

# Per Capita Consumption

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The NMFS calculation of per capita consumption is based on a “disappearance” model. The total U.S. supply of imports and landings is converted to edible weight, and decreases in supply such as exports and inventories are subtracted out. The remaining total is divided by a population value to estimate per capita consumption. Data for the model are derived primarily from secondary sources and are subject to incomplete reporting; changes in source data or invalid model assumptions may each have a significant effect on the resulting calculation.

U.S. per capita consumption of fish and shellfish was 14.8 pounds (edible meat) in 2001. This total was 0.4 pounds less than the revised 15.2 pounds consumed in 2000. Per capita consumption of fresh and frozen products was 10.3 pounds, 0.1 pound more than 2000.

Fresh and frozen finfish accounted for 5.7 pounds while fresh and frozen shellfish consumption was 4.6 pounds per capita. The fresh and frozen finfish includes approximately 1.1 pounds of farm raised catfish.

Consumption of canned fishery products was 4.2 pounds per capita in 2001, 0.5 pounds less than the revised 4.7 in 2000. Cured fish accounted for 0.3 pound per capita, the same as in previous years. Imports of edible seafood made up 76 percent of the consumption.

**PER CAPITA USE.** Per capita use is based on the supply of fishery products, both edible and non-edible (industrial), on a round-weight equivalent basis without considering beginning or ending stocks, defense purchases, or exports. The per capita use of all edible and industrial fishery products in 2001 was 63.6 pounds, up 2.2 pounds compared with 2000.

**WORLD CONSUMPTION.** The FAO calculation for apparent consumption is also based on a disappearance model. The three year average considers, on a round weight equivalent basis, a country's landings, imports, and exports. The 1997-99 data indicates that the United States ranks as the third largest consumer of seafood in the world.

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories and exports, divided by the civilian population of the United States as of July 1 of each year.

### U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1910-2001

Year	Civilian resident population July 1 (1) <u>Million persons</u>	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
		-----Pounds, edible meat-----			
<b>1910</b>	92.2	4.5	2.8	3.9	11.2
<b>1920</b>	106.5	6.3	3.2	2.3	11.8
<b>1930</b>	122.9	5.8	3.4	1.0	10.2
<b>1940</b>	132.1	5.7	4.6	0.7	11.0
<b>1950</b>	150.8	6.3	4.9	0.6	11.8
<b>1960</b>	178.1	5.7	4.0	0.6	10.3
<b>1970</b>	201.9	6.9	4.5	0.4	11.8
<b>1980</b>	225.6	7.9	4.3	0.3	12.5
1981	227.8	7.8	4.6	0.3	12.7
1982	230.0	7.9	4.3	0.3	12.5
1983	232.1	8.4	4.7	0.3	13.4
1984	234.1	9.0	4.9	0.3	14.2
1985	236.2	9.8	5.0	0.3	15.1
1986	238.4	9.8	5.4	0.3	15.5
1987	240.6	10.7	5.2	0.3	16.2
1988	242.8	10.0	4.9	0.3	15.2
1989	245.1	10.2	5.1	0.3	15.6
<b>1990</b>	247.8	9.6	5.1	0.3	15.0
1991 (5)	250.5	9.7	4.9	0.3	14.9
1992 (5)	253.5	9.9	4.6	0.3	14.8
1993 (5)	256.4	10.2	4.5	0.3	15.0
1994 (5)	259.2	10.4	4.5	0.3	15.2
1995 (5)	261.4	10.0	4.7	0.3	15.0
1996 (5)	264.0	10.0	4.5	0.3	14.8
1997 (5)	266.4	9.9	4.4	0.3	14.6
1998 (5)	269.1	10.2	4.4	0.3	14.9
1999 (5)	271.5	10.4	4.7	0.3	15.4
<b>2000 (6)</b>	280.9	10.2	4.7	0.3	15.2
2001	283.6	10.3	4.2	0.3	14.8

(1) Resident population for 1910 and 1920 and civilian resident population for 1930 to date.

