0.27	100	0.03	0.05	0.06	0.11	0.27	0.57	1.10	1.71	7.81	9.00	
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00	

Table E-129. Fish consumption per kg, consumers only, by state and income (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Race Ethnicity	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	White, Non-Hispanic	370	2888	0.556		88.7	0.00	0.00	0.00	0.15	0.38	0.78	1.32	1.69	2.64	5.98
	Black, Non-Hispanic	9	66	0.068		33.5	0.00	0.00	0.00	0.00	0.00	0.17	0.23			0.26
	Hispanic	20	178	0.672		70.9	0.00	0.00	0.00	0.00	0.29	0.70	2.14	3.43		3.71
	Asian	19	143	0.806		59.2	0.00	0.00	0.00	0.00	0.18	0.71	1.74	4.96		9.08
	Unknown	2	21	0.013		43.4	0.00	0.00	0.00	0.00	0.00	0.03				0.03
	All	420	3296	0.560	•	85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	White, Non-Hispanic	11607	11113	0.574		51.6	0.00	0.00	0.00	0.00	0.12	0.73	1.56	2.33	4.77	26.20
	Black, Non-Hispanic	1603	1522	0.674		48.3	0.00	0.00	0.00	0.00	0.00	0.87	1.87	2.77	6.14	18.48
	Hispanic	1556	1619	0.573		45.9	0.00	0.00	0.00	0.00	0.00	0.68	1.52	2.46	5.34	38.29
	Asian	223	199	0.722		49.5	0.00	0.00	0.00	0.00	0.00	0.84	1.65	2.34	6.64	30.27
	American Indian	104	98	0.777		53.4	0.00	0.00	0.00	0.00	0.20	0.92	2.46	4.52	6.22	6.38
	Unknown	274	276	0.531		45.9	0.00	0.00	0.00	0.00	0.00	0.75	1.45	2.14	4.46	12.34
	All	15367	14827	0.587		50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	White, Non-Hispanic	775	4469	0.359		93.8	0.00	0.00	0.02	0.10	0.23	0.44	0.79	1.19	2.19	10.67
	Black, Non-Hispanic	1	1	0.000	•		•	•								
	Hispanic	3	50	0.860	•	100	0.25	•	•	0.28	0.36	1.57	•			1.97
	Asian	7	94	0.712		100	0.12	0.14	0.18	0.25	0.63	1.12				1.46
	American Indian	12	78	2.771		100	0.09		0.12	0.15	0.21	1.83				12.27
	Unknown	39	204	0.430	•	100	0.03	0.12	0.14	0.16	0.31	0.46	1.05	1.36	2.22	2.59
	All	837	4897	0.412	•	94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	White, Non-Hispanic	528	559	0.433		95.1	0.00	0.01	0.04	0.11	0.24	0.44	0.96	1.62	2.96	9.00
	Black, Non-Hispanic	2	2	0.333	•	100	0.31				0.33	0.37				0.37
	Asian	4	3	0.264	•	100	0.06			0.07	0.24	0.46				0.51
	American Indian	9	9	0.404		100	0.07		0.11	0.21	0.33	0.44	0.92			1.06
	Unknown	32	36	0.395		93.5	0.00	0.00	0.06	0.08	0.18	0.57	0.95	1.25		2.24
	All	575	610	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

Table E-130. Fish consumption per kg, per capita, by state and race-ethnicity (uncooked g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

ate	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
Т	White, Non-Hispanic	331	2562	0.63	0.39	100	0.01	0.05	0.10	0.23	0.43	0.87	1.41	1.75	2.67	5.98
	Black, Non-Hispanic	3	22	0.20	0.20	100	0.16			0.17	0.20	0.24				0.26
	Hispanic	15	126	0.95	0.54	100	0.10	0.12	0.16	0.24	0.39	1.41	2.95	3.52		3.71
	Asian	12	85	1.36	0.64	100	0.07	0.07	0.12	0.35	0.69	1.34	2.57	6.24		9.08
	Unknown	1	9	0.03	0.03	100	0.03							•		0.03
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
L	White, Non-Hispanic	5957	5734	1.11	0.71	100	0.00	0.16	0.24	0.38	0.71	1.29	2.30	3.28	6.57	26.20
	Black, Non-Hispanic	785	736	1.39	0.91	100	0.04	0.23	0.30	0.47	0.91	1.67	2.81	3.92	7.61	18.48
	Hispanic	721	742	1.25	0.75	100	0.03	0.15	0.23	0.39	0.75	1.39	2.53	3.57	8.58	38.29
	Asian	110	99	1.46	0.88	100	0.14	0.27	0.35	0.45	0.84	1.45	2.34	4.08	14.10	30.27
	American Indian	57	52	1.45	0.87	100	0.06	0.18	0.28	0.39	0.90	1.58	4.02	5.73	6.36	6.38
	Unknown	127	127	1.16	0.77	100	0.06	0.17	0.24	0.40	0.81	1.41	2.23	3.10	8.60	12.34
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
N	White, Non-Hispanic	732	4194	0.38	0.22	100	0.01	0.03	0.05	0.12	0.25	0.45	0.81	1.31	2.20	10.67
	Black, Non-Hispanic		•			100								•		
	Hispanic	3	50	0.86	0.56	100	0.25			0.28	0.36	1.18				1.97
	Asian	7	94	0.71	0.54	100	0.12	0.15	0.18	0.25	0.62	1.07		•		1.46
	American Indian	12	78	2.77	0.46	100	0.09		0.12	0.15	0.21	0.50		•		12.27
	Unknown	39	204	0.43	0.32	100	0.03	0.12	0.14	0.16	0.31	0.46	1.05	1.34	1.83	2.59
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
D	White, Non-Hispanic	501	532	0.45	0.25	100	0.01	0.04	0.06	0.12	0.25	0.46	0.99	1.64	3.00	9.00
	Black, Non-Hispanic	2	2	0.33	0.33	100	0.31				0.33	0.36				0.37
	Asian	4	3	0.26	0.18	100	0.06			0.07	0.18	0.45				0.51
	American Indian	9	9	0.40	0.31	100	0.07		0.11	0.21	0.33	0.44	0.82			1.06
	Unknown	30	33	0.42	0.25	100	0.06	0.06	0.07	0.10	0.21	0.59	0.98	1.27		2.24
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-131. Fish consumption per kg, consumers only, by state and race-ethnicity (uncooked g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Race Ethnicity	-	PopN/ 1000	Pop ⁄Arith Mean	Pop Geom Mean	Percer Eating Fish		Pop Q5	Pop Q10	-	-	-	-	Pop Q95		-
СТ	Adult	White, Non-Hispani	.c 296	2194	1 0.579		92.0	0.00	0.00	0.03	0.18	0.40	0.79	1.27	1.71	2.7	7 5.98
		Black, Non-Hispani	.c 5	34	1 0.131		64.5	0.00	0.00	0.00	0.00	0.16	0.22				0.26
		Hispanic	13	103	3 1.023		82.5	0.00	0.00	0.00	0.13	0.41	1.61	3.35	3.63		3.71
		Asian	16	119	0.703		51.0	0.00	0.00	0.00	0.00	0.06	0.45	1.21	5.50		9.08
		Unknown	1	9	0.029	•	100	0.03		•	•			•			0.03
СТ	Child	White, Non-Hispani	.c 63	595	5 0.545		78.8	0.00	0.00	0.00	0.07	0.32	0.88	1.52	1.66	2.1	.0 2.11
		Black, Non-Hispani	.c 4	32	2 0.000	•	•			•	•			•			
		Hispanic	7	74	1 0.184	•	54.9	0.00	0.00	0.00	0.00	0.20	0.35	0.44	•		0.46
		Asian	3	24	1.318		100	0.73			0.85	1.22	1.81				2.01
		Unknown	1	12	2 0.000	•		•	•	•	•	•	•	•	•	•	•
СТ	Unknow	n White, Non-Hispani	.c 11	99	0.124		76.1	0.00	0.00	0.00	0.01	0.03	0.11	0.52	0.62		0.63
FL	Adult	White, Non-Hispanic	9325	8851 (.549		54.5	0.00 0.	.00 0	.00 0	.00 0	.20 0	.72	1.47	2.16	4.37	26.20
		Black, Non-Hispanic	1072	999 (0.576		51.7	0.00 0.	.00 0	.00 0	.00 0	.15 0	.76	1.60	2.22	5.02	18.48
		Hispanic	1189	1203 0).557		47.8	0.00 0.	.00 0	.00 0	.00 0	.00 0	.68	1.45	2.16	4.16	38.29
		Asian	177	158 (0.851		54.6	0.00 0.	.00 0	.00 0	.00 0	.32 0	.91	1.85	2.55	8.42	30.27
		American Indian	89	83 (0.660		52.6	0.00 0.	.00 0	.00 0	.00 0	.16 0	.91	1.59	2.97	6.18	6.38
		Unknown	226	223 (0.517	•	47.9	0.00 0.	.00 0	.00 0	.00 0	.00 0	.71	1.42	1.86	5.36	12.34
FL	Child	White, Non-Hispanic	2282	2262 (0.672		40.1	0.00 0.	.00 0	.00 0	.00 0	.00 0	.79	2.04	3.15	7.73	18.97
		Black, Non-Hispanic	531	523 (0.861		42.0	0.00 0.	.00 0	.00 0	.00 0	.00 1	.16	2.65	3.76	7.02	15.60
		Hispanic	367	416 0	0.622		40.3	0.00 0.	.00 0	.00 0	.00 0	.00 0	.70	1.87	3.32	6.26	11.58
		Asian	46	42 0	0.232		30.2	0.00 0.	.00 0	.00 0	.00 0	.00 0	.41	0.91	1.19	1.93	2.39
		American Indian	15	15 1	.444		58.1	0.00 0.	.00 0	.00 0	.00 0	.46 2	.90	5.23	5.86		6.04
		Unknown	48	53 ().592		37.6	0.00 0.	.00 0	.00 0	.00 0	.00 1	.05	2.26	2.43	4.60	4.70

FL consumption excludes away-from-home consumption by children < 18.

Table E-132. Fish consumption per kg, per capita, by state, adult/child and race-ethnicity (uncooked g/kg-day)(continued)

State	Adult Child	Race Ethnicity	_	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	-	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	Adult	White, Non-Hispanic	602		0.331	•	96.3	0.00	0.02	0.03	0.11	0.23	0.41	0.73	1.08	1.98	2.51
		Black, Non-Hispanic	1	1	0.000	•		•	•	•	•	•	•	•	•	•	
		Hispanic	3	50	0.860	•	100	0.25	•	•	0.28	0.36	1.57				1.97
		Asian	4	35	0.218		100	0.12	0.12	0.14	0.17	0.22	0.26		•		0.26
		American Indian	10	57	3.755		100	0.09	•	0.10	0.16	0.32	6.82		•		12.27
		Unknown	28	173	0.426	•	100	0.03	0.12	0.13	0.15	0.29	0.47	1.13	1.37	·	1.43
MN	Child	White, Non-Hispanic	168	1112	0.461		91.6	0.00	0.00	0.02	0.08	0.28	0.62	1.00	1.54	3.09	10.67
		Asian	3	59	1.002		100	0.58			0.68	0.97	1.33				1.46
		American Indian	2	22	0.172	•	100	0.15			0.15	0.17	0.20				0.20
		Unknown	11	31	0.452	•	100	0.05	0.08	0.31	0.37	0.40	0.42	0.52	0.95	•	2.59
MN	Unknown	White, Non-Hispanic	5	61	0.004		1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
ND	Adult	White, Non-Hispanic	375	414	0.384		95.9	0.00	0.02	0.04	0.11	0.22	0.42	0.83	1.47	2.63	5.64
		Black, Non-Hispanic	2	2	0.333		100	0.31				0.33	0.37				0.37
		Asian	4	3	0.264		100	0.06			0.07	0.24	0.46				0.51
		American Indian	б	б	0.464		100	0.18		0.19	0.25	0.32	0.58				1.06
		Unknown	27	30	0.282	•	92.4	0.00	0.00	0.06	0.08	0.13	0.51	0.73	0.87	•	0.92
ND	Child	White, Non-Hispanic	150	143	0.580		94.0	0.00	0.00	0.07	0.13	0.29	0.55	1.39	1.91	6.61	9.00
		American Indian	3	3	0.277		100	0.07			0.12	0.35	0.42				0.43
		Unknown	5	5	1.080	•	100	0.23	•	0.24	0.32	1.13	1.58	•	•	•	2.24
ND	Unknown	White, Non-Hispanic	3	3	0.143	•	31.5	0.00	0.00	0.00	0.00	0.00	0.37				0.45

FL consumption excludes away-from-home consumption by children < 18.

Table E-133. Fish consumption per kg, consumers only, by state, adult/child, and race-ethnicity (uncooked g/kg-day)

State	Adult Child	Race Ethnicity	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max		
СТ	Adult	White, Non-Hispanic	272	2017	0.63	0.40	100	0.01	0.05	0.11	0.23	0.44	0.84	1.34	1.75	2.82	5.98		
		Black, Non-Hispanic	3	22	0.20	0.20	100	0.16			0.17	0.20	0.24				0.26		
		Hispanic	11	85	1.24	0.69	100	0.10	0.11	0.14	0.22	0.78	1.76	3.41	3.67		3.71		
		Asian	9	61	1.38	0.50	100	0.07		0.09	0.21	0.45	0.75	3.19			9.08		
		Unknown	1	9	0.03	0.03	100	0.03	•	•	•	•	•	•	•	•	0.03		
СТ	Child	White, Non-Hispanic	50	469	0.69	0.48	100	0.05	0.08	0.14	0.26	0.46	1.02	1.54	1.75	2.10	2.11		
		Black, Non-Hispanic		•			100							•		•	•		
		Hispanic	4	41	0.34	0.32	100	0.21			0.26	0.33	0.41				0.46		
		Asian	3	24	1.32	1.21	100	0.73			0.85	1.22	1.72				2.01		
		Unknown	•	•	•	•	100	•	•	•	•			•	•	•	•		
СТ	Unknown	White, Non-Hispanic	9	75	0.16	0.06	100	0.01	0.01	0.01	0.02	0.05	0.20	0.54		•	0.63		
FL	Adult	White, Non-Hispanic	5042	2 482	71.	01 (0.66	100	0.00	0.1	15 0	.22	0.36	0.66	1.17	2.07	2.90	5.29	26.20
		Black, Non-Hispanic	55	7 51	61.	12 ().75	100	0.04	£ 0.2	19 0	.26	0.41	0.74	1.36	2.17	2.93	6.59	18.48
		Hispanic	573	L 57	51.	17 (0.70	100	0.03	3 0.1	15 0	.22	0.37	0.71	1.24	2.22	3.12	9.17	38.29
		Asian	9'	7 8	61.	56 (0.91	100	0.14	ŧ 0.2	26 0	.34	0.47	0.85	1.52	2.39	4.36	16.45	30.27
		American Indian	49	94	4 1.	25 (0.78	100	0.00	5 0.1	16 0	.28	0.39	0.90	1.23	2.75	5.10		6.38
		Unknown	109	9 10	7 1.	08 ().72	100	0.00	5 0.1	19 0	.28	0.40	0.73	1.19	1.88	3.02	9.24	12.34
FL	Child	White, Non-Hispanic	91	5 90	71.	67 3	L.05	100	0.05	5 0.2	23 0	.32	0.53	1.04	2.04	3.51	4.72	10.68	18.97
		Black, Non-Hispanic	228	3 22	0 2.	05 3	L.40	100	0.08	3 0.3	33 0	.50	0.84	1.37	2.52	3.94	6.10	13.93	15.60
		Hispanic	150) 16	8 1.	54 (0.96	100	0.09	9 0.2	17 0	.28	0.47	0.95	1.87	3.57	5.09	8.05	11.58
		Asian	1:	3 1	30.	77 (0.67	100	0.30	0.1	34 0	.40	0.42	0.63	1.01	1.37	1.65	2.02	2.39
		American Indian	8	3	82.	48 3	L.47	100	0.20).	0	.32	0.61	1.60	4.19	5.65	•	•	6.04
		Unknown	18	3 2	0 1.	58 3	1.13	100	0.13	3 0.1	14 0	.18	1.00	1.39	2.31	2.74	3.60		4.70

FL consumption excludes away-from-home consumption by children < 18.

Table E-133. Fish consumption per kg, consumers only, by state, adult/child, and race-ethnicity (uncooked g/kgday) (continued)

							Percent										
i	Adult		Samp	WtdNC/	Arith	Geom	Eating										
tate (Child	Race Ethnicity	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN A	dult	White, Non-Hispanic	576	3175	0.34	0.21	100	0.01	0.02	0.05	0.13	0.24	0.43	0.73	1.08	1.99	2.51
		Black, Non-Hispanic		•		•	100				•			•		•	•
		Hispanic	3	50	0.86	0.56	100	0.25			0.28	0.36	1.18	•			1.97
		Asian	4	35	0.22	0.21	100	0.12	0.13	0.14	0.18	0.21	0.26				0.26
		American Indian	10	57	3.76	0.67	100	0.09		0.10	0.16	0.32	1.94				12.27
		Unknown	28	173	0.43	0.31	100	0.03	0.12	0.13	0.15	0.29	0.47	1.12	1.35	•	1.43
MN Cl	hild	White, Non-Hispanic	155	1018	0.50	0.26	100	0.01	0.04	0.05	0.10	0.31	0.71	1.12	1.74	3.11	10.67
		Asian	3	59	1.00	0.94	100	0.58			0.68	0.97	1.29				1.46
		American Indian	2	22	0.17	0.17	100	0.15			0.15	0.17	0.20			•	0.20
		Unknown	11	31	0.45	0.37	100	0.05	0.07	0.30	0.37	0.40	0.42	0.51	0.93	•	2.59
MN U	nknown	White, Non-Hispanic	1	1	0.24	0.24	100	0.24	•				•		•	•	0.24
ND A	dult	White, Non-Hispanic	359	397	0.40	0.23	100	0.01	0.04	0.05	0.12	0.23	0.43	0.85	1.53	2.65	5.64
		Black, Non-Hispanic	2	2	0.33	0.33	100	0.31				0.33	0.36	•			0.37
		Asian	4	3	0.26	0.18	100	0.06			0.07	0.18	0.45				0.51
		American Indian	б	6	0.46	0.38	100	0.18		0.19	0.25	0.32	0.53				1.06
		Unknown	25	28	0.30	0.20	100	0.06	0.06	0.06	0.09	0.14	0.53	0.73	0.87	•	0.92
ND C	hild	White, Non-Hispanic	141	134	0.62	0.33	100	0.03	0.07	0.08	0.16	0.31	0.60	1.40	1.96	6.29	9.00
		American Indian	3	3	0.28	0.21	100	0.07			0.10	0.32	0.41				0.43
		Unknown	5	5	1.08	0.80	100	0.23	•	0.24	0.32	1.13	1.48	•	•	•	2.24
ND U	nknown	White, Non-Hispanic	1	1	0.45	0.45	100	0.45	•								0.45

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Gender	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Рор Q75	Pop Q90	Pop Q95	Pop Q99	Max
		2 mil 1						£-	2	2	2	2	2	2	2	
СТ	Male	201	1581	0.527		86.2	0.00	0.00	0.00	0.14	0.34	0.72	1.48	1.78	2.34	2.92
	Female	219	1715	0.591		84.0	0.00	0.00	0.00	0.10	0.39	0.82	1.29	1.73	3.75	9.08
	All	420	3296	0.560	•	85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	Male	7911	7568	0.553		49.2	0.00	0.00	0.00	0.00	0.00	0.68	1.51	2.32	4.65	38.29
	Female	7426	7229	0.622		51.9	0.00	0.00	0.00	0.00	0.14	0.81	1.66	2.48	5.45	30.27
	Unknown	30	30	0.505		48.0	0.00	0.00	0.00	0.00	0.00	0.90	1.73	2.90		3.27
	All	15367	14827	0.587	•	50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	Male	419	2495	0.352		95.3	0.00	0.01	0.03	0.11	0.22	0.44	0.77	1.41	2.01	10.67
	Female	418	2402	0.475		93.4	0.00	0.00	0.02	0.11	0.27	0.47	0.87	1.46	2.49	12.27
	All	837	4897	0.412	•	94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	Male	276	293	0.425		96.2	0.00	0.02	0.05	0.11	0.25	0.44	0.91	1.60	2.50	5.72
	Female	299	317	0.432		94.2	0.00	0.00	0.04	0.11	0.23	0.44	0.97	1.55	3.01	9.00
	All	575	610	0.429	•	95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

 Table E-134. Fish consumption per kg, per capita, by state and gender (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

		Samp	WtdNC/	Arith	Geom	Percent Eating										
tate	Gender	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Male	175	1362	0.61	0.40	100	0.01	0.05	0.11	0.23	0.41	0.79	1.54	1.85	2.46	2.92
	Female	187	1441	0.70	0.40	100	0.01	0.04	0.09	0.21	0.47	0.93	1.40	1.77	4.34	9.08
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Male	3880	3723	1.12	0.71	100	0.01	0.16	0.23	0.37	0.69	1.31	2.33	3.32	7.08	38.29
	Female	3861	3753	1.20	0.77	100	0.00	0.16	0.25	0.42	0.77	1.37	2.42	3.48	7.29	30.27
	Unknown	16	14	1.05	0.62	100	0.10	0.11	0.15	0.21	0.91	1.48	2.90	3.19		3.27
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Male	401	2378	0.37	0.22	100	0.01	0.03	0.05	0.12	0.23	0.44	0.82	1.43	2.03	10.67
	Female	392	2243	0.51	0.26	100	0.01	0.03	0.06	0.13	0.29	0.50	0.93	1.62	2.51	12.27
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Male	265	282	0.44	0.25	100	0.01	0.04	0.06	0.12	0.27	0.46	0.99	1.62	2.51	5.72
	Female	281	298	0.46	0.25	100	0.01	0.04	0.07	0.13	0.24	0.47	0.99	1.60	3.08	9.00
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

 Table E-135. Fish consumption per kg, consumers only, by state and gender (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Рор Q99	Max
СТ	Adult	Male	155	1152	0.541		90.3	0.00	0.00	0.03	0.18	0.36	0.71	1.37	1.76	2.65	2.92
		Female	176	1308	0.643		88.3	0.00	0.00	0.00	0.13	0.41	0.86	1.32	1.77	4.99	9.08
СТ	Child	Male	40	373	0.548		74.6	0.00	0.00	0.00	0.00	0.32	0.86	1.58	1.88		2.11
		Female	38	364	0.454	·	70.2	0.00	0.00	0.00	0.00	0.29	0.68	1.24	1.52	·	2.01
СТ	Unknown	Male	б	55			78.7	0.00	0.00	0.00	0.01	0.03	0.05	0.39	•		0.44
		Female	5	44	0.167		72.9	0.00	0.00	0.00	0.00	0.05	0.25	•	•	•	0.63
FL	Adult	Male	6244	5887			52.0	0.00	0.00	0.00	0.00	0.13	0.67	1.40	2.11	4.38	38.29
		Female	5828	5626		•	54.9	0.00	0.00	0.00	0.00	0.22	0.80	1.56	2.25	4.46	30.27
		Unknown	б	5	0.440	•	60.2	0.00	0.00	0.00	0.00	0.29	0.92	1.12	1.88	2.49	2.57
FL	Child	Male	1667	1681			39.4	0.00	0.00	0.00	0.00	0.00	0.81	2.12	2.91	6.03	17.84
		Female	1598	1603	0.746	•	41.3	0.00	0.00	0.00	0.00	0.00	0.85	2.18	3.59	7.79	18.97
		Unknown	24	25	0.517	·	45.6	0.00	0.00	0.00	0.00	0.00	0.50	2.04	3.00	•	3.27
MN	Adult	Male	318	1786	0.299		97.7	0.00	0.02	0.04	0.13	0.22	0.36	0.63	0.86	1.77	2.51
		Female	330	1826	0.490	•	95.6	0.00	0.02	0.03	0.12	0.27	0.45	0.87	1.50	4.89	12.27
MN	Child	Male	97	668	0.516		94.6	0.00	0.00	0.04	0.08	0.31	0.74	1.43	1.51	3.20	10.67
		Female	87	556	0.440		89.6	0.00	0.00	0.00	0.11	0.31	0.62	0.87	1.47	2.49	7.11
MN	Unknown	Male	4	41	0.005		2.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.24
		Female	1	20	0.000	•	•	•	•	•	•	•	•		•	•	•
ND	Adult	Male	194	215	0.330		96.4	0.00	0.02	0.05	0.10	0.21	0.39	0.72	1.13	2.37	2.56
		Female	220	241	0.419	•	95.3	0.00	0.01	0.04	0.11	0.22	0.46	0.96	1.54	2.86	5.64
ND	Child	Male	79	76	0.705		97.8	0.00	0.06	0.08	0.20	0.36	0.78	1.62	2.10		5.72
		Female	79	75	0.476	•	90.8	0.00	0.00	0.05	0.10	0.26	0.40	0.99	1.75	6.54	9.00
ND	Unknown	Male	3	3	0.143		31.5	0.00	0.00	0.00	0.00	0.00	0.37				0.45

 Table E-136. Fish consumption per kg, per capita, by state, adult/child and gender (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Adult Child	Gender	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Adult	Male Female	140 156	1041 1154	0.60 0.73	0.41 0.40	100 100	0.03	0.09 0.03	0.14 0.08	0.23 0.21	0.40 0.49	0.76 0.93	1.50 1.41	1.84 1.79	2.70 5.24	2.92 9.08
СТ	Child	Male Female	30 27	278 256	0.73 0.65	0.49 0.48	100 100	0.05 0.07	0.07 0.16			0.59 0.44		1.68 1.39	2.01 1.54		2.11 2.01
СТ	Unknown	Male Female	5 4	44 32	0.11 0.23	0.05 0.10	100 100	0.01 0.01			0.02	0.03 0.10	0.07 0.30		•		0.44 0.63
FL	Adult	Male Female Unknown	3221 3200 4	3061 3091 3	1.01 1.07 0.73	0.65 0.71 0.63	100 100 100	0.01 0.00 0.29	0.15 0.16	0.22 0.24	0.35 0.39 0.41	0.65 0.72 0.92		2.07 2.14 1.20	2.92 2.96 1.53	6.01 5.50 2.41	38.29 30.27 2.57
FL	Child	Male Female Unknown	659 661 12	662 662 11	1.63 1.81 1.13	1.07 1.12 0.62	100 100 100	0.09 0.05 0.10	0.23 0.23	0.32 0.35 0.14	0.56 0.58 0.17	1.11 1.06 0.78	2.15	3.31 3.83 3.00	4.35 5.78	10.05 12.78	17.84 18.97 3.27
MN	Adult	Male Female	309 312	1745 1745	0.31 0.51	0.20 0.25	100 100	0.01 0.01	0.03	0.05 0.06	0.13 0.13	0.22 0.29	0.38 0.46	0.64 0.93	0.86 1.62	1.77 3.60	2.51 12.27
MN	Child	Male Female	91 80	632 498	0.55 0.49	0.27 0.30	100 100	0.01 0.02	0.04 0.04	0.05 0.08	0.10 0.12	0.33 0.35	0.75 0.68	1.44 0.89	1.57 1.75	3.29 2.48	10.67 7.11
MN	Unknown	Male Female	1	1	0.24	0.24	100 100	0.24									0.24
ND	Adult	Male Female	187 209	207 230	0.34 0.44	0.21 0.25	100 100	0.01 0.01	0.03 0.04	0.05 0.06	0.11 0.13	0.23 0.23	0.40 0.49	0.72 0.98	1.17 1.57	2.37 2.87	2.56 5.64
ND	Child	Male Female	77 72	74 68	0.72 0.52	0.40 0.28	100 100	0.03 0.05	0.07 0.07		0.22 0.11	0.38 0.28	0.80 0.44	1.62 1.00	2.12 1.93	5.43	5.72 9.00
ND	Unknown	Male	1	1	0.45	0.45	100	0.45									0.45

Table E-137. Fish consumption per kg, consumers only, by state, adult/child and gender (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

	Respondent	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	qoq	
State	Education	N	1000	Mean	Mean	Fish	Min	P0p 05	010	025	рор 050	рор 075	090	P0p 095	099	Max
beace	Baucación		1000	mean	mean	1 1011		25	Q±0	215	200	2,5	220	2,2	2,,,	nan
CT	0-11 years	13	97	0.426		100	0.03	0.04	0.07	0.12	0.20	0.53	1.34	1.74		1.76
	High School	87	667	0.514	•	85.3	0.00	0.00	0.00	0.08	0.30	0.81	1.40	1.55	2.07	2.11
	Some College	62	477	0.560	•	88.7	0.00	0.00	0.00	0.19	0.41	0.70	1.09	1.87	3.44	3.62
	College grad	258	2055	0.581	•	83.4	0.00	0.00	0.00	0.12	0.36	0.73	1.40	1.78	3.53	9.08
FL	0-11 years	1481	1387	0.500		41.5	0.00	0.00	0.00	0.00	0.00	0.60	1.45	2.16	4.80	24.22
	High School	4992	4722	0.583	•	48.5	0.00	0.00	0.00	0.00	0.00	0.70	1.59	2.45	5.29	38.29
	Some College	4791	4650	0.609	•	52.3	0.00	0.00	0.00	0.00	0.15	0.76	1.59	2.47	4.95	30.27
	College grad	4012	3979	0.595	•	54.2	0.00	0.00	0.00	0.00	0.20	0.79	1.64	2.34	5.03	18.97
	Unknown	91	89	0.575	•	41.2	0.00	0.00	0.00	0.00	0.00	0.85	2.04	3.05	3.21	3.22
MN	0-11 years	46	214	0.453		86.2	0.00	0.00	0.00	0.13	0.25	0.37	1.64	2.08		2.18
	High School	234	1331	0.387	•	92.9	0.00	0.00	0.02	0.11	0.22	0.44	0.86	1.48	2.69	3.20
	Some College	259	1329	0.543	•	95.3	0.00	0.01	0.04	0.09	0.27	0.62	0.86	1.27	11.37	12.27
	College grad	255	1808	0.341	•	95.0	0.00	0.01	0.03	0.11	0.23	0.41	0.76	1.40	1.81	2.24
	Unknown	43	215	0.323	•	99.7	0.00	0.04	0.12	0.15	0.30	0.41	0.55	0.68	0.99	2.59
ND	0-11 years	29	32	0.301		86.6	0.00	0.00	0.00	0.09	0.15	0.33	0.86	1.15		1.82
	High School	138	139	0.559		97.3	0.00	0.03	0.06	0.14	0.26	0.65	1.19	2.08	5.22	5.72
	Some College	183	200	0.366		95.2	0.00	0.02	0.04	0.10	0.25	0.44	0.84	1.32	2.12	2.74
	College grad	188	197	0.414		96.7	0.00	0.02	0.05	0.12	0.25	0.40	0.92	1.69	2.49	9.00
	Unknown	37	42	0.460	•	87.2	0.00	0.00	0.00	0.06	0.13	0.54	0.98	1.76		5.64

Table E-138. Fish consumption per kg, per capita, by state and education (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

	Respondent	Samp	WtdNC/	Arith	Geom	Percent Eating										
tate	Education	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	0-11 years	13	97	0.43	0.24	100	0.03	0.04	0.07	0.12	0.20	0.53	1.27	1.72		1.76
	High School	76	569	0.60	0.36	100	0.03	0.04	0.06	0.17	0.37	1.02	1.47	1.56	2.07	2.11
	Some College	56	424	0.63	0.43	100	0.01	0.08	0.16	0.31	0.46	0.75	1.16	1.89	3.42	3.62
	College grad	217	1714	0.70	0.42	100	0.01	0.04	0.11	0.24	0.45	0.91	1.53	1.85	3.74	9.08
FL	0-11 years	613	576	1.20	0.77	100	0.02	0.21	0.27	0.41	0.74	1.43	2.38	3.53	8.21	24.22
	High School	2405	2291	1.20	0.74	100	0.02	0.16	0.23	0.40	0.73	1.36	2.49	3.58	7.82	38.29
	Some College	2511	2430	1.16	0.73	100	0.01	0.16	0.24	0.38	0.72	1.34	2.39	3.39	6.87	30.27
	College grad	2190	2157	1.10	0.72	100	0.00	0.15	0.24	0.40	0.73	1.33	2.25	3.17	6.19	18.97
	Unknown	38	37	1.40	1.09	100	0.21	0.28	0.32	0.75	1.06	2.01	3.08	3.17	-	3.22
MN	0-11 years	41	185	0.53	0.31	100	0.01	0.07	0.10	0.16	0.26	0.44	1.83	2.08		2.18
	High School	219	1237	0.42	0.23	100	0.02	0.03	0.06	0.12	0.24	0.45	0.90	1.51	2.67	3.20
	Some College	249	1267	0.57	0.26	100	0.01	0.04	0.05	0.12	0.29	0.62	0.86	1.31	11.33	12.27
	College grad	242	1718	0.36	0.22	100	0.01	0.03	0.05	0.12	0.25	0.42	0.78	1.41	1.81	2.24
	Unknown	42	215	0.32	0.25	100	0.02	0.04	0.12	0.15	0.31	0.41	0.55	0.67	0.98	2.59
ND	0-11 years	25	28	0.35	0.21	100	0.04	0.08	0.09	0.11	0.16	0.37	0.97	1.20		1.82
	High School	134	135	0.57	0.30	100	0.02	0.05	0.07	0.14	0.27	0.67	1.30	2.16	5.00	5.72
	Some College	174	190	0.38	0.23	100	0.02	0.04	0.06	0.11	0.26	0.45	0.87	1.36	2.14	2.74
	College grad	181	190	0.43	0.24	100	0.01	0.04	0.07	0.13	0.25	0.41	0.95	1.73	2.48	9.00
	Unknown	32	36	0.53	0.23	100	0.05	0.05	0.05	0.08	0.17	0.57	1.12	1.91		5.64

Table E-139. Fish consumption per kg, consumers only, by state and education (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

	Ave Gender	0	D NI (Pop	Рор	Percent	Dec	D	D	Dec	Dec	Dava	Dev	Dec	D.	
.	Age-Gender	Samp	PopN/	Arith	Geom	Eating	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	Pop	
State	Category	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-5	26	253	0.429		51.7	0.00	0.00	0.00	0.00	0.07	0.77	1.25	1.95		2.11
	Child 6-10	26	239	0.706		86.7	0.00	0.00	0.00	0.24	0.48	1.17	1.55	1.74		2.05
	Child 11-15	21	193	0.369		85.6	0.00	0.00	0.00	0.14	0.25	0.48	0.71	1.20		1.77
	Female 16-29	17	141	0.882		79.9	0.00	0.00	0.00	0.10	0.43	0.93	1.41	5.25		9.08
	Female 30-49	85	634	0.636		86.7	0.00	0.00	0.00	0.11	0.39	0.83	1.39	1.80	5.18	5.98
	Female 50+	77	563	0.587		90.6	0.00	0.00	0.01	0.14	0.45	0.89	1.28	1.74	3.24	3.62
	Male 16-29	14	119	0.227		70.5	0.00	0.00	0.00	0.00	0.21	0.32	0.55	0.74		0.81
	Male 30-49	80	594	0.642		92.8	0.00	0.00	0.04	0.21	0.43	0.91	1.56	1.97	2.85	2.92
	Male 50+	63	461	0.474		90.5	0.00	0.00	0.03	0.17	0.36	0.63	1.15	1.55	1.91	1.91
	Unknown	11	99	0.124	•	76.1	0.00	0.00	0.00	0.01	0.03	0.11	0.52	0.62	•	0.63
FL	Child 1-5	1102	1134	1.101		37.8	0.00	0.00	0.00	0.00	0.00	1.59	3.41	4.85	10.33	18.97
	Child 6-10	938	956	0.539		39.4	0.00	0.00	0.00	0.00	0.00	0.80	1.69	2.55	3.96	13.19
	Child 11-15	864	848	0.455		42.9	0.00	0.00	0.00	0.00	0.00	0.64	1.27	1.92	3.76	13.47
	Female 16-29	1537	1477	0.548		49.1	0.00	0.00	0.00	0.00	0.00	0.69	1.42	2.20	4.54	30.27
	Female 30-49	2264	2178	0.669		56.6	0.00	0.00	0.00	0.00	0.27	0.88	1.73	2.56	5.32	24.22
	Female 50+	2080	2025	0.517		56.5	0.00	0.00	0.00	0.00	0.27	0.76	1.44	2.04	3.47	9.28
	Male 16-29	1638	1551	0.550		46.1	0.00	0.00	0.00	0.00	0.00	0.61	1.41	2.20	5.95	38.29
	Male 30-49	2540	2383	0.540		53.0	0.00	0.00	0.00	0.00	0.16	0.70	1.49	2.21	4.40	25.64
	Male 50+	2206	2090	0.485		54.5	0.00	0.00	0.00	0.00	0.20	0.66	1.24	1.86	4.12	16.75
	Unknown	198	185	0.445		54.7	0.00	0.00	0.00	0.00	0.27	0.68	1.07	1.53	4.11	5.78

Table E-140. Fish consumption per kg, per capita, by state and age-gender category (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-140. Fish consumption per kg, per capita, by state and age-gender category (uncooked g/kg-day)(continued)

	Age-Gender	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Pop									
State	Category	Ν	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Child 1-5	47	437	0.757		97.4	0.00	0.04	0.06	0.15	0.60	0.97	1.46	2.32	5.97	10.67
	Child 6-10	46	298	0.444		88.4	0.00	0.00	0.00	0.07	0.28	0.58	1.09	1.79	2.24	7.11
	Child 11-15	68	337	0.292		92.8	0.00	0.00	0.02	0.07	0.25	0.42	0.72	0.78	1.06	1.97
	Female 16-29	47	331	0.887		96.0	0.00	0.02	0.03	0.09	0.20	0.37	0.81	5.97		12.27
	Female 30-49	132	722	0.320		95.0	0.00	0.00	0.03	0.12	0.29	0.42	0.67	0.77	1.32	1.76
	Female 50+	162	854	0.456		94.9	0.00	0.00	0.04	0.13	0.28	0.50	1.19	1.80	2.33	2.49
	Male 16-29	55	275	0.132		92.3	0.00	0.00	0.01	0.02	0.09	0.17	0.35	0.44	0.53	0.99
	Male 30-49	120	731	0.316		96.0	0.00	0.02	0.06	0.13	0.22	0.40	0.56	0.85	1.98	2.51
	Male 50+	155	851	0.324		99.8	0.00	0.04	0.06	0.14	0.25	0.38	0.70	0.91	1.58	1.67
	Unknown	5	61	0.004	•	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
ND	Child 1-5	30	30	0.887		94.4	0.00	0.00	0.05	0.12	0.30	0.77	2.08	5.10		9.00
	Child 6-10	44	42	0.683		92.0	0.00	0.00	0.09	0.24	0.39	0.76	1.52	1.99		5.72
	Child 11-15	55	52	0.529		97.1	0.00	0.06	0.07	0.14	0.28	0.69	1.35	1.65		3.01
	Female 16-29	42	43	0.239		89.9	0.00	0.00	0.00	0.07	0.15	0.34	0.52	0.84		1.06
	Female 30-49	95	101	0.375		98.3	0.00	0.03	0.05	0.13	0.24	0.47	0.74	1.14	2.31	3.46
	Female 50+	99	112	0.503		93.4	0.00	0.00	0.03	0.11	0.21	0.51	1.32	1.95	3.86	5.64
	Male 16-29	36	38	0.290		100	0.02	0.02	0.05	0.10	0.17	0.30	0.61	0.75		2.56
	Male 30-49	90	97	0.287		97.8	0.00	0.03	0.05	0.10	0.23	0.35	0.59	0.71	1.62	1.74
	Male 50+	81	92	0.383		94.0	0.00	0.00	0.02	0.09	0.23	0.44	0.90	1.54	2.39	2.41
	Unknown	3	3	0.143		31.5	0.00	0.00	0.00	0.00	0.00	0.37				0.45

FL consumption excludes away-from-home consumption by children < 18.

tate	Age-Gender Category	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	075	090	095	099	Max
cucc	00009017		1000	moun	moun	1 1011		20	2-0	220	200	2.5	2,20	210	2	11011
СТ	Child 1-5	14	131	0.83	0.61	100	0.06	0.10	0.21	0.37	0.74	1.14	1.88	2.07		2.11
	Child 6-10	22	207	0.81	0.59	100	0.07	0.12	0.21	0.30	0.74	1.29	1.57	1.76	•	2.05
	Child 11-15	18	165	0.43	0.31	100	0.05	0.07	0.12	0.19	0.30	0.51	0.72	1.14	•	1.77
	Female 16-29	14	113	1.10	0.58	100	0.07	0.09	0.15	0.40	0.47	1.12	1.50	4.07		9.08
	Female 30-49	74	550	0.73	0.40	100	0.01	0.03	0.08	0.22	0.47	0.91	1.60	1.97	5.08	5.98
	Female 50+	70	511	0.65	0.38	100	0.01	0.03	0.07	0.19	0.50	0.99	1.39	1.76	3.15	3.62
	Male 16-29	10	84	0.32	0.27	100	0.08	0.08	0.11	0.17	0.30	0.34	0.63	0.78	•	0.81
	Male 30-49	74	551	0.69	0.46	100	0.03	0.08	0.15	0.25	0.48	0.95	1.58	1.98	2.84	2.92
	Male 50+	57	417	0.52	0.38	100	0.03	0.10	0.14	0.24	0.38	0.70	1.25	1.55	1.91	1.91
	Unknown	9	75	0.16	0.06	100	0.01	0.01	0.01	0.02	0.05	0.20	0.54	•	•	0.63
L	Child 1- 5	420	428	2.92	2.03	100	0.11	0.37	0.63	1.26	2.16	3.50	5.73	8.37	15.57	18.97
	Child 6-10	375	377	1.37	1.01	100	0.06	0.23	0.38	0.64	1.01	1.69	2.72	3.45	6.30	13.19
	Child 11-15	365	364	1.06	0.75	100	0.05	0.18	0.28	0.45	0.79	1.21	2.02	2.78	6.05	13.47
	Female 16-29	753	725	1.12	0.69	100	0.04	0.16	0.23	0.39	0.71	1.17	2.22	3.10	5.92	30.27
	Female 30-49	1287	1232	1.18	0.77	100	0.02	0.16	0.24	0.42	0.78	1.39	2.39	3.31	7.27	24.22
	Female 50+	1171	1145	0.91	0.66	100	0.00	0.15	0.24	0.37	0.66	1.15	1.92	2.53	4.03	9.28
	Male 16-29	754	714	1.19	0.68	100	0.01	0.15	0.22	0.34	0.66	1.22	2.26	3.30	10.80	38.29
	Male 30-49	1334	1264	1.02	0.66	100	0.02	0.14	0.22	0.36	0.67	1.22	2.18	3.05	5.03	25.64
	Male 50+	1192	1139	0.89	0.61	100	0.01	0.14	0.22	0.34	0.62	1.07	1.75	2.51	5.06	16.75
	Unknown	106	102	0.81	0.60	100	0.03	0.17	0.27	0.37	0.61	0.93	1.50	2.02	5.38	5.78

Table E-141. Fish consumption per kg, consumers only, by state and age-gender category (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-141. Fish consumption per kg, consumers only, by state and age-gender category (uncooked g/kg-day)(continued)

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating											
State	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max	
MN	Child 1-5	46	425	0.78	0.46	100	0.04	0.05	0.09	0.19	0.62	0.97	1.47	2.33	4.03	10.67	
	Child 6-10	42	264	0.50	0.27	100	0.04	0.05	0.06	0.09	0.33	0.63	1.35	1.81	2.41	7.11	
	Child 11-15	63	313	0.32	0.20	100	0.02	0.03	0.04	0.08	0.28	0.43	0.73	0.78	1.10	1.97	
	Female 16-29	44	318	0.92	0.21	100	0.02	0.02	0.03	0.10	0.21	0.38	0.88	3.93		12.27	
	Female 30-49	127	686	0.34	0.24	100	0.01	0.03	0.05	0.13	0.30	0.43	0.68	0.78	1.33	1.76	
	Female 50+	150	810	0.48	0.27	100	0.01	0.04	0.07	0.14	0.29	0.51	1.24	1.82	2.33	2.49	
	Male 16-29	52	254	0.14	0.08	100	0.01	0.01	0.02	0.03	0.11	0.18	0.36	0.44	0.54	0.99	
	Male 30-49	115	702	0.33	0.23	100	0.02	0.04	0.09	0.14	0.23	0.40	0.56	0.86	1.90	2.51	
	Male 50+	153	850	0.33	0.22	100	0.01	0.04	0.06	0.15	0.25	0.38	0.70	0.91	1.56	1.67	
	Unknown	1	1	0.24	0.24	100	0.24	•	•	•	•	•	•	•	·	0.24	
ND	Child 1-5	28	28	0.94	0.36	100	0.05	0.05	0.07	0.16	0.31	0.90	2.11	5.09		9.00	
	Child 6-10	41	39	0.74	0.47	100	0.09	0.11	0.14	0.28	0.40	0.88	1.56	2.02		5.72	
	Child 11-15	53	50	0.54	0.32	100	0.03	0.07	0.08	0.15	0.29	0.72	1.39	1.68		3.01	
	Female 16-29	38	39	0.27	0.18	100	0.04	0.04	0.05	0.09	0.19	0.35	0.54	0.89		1.06	
	Female 30-49	93	99	0.38	0.24	100	0.03	0.04	0.06	0.14	0.24	0.48	0.75	1.16	2.03	3.46	
	Female 50+	92	104	0.54	0.27	100	0.01	0.04	0.08	0.13	0.23	0.69	1.53	2.02	3.59	5.64	
	Male 16-29	36	38	0.29	0.17	100	0.02	0.02	0.05	0.10	0.17	0.30	0.60	0.75		2.56	
	Male 30-49	88	95	0.29	0.21	100	0.02	0.04	0.06	0.11	0.25	0.35	0.60	0.72	1.58	1.74	
	Male 50+	76	86	0.41	0.22	100	0.01	0.03	0.05	0.11	0.25	0.44	0.99	1.60	2.39	2.41	
	Unknown	1	1	0.45	0.45	100	0.45									0.45	

FL consumption excludes away-from-home consumption by children < 18.

State	Age-Gender Category	Samp N	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Child 1-14	72	676	0.513		73.1	0.00	0.00	0.00	0.00	0.30	0.81	1.47	1.72	2.09	2.11
	Female 15-44	88	668	0.733		88.8	0.00	0.00	0.00	0.15	0.41	0.88	1.46	1.98	7.42	9.08
	Female 45+	92	679	0.545		86.7	0.00	0.00	0.00	0.11	0.37	0.82	1.19	1.75	3.06	3.62
	Male 15-44	14	119	0.227		70.5	0.00	0.00	0.00	0.00	0.21	0.32	0.55	0.74		0.81
	Male 45+	143	1055	0.569		91.8	0.00	0.00	0.04	0.20	0.37	0.73	1.49	1.84	2.70	2.92
	Unknown	11	99	0.124		76.1	0.00	0.00	0.00	0.01	0.03	0.11	0.52	0.62	•	0.63
FL	Child 1-14	2740	2776	0.755		40.0	0.00	0.00	0.00	0.00	0.00	0.93	2.30	3.44	7.77	18.97
	Female 15-44	3477	3350	0.605	•	52.7	0.00	0.00	0.00	0.00	0.16	0.79	1.63	2.34	4.82	30.27
	Female 45+	2487	2413	0.548	•	56.7	0.00	0.00	0.00	0.00	0.28	0.78	1.48	2.07	3.81	11.14
	Male 15-44	1719	1629	0.535	•	45.5	0.00	0.00	0.00	0.00	0.00	0.60	1.38	2.17	5.33	38.29
	Male 45+	4746	4473	0.514	•	53.7	0.00	0.00	0.00	0.00	0.18	0.68	1.39	2.07	4.35	25.64
	Unknown	198	185	0.445	•	54.7	0.00	0.00	0.00	0.00	0.27	0.68	1.07	1.53	4.11	5.78
MN	Child 1-14	145	1016	0.540		93.3	0.00	0.00	0.04	0.09	0.34	0.75	1.41	1.78	3.12	10.67
	Female 15-44	146	968	0.502	•	94.9	0.00	0.00	0.03	0.11	0.25	0.41	0.67	0.83	11.24	12.27
	Female 45+	203	978	0.446	•	95.4	0.00	0.02	0.05	0.13	0.28	0.49	1.18	1.77	2.27	2.49
	Male 15-44	63	292	0.141	•	92.4	0.00	0.00	0.01	0.02	0.10	0.19	0.35	0.44	0.59	0.99
	Male 45+	275	1582	0.321	•	98.1	0.00	0.03	0.06	0.14	0.23	0.39	0.65	0.88	1.79	2.51
	Unknown	5	61	0.004	•	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
ND	Child 1-14	115	111	0.698		94.1	0.00	0.00	0.07	0.17	0.36	0.81	1.59	2.11	7.34	9.00
	Female 15-44	118	123	0.337	•	95.1	0.00	0.03	0.05	0.10	0.23	0.42	0.71	1.04	1.88	3.46
	Female 45+	124	139	0.463	•	94.7	0.00	0.00	0.03	0.11	0.20	0.51	1.10	1.82	3.06	5.64
	Male 15-44	44	46	0.333	•	100	0.02	0.03	0.06	0.10	0.18	0.31	0.67	1.20	2.55	2.56
	Male 45+	171	189	0.334	•	95.9	0.00	0.02	0.05	0.10	0.23	0.39	0.72	1.18	2.28	2.41
	Unknown	3	3	0.143	•	31.5	0.00	0.00	0.00	0.00	0.00	0.37			•	0.45

Table E-142. Fish consumption per kg, per capita, by state and age-gender category (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

	Age-Gender	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Category	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Child 1-14	53	495	0.70	0.49	100	0.05	0.08	0.17	0.27	0.46	1.02	1.55	1.92	2.10	2.11
	Female 15-44	79	593	0.83	0.45	100	0.01	0.05	0.09	0.24	0.48	0.94	1.55	2.34	7.22	9.08
	Female 45+	80	589	0.63	0.36	100	0.01	0.03	0.07	0.19	0.48	0.95	1.39	1.77	3.03	3.62
	Male 15-44	10	84	0.32	0.27	100	0.08	0.08	0.11	0.17	0.30	0.34	0.63	0.78		0.81
	Male 45+	131	968	0.62	0.42	100	0.03	0.10	0.14	0.24	0.41	0.77	1.54	1.86	2.71	2.92
	Unknown	9	75	0.16	0.06	100	0.01	0.01	0.01	0.02	0.05	0.20	0.54			0.63
FL	Child 1-14	1100	1112	1.89	1.22	100	0.05	0.25	0.37	0.66	1.21	2.30	3.87	5.61	11.95	18.97
	Female 15-44	1835	1764	1.15	0.74	100	0.02	0.15	0.23	0.40	0.75	1.34	2.27	3.21	6.32	30.27
	Female 45+	1408	1368	0.97	0.68	100	0.00	0.16	0.25	0.38	0.68	1.19	1.99	2.65	4.79	11.14
	Male 15-44	782	742	1.18	0.67	100	0.01	0.15	0.22	0.34	0.66	1.21	2.23	3.07	10.07	38.29
	Male 45+	2526	2403	0.96	0.64	100	0.01	0.14	0.22	0.35	0.64	1.13	1.99	2.83	5.03	25.64
	Unknown	106	102	0.81	0.60	100	0.03	0.17	0.27	0.37	0.61	0.93	1.50	2.02	5.38	5.78
MN	Child 1-14	137	947	0.58	0.32	100	0.02	0.04	0.06	0.12	0.42	0.77	1.43	1.89	3.13	10.67
	Female 15-44	139	919	0.53	0.22	100	0.01	0.02	0.04	0.12	0.26	0.42	0.67	0.85	10.37	12.27
	Female 45+	189	932	0.47	0.27	100	0.01	0.04	0.07	0.14	0.29	0.51	1.19	1.78	2.29	2.49
	Male 15-44	59	270	0.15	0.09	100	0.01	0.02	0.02	0.03	0.12	0.21	0.36	0.45	0.62	0.99
	Male 45+	268	1552	0.33	0.22	100	0.01	0.04	0.08	0.14	0.23	0.39	0.65	0.89	1.79	2.51
	Unknown	1	1	0.24	0.24	100	0.24	•	•	•	•	•		•		0.24
ND	Child 1-14	108	104	0.74	0.40	100	0.03	0.07	0.10	0.22	0.37	0.84	1.61	2.15	6.79	9.00
	Female 15-44	112	117	0.35	0.23	100	0.03	0.05	0.07	0.11	0.24	0.44	0.72	1.06	1.83	3.46
	Female 45+	117	131	0.49	0.25	100	0.01	0.03	0.06	0.13	0.23	0.57	1.12	1.84	3.07	5.64
	Male 15-44	44	46	0.33	0.19	100	0.02	0.03	0.06	0.10	0.18	0.30	0.67	0.99	2.54	2.56
	Male 45+	164	181	0.35	0.21	100	0.01	0.04	0.05	0.11	0.25	0.41	0.72	1.22	2.28	2.41
	Unknown	1	1	0.45	0.45	100	0.45									0.45