(2) Fresh and frozen fish consumption for 1910 and 1920 is estimated. Beginning in 1973, data include consumption of cultivated catfish.

(3) Canned fish consumption for 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.

(4) Cured fish consumption for 1910 and 1920 is estimated.

(5) Resident population estimates for 1991 through 1999 have not been released. Consumption estimates will be revised accordingly upon new population estimates.

(6) Resident population for 2000 has been revised and data adjusted to reflect change.

\*Record years: Fresh and Frozen--10.7 lb, 1987; Canned--5.8, 1936; Cured--4.0, 1909; and Total--16.2 lb, 1987.

### U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1980-2001

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
----- Pounds -----						
<b>1980</b>	0.5	0.3	3.0	0.4	0.1	4.3
1981	0.5	0.4	3.0	0.4	0.3	4.6
1982	0.5	0.3	2.8	0.4	0.3	4.3
1983	0.5	0.2	3.2	0.4	0.4	4.7
1984	0.6	0.2	3.2	0.4	0.5	4.9
1985	0.5	0.3	3.3	0.5	0.4	5.0
1986	0.5	0.3	3.6	0.5	0.5	5.4
1987	0.4	0.3	3.5	0.5	0.5	5.2
1988	0.3	0.3	3.6	0.4	0.3	4.9
1989	0.3	0.3	3.9	0.4	0.2	5.1
<b>1990</b>	0.4	0.3	3.7	0.3	0.4	5.1
1991 (1)	0.5	0.2	3.6	0.4	0.2	4.9
1992 (1)	0.5	0.2	3.5	0.3	0.1	4.6
1993 (1)	0.4	0.2	3.5	0.3	0.1	4.5
1994 (1)	0.4	0.2	3.3	0.3	0.3	4.5
1995 (1)	0.5	0.2	3.4	0.3	0.3	4.7
1996 (1)	0.5	0.2	3.2	0.3	0.3	4.5
1997 (1)	0.4	0.2	3.1	0.3	0.4	4.4
1998 (1)	0.3	0.2	3.4	0.3	0.2	4.4
1999 (1)	0.3	0.2	3.5	0.4	0.3	4.7
<b>2000 (2)</b>	0.3	0.2	3.5	0.3	0.4	4.7
2001	0.4	0.2	2.9	0.3	0.4	4.2

(1) Residential population estimates for 1991 through 1999 have not been released. Consumption estimates will be revised accordingly upon new population estimates.

(2) Resident population for 2000 has been revised and data adjusted to reflect changes.

### U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1980-2001

Year	Fillets and steaks (1)	Sticks and portions (2)	Shrimp, all preparation
----- Pounds (2) -----			
<b>1980</b>	2.4	2.0	1.4
1981	2.4	1.8	1.5
1982	2.5	1.7	1.5
1983	2.7	1.8	1.7
1984	3.0	1.8	1.9
1985	3.2	1.8	2.0
1986	3.4	1.8	2.2
1987	* 3.6	1.7	2.4
1988	3.2	1.5	2.4
1989	3.1	1.5	2.3
<b>1990</b>	3.1	1.5	2.2
1991 (3)	3.0	1.2	2.4
1992 (3)	2.9	0.9	2.5
1993 (3)	2.9	1.0	2.5
1994 (3)	3.1	0.9	2.6
1995 (3)	2.9	1.2	2.5
1996 (3)	3.0	1.0	2.5
1997 (3)	3.0	1.0	2.7
1998 (3)	3.2	0.9	2.8
1999 (3)	3.2	1.0	3.0
<b>2000 (4)</b>	3.3	0.9	3.2
2001	3.4	0.8	* 3.4

(1) Data include groundfish and other species. Data do not include blocks, but fillets could be made into blocks from which sticks and portions could be produced.

(2) Products weight of fillets and steaks, sticks and portions; edible (meat) weight of shrimp.