Table E-143. Fish consumption per kg, consumers only, by state and age-gender category (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

State	Bought or Caught Acquisition Method	SampN	PopN/ 1000	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Bought	420	3296	0.549		84.8	0.00	0.00	0.00	0.11	0.34	0.76	1.30	1.76	3.17	9.08
	Caught	420	3296	0.011		16.3	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.22	0.68
	All	420	3296	0.560	•	85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	Bought	15367	14827	0.509		47.5	0.00	0.00	0.00	0.00	0.00	0.64	1.41	2.16	4.44	37.86
	Caught	15367	14827	0.077		7.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	1.90	23.57
	All	15367	14827	0.587	•	50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	Bought	837	4897	0.266		89.9	0.00	0.00	0.00	0.05	0.14	0.31	0.68	1.01	1.78	10.67
	Caught	837	4897	0.146		60.6	0.00	0.00	0.00	0.00	0.03	0.12	0.30	0.49	1.59	9.95
	All	837	4897	0.412	•	94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	Bought	575	610	0.304		89.9	0.00	0.00	0.00	0.05	0.13	0.30	0.69	1.24	2.73	9.00
	Caught	575	610	0.125		68.3	0.00	0.00	0.00	0.00	0.05	0.13	0.31	0.53	0.98	2.41
	All	575	610	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

Table E-144. Fish consumption per kg, per capita, by state and acquisition method (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Bought or Caught Acquisition Method	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	361	2795	0.65	0.39	100	0.01	0.05	0.10	0.21	0.43	0.87	1.43	1.80	3.41	9.08
	Caught	71	539	0.07	0.03	100	0.00	0.00	0.00	0.01	0.02	0.06	0.17	0.23	0.66	0.68
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Bought	7246	7036	1.07	0.69	100	0.00	0.16	0.23	0.37	0.68	1.23	2.22	3.18	6.21	37.86
	Caught	1212	1090	1.05	0.66	100	0.02	0.14	0.20	0.39	0.64	1.20	2.18	3.03	5.81	23.57
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Bought	755	4400	0.30	0.16	100	0.01	0.02	0.04	0.07	0.16	0.34	0.73	1.10	1.91	10.67
	Caught	593	2968	0.24	0.10	100	0.01	0.02	0.02	0.05	0.09	0.22	0.40	0.76	1.68	9.95
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Bought	516	548	0.34	0.16	100	0.01	0.03	0.04	0.07	0.15	0.32	0.81	1.36	2.74	9.00
	Caught	389	416	0.18	0.10	100	0.01	0.02	0.02	0.05	0.09	0.22	0.46	0.61	1.07	2.41
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-145. Fish consumption per kg, consumers only, by state and acquisition method (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught Acquisition	Household	Samp	PopN/	Pop Arith	Pop Geom	Percent Eating	Рор									
tate	Method	Income	N	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$ 0-20000	40	303	0.511	•	86.4	0.00	0.00	0.00	0.13	0.34	0.65	1.28	1.86		3.62
		\$20000-50000	150	1137	0.619		86.6	0.00	0.00	0.00	0.14	0.37	0.78	1.22	1.93	5.51	9.08
		\$50000-	214	1737	0.518		84.1	0.00	0.00	0.00	0.09	0.33	0.72	1.34	1.64	2.62	3.27
		Unknown	16	119	0.445	•	73.4	0.00	0.00	0.00	0.00	0.42	0.68	1.02	1.36	•	1.55
СТ	Caught	\$ 0-20000	40	303	0.008		11.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06		0.21
		\$20000-50000	150	1137	0.019		18.1	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.60	0.68
		\$50000-	214	1737	0.006		16.8	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.14	0.24
		Unknown	16	119	0.001	•	6.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	•	0.01
FL	Bought	\$ 0-20000	3314	3158	0.511		42.5	0.00	0.00	0.00	0.00	0.00	0.58	1.34	2.32	4.57	37.86
		\$20000-50000	6678	6430	0.516		47.4	0.00	0.00	0.00	0.00	0.00	0.66	1.40	2.12	4.58	30.27
		\$50000-	3136	3066	0.568		54.2	0.00	0.00	0.00	0.00	0.19	0.72	1.58	2.27	4.70	18.48
		Unknown	2239	2172	0.404	•	45.3	0.00	0.00	0.00	0.00	0.00	0.54	1.21	1.82	3.57	7.96
FL	Caught	\$ 0-20000	3314	3158	0.077		6.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	1.77	16.08
		\$20000-50000	6678	6430	0.088		7.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	2.06	23.57
		\$50000-	3136	3066	0.080		8.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	1.96	11.28
		Unknown	2239	2172	0.041		5.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	1.08	8.18

Table E-146. Fish consumption per kg, per capita, by state acquisition method, and income (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught				Рор	Рор	Percent										
	Acquisition	Household	Samp	Nqoq /	Arith	Geom	Eating	Pop									
State	Method	Income	N	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$ 0-20000	87	371	0.351		90.7	0.00	0.00	0.02	0.08	0.15	0.32	0.82	1.42	5.10	10.67
		\$20000-50000	326	1801	0.245		84.4	0.00	0.00	0.00	0.04	0.13	0.27	0.60	0.77	2.10	2.32
		\$50000-	327	2155	0.267		93.9	0.00	0.00	0.02	0.05	0.14	0.31	0.74	1.15	1.71	2.42
		Unknown	97	570	0.275		91.3	0.00	0.00	0.02	0.07	0.23	0.36	0.72	0.86	•	1.14
MN	Caught	\$ 0-20000	87	371	0.183		70.4	0.00	0.00	0.00	0.00	0.04	0.18	0.38	1.33		1.64
		\$20000-50000	326	1801	0.204		66.0	0.00	0.00	0.00	0.00	0.06	0.14	0.33	0.48	1.67	9.95
		\$50000-	327	2155	0.117		55.5	0.00	0.00	0.00	0.00	0.03	0.12	0.31	0.53	1.46	2.46
		Unknown	97	570	0.051	•	56.7	0.00	0.00	0.00	0.00	0.02	0.04	0.16	0.19	0.57	1.88
ND	Bought	\$ 0-20000	51	54	0.553		88.0	0.00	0.00	0.00	0.09	0.15	0.33	1.79	2.71		5.16
		\$20000-50000	235	251	0.275		90.6	0.00	0.00	0.01	0.05	0.13	0.28	0.65	1.35	2.40	2.82
		\$50000-	233	245	0.255		90.7	0.00	0.00	0.01	0.05	0.13	0.29	0.64	1.02	1.64	1.85
		Unknown	56	60	0.405	•	85.5	0.00	0.00	0.00	0.04	0.14	0.33	0.88	1.21	7.58	9.00
ND	Caught	\$ 0-20000	51	54	0.137		53.9	0.00	0.00	0.00	0.00	0.01	0.11	0.31	0.61	2.35	2.41
		\$20000-50000	235	251	0.088		59.4	0.00	0.00	0.00	0.00	0.03	0.10	0.23	0.40	1.03	1.59
		\$50000-	233	245	0.154		76.2	0.00	0.00	0.00	0.01	0.08	0.21	0.45	0.61	0.93	1.07
		Unknown	56	60	0.149		85.7	0.00	0.00	0.00	0.04	0.07	0.18	0.29	0.31	2.19	2.33

Table E-146. Fish consumption per kg, per capita, by state acquisition method, and income (uncooked g/kg-day)(continued)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught Acquisition	Household	Samp	WtdNC/	Arith	Geom	Percent Eating										
State	Method	Income	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Bought	\$ 0-20000	35	261	0.59	0.35	100	0.01	0.03	0.10	0.18	0.41	0.75	1.53	1.90		3.62
		\$20000-50000	132	985	0.71	0.41	100	0.01	0.05	0.11	0.20	0.45	0.88	1.40	1.98	5.96	9.08
		\$50000-	182	1461	0.62	0.39	100	0.01	0.05	0.08	0.24	0.41	0.91	1.45	1.75	2.64	3.27
		Unknown	12	87	0.61	0.48	100	0.12	0.12	0.13	0.29	0.57	0.78	1.14	1.41	•	1.55
СТ	Caught	\$ 0-20000	4	33	0.07	0.02	100	0.00			0.01	0.02	0.14				0.21
		\$20000-50000	30	206	0.11	0.04	100	0.00	0.00	0.01	0.02	0.03	0.10	0.30	0.62		0.68
		\$50000-	36	292	0.04	0.02	100	0.00	0.00	0.00	0.01	0.02	0.04	0.11	0.15		0.24
		Unknown	1	7	0.01	0.01	100	0.01	•	•	•	•			•	•	0.01
FL	Bought	\$ 0-20000	1418	1342	1.20	0.72	100	0.01	0.15	0.24	0.37	0.72	1.28	2.54	3.44	8.93	37.86
		\$20000-50000	3141	3047	1.09	0.70	100	0.01	0.17	0.24	0.38	0.70	1.22	2.18	3.21	6.81	30.27
		\$50000-	1695	1662	1.05	0.68	100	0.00	0.15	0.22	0.38	0.67	1.27	2.18	3.17	5.80	18.48
		Unknown	992	984	0.89	0.62	100	0.02	0.14	0.22	0.34	0.60	1.12	1.96	2.50	4.33	7.96
FL	Caught	\$ 0-20000	246	213	1.14	0.75	100	0.02	0.17	0.26	0.42	0.76	1.27	2.40	3.72	6.53	16.08
		\$20000-50000	563	500	1.14	0.69	100	0.02	0.13	0.20	0.40	0.67	1.39	2.31	3.13	5.94	23.57
		\$50000-	274	258	0.95	0.61	100	0.03	0.12	0.16	0.36	0.61	1.11	2.09	3.06	5.62	11.28
		Unknown	129	119	0.74	0.54	100	0.03	0.16	0.22	0.35	0.54	0.87	1.36	2.03	3.51	8.18

Table E-147. Fish consumption per kg, consumers only, by state, acquisition method, and income (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Bought or Caught							Percent										
	Acquisition	Hou	sehold	Samp	WtdNC/	Arith	Geom	Eating										
State	Method	Inc	ome	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	Bought	\$	0-20000	76	337	0.39	0.20	100	0.01	0.03	0.05	0.10	0.18	0.33	0.85	1.44	4.02	10.67
		\$20	000-50000	284	1520	0.29	0.17	100	0.01	0.03	0.04	0.09	0.17	0.34	0.63	0.99	2.14	2.32
		\$50	000-	312	2023	0.28	0.15	100	0.01	0.02	0.03	0.06	0.15	0.32	0.76	1.30	1.71	2.42
		Unki	nown	83	520	0.30	0.19	100	0.01	0.02	0.03	0.11	0.26	0.38	0.73	0.87	•	1.14
MN	Caught	\$	0-20000	56	261	0.26	0.10	100	0.01	0.02	0.02	0.03	0.07	0.22	0.65	1.45		1.64
		\$20	000-50000	232	1188	0.31	0.11	100	0.01	0.02	0.03	0.06	0.10	0.24	0.41	0.61	4.73	9.95
		\$50	000-	235	1195	0.21	0.11	100	0.01	0.01	0.03	0.05	0.11	0.24	0.50	0.86	1.62	2.46
		Unki	nown	70	323	0.09	0.05	100	0.01	0.02	0.02	0.03	0.04	0.13	0.19	0.21	0.67	1.88
ND	Bought	\$	0-20000	45	47	0.63	0.24	100	0.03	0.04	0.06	0.10	0.19	0.33	2.06	2.97		5.16
		\$20	000-50000	213	227	0.30	0.15	100	0.01	0.02	0.04	0.07	0.15	0.30	0.69	1.37	2.44	2.82
		\$50	000-	210	222	0.28	0.16	100	0.01	0.03	0.04	0.07	0.15	0.31	0.64	1.05	1.64	1.85
		Unk	nown	48	52	0.47	0.18	100	0.02	0.03	0.04	0.06	0.19	0.39	0.93	1.44	7.09	9.00
ND	Caught	\$	0-20000	27	29	0.25	0.11	100	0.01	0.01	0.02	0.04	0.10	0.26	0.56	0.86		2.41
	-	\$20	000-50000	142	149	0.15	0.08	100	0.01	0.02	0.02	0.04	0.07	0.15	0.33	0.54	1.16	1.59
		\$50	000-	173	187	0.20	0.12	100	0.01	0.02	0.03	0.06	0.11	0.29	0.51	0.71	0.94	1.07
		Unk	nown	47	52	0.17	0.10	100	0.01	0.03	0.04	0.05	0.08	0.20	0.30	0.32	2.33	2.33

Table E-147. Fish consumption per kg, consumers only, by state, acquisition method, and income (uncookedg/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

 Table E-148. Fish consumption per kg, per capita, by state and habitat (uncooked g/kg-day)

				Pop	Pop	Percent										
			PopN/	Arith	Geom	Eating	Pop									
State	Habitat	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Freshwater	420	3296	0.019	•	36.4	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.09	0.36	0.67
	Estuarine	420	3296	0.145		76.0	0.00	0.00	0.00	0.00	0.06	0.15	0.36	0.59	1.44	3.70
	Marine	420	3296	0.396		84.8	0.00	0.00	0.00	0.07	0.23	0.53	0.90	1.29	2.15	7.32
	All	420	3296	0.560	•	85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	Freshwater	15367	14827	0.053		9.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.31	7.65
	Estuarine	15367	14827	0.132		26.5	0.00	0.00	0.00	0.00	0.00	0.08	0.43	0.73	1.70	17.01
	Marine	15367	14827	0.401		40.3	0.00	0.00	0.00	0.00	0.00	0.46	1.11	1.76	3.91	38.29
	All	15367	14827	0.587	•	50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	Freshwater	837	4897	0.146		60.6	0.00	0.00	0.00	0.00	0.03	0.12	0.30	0.49	1.59	9.95
	Estuarine	837	4897	0.028		67.5	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.12	0.34	1.78
	Marine	837	4897	0.238		89.9	0.00	0.00	0.00	0.05	0.12	0.27	0.61	0.91	1.74	8.89
	All	837	4897	0.412	•	94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	Freshwater	575	610	0.125		68.3	0.00	0.00	0.00	0.00	0.05	0.13	0.31	0.53	0.98	2.41
	Estuarine	575	610	0.026		71.3	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.10	0.31	0.75
	Marine	575	610	0.278		89.9	0.00	0.00	0.00	0.04	0.11	0.28	0.60	1.07	2.63	9.00
	All	575	610	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

State	Habitat	Samp NC	WtdNC/ 1000	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Freshwater	157	1201	0.05	0.02	100	0.00	0.00	0.00	0.01	0.03	0.05	0.10	0.21	0.49	0.67
	Estuarine	327	2506	0.19	0.08	100	0.00	0.01	0.01	0.04	0.09	0.20	0.40	0.69	1.46	3.70
	Marine	361	2796	0.47	0.27	100	0.00	0.03	0.06	0.15	0.31	0.60	1.03	1.45	2.19	7.32
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Freshwater	1426	1346	0.59	0.35	100	0.03	0.08	0.09	0.14	0.37	0.76	1.36	1.89	3.20	7.65
	Estuarine	4124	3932	0.50	0.31	100	0.00	0.07	0.10	0.16	0.31	0.59	1.05	1.46	2.86	17.01
	Marine	6124	5981	0.99	0.61	100	0.00	0.12	0.20	0.34	0.62	1.10	2.01	2.94	6.14	38.29
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Freshwater	593	2968	0.24	0.10	100	0.01	0.02	0.02	0.05	0.09	0.22	0.40	0.76	1.68	9.95
	Estuarine	559	3308	0.04	0.02	100	0.00	0.00	0.00	0.01	0.02	0.04	0.09	0.16	0.36	1.78
	Marine	755	4400	0.26	0.14	100	0.01	0.02	0.03	0.07	0.14	0.29	0.67	0.97	1.80	8.89
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Freshwater	389	416	0.18	0.10	100	0.01	0.02	0.02	0.05	0.09	0.22	0.46	0.61	1.07	2.41
	Estuarine	407	435	0.04	0.02	100	0.00	0.00	0.01	0.01	0.01	0.04	0.08	0.14	0.34	0.75
	Marine	516	548	0.31	0.14	100	0.01	0.02	0.03	0.06	0.13	0.30	0.72	1.15	2.73	9.00
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-149. Fish consumption per kg, consumers only, by state and habitat (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-150. Fish consumption per kg, per capita, by state and fish/shellfish type (uncooked g/kg-day)

	Finfish or Shellfish		PopN/	Pop Arith	Pop Geom	Percent Eating	Рор	Pop	Pop	Рор	Pop	Рор	Рор	Pop	Pop	
State	Туре	SampN	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Shellfish	420	3296	0.192	•	74.6	0.00	0.00	0.00	0.00	0.09	0.22	0.43	0.76	1.70	3.71
	Finfish	420	3296	0.355		82.7	0.00	0.00	0.00	0.03	0.19	0.48	0.94	1.28	2.09	5.77
	All	420	3296	0.560		85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
FL	Shellfish	15367	14827	0.106		21.1	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.61	1.47	13.19
	Finfish	15367	14827	0.481		41.9	0.00	0.00	0.00	0.00	0.00	0.60	1.35	2.08	4.50	38.29
	All	15367	14827	0.587		50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	Shellfish	837	4897	0.057		67.5	0.00	0.00	0.00	0.00	0.02	0.05	0.13	0.24	0.68	3.56
	Finfish	837	4897	0.356		94.0	0.00	0.00	0.02	0.09	0.19	0.41	0.76	1.11	2.12	11.59
	All	837	4897	0.412		94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
ND	Shellfish	575	610	0.051		71.3	0.00	0.00	0.00	0.00	0.02	0.05	0.12	0.20	0.61	1.51
	Finfish	575	610	0.378		94.3	0.00	0.00	0.03	0.09	0.19	0.39	0.84	1.35	2.73	9.00
	All	575	610	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Finfish or					Percent										
	Shellfish	Samp	WtdNC/	Arith	Geom	Eating										
State	Туре	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Shellfish	320	2458	0.26	0.13	100	0.00	0.02	0.03	0.06	0.14	0.28	0.56	0.91	2.14	3.71
	Finfish	353	2727	0.43	0.21	100	0.00	0.01	0.03	0.10	0.26	0.54	1.03	1.45	2.28	5.77
	All	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Shellfish	3260	3132	0.50	0.31	100	0.00	0.07	0.10	0.16	0.30	0.57	1.07	1.42	3.64	13.19
	Finfish	6428	6209	1.15	0.77	100	0.06	0.23	0.29	0.42	0.73	1.31	2.28	3.32	7.38	38.29
	All	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Shellfish	559	3308	0.08	0.04	100	0.00	0.01	0.01	0.02	0.03	0.08	0.19	0.32	0.71	3.56
	Finfish	791	4603	0.38	0.20	100	0.01	0.02	0.04	0.10	0.21	0.43	0.77	1.15	2.13	11.59
	All	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Shellfish	407	435	0.07	0.04	100	0.01	0.01	0.01	0.02	0.03	0.08	0.17	0.27	0.67	1.51
	Finfish	541	575	0.40	0.21	100	0.01	0.03	0.05	0.11	0.21	0.41	0.89	1.44	2.77	9.00
	All	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-151. Fish consumption per kg, consumers only, by state and fish/shellfish type (uncooked g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-152. Fish consumption per kg, consumers only, by state and type of fish consumed (uncooked g/kg-day)

	Type of					Percent										
	Fish/Shellfish	Samp	WtdNC/	Arith	Geom	Eating										
State	Eaten	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Eats Caught Only	1	9	0.03	0.03	100	0.03									0.03
	Eats Caught&Bought	70	530	0.67	0.45	100	0.08	0.10	0.13	0.23	0.46	1.01	1.54	1.71	3.18	3.30
	Eats Bought Only	291	2265	0.66	0.39	100	0.01	0.04	0.09	0.21	0.43	0.86	1.50	1.82	3.64	9.08
	All Fish Consumers	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Eats Caught Only	511	454	0.97	0.65	100	0.02	0.12	0.20	0.38	0.64	1.16	2.14	2.89	4.94	9.55
	Eats Caught&Bought	701	636	2.28	1.59	100	0.10	0.49	0.65	0.97	1.48	2.49	4.38	6.37	13.74	38.29
	Eats Bought Only	6545	6400	1.06	0.69	100	0.00	0.16	0.23	0.37	0.68	1.22	2.20	3.08	6.08	30.27
	All Fish Consumers	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Eats Caught Only	38	221	0.21	0.11	100	0.02	0.02	0.02	0.04	0.11	0.33	0.49	0.68		0.75
	Eats Caught&Bought	555	2746	0.53	0.31	100	0.02	0.08	0.11	0.15	0.31	0.56	0.93	1.76	3.04	12.27
	Eats Bought Only	200	1653	0.31	0.16	100	0.01	0.02	0.03	0.07	0.18	0.35	0.75	1.21	1.65	10.67
	All Fish Consumers	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Eats Caught Only	30	32	0.28	0.18	100	0.02	0.03	0.07	0.11	0.18	0.29	0.43	0.68		2.41
	Eats Caught&Bought	359	384	0.52	0.32	100	0.05	0.08	0.10	0.17	0.31	0.58	1.10	1.66	3.32	5.72
	Eats Bought Only	157	164	0.33	0.15	100	0.01	0.02	0.03	0.06	0.13	0.32	0.71	1.29	2.60	9.00
	All Fish Consumers	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

	Eats Freshwater/					Percent										
	Estuarine Caught	Samp	WtdNC/	Arith	Geom	Eating										
State	Fish	NC	1000	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Sometimes	50	388	0.64	0.42	100	0.03	0.09	0.12	0.23	0.39	0.99	1.53	1.68	3.22	3.30
	Never	312	2416	0.66	0.40	100	0.01	0.04	0.10	0.22	0.44	0.87	1.50	1.83	3.62	9.08
	All Fish Consumers	362	2804	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
FL	Exclusively	235	189	0.91	0.55	100	0.02	0.09	0.13	0.32	0.56	1.22	2.14	2.70	4.65	9.55
	Sometimes	458	404	2.21	1.49	100	0.07	0.42	0.56	0.89	1.40	2.46	4.54	6.17	13.80	26.20
	Never	7064	6896	1.11	0.71	100	0.00	0.16	0.24	0.38	0.71	1.28	2.27	3.24	6.42	38.29
	All Fish Consumers	7757	7490	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	Exclusively	38	221	0.21	0.11	100	0.02	0.02	0.02	0.04	0.11	0.33	0.49	0.68		0.75
	Sometimes	555	2746	0.53	0.31	100	0.02	0.08	0.11	0.15	0.31	0.56	0.93	1.76	3.04	12.27
	Never	200	1653	0.31	0.16	100	0.01	0.02	0.03	0.07	0.18	0.35	0.75	1.21	1.65	10.67
	All Fish Consumers	793	4621	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
ND	Exclusively	30	32	0.28	0.18	100	0.02	0.03	0.07	0.11	0.18	0.29	0.43	0.68		2.41
	Sometimes	359	384	0.52	0.32	100	0.05	0.08	0.10	0.17	0.31	0.58	1.10	1.66	3.32	5.72
	Never	157	164	0.33	0.15	100	0.01	0.02	0.03	0.06	0.13	0.32	0.71	1.29	2.60	9.00
	All Fish Consumers	546	580	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-153. Fish consumption per kg, consumers only, by state and fresh/estuarine fish consumption (uncooked g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Statistics are weighted to represent the general population in the states.

Table E-154. Fish consum	ption, per capita	, by state and subpopulation	n (as-consumed g/day)

State	Population for sample selection	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
CT	Angler	266	47.5		96.6	0.00	1	5	12	28	58	99	160	319	550
	Aquaculture Students	25	14.7		76.0	0.00	0	0	0	3	25	41	61		82
	Asians	402	56.5		98.5	0.00	2	9	26	46	76	109	157	219	245
	Commercial Fishermen	178	46.9		96.1	0.00	1	4	14	29	65	100	129	280	490
	EFNEP Participants	71	50.7		84.5	0.00	0	0	5	22	44	160	188	404	414
	General	431	26.5		84.2	0.00	0	0	5	15	33	66	85	169	494
	WIC Participants	703	36.3	•	79.2	0.00	0	0	3	17	44	89	142	280	571
FL	General	17181	27.1		49.6	0.00	0	0	0	0	36	71	108	228	2339
MN	American Indians	221	11.7		88.7	0.00	0	0	2	8	13	24	40	118	140
	Anglers	1171	20.9		96.2	0.00	1	2	б	12	23	45	64	171	434
	General	841	18.1		94.4	0.00	0	1	5	11	20	39	54	103	489
	New Mothers	415	14.3	•	84.8	0.00	0	0	2	б	17	32	49	143	227
ND	American Indians	133	15.3		58.6	0.00	0	0	0	1	16	47	98	139	144
	Anglers	871	19.5		94.7	0.00	0	2	б	13	22	42	68	117	172
	General	602	19.0		94.9	0.00	0	2	5	11	23	44	64	122	240

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	257	49.2	27.4	100	0.34	4	7	14	30	59	99	162	320	550
	Aquaculture Students	19	19.3	7.6	100	0.47	1	1	2	8	34	48	65		82
	Asians	396	57.4	38.4	100	0.13	5	12	26	46	77	109	157	219	245
	Commercial Fishermen	171	48.8	27.7	100	0.27	3	5	15	30	66	102	129	280	490
	EFNEP Participants	60	59.9	26.3	100	1.35	3	5	11	24	54	168	243	406	414
	General	369	31.4	17.5	100	0.26	2	4	9	20	39	68	94	178	494
	WIC Participants	557	45.9	24.0	100	0.34	3	5	12	27	52	102	154	302	571
۲L	General	8566	54.6	35.1	100	0.17	7	12	22	36	65	108	157	317	2339
ΊN	American Indians	196	13.2	7.2	100	0.58	1	2	3	9	14	27	43	119	140
	Anglers	1127	21.7	12.5	100	0.44	2	3	7	12	23	45	65	174	434
	General	796	19.1	10.7	100	0.58	1	2	6	12	20	39	56	105	489
	New Mothers	352	16.8	8.2	100	0.44	1	2	3	9	19	35	58	171	225
ND	American Indians	78	26.0	9.8	100	0.44	1	1	3	12	31	93	107		144
	Anglers	825	20.6	12.6	100	0.44	2	4	7	13	23	44	69	119	172
	General	570	20.0	11.6	100	0.58	2	3	б	12	24	46	68	123	240

Table E-155. Fish consumption, consumers only, by state and subpopulation (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

	Population for	Adult		Pop Arith	Pop Geom	Percent Eating	Pop	Pop	Pop	Рор	qoq	Рор	Рор	Рор	Рор	
State	sample selection	Child	SampN	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Adult	227	49.3	•	97.8	0.00	4	8	15	30	57	100	164	343	550
		Child	20	36.1	•	100	0.77	1	1	3	17	75	85	102		117
		Unknown	19	38.2	•	78.9	0.00	0	0	1	11	42	82	218	•	322
СТ	Aquaculture Students	Adult	19	14.9		84.2	0.00	0	0	1	7	29	39	48		54
		Child	б	14.1	•	50.0	0.00	0	0	0	0	3	74		•	82
СТ	Asians	Adult	294	66.1		99.7	0.00	13	19	33	54	84	127	182	228	245
		Child	101	29.5	•	96.0	0.00	0	2	8	23	38	70	91	105	109
		Unknown	7	43.2		85.7	0.00	0	0	10	39	69	88			92
СТ	Commercial Fishermen	Adult	142	53.5		97.2	0.00	1	5	18	35	74	108	136	303	490
		Child	30	19.1		93.3	0.00	0	1	4	14	21	29	87		128
		Unknown	6	29.1		83.3	0.00	0	0	10	29	43	61			63
СТ	EFNEP Participants	Adult	36	64.2		91.7	0.00	0	1	11	23	54	174	312	-	414
		Child	31	38.1		74.2	0.00	0	0	0	11	34	104	177		324
		Unknown	4	25.6	•	100	6.98	•		16	28	35	•		•	40
СТ	General	Adult	337	32.4		89.4	0.00	0	0	9	20	43	71	99	186	494
		Child	83	9.9		68.9	0.00	0	0	0	6	14	25	37	61	66
		Unknown	11	6.9	•	76.1	0.00	0	0	0	1	6	30	31	•	32
СТ	WIC Participants	Adult	339	52.6		92.3	0.00	0	2	12	33	66	125	185	369	571
	-	Child	352	21.1		66.8	0.00	0	0	0	9	29	48	86	174	363
		Unknown	12	23.4	•	75.0	0.00	0	0	5	16	47	55	65	•	66
FL	General	Adult	13589	31.1		52.5	0.00	0	0	0	8	43	84	122	252	2339
		Child	3592	13.6		39.8	0.00	0	0	0	0	20	44	63	112	810

Table E-156. Fish consumption, per capita, by state, subpopulation, and adult/child (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	American Indians	Adult	140	14.3		92.1	0.00	0	1	2	9	16	31	46	127	140
		Child Unknown	79 2	7.5 0.0	•	84.8	0.00	0	0	2	8	11	15	16	48	49
		UIIKIIOWII	2	0.0	•	•	•	·	·	•	•	•	·	•	·	•
MN	Anglers	Adult	913	22.2		97.7	0.00	2	3	7	13	24	48	68	165	434
MN	Anglers	Child	249	15.6		92.8	0.00	0	1	4	8	16	30	48	194	251
		Unknown	9	28.7	•	44.4	0.00	0	0	0	0	65	87	•	•	99
MN	General	Adult	650	21.3		96.6	0.00	1	2	7	13	23	47	61	112	489
		Child	185	9.6		92.4	0.00	0	1	2	7	13	20	32	48	109
		Unknown	б	0.0	•	1.5	0.00	0	0	0	0	0	0	0	1	1
MN	New Mothers	Adult	216	19.0		93.1	0.00	0	1	4	10	21	40	67	192	227
		Child	187	9.7		79.7	0.00	0	0	1	4	13	24	30	100	172
		Unknown	12	0.3		16.7	0.00	0	0	0	0	0	2	2	•	2
ND	American Indians	Adult	63	16.4		63.5	0.00	0	0	0	3	17	49	107	141	144
		Child	65	15.4		58.5	0.00	0	0	0	1	16	47	91	137	144
		Unknown	5	0.0			•	•		•	•	•	•	•	•	•
ND	Anglers	Adult	625	21.0		96.5	0.00	1	3	6	13	24	47	71	119	172
		Child	240	15.9	•	92.1	0.00	0	1	4	11	19	35	48	101	158
		Unknown	б	9.2	•	16.7	0.00	0	0	0	0	0	53	•	•	55
ND	General	Adult	430	20.2		95.5	0.00	1	2	6	12	24	45	71	126	240
		Child	165	15.0		93.9	0.00	0	1	4	9	19	32	59		97
		Unknown	7	24.0		75.2	0.00	0	0	5	18	38				60

Table E-156. Fish consumption, per capita, by state, subpopulation, and adult/child (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

tate	Population for sample selection	Adult Child	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Adult	222	50.4	29.8	100	0.34	5	9	16	30	58	102	166	337	550
CI	Anglei	Child	222	36.1	14.5	100	0.34	1	1	3	30 17	75	85	98		117
		Unknown	15	48.4	14.5	100	0.86	1	2	6	27	57	91	209	•	322
		UIIKIIOWII	12	40.4	10.3	100	0.00	T	2	0	21	57	91	209	•	544
СТ	Aquaculture Students	Adult	16	17.6	8.3	100	0.53	1	1	2	10	33	40	49		54
		Child	3	28.3	4.7	100	0.47	•	•	1	3	29		•	•	82
СТ	Asians	Adult	293	66.3	48.9	100	0.23	13	20	34	54	84	128	183	228	245
		Child	97	30.7	18.9	100	0.13	2	5	10	23	40	70	92	105	109
		Unknown	6	50.4	28.8	100	0.98		2	37	49	71	89	•	•	92
CT	Commercial Fishermen	Adult	138	55.0	33.3	100	0.49	4	7	20	36	76	108	138	299	490
CT	Commercial Fishermen							-								
		Child	28	20.5	11.0	100	0.27	1	2	5	14	22	30	90	•	128
		Unknown	5	34.9	29.1	100	9.80	•	10	18	38	46	63	•	•	63
CT	EFNEP Participants	Adult	33	70.1	30.4	100	1.35	2	6	12	24	73	177	325		414
		Child	23	51.4	22.1	100	2.95	3	4	б	24	72	124	210		324
		Unknown	4	25.6	21.4	100	6.98			14	27	34			•	40
CT	General	Adult	302	36.3	21.3	100	0.26	2	6	12	23	45	74	109	217	494
		Child	58	14.4	9.8	100	0.63	2	3	6	10	18	28	51	63	66
		Unknown	9	9.0	3.1	100	0.31	0	1	1	3	11	30			32
		0111110411)	2.0	5.1	700	5.51	Ŭ	-	-	5		50	•	•	52
СТ	WIC Participants	Adult	313	57.0	31.2	100	0.34	4	7	16	35	72	135	193	381	571
		Child	235	31.6	17.0	100	0.41	2	4	9	17	36	76	100	197	363
		Unknown	9	31.2	24.6	100	7.08	•	9	15	18	48	58	•	•	66
FL	General	Adult	7131	59.2	37.8	100	0.17	8	12	22	41	66	118	171	350	2339
-		Child	1435	34.2	25.1	100	1.01	6	9	18	23	44	67	88	170	810

Table E-157. Fish consumption, consumers only, state, subpopulation, and adult/child (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

						Percent										
	Population for	Adult	Samp	Arith	Geom	Eating										
ate	sample selection	Child	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
IN	American Indians	Adult	129	15.5	7.9	100	0.58	1	2	3	10	17	34	47	125	140
		Child	67	8.8	6.0	100	0.58	1	1	3	8	11	15	16	48	49
		Unknown	•			100	•		•			•	•	•		
ĺΝ	Anglers	Adult	892	22.8	13.5	100	0.44	2	4	7	13	24	48	69	166	434
MN	Anglers	Child	231	16.8	9.0	100	0.58	2	2	5	9	18	32	50	197	251
		Unknown	4	64.6	58.5	100	26.9	•	•	44	66	80	•	•	•	99
٩N	General	Adult	623	22.0	12.8	100	0.58	2	4	8	13	23	47	62	114	489
		Child	172	10.4	6.2	100	0.58	1	1	3	9	14	20	32	50	109
		Unknown	1	1.0	1.0	100	1.05	•	•	•	•	•	•	•	•	1
٩N	New Mothers	Adult	201	20.4	10.7	100	0.58	2	2	5	11	22	44	70	195	227
		Child	149	12.2	6.0	100	0.44	1	1	3	6	16	28	34	119	172
		Unknown	2	1.6	1.6	100	1.40	•	•	1	2	2	•	•	•	2
JD	American Indians	Adult	40	25.8	10.1	100	0.44	1	1	3	11	22	105	115		144
		Child	38	26.3	9.4	100	0.58	1	1	2	13	38	88	96		144
		Unknown	•			100	•	•				•	•	•	•	•
ID	Anglers	Adult	603	21.7	13.2	100	0.44	2	4	7	14	24	49	72	120	172
		Child	221	17.3	11.2	100	0.44	3	3	6	12	21	35	48	107	158
		Unknown	1	54.9	54.9	100	54.9									55
D	General	Adult	410	21.2	12.6	100	0.58	2	3	7	13	25	46	77	127	240
		Child	155	16.0	8.9	100	0.58	2	2	4	9	20	33	59		97
		Unknown	5	31.9	24.8	100	8.91			14	23	45				60

Table E-157. Fish consumption, consumers only, state, subpopulation, and adult/child (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

	Population for		Samp	Pop Arith	Pop Geom	Percent Eating	Pop	Рор	Рор	Рор	Pop	Pop	Рор	Рор	Рор	
State	sample selection	Gender	N	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	290	Q95	299	Max
СТ	Angler	Male	204	53.8	•	97.1	0.00	2	5	14	32	67	118	175	394	550
		Female	59	28.2		98.3	0.00	1	5	10	23	41	59	79	112	113
		Unknown	3	0.3	•	33.3	0.00	0	0	0	0	1	•	•		1
CT	Aquaculture Students	Male	10	12.2		90.0	0.00	0	0	1	5	13	44	54		54
		Female	15	16.3		66.7	0.00	0	0	0	2	29	41	72	•	82
СТ	Asians	Male	192	58.2		99.0	0.00	2	б	27	47	82	113	157	207	245
		Female	210	55.0	•	98.1	0.00	5	12	25	45	68	104	158	227	244
CT	Commercial Fishermen	Male	97	52.5		92.8	0.00	0	4	15	36	72	108	131	394	490
		Female	81	40.2	•	100	0.27	2	4	14	22	53	95	129	262	264
СТ	EFNEP Participants	Male	26	63.7		88.5	0.00	0	0	11	24	97	166	227		414
		Female	44	44.1	•	84.1	0.00	0	0	4	19	35	159	229	•	365
		Unknown	1	0.0			•	•	•	•	•	•	•	•	•	•
CT	General	Male	205	27.4		85.1	0.00	0	0	б	17	35	70	92	158	311
		Female	226	25.6	•	83.4	0.00	0	0	3	14	33	58	74	185	494
СТ	WIC Participants	Male	313	37.7	•	79.2	0.00	0	0	3	17	42	91	145	384	571
		Female	390	35.2		79.2	0.00	0	0	3	18	47	90	136	232	363
FL	General	Male	8262	29.1	•	49.1	0.00	0	0	0	0	39	76	119	250	2339
		Female	8110	26.3		51.5	0.00	0	0	0	5	36	69	102	208	1358
		Unknown	809	14.7		36.1	0.00	0	0	0	0	19	45	69	177	284

Table E-158. Fish consumption, per capita, by state, subpopulation, and gender (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Gender	Samp N	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	American Indians	Male	112	12.5		89.3	0.00	0	0	2	8	14	27	41	127	140
		Female	109	10.8		88.1	0.00	0	0	2	8	12	20	39	118	119
MN	Anglers	Male	615	22.7		96.7	0.00	2	3	7	13	25	47	68	183	434
		Female	556	18.8	•	95.7	0.00	1	2	5	11	21	42	64	161	265
MN	General	Male	422	16.3		95.3	0.00	0	1	5	11	20	34	53	97	167
		Female	419	19.8	•	93.4	0.00	0	1	4	12	20	40	60	134	489
MN	New Mothers	Male	211	14.1		86.3	0.00	0	0	2	7	17	30	47	122	227
		Female	204	14.4	•	83.3	0.00	0	0	2	б	16	34	52	174	224
ND	American Indians	Male	62	15.8		58.1	0.00	0	0	0	2	14	49	103	141	144
		Female	71	14.8		59.2	0.00	0	0	0	1	17	47	91	136	144
ND	Anglers	Male	472	20.6		95.3	0.00	0	3	7	13	24	44	71	128	172
		Female	399	18.1		94.0	0.00	0	2	5	12	21	40	66	113	172
ND	General	Male	288	20.2		96.3	0.00	1	3	6	13	25	46	71	120	130
		Female	314	17.9		93.5	0.00	0	2	4	10	20	43	61	127	240

Table E-158. Fish consumption, per capita, by state, subpopulation, and gender (as-consumed g/day)(continued)

FL consumption excludes away-from-home consumption by children < 18.

	Population for		Samp	Arith	Geom	Percent Eating										
State	sample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Angler	Male	198	55.4	31.2	100	0.34	4	8	16	33	70	121	178	387	550
		Female	58	28.7	18.5	100	0.47	2	5	10	23	42	60	79	111	113
		Unknown	1	0.9	0.9	100	0.86	•	•	•		•	•	•	•	1
СТ	Aquaculture Students	Male	9	13.6	5.2	100	0.53		1	1	7	16	43			54
		Female	10	24.5	10.6	100	0.47	0	1	2	23	35	54	82	•	82
СТ	Asians	Male	190	58.8	36.9	100	0.13	2	7	27	48	82	113	157	207	245
		Female	206	56.1	39.9	100	1.14	7	12	26	45	69	105	162	227	244
СТ	Commercial Fishermen	Male	90	56.5	34.1	100	0.49	4	б	21	38	76	109	132	371	490
		Female	81	40.2	22.0	100	0.27	2	4	14	22	53	95	129	261	264
СТ	EFNEP Participants	Male	23	72.0	37.1	100	5.26	7	9	15	25	110	170	224		414
		Female	37	52.4	21.2	100	1.35	2	3	7	23	43	166	261		365
		Unknown				100	•	•	•	•		•	•	•	•	
СТ	General	Male	177	32.2	19.2	100	0.63	2	5	11	20	40	72	109	160	311
		Female	192	30.6	16.0	100	0.26	1	3	8	19	39	65	86	227	494
СТ	WIC Participants	Male	248	47.6	23.8	100	0.41	3	5	12	27	48	100	181	420	571
		Female	309	44.4	24.2	100	0.34	2	6	12	29	54	103	153	251	363
FL	General	Male	4066	59.4	37.6	100	0.34	8	12	22	40	65	120	173	359	2339
		Female	4206	51.0	33.2	100	0.17	7	11	20	34	61	100	144	279	1358
		Unknown	294	40.8	29.5	100	3.25	10	16	18	24	46	84	140	211	284

Table E-159. Fish consumption, consumers only, state, subpopulation, and gender (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

			-		-	Percent										
State	Population for sample selection	Gender	Samp NC	Arith Mean	Geom Mean	Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Male	100	14.1	8.1	100	0.58	1	2	5	10	15	29	42	126	140
		Female	96	12.3	6.3	100	0.58	1	1	3	8	12	23	43	118	119
MN	Anglers	Male	595	23.5	13.8	100	0.58	2	4	8	14	25	48	69	185	434
		Female	532	19.7	11.2	100	0.44	2	3	6	11	21	43	64	163	265
MN	General	Male	403	17.2	10.5	100	0.58	1	2	7	12	20	37	54	97	167
		Female	393	21.3	11.0	100	0.58	1	2	б	12	21	41	61	137	489
MN	New Mothers	Male	182	16.4	8.1	100	0.44	1	2	3	9	19	34	54	124	227
		Female	170	17.3	8.4	100	0.58	1	2	4	8	19	37	58	175	224
ND	American Indians	Male	36	27.2	10.7	100	0.58	1	1	3	12	32	98	118		144
		Female	42	25.1	9.1	100	0.44	1	1	2	13	31	87	105	•	144
ND	Anglers	Male	450	21.6	13.5	100	0.44	3	4	7	14	24	48	71	130	172
		Female	375	19.3	11.7	100	0.44	2	3	6	12	22	41	66	114	172
ND	General	Male	277	21.0	12.8	100	0.87	2	3	7	14	25	48	78	119	130
		Female	293	19.1	10.6	100	0.58	2	3	б	11	22	45	63	133	240

Table E-159. Fish consumption, consumers only, state, subpopulation, and gender (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Eats Freshwater/ Estuarine Caught Fish	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Angler	Exclusively	2	32.7	14.7	100	3.52		<u> </u>	4	15	62				62
01	inigici	Sometimes	197	55.6	33.0	100	0.77	5	9	17	33	67	121	179	389	550
		Never	58	27.8	14.8	100	0.34	1	2	8	21	36	69	89	112	113
СТ	Aquaculture Students	Sometimes	2	24.2	17.1	100	7.13			7	17	41				41
	-	Never	17	18.8	6.9	100	0.47	0	1	2	8	32	49	68		82
СТ	Asians	Sometimes	200	61.2	42.4	100	0.98	7	13	26	49	78	131	185	209	245
		Never	196	53.4	34.8	100	0.13	4	7	26	44	77	105	124	228	244
СТ	Commercial Fishermen	Sometimes	125	57.8	38.4	100	1.90	7	14	21	38	76	109	145	315	490
		Never	46	24.3	11.4	100	0.27	1	1	5	15	28	76	93	•	129
CT	EFNEP Participants	Sometimes	8	15.5	13.0	100	4.38		5	8	16	23	24			25
		Never	52	66.8	29.3	100	1.35	3	5	11	30	94	174	305	413	414
СТ	General	Sometimes	53	34.0	20.6	100	0.99	3	5	9	23	62	76	94	113	113
		Never	316	31.0	17.0	100	0.26	2	3	9	20	39	66	94	191	494
СТ	WIC Participants	Sometimes	67	90.1	48.5	100	1.85	9	15	23	44	105	234	384	531	571
		Never	490	39.8	21.8	100	0.34	2	5	11	26	48	95	138	197	304
FL	General	Exclusively	288	41.8	25.7	100	1.03	4	6	12	24	47	95	142	217	217
		Sometimes	539	106.4	72.2	100	3.75	20	28	43	69	120	202	305	522	1484
		Never	7739	52.0	33.9	100	0.17	7	12	20	36	61	103	149	295	2339

Table E-160. Fish consumption, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

		Eats Freshwater/				Percent										
Otata	Population for	Estuarine	Samp	Arith	Geom	Eating	Min	05	010	0.05	050	075	000	005	000	Mass
State	sample selection	Caught Fish	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Exclusively	32	9.9	4.5	100	0.58	•	1	1	4	12	24	30	•	67
		Sometimes	139	15.9	10.4	100	1.60	2	3	7	10	15	34	47	124	140
		Never	25	2.4	1.7	100	0.58	•	1	1	2	3	5	б	•	13
MN	Anglers	Exclusively	58	27.6	9.6	100	0.58	1	1	3	11	24	64	135	272	283
		Sometimes	888	23.2	14.4	100	1.02	3	5	8	14	24	49	70	178	434
		Never	181	12.3	6.6	100	0.44	1	2	3	6	15	35	43	70	106
MN	General	Exclusively	38	6.8	4.0	100	1.16		1	1	4	12	19	19	19	41
		Sometimes	556	24.3	15.0	100	1.02	4	5	8	14	27	50	74	127	489
		Never	202	12.2	7.0	100	0.58	1	1	3	10	16	23	41	67	109
MN	New Mothers	Exclusively	17	2.3	1.7	100	0.58		1	1	1	3	5		•	9
		Sometimes	198	22.5	13.1	100	1.60	2	3	б	14	25	40	71	197	227
		Never	137	10.5	5.2	100	0.44	1	1	2	5	11	26	42	72	73
ND	American Indians	Exclusively	8	36.7	14.1	100	2.79			3	10	62	106			122
		Sometimes	32	42.9	26.3	100	7.90	8	9	10	19	65	106	126	•	144
		Never	38	9.6	3.9	100	0.44	1	1	1	3	17	25	37	•	47
ND	Anglers	Exclusively	48	12.5	5.5	100	0.58	1	1	3	5	12	23	94		95
		Sometimes	676	23.0	15.5	100	2.04	4	5	9	16	26	49	71	128	172
		Never	101	8.4	4.9	100	0.44	1	1	2	б	12	18	23	48	64
ND	General	Exclusively	33	13.3	8.4	100	1.16	1	2	6	8	15	22	25		127
		Sometimes	376	23.3	15.3	100	1.60	4	5	8	15	27	53	83	127	240
		Never	161	13.5	6.4	100	0.58	1	2	3	6	14	34	65	94	121

Table E-160. Fish consumption, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Рор Q75	Рор Q90	Рор Q95	Pop Q99	Max
СТ	Angler	266	64.5		96.6	0.00	2	6	17	38	80	140	217	426	724
	Aquaculture Students	25	20.7		76.0	0.00	0	0	1	4	38	59	83		109
	Asians	402	76.1		98.5	0.00	4	12	34	62	103	148	206	304	350
	Commercial Fishermen	178	63.8	-	96.1	0.00	1	б	19	39	89	139	175	373	639
	EFNEP Participants	71	67.5		84.5	0.00	0	0	7	30	58	214	245	552	566
	General	431	36.1		84.2	0.00	0	0	7	21	46	90	113	227	651
	WIC Participants	703	49.6		79.2	0.00	0	0	4	23	60	126	192	365	753
FL	General	17181	34.1		49.6	0.00	0	0	0	0	43	89	137	288	2605
MN	American Indians	221	15.6		88.7	0.00	0	0	3	11	17	32	53	158	186
	Anglers	1171	27.8		96.2	0.00	1	3	8	16	30	60	86	228	578
	General	841	24.1		94.4	0.00	0	2	6	15	26	52	73	138	651
	New Mothers	415	19.0		84.8	0.00	0	0	2	8	23	42	65	191	302
ND	American Indians	133	20.4		58.6	0.00	0	0	0	2	21	62	130	185	192
	Anglers	871	26.0		94.7	0.00	0	3	8	17	30	56	91	156	229
	General	602	25.3		94.9	0.00	0	2	7	15	30	59	86	163	320

FL consumption excludes away-from-home consumption by children < 18.