(3) Resident population estimates for 1991 through 1999 have not been released. Consumption estimates will be revised accordingly upon new population estimates.

(4) Resident population for 2000 has been revised and data adjusted to reflect changes.

\*Record

## ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1997-99 AVERAGE

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
<b>North America:</b>			<b>Europe - Continued:</b>		
Canada	23.0	50.7	Belgium and Luxembourg	19.9	43.9
Greenland	84.3	185.8	Bosnia-Herzegovina	1.6	3.5
St. Pierre and Miquelon	64.2	141.5	Bulgaria	4.2	9.3
United States	21.2	46.7	Croatia	4.7	10.4
<b>Caribbean:</b>			Czech Republic	9.7	21.4
Anguilla	23.5	51.8	Denmark	23.4	51.6
Antigua	40.5	89.3	Estonia	19.0	41.9
Aruba	44.1	97.2	Faeroe Island	86.5	190.7
Bahamas	21.9	48.3	Finland	31.2	68.8
Barbados	30.3	66.8	France	29.9	65.9
Bermuda	36.4	80.2	Georgia	1.2	2.6
British Virgin Islands	5.0	11.0	Germany	12.8	28.2
Cayman Islands	6.2	13.7	Greece	25.7	56.7
Cuba	13.0	28.7	Hungary	3.8	8.4
Dominica	34.8	76.7	Iceland	90.2	198.9
Dominican Republic	8.4	18.5	Ireland	15.4	34.0
Grenada	21.8	48.1	Italy	22.9	50.5
Guadeloupe	22.8	50.3	Kazakhstan	1.7	3.7
Haiti	2.9	6.4	Kyrgyzstan	0.7	1.5
Jamaica	19.8	43.7	Latvia	14.1	31.1
Martinique	32.6	71.9	Lithuania	20.7	45.6
Netherlands Antilles	17.2	37.9	Macedonia	4.5	9.9
Puerto Rico	0.7	1.5	Malta	29.9	65.9
Saint Lucia	27.4	60.4	Moldova	3.2	7.1
Saint Kitts and Nevis	26.7	58.9	Netherlands	19.2	42.3
Saint Vincent	14.1	31.1	Norway	51.9	114.4
Trinidad-Tobago	12.0	26.5	Poland	10.4	22.9
Turks & Caicos	29.9	65.9	Portugal	60.1	132.5
U.S. Virgin Islands	6.8	15.0	Romania	2.3	5.1
<b>Latin America:</b>			Russian Federation	21.6	47.6
Argentina	8.4	18.5	Slovakia	7.5	16.5
Belize	12.4	27.3	Slovenia	6.7	14.8
Bolivia	1.6	3.5	Spain	44.0	97.0
Brazil	6.5	14.3	Sweden	26.6	58.6
Chile	20.6	45.4	Switzerland	14.5	32.0
Colombia	4.4	9.7	Tajikistan	0.1	0.2
Costa Rica	5.4	11.9	Turkmenistan	1.6	3.5
Ecuador	7.0	15.4	Ukraine	11.3	24.9
El Salvador	2.5	5.5	United Kingdom	20.3	44.8
French Guiana	50.3	110.9	Uzbekistan	0.5	1.1
Guatemala	1.4	3.1	Yugoslavia	2.7	6.0
Guyana	59.6	131.4	<b>Near East:</b>		
Honduras	2.5	5.5	Afghanistan	0.1	0.2
Mexico	9.6	21.2	Bahrain	13.8	30.4
Nicaragua	3.0	6.6	Cyprus	22.0	48.5
Panama	9.5	20.9	Egypt	11.0	24.3
Paraguay	5.4	11.9	Iran	4.4	9.7
Peru	20.3	44.8	Iraq	1.5	3.3
Suriname	22.8	50.3	Israel	22.9	50.5
Uruguay	8.2	18.1	Jordan	4.2	9.3
Venezuela	18.3	40.3	Kuwait	12.1	26.7
<b>Europe:</b>			Lebanon	6.6	14.6
Albania	2.0	4.4	Libya	6.1	13.4
Armenia	0.4	0.9	Oman	25.5	56.2
Austria	11.3	24.9	Qatar	10.9	24.0
Azerbaijan	0.7	1.5	Saudi Arabia	7.2	15.9
Belarus	8.2	18.1	Sudan	1.7	3.7
			Syria	1.5	3.3
			Turkey	8.0	17.6
			United Arab Emirates	24.5	54.0
			Yemen Republic	6.8	15.0

See note at end of table.