	Population for	0.0.000	Arith	Geom	Percent Eating										
State	sample selection	Samp NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Angler	257	66.8	37.2	100	0.46	5	10	20	42	81	145	220	428	724
	Aquaculture Students	19	27.2	10.6	100	0.65	1	1	2	10	46	67	88		109
	Asians	396	77.3	52.4	100	0.17	7	15	35	62	103	148	208	304	350
	Commercial Fishermen	171	66.4	37.9	100	0.36	4	8	21	42	90	142	176	374	639
	EFNEP Participants	60	79.8	35.0	100	1.80	4	б	14	33	72	227	315	555	566
	General	369	42.8	24.2	100	0.42	3	б	13	27	54	93	123	232	651
	WIC Participants	557	62.5	32.6	100	0.46	3	7	16	38	73	135	209	425	753
FL	General	8566	68.7	44.6	100	0.28	10	16	26	44	79	137	199	407	2605
MN	American Indians	196	17.6	9.6	100	0.78	1	2	4	12	18	36	57	159	186
	Anglers	1127	28.9	16.6	100	0.58	3	5	9	17	31	61	87	233	578
	General	796	25.5	14.3	100	0.78	2	2	8	16	27	52	74	140	651
	New Mothers	352	22.4	11.0	100	0.58	1	2	5	11	26	47	77	228	302
ND	American Indians	78	34.7	13.0	100	0.58	1	1	4	16	42	123	143		192
	Anglers	825	27.4	16.9	100	0.58	3	5	9	18	31	58	92	158	229
	General	570	26.7	15.5	100	0.78	2	4	8	16	32	61	91	164	320

Table E-162. Fish consumption, consumers only, by state and subpopulation (as-consumed g/day)

FL consumption excludes away-from-home consumption by children < 18.

tate	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Angler	Adult	227	66.9		97.8	0.00	б	12	20	40	79	148	223	456	724
		Child	20	49.1	•	100	1.10	1	2	5	23	102	114	136		159
		Unknown	19	51.7	•	78.9	0.00	0	0	2	14	56	111	294	•	430
СТ	Aquaculture Students	Adult	19	21.3		84.2	0.00	0	0	1	10	42	55	67		74
		Child	6	18.9	•	50.0	0.00	0	0	0	0	4	99	•	•	109
СТ	Asians	Adult	294	89.2		99.7	0.00	17	27	44	72	113	168	240	319	350
		Child	101	39.2		96.0	0.00	1	3	11	30	52	95	120	140	147
		Unknown	7	57.1	•	85.7	0.00	0	0	13	50	92	116			122
CT	Commercial Fishermen	Adult	142	72.8		97.2	0.00	2	7	24	49	101	147	185	401	639
		Child	30	25.8		93.3	0.00	0	1	6	19	32	39	115		172
		Unknown	6	41.7	•	83.3	0.00	0	0	13	43	63	87	•	•	89
СТ	EFNEP Participants	Adult	36	86.1		91.7	0.00	0	2	14	31	73	232	423		566
		Child	31	50.1		74.2	0.00	0	0	0	14	44	137	234		418
		Unknown	4	34.3	•	100	9.41	•	•	22	37	47	•	•	•	54
СТ	General	Adult	337	44.2		89.4	0.00	0	0	12	29	58	97	134	235	651
		Child	83	13.6		68.9	0.00	0	0	0	9	20	33	50	82	90
		Unknown	11	9.5		76.1	0.00	0	0	0	2	8	41	43	•	44
СТ	WIC Participants	Adult	339	71.8		92.3	0.00	0	2	15	44	92	170	255	539	753
		Child	352	28.8		66.8	0.00	0	0	0	12	39	66	117	232	620
		Unknown	12	30.5		75.0	0.00	0	0	7	21	61	72	83	•	85
FL	General	Adult	13589	39.1		52.5	0.00	0	0	0	11	53	105	154	313	2605
FL		Child	3592	16.9		39.8	0.00	0	0	0	0	26	55	76	137	990

Table E-163. Fish consumption, per capita, by state, subpopulation, and adult/child (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	American Indians	Adult	140	19.0		92.1	0.00	0	1	3	11	21	41	61	169	186
		Child Unknown	79 2	10.0 0.0	•	84.8	0.00	0	0	2	10	14	19	21	64	65
MN	Anglers	Adult	913	29.6		97.7	0.00	2	4	9	17	32	64	91	221	578
		Child Unknown	249 9	20.8 38.3	•	92.8 44.4	0.00 0.00	0 0	1 0	5 0	11 0	21 87	40 116	64	259	334 132
MN	General	Adult	650	28.3		96.6	0.00	1	2	9	17	30	62	81	150	651
		Child Unknown	185 6	12.8 0.0	•	92.4 1.5	0.00 0.00	0 0	1 0	2 0	9 0	18 0	26 0	42 0	64 1	145 1
MN	New Mothers	Adult	216	25.3		93.1	0.00	0	2	5	13	28	53	89	256	302
		Child Unknown	187 12	13.0 0.3	•	79.7 16.7	0.00 0.00	0 0	0 0	1 0	5 0	17 0	33 2	40 2	134	230 2
ND	American Indians	Adult	63	21.8		63.5	0.00	0	0	0	4	22	65	142	188	192
		Child Unknown	65 5	20.5 0.0	•	58.5	0.00	0	0	0	1	21	62	121	183	192
ND	Anglers	Adult	625	27.9		96.5	0.00	1	4	9	18	32	63	95	158	229
		Child Unknown	240 6	21.2 12.2	•	92.1 16.7	0.00 0.00	0 0	2 0	6 0	15 0	26 0	46 71	63	135	210 73
ND	General	Adult	430	27.0		95.5	0.00	1	3	8	16	32	60	94	168	320
ND		Child Unknown	165 7	20.0 32.0		93.9 75.2	0.00 0.00	0 0	2 0	5 7	12 23	25 51	43	79	•	130 79

Table E-163. Fish consumption, per capita, by state, subpopulation, and adult/child (as-consumed g/day)(continued)

FL consumption excludes away-from-home consumption by children < 18.

	Population for	Adult	Samp	Arith	Geom	Percent Eating										
tate	sample selection	Child	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Adult	222	68.4	40.4	100	0.46	7	12	22	42	80	149	225	448	724
		Child	20	49.1	19.9	100	1.10	2	2	4	23	101	114	130		159
		Unknown	15	65.5	25.1	100	1.14	2	3	9	37	78	127	283	•	430
СТ	Aquaculture Students	Adult	16	25.3	11.6	100	0.70	1	1	3	15	45	58	68		74
		Child	3	37.7	6.3	100	0.65		•	1	4	39	•			109
СТ	Asians	Adult	293	89.5	66.9	100	0.94	17	28	44	72	114	168	240	319	350
		Child	97	40.8	25.4	100	0.17	3	б	14	31	55	97	121	139	147
		Unknown	б	66.6	38.1	100	1.31	•	2	49	65	94	117	•	•	122
СТ	Commercial Fishermen	Adult	138	74.9	45.6	100	0.65	6	10	27	50	101	147	186	396	639
		Child	28	27.7	15.0	100	0.36	2	3	8	20	32	40	118		172
		Unknown	5	50.0	41.0	100	12.9	•	13	24	58	67	89	•	•	89
СТ	EFNEP Participants	Adult	33	93.9	40.5	100	1.80	3	8	16	32	96	235	440		566
		Child	23	67.6	29.4	100	4.02	4	5	7	33	94	164	276		418
		Unknown	4	34.3	28.8	100	9.41	•	•	20	37	46	•	•	•	54
СТ	General	Adult	302	49.4	29.5	100	0.46	3	9	17	31	60	100	141	278	651
		Child	58	19.7	13.7	100	0.83	3	4	8	16	24	37	68	85	90
		Unknown	9	12.5	4.3	100	0.42	0	1	1	4	16	42	•	•	44
СТ	WIC Participants	Adult	313	77.8	42.5	100	0.46	5	9	21	48	96	182	263	542	753
		Child	235	43.1	22.9	100	0.54	2	5	12	23	48	103	134	263	620
		Unknown	9	40.7	32.0	100	9.24	•	12	19	23	63	76	•	•	85
FL	General	Adult	7131	74.6	48.2	100	0.28	11	17	27	50	86	148	214	448	2605
		Child	1435	42.5	31.4	100	1.43	7	11	22	29	55	83	107	218	990

Table E-164. Fish consumption, consumers only, state, subpopulation, and adult/child (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

						Percent										
	Population for	Adult	Samp	Arith	Geom	Eating										
tate	sample selection	Child	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Adult	129	20.6	10.6	100	0.78	1	2	4	13	23	45	63	167	186
		Child	67	11.8	8.0	100	0.78	1	2	4	11	15	20	22	64	65
		Unknown	•		•	100	•	•	•	•	•	•	•	•	•	•
MN	Anglers	Adult	892	30.3	18.0	100	0.58	3	5	10	18	32	64	91	221	578
		Child	231	22.4	12.0	100	0.78	2	3	6	12	24	43	67	263	334
		Unknown	4	86.1	77.9	100	35.8	•	•	59	88	107	•	•	•	132
MN	General	Adult	623	29.3	17.1	100	0.78	2	5	10	18	31	63	82	152	651
		Child	172	13.8	8.3	100	0.78	1	2	4	12	18	27	43	66	145
		Unknown	1	1.4	1.4	100	1.40	•		•	•	•		•		1
MN	New Mothers	Adult	201	27.2	14.2	100	0.78	2	3	6	15	30	59	94	260	302
		Child	149	16.3	8.0	100	0.58	1	1	3	8	22	38	46	159	230
		Unknown	2	2.1	2.1	100	1.86	•		2	2	2	•	•		2
ND	American Indians	Adult	40	34.4	13.5	100	0.58	1	2	4	14	30	140	153		192
		Child	38	35.1	12.6	100	0.78	1	1	2	17	50	117	128	•	192
		Unknown	•	•	•	100	•	•	•	•	•	•	•	•	•	•
ND	Anglers	Adult	603	29.0	17.6	100	0.58	3	5	10	18	32	65	95	160	229
		Child	221	23.0	14.9	100	0.58	3	5	8	16	28	47	64	142	210
		Unknown	1	73.2	73.2	100	73.2	•	•	•	•	•	•	•	•	73
ND	General	Adult	410	28.2	16.8	100	0.78	3	4	9	17	33	61	103	169	320
		Child	155	21.3	11.9	100	0.78	2	3	5	12	27	44	79	•	130
		Unknown	5	42.5	33.1	100	11.9			19	31	60			•	79

Table E-164. Fish consumption, consumers only, state, subpopulation, and adult/child (as-consumed g/day)(continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Gender	Samp N	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop 010	Pop Q25	Pop Q50	Pop Q75	Pop 090	Pop 095	Pop Q99	Max
	-							~	~	~	~	~	~	~	~	
CT	Angler	Male	204	72.8		97.1	0.00	3	7	20	43	90	160	239	528	724
		Female	59	39.1	•	98.3	0.00	1	7	14	30	54	81	109	171	173
		Unknown	3	0.4	•	33.3	0.00	0	0	0	0	1	•	•	•	1
СТ	Aquaculture Students	Male	10	17.1		90.0	0.00	0	0	1	7	22	61	74		74
		Female	15	23.1	•	66.7	0.00	0	0	0	3	42	59	97	•	109
СТ	Asians	Male	192	78.0		99.0	0.00	3	8	35	63	110	150	200	278	318
		Female	210	74.4	•	98.1	0.00	б	16	33	61	94	144	224	324	350
СТ	Commercial Fishermen	Male	97	71.5		92.8	0.00	0	5	20	50	98	147	178	518	639
		Female	81	54.6		100	0.36	2	5	19	32	71	130	174	350	356
СТ	EFNEP Participants	Male	26	85.1	-	88.5	0.00	0	0	14	32	128	224	304		566
		Female	44	58.6	•	84.1	0.00	0	0	5	24	45	211	297		499
		Unknown	1	0.0	•		•	•	•	•	•	•	•	•	•	•
СТ	General	Male	205	37.6		85.1	0.00	0	0	8	23	48	96	125	216	411
		Female	226	34.7	•	83.4	0.00	0	0	4	19	46	78	100	235	651
CT	WIC Participants	Male	313	51.1		79.2	0.00	0	0	4	22	56	125	195	542	753
		Female	390	48.3	•	79.2	0.00	0	0	4	24	63	128	182	313	620
FL	General	Male	8262	36.7		49.1	0.00	0	0	0	0	49	99	148	315	2605
		Female	8110	33.1		51.5	0.00	0	0	0	7	43	87	128	260	1770
		Unknown	809	18.3	•	36.1	0.00	0	0	0	0	24	56	86	216	346

Table E-165. Fish consumption, per capita, by state, subpopulation, and gender (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Gender	Samp N	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop 05	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
Juace	sample selection	Gender	IN	Mean	Mean	r 1511	MIII	QJ	QIU	Q23	Q30	QIJ	QJU	QJJ	QJJ	Max
MN	American Indians	Male	112	16.7		89.3	0.00	0	0	3	11	19	36	54	169	186
		Female	109	14.4	•	88.1	0.00	0	0	2	10	16	26	52	157	158
MN	Anglers	Male	615	30.3		96.7	0.00	2	4	9	18	33	63	91	244	578
		Female	556	25.1	•	95.7	0.00	1	3	7	14	28	56	85	215	354
MN	General	Male	422	21.8		95.3	0.00	1	2	7	15	26	46	71	129	222
		Female	419	26.5		93.4	0.00	0	2	б	16	26	54	80	179	651
MN	New Mothers	Male	211	18.8		86.3	0.00	0	0	3	9	23	40	63	163	302
		Female	204	19.3		83.3	0.00	0	0	2	8	22	46	69	232	298
ND	American Indians	Male	62	21.0		58.1	0.00	0	0	0	3	18	65	137	188	192
		Female	71	19.8	•	59.2	0.00	0	0	0	1	22	62	122	181	192
ND	Anglers	Male	472	27.5		95.3	0.00	1	4	9	18	32	59	94	171	229
	-	Female	399	24.2	•	94.0	0.00	0	2	7	16	28	53	88	151	229
ND	General	Male	288	27.0		96.3	0.00	1	4	8	17	33	61	95	159	174
		Female	314	23.8	•	93.5	0.00	0	2	5	13	27	57	82	169	320

Table E-165. Fish consumption, per capita, by state, subpopulation, and gender (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

	Population for		Samp	Arith	Geom	Percent Eating										
state	sample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Male	198	75.0	42.3	100	0.46	б	12	22	44	92	160	242	519	724
		Female	58	39.8	25.5	100	0.62	3	8	14	31	55	81	110	170	173
		Unknown	1	1.1	1.1	100	1.14	•		•	•		•	•	•	1
СТ	Aquaculture Students	Male	9	19.0	7.2	100	0.70		1	2	10	26	59			74
		Female	10	34.7	15.0	100	0.65	1	1	3	36	49	76	109	•	109
СТ	Asians	Male	190	78.8	50.7	100	0.17	4	10	36	64	111	151	200	277	318
		Female	206	75.8	53.9	100	1.45	9	19	34	61	95	147	226	324	350
СТ	Commercial Fishermen	Male	90	77.0	46.7	100	0.65	6	9	27	53	106	150	181	488	639
		Female	81	54.6	30.0	100	0.36	2	5	19	32	71	130	174	347	356
СТ	EFNEP Participants	Male	23	96.2	49.2	100	6.77	9	12	20	34	145	229	298		566
		Female	37	69.7	28.3	100	1.80	3	5	9	31	58	223	338		499
		Unknown		•	•	100		•	•		•	•	•	•	•	•
СТ	General	Male	177	44.1	26.7	100	0.83	3	7	15	29	56	99	141	219	411
		Female	192	41.6	22.2	100	0.42	2	4	11	25	53	86	114	290	651
СТ	WIC Participants	Male	248	64.5	32.1	100	0.54	4	б	16	36	66	131	245	552	753
		Female	309	61.0	32.9	100	0.46	3	7	16	40	76	135	209	331	620
FL	General	Male	4066	74.8	47.9	100	0.56	11	17	27	50	84	149	221	451	2605
		Female	4206	64.2	42.2		0.28	9	14	23	43	76	126	182	349	1770
		Unknown	294	50.8	37.0	100	4.57	14	21	22	29	58	102	172	257	346

Table E-166. Fish consumption, consumers only, state, subpopulation, and gender (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

						Percent	:									
State	Population for sample selection	Gender	Samp NC	Arith Mean	Geom Mean	Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Male Female	100 96	18.7 16.4	10.9 8.4	100 100	0.78 0.78	2 1	2 1	6 4	13 11	20 16	39 31	56 58	169 157	186 158
MN	Anglers	Male Female	595 532	31.3 26.3	18.3 14.9	100 100	0.78 0.58	3 3	5 4	10 8	18 15	34 28	64 57	92 85	247 218	578 354
MN	General	Male Female	403 393	22.9 28.3	14.0 14.6	100 100	0.78 0.78	2 2	2 3	9 7	16 17	27 27	49 54	72 81	129 183	222 651
MN	New Mothers	Male Female	182 170	21.8 23.1	10.8 11.2	100 100	0.58 0.78	1 2	2 2	4 5	12 11	26 26	45 49	72 78	165 233	302 298
ND	American Indians	Male Female	36 42	36.2 33.4	14.2 12.1	100 100	0.78 0.58	1 1	2 1	4 3	16 18	43 42	130 116	157 140		192 192
ND	Anglers	Male Female	450 375	28.8 25.7	18.0 15.6	100 100	0.58 0.58	4 3	5 4	10 8	18 16	33 29	63 55	94 88	173 152	229 229
ND	General	Male Female	277 293	28.0 25.5	17.1 14.2	100 100	1.16 0.78	3 2	5 3	9 7	18 14	34 29	64 59	104 84	159 178	174 320

Table E-166. Fish consumption, consumers only, state, subpopulation, and gender (as-consumed g/day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Eats Freshwater/ Estuarine Caught Fish	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
CT	Angler	Exclusively	2	45.2	20.0	100	4.69			5	20	86				86
		Sometimes	197	75.5	45.0	100	1.10	8	13	23	44	91	163	242	521	724
		Never	58	37.7	20.0	100	0.46	1	3	12	27	49	91	120	150	150
CT	Aquaculture Students	Sometimes	2	34.6	24.0	100	9.70			10	24	59				59
		Never	17	26.4	9.6	100	0.65	1	1	2	10	45	67	91	•	109
CT	Asians	Sometimes	200	82.1	57.1	100	1.31	9	18	35	66	102	171	263	278	318
		Never	196	72.3	47.9	100	0.17	5	10	33	60	103	141	164	325	350
CT	Commercial Fishermen	Sometimes	125	78.7	52.6	100	2.51	9	19	30	52	101	152	194	416	639
		Never	46	33.1	15.5	100	0.36	1	2	7	20	38	102	134	•	171
CT	EFNEP Participants	Sometimes	8	20.7	17.3	100	5.64		б	10	21	31	33			34
	-	Never	52	88.9	39.0	100	1.80	4	7	15	40	124	233	393	563	566
CT	General	Sometimes	53	47.2	28.8	100	1.97	5	7	12	31	82	101	126	185	187
		Never	316	42.1	23.6	100	0.42	3	б	13	27	53	92	121	242	651
CT	WIC Participants	Sometimes	67	127.0	66.3	100	2.37	12	20	31	61	150	318	556	725	753
	-	Never	490	53.7	29.6	100	0.46	3	7	15	36	67	127	182	272	429
FL	General	Exclusively	288	53.7	33.7	100	1.43	6	9	18	34	58	121	174	289	289
_		Sometimes	539	136.6	93.3	100	5.36	27	36	55	87	156	257	402	680	1770
		Never	7739	65.2	43.0	100	0.28	10	16	25	43	76	129	185	366	2605

Table E-167. Fish consumption, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

		Eats														
		Freshwater/				Percent										
	Population for	Estuarine	Samp	Arith	Geom	Eating										
State	sample selection	Caught Fish	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Exclusively	32	13.2	6.0	100	0.78	•	1	2	5	16	31	40	•	89
		Sometimes	139	21.2	13.9	100	2.14	3	4	10	13	20	45	62	166	186
		Never	25	3.1	2.2	100	0.78	•	1	1	2	4	6	8		18
MIN	Anglers	Exclusively	58	36.8	12.7	100	0.78	2	2	4	15	32	85	179	363	377
		Sometimes	888	30.9	19.3	100	1.36	5	б	11	18	32	66	93	238	578
		Never	181	16.5	8.8	100	0.58	1	2	4	8	20	47	57	93	141
MN	General	Exclusively	38	9.1	5.3	100	1.55		2	2	5	16	25	25	26	54
		Sometimes	556	32.4	20.0	100	1.36	5	6	11	19	36	67	98	170	651
		Never	202	16.3	9.4	100	0.78	1	2	4	13	21	30	55	90	145
MN	New Mothers	Exclusively	17	3.1	2.2	100	0.78		1	1	2	4	6			11
		Sometimes	198	29.9	17.4	100	2.14	3	4	8	19	33	53	94	262	302
		Never	137	14.0	6.9	100	0.58	1	1	3	6	15	35	56	96	98
ND	American Indians	Exclusively	8	48.9	18.8	100	3.72			5	13	82	141			163
		Sometimes	32	57.2	35.0	100	10.5	11	11	14	25	87	142	167		192
		Never	38	12.8	5.2	100	0.58	1	1	1	4	22	33	49	•	63
ND	Anglers	Exclusively	48	16.6	7.3	100	0.78	1	2	3	7	16	31	125		127
		Sometimes	676	30.6	20.6	100	2.72	5	б	12	21	35	65	94	171	229
		Never	101	11.2	6.5	100	0.58	1	1	3	7	15	24	31	64	85
ND	General	Exclusively	33	17.8	11.2	100	1.55	2	3	8	11	20	30	33		170
		Sometimes	376	31.1	20.5	100	2.14	5	б	11	20	37	71	111	169	320
		Never	161	18.0	8.6	100	0.78	1	2	3	8	19	45	87	126	162

Table E-167. Fish consumption, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-168. Fish consumption per kg, per capita, by state and subpopulation (as-consumed g/kg-day)

State	Population for sample selection	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Angler	250	0.640	•	97.6	0.00	0.04	0.08	0.19	0.40	0.79	1.51	2.07	3.38	7.09
	Aquaculture Students	25	0.224		76.0	0.00	0.00	0.00	0.01	0.07	0.39	0.65	0.89	•	1.00
	Asians	396	1.153		99.2	0.00	0.19	0.30	0.55	0.91	1.53	2.28	3.15	4.16	4.89
	Commercial Fishermen	173	0.650		96.0	0.00	0.01	0.05	0.24	0.44	0.86	1.51	1.63	4.31	5.84
	EFNEP Participants	67	0.995		86.6	0.00	0.00	0.00	0.13	0.31	1.04	2.46	3.50	11.84	12.99
	General	420	0.410		85.1	0.00	0.00	0.00	0.08	0.25	0.55	1.00	1.32	2.18	6.99
	WIC Participants	699	0.801		79.1	0.00	0.00	0.00	0.07	0.42	1.00	1.93	3.02	5.32	18.11
FL	General	15367	0.467	•	50.5	0.00	0.00	0.00	0.00	0.06	0.59	1.27	1.91	3.99	34.37
MN	American Indians	216	0.212		88.9	0.00	0.00	0.00	0.03	0.13	0.25	0.52	0.64	1.62	2.38
	Anglers	1152	0.306		96.3	0.00	0.02	0.04	0.09	0.17	0.33	0.66	0.97	2.21	4.63
	General	837	0.309		94.4	0.00	0.00	0.02	0.08	0.18	0.33	0.62	1.07	1.81	9.21
	New Mothers	401	0.325	•	85.0	0.00	0.00	0.00	0.05	0.15	0.34	0.80	1.21	2.65	8.26
ND	American Indians	106	0.352		60.4	0.00	0.00	0.00	0.00	0.04	0.26	1.10	2.27	4.35	5.28
	Anglers	854	0.323		94.6	0.00	0.00	0.04	0.09	0.19	0.38	0.77	1.14	2.01	5.89
	General	575	0.322		95.2	0.00	0.01	0.03	0.08	0.18	0.33	0.71	1.18	2.17	6.75

FL consumption excludes away-from-home consumption by children < 18.

	Population for	Samp	Arith	Geom	Percent Eating										
State	sample selection	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	244	0.66	0.38	100	0.00	0.06	0.10	0.20	0.40	0.80	1.55	2.07	3.48	7.09
	Aquaculture Students	19	0.30	0.13	100	0.01	0.01	0.02	0.03	0.14	0.58	0.75	0.91		1.00
	Asians	393	1.16	0.83	100	0.00	0.22	0.31	0.56	0.91	1.55	2.28	3.16	4.16	4.89
	Commercial Fishermen	166	0.68	0.42	100	0.01	0.05	0.09	0.26	0.46	0.86	1.53	1.65	4.32	5.84
	EFNEP Participants	58	1.15	0.48	100	0.02	0.07	0.11	0.22	0.39	1.38	2.69	4.51	11.83	12.99
	General	362	0.48	0.29	100	0.01	0.03	0.07	0.16	0.32	0.63	1.09	1.37	2.40	6.99
	WIC Participants	553	1.01	0.55	100	0.01	0.06	0.12	0.28	0.61	1.23	2.30	3.39	5.32	18.11
FL	General	7757	0.93	0.58	100	0.00	0.12	0.19	0.32	0.58	1.07	1.89	2.73	5.70	34.37
MN	American Indians	192	0.24	0.13	100	0.01	0.01	0.02	0.06	0.15	0.29	0.53	0.70	1.71	2.38
	Anglers	1109	0.32	0.19	100	0.01	0.04	0.05	0.10	0.18	0.34	0.67	0.99	2.22	4.63
	General	793	0.33	0.18	100	0.01	0.02	0.04	0.10	0.20	0.34	0.65	1.08	1.84	9.21
	New Mothers	341	0.38	0.19	100	0.01	0.03	0.04	0.09	0.20	0.40	0.89	1.30	2.78	8.26
ND	American Indians	64	0.58	0.20	100	0.01	0.02	0.03	0.05	0.19	0.63	1.75	2.65	4.88	5.28
	Anglers	808	0.34	0.20	100	0.01	0.04	0.05	0.10	0.20	0.39	0.81	1.17	2.03	5.89
	General	546	0.34	0.19	100	0.01	0.03	0.05	0.09	0.19	0.35	0.74	1.21	2.20	6.75

Table E-169. Fish consumption per kg, consumers only, by state and subpopulation (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-170. Fish consumption per kg, per capita, by state, subpopulation, and adult/child (as-consumed g/kg-day)

State	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Рор Q90	Рор Q95	Pop Q99	Max
СТ	Angler	Adult	220	0.626		98.2	0.00	0.05	0.09	0.20	0.39	0.78	1.36	2.08	4.00	7.09
		Child	20	0.809	•	100	0.04	0.06	0.07	0.12	0.56	1.55	1.81	1.91	•	1.94
		Unknown	10	0.595	•	80.0	0.00	0.00	0.00	0.10	0.23	0.56	2.08	3.38	•	3.38
СТ	Aquaculture Students	Adult	19	0.234		84.2	0.00	0.00	0.00	0.02	0.11	0.47	0.64	0.76		0.85
		Child	6	0.194	•	50.0	0.00	0.00	0.00	0.00	0.02	0.14	0.91		•	1.00
СТ	Asians	Adult	294	1.173		99.7	0.00	0.24	0.31	0.62	0.94	1.54	2.22	3.16	4.37	4.89
		Child	95	1.121		98.9	0.00	0.18	0.30	0.46	0.73	1.59	2.29	3.13	4.09	4.12
		Unknown	7	0.730		85.7	0.00	0.00	0.00	0.16	0.70	1.13	1.60	•	•	1.70
СТ	Commercial Fishermen	Adult	138	0.698		97.1	0.00	0.02	0.07	0.26	0.46	0.89	1.57	1.69	4.80	5.84
		Child	29	0.473		93.1	0.00	0.00	0.02	0.16	0.31	0.74	1.03	1.55		1.88
		Unknown	б	0.418		83.3	0.00	0.00	0.00	0.18	0.45	0.61	0.80	•	•	0.82
СТ	EFNEP Participants	Adult	34	0.833		91.2	0.00	0.00	0.02	0.14	0.30	0.66	1.75	5.36		6.20
		Child	29	1.272		79.3	0.00	0.00	0.00	0.10	0.33	1.60	2.82	3.54		12.99
		Unknown	4	0.369		100	0.12	•	•	0.20	0.34	0.54	•	•	•	0.66
СТ	General	Adult	331	0.437		89.2	0.00	0.00	0.00	0.11	0.28	0.57	0.99	1.35	2.68	6.99
		Child	78	0.365		72.4	0.00	0.00	0.00	0.00	0.21	0.54	1.10	1.24	1.57	1.59
		Unknown	11	0.089	•	76.1	0.00	0.00	0.00	0.01	0.02	0.08	0.37	0.45	•	0.4
СТ	WIC Participants	Adult	336	0.706		92.3	0.00	0.00	0.02	0.16	0.43	0.92	1.64	2.29	5.03	8.39
		Child	351	0.902		66.7	0.00	0.00	0.00	0.00	0.41	1.20	2.38	3.55	5.40	18.1
		Unknown	12	0.503		75.0	0.00	0.00	0.00	0.12	0.53	0.75	1.18	1.36	•	1.39
FL	General	Adult	12078	0.442		53.4	0.00	0.00	0.00	0.00	0.13	0.57	1.16	1.70	3.46	34.3
		Child	3289	0.557		40.3	0.00	0.00	0.00	0.00	0.00	0.66	1.74	2.67	5.55	14.6

FL consumption excludes away-from-home consumption by children < 18.

Table E-170. Fish consumption per kg, per capita, by state, subpopulation, and adult/child (as-consumed g/kg-day) (continued)

	Population for	Adult		Pop Arith	Pop Geom	Percent Eating	Pop	qoq	Pop	Pop	qoq	Pop	Pop	Pop	Pop	
tate	sample selection	Child	SampN	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Adult	139	0.188	•	92.1	0.00	0.00	0.01	0.03	0.12	0.20	0.39	0.57	2.09	2.38
		Child	75	0.260		85.3	0.00	0.00	0.00	0.05	0.20	0.38	0.57	0.87	0.97	0.98
		Unknown	2	0.000			•	•	•	•	•			•	•	•
MN	Anglers	Adult	906	0.291		97.7	0.00	0.02	0.04	0.09	0.17	0.32	0.62	0.93	2.04	4.63
MN	Anglers	Child	242	0.365		92.6	0.00	0.00	0.03	0.10	0.21	0.41	0.92	1.22	2.38	3.16
		Unknown	4	0.000			•	•	•	•	•		•	•	•	•
MN	General	Adult	648	0.297		96.6	0.00	0.01	0.03	0.09	0.18	0.31	0.56	0.90	1.64	9.21
		Child	184	0.361		92.3	0.00	0.00	0.02	0.07	0.23	0.50	0.84	1.13	2.29	8.00
		Unknown	5	0.003		1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18
MN	New Mothers	Adult	208	0.212		93.8	0.00	0.00	0.02	0.05	0.12	0.27	0.50	0.71	1.30	2.16
		Child	182	0.471		79.1	0.00	0.00	0.00	0.05	0.21	0.51	1.18	1.76	3.61	8.26
		Unknown	11	0.036		18.2	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	•	0.20
ND	American Indians	Adult	55	0.195		63.6	0.00	0.00	0.00	0.00	0.03	0.19	0.37	1.16	2.58	2.64
		Child	50	0.531	•	58.0	0.00	0.00	0.00	0.00	0.05	0.60	1.98	2.66	5.28	5.28
		Unknown	1	0.000			•	•	•	•	•	•	•			
ND	Anglers	Adult	615	0.269		96.4	0.00	0.01	0.04	0.08	0.17	0.31	0.60	0.95	1.70	2.10
		Child	234	0.470		91.9	0.00	0.00	0.04	0.11	0.28	0.57	1.12	1.53	3.11	5.89
		Unknown	5	0.000	•	•	•	•	•	•	•	•	•	•	•	•
ND	General	Adult	414	0.283		95.8	0.00	0.01	0.03	0.08	0.16	0.31	0.62	1.02	1.92	4.23
UD UI	GEHELAL	Child	414 158	0.283	•	95.8 94.3	0.00	0.01	0.03	0.08	0.10	0.31	1.04	1.02	4.82	4.23
		Unknown	100	0.443	•	31.5	0.00	0.00	0.03	0.10	0.22	0.43	1.04	1.49	4.02	0.34
		UIIKIIOWII	3	0.10/	•	31.3	0.00	0.00	0.00	0.00	0.00	0.20	•	·	·	0.34

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-171. Fish consumption per kg, consumers only, state, subpopulation, and adult/child (as-consumed	
g/kg-day)	

	Population for	Adult	Samp	Arith	Geom	Percent Eating										
ate	sample selection	Child	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Adult	216	0.64	0.38	100	0.00	0.06	0.11	0.20	0.40	0.79	1.36	2.08	3.77	7.09
		Child	20	0.81	0.44	100	0.04	0.06	0.07	0.12	0.56	1.54	1.80	1.90	•	1.94
		Unknown	8	0.74	0.40	100	0.10	•	0.12	0.19	0.35	0.65	1.90		•	3.38
СТ	Aquaculture Students	Adult	16	0.28	0.12	100	0.01	0.01	0.02	0.03	0.14	0.56	0.65	0.76		0.85
		Child	3	0.39	0.15	100	0.02	•	•	0.04	0.14	0.55		•	•	1.00
СТ	Asians	Adult	293	1.18	0.86	100	0.00	0.24	0.33	0.62	0.94	1.55	2.23	3.16	4.36	4.89
		Child	94	1.13	0.78	100	0.01	0.19	0.31	0.46	0.74	1.65	2.34	3.13	4.09	4.12
		Unknown	6	0.85	0.47	100	0.01	•	0.02	0.60	0.78	1.22	1.62	•	•	1.70
СТ	Commercial Fishermen	Adult	134	0.72	0.44	100	0.01	0.05	0.09	0.27	0.48	0.89	1.57	1.70	4.77	5.84
		Child	27	0.51	0.30	100	0.01	0.03	0.05	0.22	0.31	0.75	1.07	1.57	•	1.88
		Unknown	5	0.50	0.45	100	0.18	•	0.18	0.32	0.52	0.65	0.82		•	0.82
СТ	EFNEP Participants	Adult	31	0.91	0.38	100	0.02	0.04	0.07	0.17	0.32	0.92	1.93	5.76		6.20
		Child	23	1.60	0.71	100	0.06	0.09	0.13	0.23	0.79	2.23	2.87	4.44	•	12.99
		Unknown	4	0.37	0.31	100	0.12	•	•	0.19	0.34	0.51	•	•	•	0.66
СТ	General	Adult	296	0.49	0.29	100	0.01	0.03	0.08	0.16	0.32	0.62	1.04	1.39	2.77	6.99
		Child	57	0.50	0.35	100	0.04	0.07	0.10	0.19	0.34	0.69	1.13	1.40	1.58	1.59
		Unknown	9	0.12	0.05	100	0.01	0.01	0.01	0.02	0.04	0.14	0.39	•	•	0.45
СТ	WIC Participants	Adult	310	0.77	0.43	100	0.01	0.05	0.10	0.22	0.47	0.96	1.68	2.34	5.10	8.39
		Child	234	1.35	0.78	100	0.02	0.09	0.17	0.41	0.86	1.69	3.16	4.30	5.77	18.11
		Unknown	9	0.67	0.54	100	0.16	•	0.16	0.36	0.67	0.88	1.23		•	1.39
FL	General	Adult	6425	0.83	0.53	100	0.00	0.11	0.17	0.30	0.54	0.95	1.66	2.33	4.55	34.37
		Child	1332	1.38	0.87	100	0.04	0.16	0.26	0.46	0.87	1.73	2.90	3.97	9.14	14.63

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Adult Child	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Adult	128	0.20	0.10	100	0.01	0.01	0.02	0.04	0.12	0.20	0.40	0.57	2.11	2.38
		Child Unknown	64	0.30	0.20	100 100	0.01	0.03	0.04	0.12	0.24	0.46	0.59	0.92	0.97	0.98
MN	Anglers	Adult	885	0.30	0.18	100	0.01	0.04	0.05	0.10	0.17	0.32	0.63	0.94	2.05	4.63
MN	Anglers	Child	224	0.39	0.24	100	0.01	0.05	0.07	0.12	0.23	0.45	0.95	1.28	2.47	3.16
		Unknown	•	•	•	100	•			•		•	•	•	•	•
MN	General	Adult	621	0.31	0.17	100	0.01	0.02	0.04	0.10	0.19	0.32	0.57	0.94	1.64	9.21
		Child	171	0.39	0.21	100	0.01	0.03	0.04	0.08	0.25	0.55	0.96	1.15	2.30	8.00
		Unknown	1	0.18	0.18	100	0.18	•	•	•	•	•		•	•	0.18
MN	New Mothers	Adult	195	0.23	0.13	100	0.01	0.02	0.03	0.06	0.14	0.29	0.50	0.73	1.30	2.16
		Child	144	0.60	0.32	100	0.02	0.05	0.08	0.14	0.30	0.74	1.39	2.13	4.11	8.26
		Unknown	2	0.20	0.20	100	0.19	•	•	0.19	0.20	0.20		•	•	0.20
ND	American Indians	Adult	35	0.31	0.12	100	0.01	0.01	0.02	0.04	0.16	0.26	1.03	1.31		2.64
		Child	29	0.92	0.34	100	0.02	0.04	0.04	0.07	0.44	1.17	2.52	3.67		5.28
		Unknown		•	•	100	•	•	•		•			•	•	•
ND	Anglers	Adult	593	0.28	0.17	100	0.01	0.03	0.05	0.09	0.18	0.32	0.63	0.98	1.72	2.10
		Child	215	0.51	0.30	100	0.03	0.05	0.07	0.14	0.33	0.60	1.14	1.64	3.24	5.89
		Unknown		•	•	100	•			•				•	•	•
ND	General	Adult	396	0.30	0.17	100	0.01	0.03	0.04	0.09	0.17	0.33	0.63	1.03	1.94	4.23
		Child	149	0.47	0.25	100	0.02	0.05	0.06	0.12	0.24	0.47	1.07	1.53	4.63	6.75
		Unknown	1	0.34	0.34	100	0.34									0.34

Table E-171. Fish consumption per kg, consumers only, state, subpopulation, and adult/child (as-consumed g/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Gender	Samp N	Pop Arith Mean	Pop Geom Mean	Percen Eating Fish		Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Angler	Male Female	197 53	0.680 0.489		97.5 98.1	0.00 0.00	0.04 0.05	0.08	0.20 0.17	0.41 0.30	0.80 0.77	1.68 1.06	2.16 1.45	4.88 1.69	7.09 1.69
СТ	Aquaculture Student	s Male Female	10 15	0.205 0.238		90.0 66.7	0.00	0.00	0.00	0.02	0.09 0.03	0.18 0.47	0.75 0.62	0.85 0.91		0.85 1.00
CT	Asians	Male Female	188 208	1.059 1.237		99.5 99.0	0.00	0.08 0.24	0.27 0.36	0.51 0.61		1.44 1.57	1.99 2.85	2.44 3.33	3.95 4.54	4.06 4.89
CT	Commercial Fisherme	en Male Female	94 79	0.669 0.628		92.6 100	0.00 0.01	0.00 0.04	0.05 0.06	0.23 0.24	0.46 0.42	0.88 0.81	1.54 1.40	1.62 1.93	4.66 3.97	5.84 4.66
СТ	EFNEP Participants	Male Female	25 42	1.053 0.961		88.0 85.7	0.00 0.00	0.00	0.00 0.00	0.15 0.08	0.33 0.26	1.65 0.89	2.83 2.02	3.80 3.95		6.09 12.99
СТ	General	Male Female	201 219	0.385 0.434		86.2 84.0	0.00	0.00	0.00	0.10 0.07	0.24 0.28	0.53 0.57	1.05 0.95	1.34 1.30	1.80 2.96	2.21 6.99
СТ	WIC Participants	Male Female	312 387	0.937 0.692		79.2 79.1	0.00 0.00	0.00	0.00 0.00	0.07 0.06	0.45 0.40	1.16 0.95	2.30 1.64	3.52 2.43	5.79 5.01	18.11 7.28
FL	I		426 0.	100		51.9	0.00 0.	00 0.	00 0.	00 0.	10 0.	64 1	.32 1	L.98 4	.18 24	.37 .77 .68

Table E-172. Fish consumption per kg, per capita, by state, subpopulation, and gender (as-consumed g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-172. Fish consumption per kg, per capita, by state, subpopulation, and gender (as-consumed g/kg-day)	
(continued)	

	Population for		Samp	Pop Arith	Pop Geom	Percent Eating	Pop	Рор	Pop	Pop	Pop	Pop	Рор	Рор	Рор	
State	sample selection	Gender	N	Mean	Mean	Fish	Min	-	Q10	Q25	-	ұор Q75	Q90	Q95	Q99	Max
MN	American Indians	Male	108	0.190		89.8	0.00	0.00	0.00	0.04	0.14	0.23	0.46	0.55	1.27	1.31
		Female	108	0.233	•	88.0	0.00	0.00	0.00	0.03	0.12	0.27	0.57	0.93	2.19	2.38
MN	Anglers	Male	606	0.298		96.9	0.00	0.02	0.04	0.09	0.18	0.34	0.63	0.93	2.16	4.34
		Female	546	0.314	•	95.6	0.00	0.01	0.04	0.09	0.17	0.33	0.70	1.04	2.92	4.63
MN	General	Male	419	0.264		95.3	0.00	0.01	0.02	0.08	0.16	0.33	0.58	1.06	1.51	8.00
		Female	418	0.356	•	93.4	0.00	0.00	0.02	0.08	0.21	0.36	0.65	1.10	1.87	9.21
MN	New Mothers	Male	205	0.266		86.3	0.00	0.00	0.00	0.05	0.15	0.33	0.67	0.93	1.74	2.13
		Female	196	0.386	•	83.7	0.00	0.00	0.00	0.05	0.14	0.35	0.95	1.42	3.44	8.26
ND	American Indians	Male	50	0.346		58.0	0.00	0.00	0.00	0.00	0.04	0.25	0.76	1.39	5.28	5.28
		Female	56	0.357		62.5	0.00	0.00	0.00	0.00	0.05	0.27	1.34	2.32	2.66	2.66
ND	Anglers	Male	467	0.318		95.3	0.00	0.01	0.04	0.09	0.19	0.37	0.77	1.14	1.93	5.89
		Female	387	0.329		93.8	0.00	0.00	0.03	0.09	0.19	0.39	0.77	1.18	2.06	4.13
ND	General	Male	276	0.319		96.2	0.00	0.01	0.04	0.08	0.19	0.33	0.68	1.20	1.87	4.29
		Female	299	0.324		94.2	0.00	0.00	0.03	0.08	0.17	0.33	0.73	1.16	2.26	6.75

FL consumption excludes away-from-home consumption by children < 18.

Table E-173. Fish consumption per kg, consumers only, state, subpopulation, and gender (as-consumed g/kg-day)

	Population for		Samp	Arith	Geom	Percent Eating	t									
tate	sample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Male	192	0.70	0.40	100	0.00	0.06	0.10	0.21	0.42	0.80	1.69	2.17	4.65	7.09
		Female	52	0.50	0.33	100	0.01	0.08	0.11	0.17	0.33	0.78	1.07	1.45	1.69	1.69
СТ	Aquaculture Studen	ts Male	9	0.23	0.09	100	0.01		0.01	0.02	0.11	0.24	0.74			0.85
		Female	10	0.36	0.18	100	0.02	0.02	0.03	0.03	0.31	0.61	0.75	1.00	•	1.00
СТ	Asians	Male	187	1.06	0.73	100	0.00	0.10	0.28	0.51	0.88	1.44	1.99	2.44	3.94	4.06
		Female	206	1.25	0.94	100	0.02	0.27	0.37	0.62	0.93	1.58	2.86	3.34	4.54	4.89
СТ	Commercial Fisherm	en Male	87	0.72	0.46	100	0.01	0.06	0.12	0.27	0.54	0.90	1.57	1.63	4.33	5.84
		Female	79	0.63	0.37	100	0.01	0.04	0.06	0.24	0.42	0.80	1.40	1.91	3.51	4.66
СТ	EFNEP Participants	Male	22	1.20	0.61	100	0.13	0.13	0.14	0.27	0.42	1.67	2.89	3.75		6.09
		Female	36	1.12	0.41	100	0.02	0.04	0.07	0.21	0.39	1.04	2.38	4.50	•	12.99
СТ	General	Male	175	0.45	0.29	100	0.01	0.04	0.08	0.17	0.29	0.58	1.11	1.40	1.91	2.21
		Female	187	0.52	0.29	100	0.01	0.03	0.05	0.16	0.34	0.68	1.03	1.35	3.38	6.99
СТ	WIC Participants	Male	247	1.18	0.63	100	0.01	0.07	0.12	0.32	0.69	1.51	2.89	3.78	6.20	18.11
		Female	306	0.87	0.50	100	0.01	0.06	0.12	0.24	0.59	1.09	1.87	2.73	5.31	7.28
FL						100 (0.00 0.				55 1.					1.37
							0.00 0.				62 1.					1.77
		Unknown	16 0.	85 0.	50	100 0	0.09 0.	09 0.	12 0.	18 0.	69 1.	19 2	.37 2	2.61	. 2	2.68

FL consumption excludes away-from-home consumption by children < 18.

	Population for		Samp	Arith	Geom	Percent Eating										
State	sample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Male	97	0.21	0.13	100	0.01	0.02	0.03	0.07	0.15	0.26	0.49	0.55	1.27	1.31
		Female	95	0.26	0.12	100	0.01	0.01	0.02	0.04	0.16	0.29	0.59	0.95	2.19	2.38
MN	Anglers	Male	587	0.31	0.19	100	0.01	0.04	0.05	0.10	0.18	0.34	0.63	0.93	2.18	4.34
		Female	522	0.33	0.19	100	0.01	0.04	0.05	0.10	0.18	0.35	0.72	1.05	2.93	4.63
MN	General	Male	401	0.28	0.16	100	0.01	0.02	0.04	0.09	0.17	0.33	0.62	1.07	1.52	8.00
		Female	392	0.38	0.19	100	0.01	0.02	0.05	0.10	0.22	0.38	0.70	1.22	1.88	9.21
MN	New Mothers	Male	177	0.31	0.18	100	0.01	0.03	0.04	0.09	0.19	0.37	0.75	1.06	1.77	2.13
		Female	164	0.46	0.21	100	0.01	0.03	0.05	0.09	0.21	0.44	1.04	1.83	3.76	8.26
ND	American Indians	Male	29	0.60	0.18	100	0.01	0.03	0.03	0.04	0.18	0.60	1.31	3.67		5.28
		Female	35	0.57	0.21	100	0.01	0.02	0.02	0.06	0.19	0.69	2.25	2.55	•	2.66
ND	Anglers	Male	445	0.33	0.19	100	0.01	0.04	0.05	0.10	0.20	0.38	0.78	1.14	1.94	5.89
		Female	363	0.35	0.20	100	0.01	0.04	0.05	0.11	0.21	0.42	0.83	1.29	2.07	4.13
ND	General	Male	265	0.33	0.18	100	0.01	0.03	0.04	0.09	0.20	0.34	0.74	1.22	1.88	4.29
		Female	281	0.34	0.19	100	0.01	0.03	0.05	0.10	0.18	0.35	0.74	1.20	2.31	6.75

Table E-173. Fish consumption per kg, consumers only, state, subpopulation, and gender (as-consumed g/kg-day) (continued)

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Eats Freshwater/ Estuarine Caught Fish	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Exclusively	1	0.04	0.04	100	0.04									0.04
		Sometimes	190	0.74	0.46	100	0.04	0.10	0.14	0.23	0.44	0.89	1.69	2.18	4.71	7.09
		Never	53	0.38	0.22	100	0.00	0.02	0.05	0.11	0.27	0.59	0.89	1.00	1.63	1.66
СТ	Aquaculture Student	s Sometimes	2	0.34	0.21	100	0.07			0.07	0.21	0.61				0.61
	-	Never	17	0.29	0.12	100	0.01	0.01	0.02	0.03	0.14	0.54	0.80	0.93	•	1.00
СТ	Asians	Sometimes	199	1.23	0.87	100	0.01	0.24	0.30	0.51	0.93	1.58	2.94	3.50	4.15	4.51
		Never	194	1.09	0.79	100	0.00	0.19	0.34	0.58	0.87	1.46	2.03	2.39	3.83	4.89
СТ	Commercial Fisherme	n Sometimes	120	0.78	0.53	100	0.04	0.10	0.18	0.31	0.54	0.94	1.58	1.98	4.89	5.84
		Never	46	0.41	0.22	100	0.01	0.01	0.03	0.10	0.30	0.58	0.89	1.36	•	1.72
СТ	EFNEP Participants	Sometimes	8	0.25	0.23	100	0.13		0.14	0.18	0.22	0.30	0.40			0.48
	-	Never	50	1.29	0.54	100	0.02	0.06	0.09	0.24	0.52	1.54	2.82	6.09	12.99	12.99
СТ	General	Sometimes	50	0.46	0.30	100	0.01	0.06	0.09	0.17	0.29	0.73	1.10	1.25	1.96	1.99
		Never	312	0.49	0.29	100	0.01	0.03	0.07	0.16	0.32	0.62	1.06	1.41	2.71	6.99
СТ	WIC Participants	Sometimes	67	1.49	0.93	100	0.16	0.24	0.28	0.42	0.91	1.81	3.43	5.12	8.09	8.39
	-	Never	486	0.95	0.51	100	0.01	0.05	0.10	0.26	0.60	1.20	2.02	3.12	5.31	18.11
FL	General E	xclusively 23	5 0.7	1 0.4	2 1	00 0.0	2 0.0	6 0.1	0 0.2	5 0.4	2 0.8	8 1.	60 2.3	16 3.	72 7.	38
	S	ometimes 45	8 1.7	3 1.1	.6 1	00 0.0	5 0.3	2 0.4	3 0.6	9 1.1	0 1.9	3 3.	44 4.	96 10.	51 23.	38
	Ν	ever 706	4 0.8	8 0.5	6 1	00 0.0	0 0.1	2 0.1	8 0.3	1 0.5	6 1.0	2 1.	81 2.	60 5.	15 34.	37

Table E-174. Fish consumption per kg, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

		Eats														
		Freshwater/				Percent										
	Population for	Estuarine	Samp	Arith	Geom	Eating										
State	sample selection	Caught Fish	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Exclusively	31	0.18	0.07	100	0.01	0.01	0.01	0.02	0.07	0.27	0.42	0.55	•	1.40
		Sometimes	136	0.28	0.18	100	0.02	0.03	0.05	0.11	0.18	0.35	0.57	0.92	2.09	2.38
		Never	25	0.05	0.04	100	0.01	0.01	0.01	0.02	0.04	0.07	0.12	0.15	•	0.23
MN	Anglers	Exclusively	57	0.35	0.13	100	0.01	0.02	0.02	0.04	0.16	0.35	0.89	1.93	2.76	2.83
		Sometimes	879	0.34	0.21	100	0.02	0.05	0.07	0.12	0.20	0.37	0.71	1.05	2.28	4.63
		Never	173	0.20	0.11	100	0.01	0.02	0.03	0.05	0.10	0.22	0.46	0.66	1.15	2.12
MN	General	Exclusively	38	0.16	0.09	100	0.01	0.02	0.02	0.03	0.08	0.25	0.37	0.51		0.57
FIN C		Sometimes	555	0.40	0.24	100	0.01	0.06	0.08	0.11	0.23	0.42	0.70	1.32	2.28	9.21
		Never	200	0.23	0.12	100	0.01	0.01	0.02	0.05	0.14	0.26	0.56	0.91	1.24	8.00
MN	New Mothers	Exclusively	17	0.10	0.06	100	0.01	0.02	0.02	0.02	0.09	0.16	0.20	0.25		0.31
		Sometimes	189	0.47	0.27	100	0.02	0.05	0.07	0.14	0.27	0.51	1.00	1.32	3.41	8.26
		Never	135	0.30	0.14	100	0.01	0.02	0.03	0.06	0.12	0.32	0.74	1.35	2.47	2.53
ND	American Indians	Exclusively	4	0.05	0.05	100	0.03			0.03	0.05	0.07				0.08
		Sometimes	30	1.08	0.60	100	0.09	0.12	0.13	0.22	0.60	1.39	2.65	3.62		5.28
		Never	30	0.16	0.08	100	0.01	0.01	0.02	0.04	0.07	0.19	0.36	0.66	•	1.10
ND	Anglers	Exclusively	47	0.19	0.08	100	0.01	0.01	0.01	0.03	0.07	0.14	0.61	1.02		1.68
		Sometimes	660	0.38	0.24	100	0.03	0.05	0.07	0.12	0.23	0.42	0.84	1.29	2.07	5.89
		Never	101	0.18	0.10	100	0.01	0.01	0.02	0.05	0.10	0.22	0.41	0.53	1.16	1.24
ND	General	Exclusively	30	0.21	0.13	100	0.01	0.03	0.05	0.09	0.14	0.22	0.33	0.51		1.81
		Sometimes	359	0.39	0.24	100	0.03	0.06	0.07	0.13	0.23	0.43	0.82	1.25	2.49	4.29
		Never	157	0.25	0.11	100	0.01	0.02	0.03	0.05	0.10	0.24	0.53	0.97	1.95	6.75

Table E-174. Fish consumption per kg, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

 Table E-175. Fish consumption per kg, per capita, by state and subpopulation (as-consumed g/kg-day)

State	Population for sample selection	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
СТ	Angler	250	0.868		97.6	0.00	0.06	0.12	0.25	0.53	1.06	2.06	2.88	4.52	9.33
	Aquaculture Students	25	0.316		76.0	0.00	0.00	0.00	0.01	0.10	0.62	0.89	1.20		1.34
	Asians	396	1.550		99.2	0.00	0.25	0.42	0.73	1.20	2.05	3.04	4.22	5.54	7.02
	Commercial Fishermen	173	0.886		96.0	0.00	0.01	0.08	0.33	0.61	1.16	2.01	2.29	5.80	7.62
	EFNEP Participants	67	1.318		86.6	0.00	0.00	0.00	0.17	0.41	1.38	3.22	4.66	15.34	16.74
	General	420	0.560		85.1	0.00	0.00	0.00	0.12	0.35	0.76	1.37	1.76	3.19	9.08
	WIC Participants	699	1.095		79.1	0.00	0.00	0.00	0.09	0.57	1.32	2.64	4.11	7.19	25.54
FL	General	15367	0.587	•	50.5	0.00	0.00	0.00	0.00	0.08	0.74	1.59	2.39	5.00	38.29
MN	American Indians	216	0.282		88.9	0.00	0.00	0.00	0.04	0.18	0.33	0.70	0.86	2.16	3.17
	Anglers	1152	0.407		96.3	0.00	0.02	0.06	0.12	0.23	0.45	0.88	1.30	2.95	6.17
	General	837	0.412		94.4	0.00	0.00	0.03	0.11	0.24	0.44	0.83	1.43	2.41	12.27
	New Mothers	401	0.433	•	85.0	0.00	0.00	0.00	0.06	0.20	0.46	1.06	1.61	3.54	11.01
ND	American Indians	106	0.469		60.4	0.00	0.00	0.00	0.00	0.05	0.35	1.46	3.02	5.80	7.05
	Anglers	854	0.430		94.6	0.00	0.00	0.05	0.12	0.25	0.50	1.02	1.52	2.68	7.85
	General	575	0.429		95.2	0.00	0.01	0.05	0.11	0.24	0.44	0.95	1.58	2.89	9.00

FL consumption excludes away-from-home consumption by children < 18.