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## ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1997-99 AVERAGE

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
<b>Far East:</b>			<b>Africa - Continued:</b>		
Bangladesh	10.2	22.5	Malawi	4.5	9.9
Bhutan	0.2	0.4	Mali	8.7	19.2
Brunei	22.7	50.0	Mauritania	10.5	23.1
Burma	15.8	34.8	Mauritius	22.9	50.5
Cambodia	11.8	26.0	Morocco	8.4	18.5
China	24.4	53.8	Mozambique	2.6	5.7
Hong Kong	54.7	120.6	Namibia	11.6	25.6
India	4.7	10.4	Niger	0.9	2.0
Indonesia	19.0	41.9	Nigeria	8.8	19.4
Japan	65.2	143.7	Reunion	12.2	26.9
Laos	9.9	21.8	Rwanda	1.0	2.2
Macao	33.9	74.7	Sao Tome	18.5	40.8
Maldives	203.1	447.8	Senegal	32.1	70.8
Malaysia	57.7	60.6	Seychelles	62.7	138.2
Mongolia	0.0	0.0	Sierra Leone	13.6	30.0
Nepal	1.1	2.4	Somalia	2.4	5.3
North Korea	9.4	20.7	South Africa	6.7	14.8
Pakistan	2.5	5.5	Saint Helena	55.4	122.1
Philippines	29.6	65.3	Swaziland	10.3	22.7
Singapore	26.7	58.9	Tanzania	8.9	19.6
South Korea	47.7	105.2	Togo	13.3	29.3
Sri Lanka	20.3	44.8	Tunisia	9.4	20.7
Taiwan	35.0	77.2	Uganda	8.9	19.6
Thailand	28.6	63.1	Zambia	7.3	16.1
Vietnam	18.1	39.9	Zimbabwe	2.5	5.5
<b>Africa:</b>			<b>Oceania:</b>		
Algeria	3.5	7.7	American Samoa	7.9	17.4
Angola	10.2	22.5	Australia	20.4	45.0
Benin	8.6	19.0	Cook Island	52.2	115.1
Botswana	5.2	11.5	Fiji	32.3	71.2
Burkina	1.6	3.5	French Polynesia	46.9	103.4
Burundi	2.4	5.3	Guam	2.9	6.4
Cameroon	12.3	27.1	Kiribati	75.1	165.6
Cape Verde	20.1	44.3	Marshall Islands	6.6	14.6
Central African Rep	4.2	9.3	Micronesia	39.0	86.0
Chad	6.9	15.2	Nauru	25.9	57.1
Comoros	19.4	42.8	New Caledonia	23.5	51.8
Congo (Brazzaville)	21.0	46.3	New Zealand	30.0	66.1
Congo (Kinshasa)	6.3	13.9	Niue	60.0	132.3
Djibouti	2.2	4.9	Northern Mariana Islands	3.4	7.5
Equatorial Guinea	20.1	44.3	Palau	91.4	201.5
Eritrea	0.9	2.0	Papua New Guinea	14.9	32.8
Ethiopia	0.2	0.4	Solomon Islands	52.5	115.7
Gabon	47.6	104.9	Tokelau	200.0	440.9
Gambia	23.9	52.7	Tonga	40.7	89.7
Ghana	28.1	61.9	Tuvalu	32.8	72.3
Guinea	11.1	24.5	Vanuatu	31.6	69.7
Guinea-Bissau	4.2	9.3	Wallis and Futuna Islands	14.0	30.9
Ivory Coast	14.1	31.1	Western Samoa	50.8	112.0
Kenya	5.4	11.9			
Liberia	5.8	12.8			
Madagascar	7.5	16.5			
			<b>World</b>	<b>15.8</b>	<b>34.8</b>

Note:--Data for most countries are tentative. Aquatic plants are included where applicable.

Source:--Food and Agriculture Organization of the United Nations (FAO)

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round weight equivalent basis, without considering the beginning or ending stocks, defense purchases, or export.

Per capita use figures are not comparable with per capita consumption data. Per capita consumption figures represent edible (for human use) meat weight consumption rather than round weight consumption. In addition, per capita consumption includes allowances for beginning and ending stocks and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.

**U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1960-2001 (1)**

Year	Total population including armed forces overseas July 1	U.S. supply	Per capita utilization		
			Commercial landings	Imports	Total
	Million persons	Million pounds	Pounds		
<b>1960</b>	180.7	8,223	27.3	18.2	45.5
1961	183.7	9,570	28.2	23.9	52.1
1962	186.5	10,408	28.7	27.1	55.8
1963	189.2	11,434	25.6	34.8	60.4
1964	191.9	12,031	23.7	39.0	62.7
1965	194.3	10,535	24.6	29.6	54.2
1966	196.6	12,469	22.2	41.2	63.4
1967	198.7	13,991	20.4	50.0	70.4
1968	200.7	17,381	20.7	65.9	86.6
1969	202.7	11,847	21.4	37.0	58.4
<b>1970</b>	205.1	11,474	24.0	31.9	55.9
1971	207.7	11,804	24.1	32.7	56.8
1972	209.9	13,849	22.9	43.1	66.0
1973	211.9	10,378	22.9	26.1	49.0
1974	213.9	9,875	23.2	23.0	46.2
1975	216.0	10,164	22.6	24.5	47.1
1976	218.0	11,593	24.7	28.5	53.2
1977	220.2	10,652	23.9	24.4	48.3
1978	222.6	11,509	27.1	24.6	51.7
1979	225.1	11,831	27.9	24.7	52.6
<b>1980</b>	227.7	11,357	28.5	21.4	49.9
1981	230.0	11,353	26.0	23.4	49.4
1982	232.2	12,011	27.4	24.3	51.7
1983	234.3	12,352	27.5	25.2	52.7
1984	236.3	12,552	27.3	25.8	53.1
1985	238.5	15,150	26.2	37.3	63.5
1986	240.7	14,368	25.1	34.6	59.7
1987	242.8	15,744	28.4	36.4	64.8
1988	245.0	14,628	29.3	30.4	59.7
1989	247.3	15,485	34.2	28.4	62.6
<b>1990</b>	249.9	16,349	37.6	27.8	65.4
1991 (2)	252.7	16,363	37.5	27.3	64.8
1992 (2)	255.5	16,106	37.7	25.3	63.0
1993 (2)	258.2	20,334	40.6	38.2	78.8
1994 (2)	260.7	19,309	40.1	34.0	74.1
1995 (2)	263.0	16,484	37.2	25.5	62.7
1996 (2)	265.3	16,474	36.1	26.0	62.1
1997 (2)	268.2	17,132	36.7	27.2	63.9
1998 (2)	270.6	16,897	34.0	28.5	62.5
1999 (2)	272.9	17,378	34.2	29.5	63.7
<b>2000 (3)</b>	282.3	17,338	32.1	29.3	61.4
2001	285.0	18,118	33.3	30.3	63.6

(1) Data include U.S. commercial landings and imports of both edible and nonedible (industrial) fishery products on a round weight basis. "Total supply" is not adjusted for beginning and ending stocks, defense purchases, or exports.

(2) Resident population estimates for 1991 through 1999 have not been released. Consumption estimates will be revised accordingly upon new population estimates.

(3) Resident population for 2000 has been revised and data adjusted to reflect change.