	Population for	Samp	Arith	Geom	Percent Eating										
State	sample selection	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	244	0.89	0.52	100	0.01	0.08	0.14	0.27	0.55	1.07	2.08	2.88	4.66	9.33
	Aquaculture Students	19	0.42	0.18	100	0.01	0.01	0.03	0.04	0.19	0.82	1.03	1.24		1.34
	Asians	393	1.56	1.13	100	0.01	0.28	0.45	0.74	1.21	2.06	3.05	4.23	5.54	7.02
	Commercial Fishermen	166	0.92	0.57	100	0.01	0.06	0.12	0.36	0.62	1.18	2.03	2.29	5.81	7.62
	EFNEP Participants	58	1.52	0.64	100	0.02	0.09	0.15	0.29	0.53	1.87	3.56	6.07	15.36	16.74
	General	362	0.66	0.40	100	0.01	0.05	0.10	0.22	0.43	0.88	1.51	1.80	3.42	9.08
	WIC Participants	553	1.38	0.75	100	0.01	0.09	0.17	0.38	0.85	1.70	3.05	4.63	7.40	25.54
FL	General	7757	1.16	0.74	100	0.00	0.16	0.24	0.40	0.73	1.35	2.39	3.37	7.13	38.29
MN	American Indians	192	0.32	0.17	100	0.01	0.02	0.03	0.08	0.20	0.39	0.71	0.93	2.28	3.17
	Anglers	1109	0.42	0.25	100	0.01	0.05	0.07	0.13	0.24	0.46	0.90	1.32	2.96	6.17
	General	793	0.44	0.24	100	0.01	0.03	0.06	0.13	0.26	0.45	0.86	1.44	2.45	12.27
	New Mothers	341	0.51	0.26	100	0.01	0.04	0.06	0.12	0.27	0.53	1.19	1.73	3.71	11.01
ND	American Indians	64	0.78	0.26	100	0.01	0.02	0.04	0.07	0.26	0.84	2.33	3.53	6.50	7.05
	Anglers	808	0.45	0.26	100	0.01	0.05	0.07	0.13	0.27	0.53	1.08	1.56	2.70	7.85
	General	546	0.45	0.25	100	0.01	0.04	0.07	0.12	0.25	0.46	0.99	1.62	2.93	9.00

Table E-176. Fish consumption per kg, consumers only, by state and subpopulation (as-consumed g/kg-day)

FL consumption excludes away-from-home consumption by children < 18.

Table E-177. Fish consumption per kg, per capita, by state, subpopulation, and adult/child (as-consumed g/kg-day)

State	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Рор Q99	Max
СТ	Angler	Adult	220	0.851		98.2	0.00	0.07	0.13	0.27	0.53	1.05	1.87	2.89	5.29	9.33
		Child	20	1.094	•	100	0.06	0.08	0.10	0.16	0.84	2.05	2.41	2.59	•	2.64
		Unknown	10	0.799	•	80.0	0.00	0.00	0.00	0.15	0.34	0.74	2.77	4.52	•	4.52
СТ	Aquaculture Students	Adult	19	0.334		84.2	0.00	0.00	0.00	0.02	0.14	0.68	0.89	1.04		1.16
		Child	6	0.259	•	50.0	0.00	0.00	0.00	0.00	0.02	0.19	1.22	•	•	1.34
CT	Asians	Adult	294	1.584		99.7	0.00	0.32	0.46	0.82	1.26	2.06	3.00	4.23	6.12	7.02
		Child	95	1.490		98.9	0.00	0.24	0.42	0.61	1.00	2.06	3.19	4.19	5.42	5.49
		Unknown	7	0.965	•	85.7	0.00	0.00	0.00	0.21	0.94	1.51	2.11	•	•	2.23
СТ	Commercial Fishermen	Adult	138	0.951		97.1	0.00	0.03	0.10	0.36	0.62	1.25	2.09	2.30	6.44	7.62
		Child	29	0.638		93.1	0.00	0.00	0.03	0.21	0.47	0.98	1.38	2.05		2.52
		Unknown	6	0.599	•	83.3	0.00	0.00	0.00	0.24	0.63	0.94	1.14		•	1.16
СТ	EFNEP Participants	Adult	34	1.118		91.2	0.00	0.00	0.02	0.18	0.40	0.91	2.30	7.29		8.46
	_	Child	29	1.666		79.3	0.00	0.00	0.00	0.13	0.45	2.11	3.74	4.65		16.74
		Unknown	4	0.494		100	0.17	•	•	0.27	0.46	0.72	•	•	•	0.89
СТ	General	Adult	331	0.595		89.2	0.00	0.00	0.00	0.16	0.39	0.78	1.34	1.77	3.60	9.08
		Child	78	0.502		72.4	0.00	0.00	0.00	0.00	0.30	0.76	1.49	1.67	2.09	2.11
		Unknown	11	0.124	•	76.1	0.00	0.00	0.00	0.01	0.03	0.11	0.52	0.62	•	0.63
СТ	WIC Participants	Adult	336	0.967		92.3	0.00	0.00	0.03	0.22	0.58	1.25	2.13	3.14	6.44	11.07
	-	Child	351	1.233		66.7	0.00	0.00	0.00	0.00	0.54	1.62	3.15	4.74	7.41	25.54
		Unknown	12	0.655		75.0	0.00	0.00	0.00	0.15	0.68	1.00	1.53	1.75	•	1.79
FL	General	Adult	12078	0.556		53.4	0.00	0.00	0.00	0.00	0.18	0.72	1.48	2.17	4.40	38.29
		Child	3289	0.692	•	40.3	0.00	0.00	0.00	0.00	0.00	0.83	2.16	3.28	7.08	18.97

FL consumption excludes away-from-home consumption by children < 18.

Table E-177. Fish consumption per kg, per capita, by state, subpopulation, and adult/child (as-consumed g/kg-day) (continued)

State	Population for sample selection	Adult Child	SampN	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	Pop Q5	Pop Q10	Pop Q25	Pop Q50	Pop Q75	Pop Q90	Pop Q95	Pop Q99	Max
MN	American Indians	Adult	139	0.251		92.1	0.00	0.00	0.01	0.04	0.16	0.26	0.52	0.76	2.79	3.17
		Child	75	0.347	•	85.3	0.00	0.00	0.00	0.07	0.27	0.51	0.76	1.16	1.30	1.30
		Unknown	2	0.000	•	•	•	•	•	•	•	•	•	•	•	•
MN	Anglers	Adult	906	0.388		97.7	0.00	0.03	0.06	0.12	0.22	0.42	0.82	1.24	2.72	6.17
MN	Anglers	Child	242	0.487		92.6	0.00	0.00	0.04	0.13	0.28	0.55	1.23	1.63	3.17	4.21
		Unknown	4	0.000	•	•	•		•			•	•	•	•	
MN	General	Adult	648	0.396		96.6	0.00	0.02	0.03	0.12	0.24	0.41	0.74	1.20	2.19	12.27
		Child	184	0.482		92.3	0.00	0.00	0.02	0.09	0.31	0.67	1.13	1.51	3.06	10.67
		Unknown	5	0.004	•	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
MN	New Mothers	Adult	208	0.282		93.8	0.00	0.00	0.03	0.07	0.17	0.36	0.66	0.95	1.73	2.87
		Child	182	0.628		79.1	0.00	0.00	0.00	0.07	0.29	0.68	1.58	2.35	4.81	11.01
		Unknown	11	0.048	•	18.2	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.27	•	0.27
ND	American Indians	Adult	55	0.260		63.6	0.00	0.00	0.00	0.00	0.05	0.25	0.50	1.55	3.44	3.52
		Child	50	0.708		58.0	0.00	0.00	0.00	0.00	0.07	0.80	2.64	3.55	7.05	7.05
		Unknown	1	0.000	•	•	•		•			•	•	•	•	
ND	Anglers	Adult	615	0.359		96.4	0.00	0.01	0.05	0.11	0.23	0.42	0.80	1.27	2.27	2.81
		Child	234	0.627		91.9	0.00	0.00	0.05	0.15	0.38	0.76	1.50	2.04	4.15	7.85
		Unknown	5	0.000	-		•	•	•	•	•	•	•		•	•
ND	General	Adult	414	0.377		95.8	0.00	0.02	0.04	0.10	0.21	0.42	0.83	1.36	2.56	5.64
		Child	158	0.591		94.3	0.00	0.00	0.07	0.13	0.29	0.57	1.39	1.99	6.42	9.00
		Unknown	3	0.143		31.5	0.00	0.00	0.00	0.00	0.00	0.37				0.45

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-178. Fish consumption per kg, consumers only, state, subpopulation, and adult/child (as-consumed g/kg-day)

state	Population for sample selection	Adult Child	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	05	010	025	050	Q75	090	095	099	Max
lale	Sample Selection	CIIIIu	INC	Mean	Meall	FISH	MIII	QS	QIU	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Adult	216	0.87	0.52	100	0.01	0.08	0.14	0.28	0.54	1.06	1.90	2.89	4.94	9.33
		Child	20	1.09	0.61	100	0.06	0.08	0.10	0.16	0.83	2.05	2.40	2.58		2.64
		Unknown	8	1.00	0.55	100	0.15	•	0.17	0.27	0.48	0.86	2.53	•	•	4.52
СТ	Aquaculture Students	Adult	16	0.40	0.17	100	0.01	0.01	0.02	0.04	0.21	0.78	0.89	1.05		1.16
	-	Child	3	0.52	0.20	100	0.03			0.05	0.19	0.74		•		1.34
СТ	Asians	Adult	293	1.59	1.18	100	0.01	0.34	0.47	0.83	1.26	2.06	3.01	4.23	6.08	7.02
		Child	94	1.51	1.05	100	0.02	0.25	0.45	0.62	1.00	2.14	3.24	4.20	5.40	5.49
		Unknown	6	1.13	0.63	100	0.02	•	0.03	0.77	1.05	1.62	2.13	•	•	2.23
СТ	Commercial Fishermen	Adult	134	0.98	0.61	100	0.01	0.07	0.13	0.38	0.65	1.28	2.12	2.30	6.41	7.62
CT (Child	27	0.69	0.41	100	0.01	0.04	0.07	0.29	0.47	0.99	1.43	2.08	•	2.52
		Unknown	5	0.72	0.63	100	0.24	•	0.24	0.42	0.77	0.98	1.16	•	•	1.16
СТ	EFNEP Participants	Adult	31	1.23	0.51	100	0.02	0.05	0.10	0.22	0.41	1.22	2.52	7.84		8.46
		Child	23	2.10	0.94	100	0.09	0.13	0.16	0.32	1.04	2.94	3.79	5.83		16.74
		Unknown	4	0.49	0.42	100	0.17	•	•	0.26	0.45	0.68	•	•	•	0.89
СТ	General	Adult	296	0.67	0.40	100	0.01	0.05	0.11	0.23	0.44	0.85	1.43	1.82	3.64	9.08
		Child	57	0.69	0.49	100	0.05	0.09	0.16	0.27	0.46	1.02	1.54	1.86	2.10	2.11
		Unknown	9	0.16	0.06	100	0.01	0.01	0.01	0.02	0.05	0.20	0.54	•	•	0.63
СТ	WIC Participants	Adult	310	1.05	0.58	100	0.01	0.06	0.13	0.29	0.65	1.29	2.23	3.20	6.51	11.07
		Child	234	1.85	1.05	100	0.03	0.13	0.23		1.17	2.22	4.32	5.89	8.64	25.54
		Unknown	9	0.87	0.71	100	0.20	•	0.21	0.47	0.86	1.15	1.59	•	•	1.79
FL	General	Adult	6425	1.04	0.68	100	0.00	0.15	0.23	0.37	0.68	1.21	2.10	2.94	5.80	38.29
		Child	1332	1.71	1.09	100	0.05	0.22	0.33	0.56	1.07	2.15	3.58	4.88	11.18	18.97

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Adult Child	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Adult	128	0.27	0.13	100	0.01	0.02	0.02	0.05	0.16	0.27	0.54	0.77	2.81	3.17
		Child Unknown	64	0.41	0.27	100 100	0.01	0.04	0.05	0.15	0.32	0.61	0.79	1.23	1.30	1.30
MN	Anglers	Adult	885	0.40	0.24	100	0.01	0.05	0.07	0.13	0.23	0.43	0.84	1.25	2.73	6.17
MN	Anglers	Child Unknown	224 •	0.53	0.32	100 100	0.01	0.07	0.09	0.16	0.30	0.60	1.27	1.70	3.29	4.21
MN	General	Adult Child	621 171	0.41	0.22	100 100	0.01 0.01	0.03	0.05	0.13	0.25	0.43 0.73	0.76 1.28	1.25 1.54	2.19 3.07	12.27 10.67
		Unknown	1/1		0.28	100	0.01	•	. 0.06	•	•	•	1.28	1.54	3.07	0.24
MN	New Mothers	Adult	195	0.30	0.18	100	0.01	0.03	0.04	0.08	0.19	0.39	0.67	0.97	1.73	2.87
		Child Unknown	144 2	0.79 0.26	0.42 0.26	100 100	0.03 0.26	0.06	0.10	0.19 0.26	0.39 0.26	0.99 0.27	1.85	2.85	5.48	11.01 0.27
ND	American Indians	Adult	35	0.41	0.16	100	0.01	0.02	0.03	0.05	0.21		1.37	1.75		3.52
		Child Unknown	29	1.22	0.46	100 100	0.03	0.05	0.06	0.09	0.58	1.56	3.37	4.89	•	7.05
ND	Anglers	Adult	593	0.37	0.23	100	0.01	0.04	0.06	0.12	0.24	0.43	0.84	1.31	2.30	2.81
		Child Unknown	215	0.68	0.40	100 100	0.04	0.07	0.10	0.18	0.44	0.80	1.52	2.19	4.32	7.85
ND	General	Adult	396	0.39	0.23	100	0.01	0.04	0.06	0.12	0.23	0.44	0.84	1.37	2.59	5.64
		Child Unknown	149 1	0.63 0.45	0.34 0.45	100 100	0.03 0.45	0.07	0.08	0.17	0.32	0.63	1.43	2.04	6.17	9.00 0.45

Table E-178. Fish consumption per kg, consumers only, state, subpopulation, and adult/child (as-consumed g/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

	Population for		Samp	Pop Arith	Pop Geom	Percen Eating		Рор	Pop	Рор	Pop	Pop	Pop	Pop	Pop	
State	sample selection	Gender	Ν	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Male	197	0.919		97.5	0.00	0.06	0.11	0.27	0.56	1.07	2.27	2.92	6.54	9.33
		Female	53	0.679	•	98.1	0.00	0.07	0.14	0.24	0.44	1.05	1.43	1.93	2.91	2.93
СТ	Aquaculture Students	Male	10	0.284		90.0	0.00	0.00	0.00	0.02	0.12	0.30	1.03	1.16		1.16
		Female	15	0.337	•	66.7	0.00	0.00	0.00	0.00	0.04	0.68	0.88	1.22	•	1.34
СТ	Asians	Male	188	1.420		99.5	0.00	0.11	0.37	0.69	1.16	1.89	2.69	3.31	5.19	5.33
		Female	208	1.668	•	99.0	0.00	0.34	0.51	0.80	1.24	2.08	3.75	4.56	6.61	7.02
СТ	Commercial Fishermer	n Male	94	0.912		92.6	0.00	0.00	0.06	0.33	0.63	1.19	2.04	2.23	6.11	7.62
		Female	79	0.856	•	100	0.01	0.06	0.09	0.34	0.58	1.12	1.84	2.62	5.36	6.28
СТ	EFNEP Participants	Male	25	1.404		88.0	0.00	0.00	0.00	0.20	0.45	2.16	3.75	5.09		8.32
		Female	42	1.267	•	85.7	0.00	0.00	0.00	0.10	0.35	1.17	2.65	5.32	•	16.74
СТ	General	Male	201	0.527		86.2	0.00	0.00	0.00	0.14	0.34	0.72	1.48	1.78	2.34	2.92
		Female	219	0.591	•	84.0	0.00	0.00	0.00	0.10	0.39	0.82	1.29	1.73	3.75	9.08
СТ	WIC Participants	Male	312	1.272		79.2	0.00	0.00	0.00	0.09	0.61	1.53	3.07	4.74	9.06	25.54
		Female	387	0.953	•	79.1	0.00	0.00	0.00	0.08	0.55	1.26	2.21	3.37	6.48	12.42
FL	General Ma	ile 79	011 0.	553		49.2	0.00 0.	00 0.	00 0.	00 0.	00 0.	68 1	.51	2.32	4.65 38	8.29
	F€	emale 74		622 505										2.48 2.90).27 3.27

Table E-179. Fish consumption per kg, per capita, by state, subpopulation, and gender (as-consumed g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

Table E-179. Fish consumption per kg, per capita, by state, subpopulation, and gender (as-consumed g/k	(g-day)
(continued)	

State	Population for sample selection	Gender	Samp N	Pop Arith Mean	Pop Geom Mean	Percent Eating Fish	Pop Min	-	Pop Q10	-	Pop Q50	Pop 075	Pop 090	Pop 095	Pop 099	Max
								2-	2	2	2	2.5	2	2	2	
MN	American Indians	Male	108	0.254		89.8	0.00	0.00	0.00	0.05	0.18	0.31	0.62	0.73	1.70	1.75
		Female	108	0.310	•	88.0	0.00	0.00	0.00	0.04	0.16	0.36	0.76	1.23	2.92	3.17
MN	Anglers	Male	606	0.397		96.9	0.00	0.03	0.06	0.12	0.23	0.45	0.84	1.23	2.88	5.79
		Female	546	0.419	•	95.6	0.00	0.01	0.05	0.12	0.23	0.45	0.94	1.39	3.89	6.17
MN	General	Male	419	0.352		95.3	0.00	0.01	0.03	0.11	0.22	0.44	0.77	1.41	2.01	10.67
		Female	418	0.475	•	93.4	0.00	0.00	0.02	0.11	0.27	0.47	0.87	1.46	2.49	12.27
MN	New Mothers	Male	205	0.354		86.3	0.00	0.00	0.00	0.06	0.21	0.44	0.89	1.23	2.32	2.83
		Female	196	0.515	•	83.7	0.00	0.00	0.00	0.07	0.19	0.47	1.26	1.89	4.59	11.01
ND	American Indians	Male	50	0.461		58.0	0.00	0.00	0.00	0.00	0.05	0.33	1.02	1.86	7.05	7.05
		Female	56	0.477	•	62.5	0.00	0.00	0.00	0.00	0.07	0.36	1.78	3.09	3.55	3.55
ND	Anglers	Male	467	0.423		95.3	0.00	0.01	0.05	0.12	0.25	0.49	1.02	1.52	2.57	7.85
		Female	387	0.438	•	93.8	0.00	0.00	0.04	0.11	0.25	0.52	1.03	1.58	2.75	5.51
ND	General	Male	276	0.425		96.2	0.00	0.02	0.05	0.11	0.25	0.44	0.91	1.60	2.50	5.72
		Female	299	0.432		94.2	0.00	0.00	0.04	0.11	0.23	0.44	0.97	1.55	3.01	9.00

FL consumption excludes away-from-home consumption by children < 18.

Table E-180. Fish consumption per kg, consumers only, state, subpopulation, and gender (as-consumed g/kg-day)

P	opulation for		Samp	Arith	Geom	Percen Eating	t									
e s	ample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
A	ngler	Male	192	0.94	0.54	100	0.01	0.08	0.13	0.29	0.56	1.08	2.28	2.94	6.23	9.33
		Female	52	0.69	0.46	100	0.01	0.11	0.15	0.24	0.45	1.06	1.44	1.94	2.90	2.93
A	quaculture Student	s Male	9	0.32	0.12	100	0.01		0.01	0.03	0.14	0.38	1.02			1.16
		Female	10	0.51	0.26	100	0.03	0.03	0.03	0.04	0.50	0.86	1.04	1.34	•	1.34
A	sians	Male	187	1.43	1.00	100	0.01	0.12	0.38	0.69	1.17	1.90	2.69	3.33	5.19	5.33
		Female	206	1.68	1.27	100	0.03	0.35	0.54	0.82	1.24	2.10	3.77	4.57	6.61	7.02
C	commercial Fisherme	en Male	87	0.99	0.63	100	0.01	0.09	0.17	0.40	0.75	1.27	2.10	2.24	5.70	7.62
		Female	79	0.86	0.51	100	0.01	0.06	0.09	0.34	0.58	1.12	1.83	2.59	4.74	6.28
E	FNEP Participants	Male	22	1.60	0.81	100	0.17	0.18	0.18	0.36	0.55	2.20	3.82	5.01		8.32
		Female	36	1.48	0.55	100	0.02	0.06	0.10	0.27	0.53	1.37	3.09	6.07	•	16.74
G	eneral	Male	175	0.61	0.40	100	0.01	0.05	0.11	0.23	0.41	0.79	1.54	1.85	2.46	2.92
		Female	187	0.70	0.40	100	0.01	0.04	0.09	0.21	0.47	0.93	1.40	1.77	4.34	9.08
W	NIC Participants	Male	247	1.61	0.85	100	0.01	0.09	0.17	0.44	0.91	2.03	3.86	5.03	10.52	25.54
		Female	306	1.20	0.68	100	0.01	0.08	0.16	0.33	0.80	1.48	2.59	3.89	6.91	12.42
G	eneral M	Male 38	80 1.	12 0.	71	100	0.01 0.	16 0	.23 0.	.37 0	.69 1.	31 2	.33 3	.32 7	.08 38	3.29
	E		61 1.	20 0.	77	100	0.00 0.				.77 1.		.42 3	.48 7).27
			16 1. 16 1.				0.00 0. 0.10 0.				.77 1. .91 1.			.48 7 .19		3.

FL consumption excludes away-from-home consumption by children < 18.

Table E-180. Fish consumption per kg, consumers only, state, subpopulation, and gender (as-consumed g/kg-	
day) (continued)	

			-		a	Percent										
	Population for	G]	Samp			Eating	N C	05	01.0	0.05	050	075	000	005	000	14
State	sample selection	Gender	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Male	97	0.28	0.17	100	0.01	0.02	0.04	0.09	0.20	0.35	0.65	0.73	1.70	1.75
		Female	95	0.35	0.17	100	0.01	0.01	0.02	0.06	0.21	0.39	0.78	1.26	2.92	3.17
MN	Anglers	Male	587	0.41	0.25	100	0.01	0.05	0.07	0.14	0.24	0.46	0.84	1.24	2.90	5.79
		Female	522	0.44	0.25	100	0.01	0.05	0.07	0.13	0.24	0.47	0.96	1.40	3.90	6.17
MN	General	Male	401	0.37	0.22	100	0.01	0.03	0.05	0.12	0.23	0.44	0.82	1.43	2.03	10.67
		Female	392	0.51	0.26	100	0.01	0.03	0.06	0.13	0.29	0.50	0.93	1.62	2.51	12.27
MN	New Mothers	Male	177	0.41	0.24	100	0.01	0.04	0.05	0.11	0.26	0.49	1.01	1.41	2.37	2.83
		Female	164	0.62	0.28	100	0.01	0.03	0.07	0.12	0.28	0.58	1.39	2.44	5.01	11.01
ND	American Indians	Male	29	0.79	0.25	100	0.01	0.03	0.04	0.05	0.24	0.80	1.74	4.89		7.05
		Female	35	0.76	0.27	100	0.01	0.02	0.03	0.09	0.26	0.92	3.00	3.41	•	3.55
ND	Anglers	Male	445	0.44	0.26	100	0.01	0.05	0.07	0.13	0.26	0.51	1.04	1.52	2.58	7.85
		Female	363	0.47	0.27	100	0.01	0.05	0.07	0.14	0.28	0.56	1.10	1.72	2.76	5.51
ND	General	Male	265	0.44	0.25	100	0.01	0.04	0.06	0.12	0.27	0.46	0.99	1.62	2.51	5.72
		Female	281	0.46	0.25	100	0.01	0.04	0.07	0.13	0.24	0.47	0.99	1.60	3.08	9.00

FL consumption excludes away-from-home consumption by children < 18.

State	Population for sample selection	Eats Freshwater/ Estuarine Caught Fish	Samp NC	Arith Mean	Geom Mean	Percent Eating Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
СТ	Angler	Exclusively	1	0.05	0.05	100	0.05									0.05
		Sometimes	190	1.00	0.62	100	0.06	0.14	0.20	0.31	0.61	1.21	2.31	2.94	6.31	9.33
		Never	53	0.51	0.29	100	0.01	0.03	0.06	0.14	0.36	0.80	1.17	1.32	2.18	2.21
СТ	Aquaculture Student	s Sometimes	2	0.49	0.30	100	0.10			0.10	0.30	0.88				0.88
	_	Never	17	0.41	0.17	100	0.01	0.01	0.02	0.04	0.19	0.75	1.09	1.25		1.34
СТ	Asians	Sometimes	199	1.65	1.18	100	0.02	0.34	0.43	0.71	1.25	2.11	3.88	4.81	5.53	6.70
		Never	194	1.47	1.09	100	0.01	0.25	0.47	0.77	1.17	1.92	2.74	3.14	5.47	7.02
СТ	Commercial Fisherme	n Sometimes	120	1.06	0.73	100	0.05	0.14	0.24	0.41	0.76	1.33	2.13	2.69	6.54	7.62
		Never	46	0.56	0.30	100	0.01	0.01	0.04	0.14	0.41	0.78	1.19	1.87	•	2.30
СТ	EFNEP Participants	Sometimes	8	0.34	0.31	100	0.17		0.18	0.24	0.30	0.40	0.54			0.64
		Never	50	1.71	0.72	100	0.02	0.09	0.12	0.32	0.67	2.09	3.74	8.32	16.74	16.74
СТ	General	Sometimes	50	0.64	0.42	100	0.03	0.09	0.12	0.23	0.39	0.99	1.53	1.68	3.22	3.30
		Never	312	0.66	0.40	100	0.01	0.04	0.10	0.22	0.44	0.87	1.50	1.83	3.62	9.08
СТ	WIC Participants	Sometimes	67	2.11	1.27	100	0.21	0.32	0.38	0.56	1.22	2.49	4.97	6.83	12.07	12.42
	-	Never	486	1.28	0.70	100	0.01	0.07	0.15	0.35	0.80	1.58	2.78	4.15	7.19	25.54
FL	General E	xclusively 23	5 0.9	1 0.5	5 1	00 0.0	2 0.0	9 0.1	3 0.3	2 0.5	6 1.2	2 2.	14 2.'	70 4.	65 9.	55
	S	ometimes 45	8 2.2	1 1.4	91	00 0.0	7 0.4	2 0.5	6 0.8	9 1.4	0 2.4	64.	54 6.3	17 13.	80 26.	20
	N	ever 706	4 1.1	1 0.7	1 1	00 0.0	0 0.1	6 0.2	4 0.3	8 0.7	1 1.2	82.	27 3.3	24 6.	42 38.	29

Table E-181. Fish consumption per kg, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/kg-day)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

		Eats Freshwater/				Percent										
	Population for	Estuarine	Samp	Arith	Geom	Eating										
State	sample selection	Caught Fish	NC	Mean	Mean	Fish	Min	Q5	Q10	Q25	Q50	Q75	Q90	Q95	Q99	Max
MN	American Indians	Exclusively	31	0.24	0.09	100	0.01	0.01	0.01	0.02	0.09	0.36	0.56	0.73	•	1.86
		Sometimes	136	0.38	0.24	100	0.03	0.04	0.06	0.15	0.24	0.47	0.76	1.23	2.78	3.17
		Never	25	0.07	0.05	100	0.01	0.01	0.02	0.02	0.05	0.09	0.16	0.19	•	0.30
MN	Anglers	Exclusively	57	0.47	0.17	100	0.01	0.02	0.02	0.05	0.21	0.46	1.19	2.57	3.67	3.77
		Sometimes	879	0.45	0.29	100	0.02	0.07	0.10	0.16	0.27	0.49	0.95	1.40	3.05	6.17
		Never	173	0.26	0.14	100	0.01	0.03	0.04	0.07	0.13	0.29	0.62	0.88	1.54	2.82
MN	General	Exclusively	38	0.21	0.11	100	0.02	0.02	0.02	0.04	0.11	0.33	0.49	0.68		0.75
		Sometimes	555	0.53	0.31	100	0.02	0.08	0.11	0.15	0.31	0.56	0.93	1.76	3.04	12.27
		Never	200	0.31	0.16	100	0.01	0.02	0.03	0.07	0.18	0.35	0.75	1.21	1.65	10.67
MN	New Mothers	Exclusively	17	0.13	0.08	100	0.02	0.02	0.02	0.03	0.12	0.21	0.27	0.34		0.41
		Sometimes	189	0.62	0.35	100	0.03	0.06	0.09	0.18	0.35	0.68	1.33	1.76	4.54	11.01
		Never	135	0.40	0.19	100	0.01	0.03	0.05	0.07	0.17	0.42	0.99	1.80	3.29	3.37
ND	American Indians	Exclusively	4	0.07	0.06	100	0.04			0.04	0.06	0.09				0.10
		Sometimes	30	1.44	0.79	100	0.12	0.16	0.18	0.29	0.81	1.86	3.54	4.82		7.05
		Never	30	0.21	0.10	100	0.01	0.01	0.02	0.05	0.09	0.26	0.48	0.88	•	1.47
ND	Anglers	Exclusively	47	0.26	0.10	100	0.01	0.01	0.02	0.04	0.10	0.18	0.82	1.36		2.24
		Sometimes	660	0.50	0.31	100	0.03	0.06	0.09	0.16	0.31	0.57	1.13	1.72	2.76	7.85
		Never	101	0.24	0.13	100	0.01	0.01	0.03	0.06	0.14	0.29	0.55	0.71	1.55	1.65
ND	General	Exclusively	30	0.28	0.18	100	0.02	0.03	0.07	0.11	0.18	0.29	0.43	0.68		2.41
		Sometimes	359	0.52	0.32	100	0.05	0.08	0.10	0.17	0.31	0.58	1.10	1.66	3.32	5.72
		Never	157	0.33	0.15	100	0.01	0.02	0.03	0.06	0.13	0.32	0.71	1.29	2.60	9.00

Table E-181. Fish consumption per kg, consumers only, by state, subpopulation, and fresh/estuarine fish consumption (as-consumed g/kg-day) (continued)

FL consumption is based on a 7-day recall, CT, MN, ND consumtpion is based on rate of consumption.

FL consumption excludes away-from-home consumption by children < 18.

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
Freshwater	Bass	157	8.9	7.13	151	19.8	7.38
Freshwater	Trout	109	4.1	4.73	92	8.3	5.08
Freshwater	Crappie	5	0.9	22.98	5	2.0	22.98
Freshwater	Northern Pike	4	0.6	18.58	4	1.3	18.58
Freshwater	Pickerel	5	0.5	13.19	5	1.2	13.19
Freshwater	Sunfish	10	0.5	6.54	10	1.2	6.54
Freshwater	Catfish	13	0.5	4.38	11	1.0	4.96
Freshwater	Snails	1	0.1	8.79	1	0.2	8.79
Freshwater	Tilapia	1	0.0	2.57	0		
Freshwater	Bullhead	2	0.0	0.57	2	0.0	0.57
Freshwater	Walleye	2	0.0	0.21	2	0.0	0.21
Marine	Tuna	256	23.8	11.66	14	2.3	9.42
Marine	Flounder	147	8.1	6.89	111	14.2	7.20
Marine	Bluefish	157	7.0	5.62	149	15.4	5.81
Marine	Clams	309	6.8	2.75	66	3.5	3.03
Marine	Lobster	242	5.9	3.07	33	3.4	5.76
Marine	Shrimp	99	5.3	6.68	1	0.0	2.20
Marine	Tautog	91	3.8	5.21	85	8.4	5.55
Marine	Scallops	57	2.9	6.42	1	0.6	36.55
Marine	Crab	166	2.6	1.95	59	2.5	2.37
Marine	Perch	36	2.4	8.24	36	5.3	8.24
Marine	Salmon	64	2.3	4.45	4	0.1	1.44
Marine	Cod	56	2.0	4.58	10	1.4	8.06
Marine	Mussels	66	1.1	2.09	13	0.6	2.81
Marine	Porgy	42	1.0	2.90	39	2.0	2.95
Marine	Unspecified Fish	59	1.0	2.03	0		
Marine	Swordfish	45	0.9	2.60	0		•
Marine	Whiting	2	0.8	49.68	2	1.8	49.68
Marine	Dolphinfish	16	0.7	5.79	1	0.0	1.65

Table E-182. Total and caught fish consumption for the Connecticut angler population (as-consumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Marine	Pollock	5	0.7	17.48	0		
Marine	Scrod	11	0.6	7.27	0		
Marine	Sardines	7	0.6	10.56	0		
Marine	Oysters	31	0.5	2.22	5	0.5	5.95
larine	Eel	18	0.5	3.64	14	0.6	2.22
larine	Shark	12	0.4	4.31	1	0.3	18.47
larine	Sole	17	0.4	2.96	0		
larine	Halibut	8	0.3	5.00	2	0.0	0.22
larine	Sea Trout	1	0.3	34.61	1	0.6	34.61
larine	Haddock	18	0.3	1.75	0		
larine	Mackerel	2	0.2	14.40	2	0.5	14.40
Marine	Other fish	1	0.2	24.62	1	0.4	24.62
larine	Snapper	6	0.1	2.04	3	0.1	1.17
Marine	Sea bass	5	0.1	2.18	4	0.2	2.46
larine	Weakfish	2	0.1	4.51	2	0.2	4.51
Marine	Grouper	1	0.1	7.72	0		
Marine	Herring	3	0.1	2.12	0		
Marine	Dorado	1	0.0	3.49	0		•
Marine	Monkfish	1	0.0	1.98	0		
Marine	Shad	1	0.0	1.76	1	0.0	1.76
larine	Anchovies	4	0.0	0.20	0		
larine	Drum	1	0.0	0.73	1	0.0	0.73
Marine	Smelt	1	0.0	0.44	0		
Marine	Sheepshead	1	0.0	0.31	1	0.0	0.31

Table E-182. Total and caught fish consumption for the Connecticut angler population (as-consumed g/day) (continued)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
reshwater	Trout	2	1.3	2.27	0		•
Freshwater	Catfish	1	0.6	2.20	0		
Freshwater	Tilapia	1	0.4	1.47	0		
larine	Tuna	20	43.1	7.77	2	32.5	1.92
larine	Scallops	6	13.0	7.83	0		•
larine	Clams	17	12.7	2.70	1	10.0	1.18
larine	Lobster	14	8.0	2.05	0		•
larine	Crab	7	7.0	3.59	0		
larine	Shrimp	7	4.7	2.43	0		
larine	Anchovies	4	1.9	1.67	0		
larine	Salmon	5	1.4	1.05	0		
larine	Bluefish	4	1.4	1.22	4	33.7	1.00
larine	Mussels	3	1.1	1.30	0		
larine	Swordfish	6	1.0	0.60	0		
larine	Oysters	2	0.9	1.58	1	23.9	2.82
larine	Unspecified Fish	5	0.8	0.59	0		
larine	Halibut	1	0.2	0.88	0		•
larine	Flounder	1	0.2	0.88	0		•
larine	Sole	1	0.2	0.73	0		
larine	Grouper	1	0.1	0.37	0		
larine	Sardines	1	0.1	0.33	0		

Table E-183. Total and caught fish consumption for the Connecticut aquaculture students population (asconsumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
Freshwater	Bass	218	7.5	7.40	93	19.0	6.75
Freshwater	Trout	122	4.2	7.31	68	13.3	6.45
Freshwater	Catfish	164	2.3	3.05	113	9.0	2.64
Freshwater	Sunfish	130	1.7	2.84	95	8.9	3.08
Freshwater	Carp	63	1.4	4.82	36	6.4	5.87
Freshwater	Crappie	14	0.3	4.97	1	0.1	1.65
Freshwater	Northern Pike	20	0.2	2.26	5	0.4	2.49
Freshwater	Covina	4	0.1	5.57	0		
Freshwater	Bullhead	4	0.0	1.31	0		
Freshwater	Whitesucker	2	0.0	2.54	2	0.2	2.54
Freshwater	Snails	1	0.0	3.33	0		
Marine	Shrimp	355	28.4	17.18	0		
Marine	Flounder	225	9.5	9.11	17	3.2	6.17
Marine	Tuna	184	9.3	10.85	0		
Marine	Mackerel	187	7.5	8.65	0		
Marine	Bluefish	124	6.2	10.70	74	22.4	9.98
Marine	Salmon	260	5.5	4.57	0		•
Marine	Porgy	101	2.2	4.62	18	1.3	2.30
Marine	Butterfirsh	83	1.6	4.03	0		•
Marine	Crab	200	1.5	1.66	9	0.3	0.94
Marine	Tautog	25	1.2	10.62	21	5.9	9.32
Marine	Whitefish	52	1.0	4.16	24	4.7	6.46
Marine	Perch	47	1.0	4.57	23	4.0	5.71
Marine	Mussels	43	1.0	4.99	0		
Marine	Whiting	39	1.0	5.45	2	0.4	6.87
Marine	Lobster	89	0.9	2.06	0		
Marine	Clams	120	0.8	1.46	10	0.3	0.92
Marine	Oysters	65	0.6	1.91	0		

Table E-184. Total and caught fish consumption for the Connecticut Asian population (as-consumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Marine	Mullet	54	0.5	2.10	0		•
Marine	Swordfish	18	0.5	5.72	0		
Marine	Skate	33	0.5	2.93	0		
Marine	Sea bass	23	0.3	3.10	4	0.1	0.58
Marine	Pollock	4	0.3	14.47	0		
Marine	Sardines	27	0.2	1.76	0		
Marine	Shad	22	0.2	2.16	0		
Marine	Scallops	14	0.2	2.52	0		
Marine	Eel	24	0.1	1.08	3	0.2	2.70
Marine	Shark	3	0.1	7.85	0		
Marine	Spot	б	0.1	2.93	0		
Marine	Cod	4	0.0	2.41	0		
Marine	Halibut	2	0.0	1.09	0		
Marine	Unspecified Fish	2	0.0	0.51	1	0.0	0.18
Marine	Herring	1	0.0	0.86	0		

Table E-184. Total and caught fish consumption for the Connecticut Asian population (as-consumed g/day)(continued)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
Freshwater	Bass	86	4.0	3.77	83	10.2	3.77
Freshwater	Trout	19	0.9	3.63	15	2.1	4.38
Freshwater	Catfish	14	0.3	1.58	3	0.1	0.88
Freshwater	Crawfish	2	0.0	0.94	0		
Freshwater	Bullhead	1	0.0	0.88	1	0.0	0.88
Freshwater	Snails	2	0.0	0.32	2	0.0	0.32
Marine	Tuna	217	20.3	7.57	36	3.5	2.97
Marine	Lobster	217	16.7	6.25	140	35.5	7.79
Marine	Clams	266	8.1	2.47	95	8.2	2.66
Marine	Shrimp	83	6.7	6.56	0		
Marine	Cod	68	5.1	6.06	18	4.0	6.83
Marine	Scallops	57	5.0	7.17	5	0.9	5.42
Marine	Flounder	75	4.8	5.18	57	8.8	4.76
Marine	Tautog	86	4.3	4.02	82	10.6	3.96
Marine	Crab	171	4.3	2.02	65	3.1	1.47
Marine	Salmon	42	3.8	7.28	0		
Marine	Bluefish	75	2.9	3.12	75	7.5	3.07
Marine	Swordfish	55	2.8	4.06	0		
Marine	Unspecified Fish	65	1.6	1.97	1	0.0	0.12
Marine	Snapper	4	1.1	23.24	0		
Marine	Porgy	25	1.0	3.35	24	1.8	2.33
Marine	Sole	13	1.0	6.07	0		
Marine	Mussels	56	0.8	1.17	24	0.4	0.55
Marine	Oysters	59	0.6	0.77	13	0.3	0.61
Marine	Eel	23	0.5	1.77	17	0.3	0.60
Marine	Haddock	18	0.5	2.25	2	0.2	3.47
Marine	Dolphinfish	8	0.4	4.12	2	0.0	0.73

Table E-185. Total and caught fish consumption for the Connecticut commercial fishermen population (asconsumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Iabitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Marine	Shark	20	0.4	1.62	14	0.8	1.86
Marine	Scrod	4	0.3	5.43	0		•
Marine	Milkfish	2	0.3	10.45	0		•
Marine	Whitefish	2	0.2	9.85	2	0.4	6.57
larine	Smelt	3	0.2	5.89	3	0.5	4.78
larine	Shad	10	0.2	1.68	0		
Marine	Scungilli	11	0.2	1.33	4	0.2	1.44
Marine	Sardines	11	0.2	1.32	0		•
larine	Halibut	8	0.2	1.80	0		
larine	Pollock	6	0.1	1.66	3	0.1	1.32
Marine	Herring	4	0.1	1.78	0		
larine	Caviar	5	0.1	1.34	2	0.1	1.38
Marine	Anchovies	5	0.1	0.83	0		•
Marine	Mackerel	4	0.0	0.90	1	0.0	0.82
Marine	Grouper	4	0.0	0.87	0		
Marine	Sea bass	3	0.0	0.66	1	0.0	0.88
larine	Blowfish	1	0.0	1.86	1	0.1	1.86
Marine	Other fish	2	0.0	0.54	1	0.0	0.73
larine	Weakfish	2	0.0	0.48	2	0.0	0.48
larine	Sea Urchin	2	0.0	0.47	2	0.0	0.47
larine	Perch	2	0.0	0.33	2	0.0	0.33
larine	Mullet	1	0.0	0.22	0		

Table E-185. Total and caught fish consumption for the Connecticut commercial fishermen population (asconsumed g/day) (continued)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
abitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
reshwater	Catfish	15	2.5	5.94	0		·
Freshwater	Bass	8	0.6	2.67	8	8.1	2.67
Freshwater	Trout	1	0.0	0.32	0		
Marine	Tuna	55	36.8	23.75	0		
larine	Shrimp	30	16.8	19.86	0		
larine	Perch	18	10.0	19.79	0		
larine	Crab	27	7.6	9.99	0		
larine	Salmon	15	5.5	13.02	0		
larine	Bluefish	22	3.1	4.95	18	37.3	5.48
larine	Tautog	8	3.0	13.18	8	39.9	13.18
larine	Unspecified Fish	20	2.6	4.53	0		
larine	Scallops	13	2.5	6.80	0		
larine	Lobster	27	2.1	2.75	0		
larine	Clams	35	1.8	1.84	0		
larine	Pollock	1	1.2	43.53	0		
larine	Swordfish	4	1.2	10.35	0		
larine	Porgy	12	0.9	2.80	12	12.7	2.80
larine	Cod	13	0.6	1.56	4	1.6	1.06
larine	Flounder	11	0.3	1.04	3	0.5	0.41
larine	Oysters	5	0.3	2.20	0		
larine	Haddock	2	0.3	4.64	0		
larine	Sardines	4	0.2	2.21	0		
larine	Mussels	2	0.1	1.40	0		
arine	Sole	5	0.1	0.44	0		
larine	Mackerel	3	0.0	0.43	0		

Table E-186. Total and caught fish consumption for the Connecticut EFNEP participant population (asconsumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	N	of Total	g/day	Fish	Caught	Fish
Freshwater	Bass	62	1.5	5.97	45	27.6	6.55
Freshwater	Trout	34	0.5	3.28	12	3.6	3.20
reshwater	Catfish	10	0.3	7.32	5	2.0	4.28
reshwater	Crawfish	2	0.0	5.45	0		
reshwater	Crappie	4	0.0	1.92	4	0.7	1.92
reshwater	Whitesucker	2	0.0	2.08	2	0.4	2.08
larine	Tuna	522	34.2	16.14	0		
Marine	Unspecified Fish	330	14.3	10.67	0		
larine	Shrimp	257	9.0	8.65	0		
arine	Crab	259	5.9	5.64	6	0.6	1.01
arine	Clams	589	5.9	2.47	12	0.8	0.67
larine	Porgy	88	4.9	13.76	16	11.5	7.71
larine	Lobster	418	4.8	2.84	10	3.6	3.85
larine	Whiting	58	3.0	12.73	5	8.6	18.30
larine	Bluefish	116	2.8	5.98	60	28.3	5.04
larine	Cod	68	2.3	8.44	0		
larine	Haddock	35	1.5	10.68	0		
larine	Salmon	23	1.4	14.93	0		
larine	Snapper	17	1.2	16.69	0		
larine	Scallops	87	1.2	3.26	1	0.1	0.64
larine	Swordfish	43	0.8	4.39	0		
larine	Sole	26	0.7	6.62	1	0.0	0.43
larine	Oysters	52	0.6	3.01	0		
larine	Flounder	25	0.5	5.23	6	0.5	0.83
larine	Tautog	12	0.3	6.45	5	2.9	6.16
larine	Mussels	41	0.3	1.75	0		

Table E-187. Total and caught fish consumption for the Connecticut WIC participant population (as-consumed g/day)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Marine	Perch	10	0.3	7.10	4	4.0	10.59
Marine	Scrod	23	0.3	3.04	0		
Marine	Eel	5	0.2	11.07	3	5.0	17.70
Marine	Bream	2	0.2	26.06	0		
Marine	Herring	3	0.2	15.79	0		
Marine	Butterfirsh	4	0.2	11.23	0		•
Marine	Shark	2	0.2	19.89	0		
Marine	Whitefish	4	0.1	6.76	0		
Marine	Mackerel	2	0.1	10.41	0		
Marine	Other fish	3	0.1	6.37	0		
Marine	Halibut	8	0.0	1.54	0		
Marine	Doctorfish	1	0.0	10.90	0		
Marine	Scungilli	1	0.0	3.78	0		
Marine	Grunt	1	0.0	0.93	0		•
Marine	Anchovies	2	0.0	0.36	0		
Marine	Grouper	1	0.0	0.66	0		
Marine	Smelt	1	0.0	0.64	0		
Marine	Sea Urchin	1	0.0	0.14	1	0.0	0.14
Marine	Caviar	3	0.0	0.02	0		

Table E-187. Total and caught fish consumption for the Connecticut WIC participant population (as-consumed g/day) (continued)

					N Eating	Percent	Mean g/day
			Percent	Mean	Caught	of Total	of Caught
Habitat	Species or class of fish	Ν	of Total	g/day	Fish	Caught	Fish
Freshwater	Walleye or Sauger	169	26.2	4.02	169	44.5	4.02
Freshwater	Panfish	81	14.7	4.69	81	24.9	4.69
Freshwater	Northern pike or Muskie	73	8.2	2.89	73	13.8	2.89
Freshwater	Salmon or Lake trout	29	6.8	6.09	29	11.6	6.09
Freshwater	Other non-purchased fish	32	1.4	1.11	32	2.3	1.11
Freshwater	Stream trout	7	0.9	3.39	7	1.6	3.39
Freshwater	Bass	24	0.8	0.88	24	1.4	0.88
Marine	Canned tuna	133	16.0	3.12	0		
larine	Breaded fish, fish sticks	130	12.0	2.38	0		
Marine	Shellfish	106	8.3	2.02	0		
Marine	Other purchased fish	57	3.7	1.70	0		
larine	Swordfish & Shark	12	1.0	2.11	0		

Table E-188. Total and caught fish consumption for the Minnesota American Indian population (as-consumed g/day)

Table E-189. Total and caught fish consumption	on for the Minnesota angler	population (as-consumed g/day)
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Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Panfish	743	16.7	5.49	743	37.3	5.49
Freshwater	Walleye or Sauger	779	13.6	4.28	779	30.5	4.28
Freshwater	Northern pike or Muskie	484	8.5	4.28	484	18.9	4.28
Freshwater	Salmon or Lake trout	287	2.2	1.90	287	5.0	1.90
Freshwater	Bass	255	1.9	1.78	255	4.2	1.78
Freshwater	Other non-purchased fish	148	1.2	1.98	148	2.7	1.98
Freshwater	Stream trout	90	0.7	1.83	90	1.5	1.83
Marine	Canned tuna	927	17.9	4.72	0		
Marine	Breaded fish, fish sticks	745	12.0	3.95	0		
Marine	Other purchased fish	763	11.1	3.57	0		
Marine	Shellfish	808	11.1	3.35	0		
Marine	Swordfish & Shark	109	3.2	7.08	0		

Table E-190. Total and caught fish consumption for the Minnesota families with new mothers (as-consumedg/day)

labitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
reshwater	Panfish	175	11.3	3.84	175	37.5	3.84
reshwater	Walleye or Sauger	168	9.4	3.30	168	31.0	3.30
reshwater	Other non-purchased fish	33	3.8	6.77	33	12.5	6.77
reshwater	Northern pike or Muskie	116	2.7	1.37	116	8.8	1.37
reshwater	Bass	69	1.6	1.39	69	5.3	1.39
reshwater	Salmon or Lake trout	54	1.2	1.31	54	3.9	1.31
reshwater	Stream trout	15	0.3	1.04	15	0.9	1.04
arine	Canned tuna	282	25.5	5.36	0		
arine	Breaded fish, fish sticks	256	14.9	3.44	0		
arine	Other purchased fish	189	13.7	4.30	0		
arine	Shellfish	203	12.8	3.74	0		
arine	Swordfish & Shark	32	2.9	5.30	0		

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Panfish	10	14.5	29.47	10	48.9	29.47
Freshwater	Walleye or Sauger	36	12.4	7.00	36	41.8	7.00
Freshwater	Northern pike or Muskie	13	2.2	3.40	13	7.3	3.40
reshwater	Bass	8	0.3	0.79	8	1.0	0.79
Freshwater	Other non-purchased fish	5	0.2	0.77	5	0.6	0.77
reshwater	Salmon or Lake trout	2	0.1	0.58	2	0.2	0.58
Marine	Canned tuna	56	31.0	11.23	0		
Marine	Breaded fish, fish sticks	61	22.5	7.51	0		
larine	Shellfish	45	11.5	5.21	0		
larine	Other purchased fish	17	2.8	3.30	0		
larine	Swordfish & Shark	2	2.5	25.73	0		

Table E-191. Total and caught fish consumption for the North Dakota American Indian population (asconsumed g/day)

Table E-192. Total and caught fish consumption for the North Dakota angler population (as-consumed g/day)

Habitat	Species or class of fish	N	Percent of Total	Mean g/day	N Eating Caught Fish	Percent of Total Caught	Mean g/day of Caught Fish
Freshwater	Walleye or Sauger	633	19.0	5.10	633	42.6	5.10
Freshwater	Panfish	512	12.0	3.99	512	27.0	3.99
Freshwater	Northern pike or Muskie	407	8.8	3.66	407	19.7	3.66
Freshwater	Bass	196	1.7	1.47	196	3.8	1.47
Freshwater	Salmon or Lake trout	136	1.4	1.79	136	3.2	1.79
Freshwater	Other non-purchased fish	87	1.3	2.61	87	3.0	2.61
Freshwater	Stream trout	34	0.3	1.42	34	0.6	1.42
Marine	Canned tuna	672	17.7	4.46	0		
Marine	Breaded fish, fish sticks	575	14.4	4.25	0		
Marine	Shellfish	585	11.0	3.18	0		
Marine	Other purchased fish	550	11.0	3.38	0		
Marine	Swordfish & Shark	78	1.5	3.16	0		



