

Per Capita Consumption

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 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 16.3 pounds (edible meat) in 2003. This total was 0.7 pounds more than the 15.6 pounds consumed in 2002. Per capita consumption of fresh and frozen products was 11.4 pounds, 0.4 pound more than 2002.

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

Consumption of canned fishery products was 4.6 pounds per capita in 2003, 0.3 pound more than the 4.3 pounds in 2002. Cured fish accounted for 0.3 pound per capita, the same as in previous years. Imports of edible seafood made up 78 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 2003 was 68.2 pounds, up 2.2 pounds compared with 2002.

WORLD CONSUMPTION. The FAO calculation for apparent consumption is based on a disappearance model. The three year average considers, on a round weight equivalent basis, a countries landings, imports, and exports. The revised 1999-2001 data indicates that the United States ranks as the third largest consumer of seafood in the world.

Per Capita Consumption U.S. Consumption

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for 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, 1910-2003

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	Million persons	-----Pounds, edible meat-----			
1910	92.2	4.5	2.8	3.9	11.2
1920	106.5	6.3	3.2	2.3	11.8
1930	122.9	5.8	3.4	1.0	10.2
1940	132.1	5.7	4.6	0.7	11.0
1950	150.8	6.3	4.9	0.6	11.8
1960	178.1	5.7	4.0	0.6	10.3
1970	201.9	6.9	4.5	0.4	11.8
1980	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
1990	247.8	9.6	5.1	0.3	15.0
1991	250.5	9.7	4.9	0.3	14.9
1992	253.5	9.9	4.6	0.3	14.8
1993	256.4	10.2	4.5	0.3	15.0
1994	259.2	10.4	4.5	0.3	15.2
1995	261.4	10.0	4.7	0.3	15.0
1996	264.0	10.0	4.5	0.3	14.8
1997	266.4	9.9	4.4	0.3	14.6
1998	269.1	10.2	4.4	0.3	14.9
1999	271.5	10.4	4.7	0.3	15.4
2000	280.9	10.2	4.7	0.3	15.2
2001	283.6	10.3	4.2	0.3	14.8
2002	287.1	11.0	4.3	0.3	15.6
2003 (5)	289.6	*11.4	4.6	0.3	*16.3

(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) The use of beginning and ending inventories was discontinued as of 2003.

*Record years: Canned--5.8, 1936; Cured--4.0, 1909.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1980-2003

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
----- Pounds -----						
1980	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
1990	0.4	0.3	3.7	0.3	0.4	5.1
1991	0.5	0.2	3.6	0.4	0.2	4.9
1992	0.5	0.2	3.5	0.3	0.1	4.6
1993	0.4	0.2	3.5	0.3	0.1	4.5
1994	0.4	0.2	3.3	0.3	0.3	4.5
1995	0.5	0.2	3.4	0.3	0.3	4.7
1996	0.5	0.2	3.2	0.3	0.3	4.5
1997	0.4	0.2	3.1	0.3	0.4	4.4
1998	0.3	0.2	3.4	0.3	0.2	4.4
1999	0.3	0.2	3.5	0.4	0.3	4.7
2000	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
2002	0.5	0.1	3.1	0.3	0.3	4.3
2003	0.4	0.1	3.4	0.4	0.3	4.6

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1980-2003

Year	Fillets and steaks (1)	Sticks and portions	Shrimp, all preparation
----- Pounds (2) -----			
1980	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
1990	3.1	1.5	2.2
1991	3.0	1.2	2.4
1992	2.9	0.9	2.5
1993	2.9	1.0	2.5
1994	3.1	0.9	2.6
1995	2.9	1.2	2.5
1996	3.0	1.0	2.5
1997	3.0	1.0	2.7
1998	3.2	0.9	2.8
1999	3.2	1.0	3.0
2000	3.6	0.9	3.2
2001	3.7	0.8	3.4
2002	4.1	0.8	3.7
2003	* 4.3	0.7	* 4.0

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

*Record

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1999-2001 AVERAGE

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
North America:			Europe - Continued:		
Canada	23.9	52.7	Belgium and Luxembourg	20.6	45.4
Greenland	84.3	185.8	Bosnia-Herzegovina	2.8	6.2
St. Pierre and Miquelon	72.4	159.6	Bulgaria	3.4	7.5
United States	21.3	47.0	Croatia	7.4	16.3
			Czech Republic	10.3	22.7
Caribbean:			Denmark	22.6	49.8
Anguilla	22.7	50.0	Estonia	19.2	42.3
Antigua	32.2	71.0	Faeroe Island	86.5	190.7
Aruba	42.7	94.1	Finland	30.3	66.8
Bahamas	22.3	49.2	France	29.7	65.5
Barbados	36.3	80.0	Georgia	1.0	2.2
Bermuda	30.9	68.1	Germany	12.2	26.9
British Virgin Islands	3.5	7.7	Greece	22.7	50.0
Cayman Islands	6.7	14.8	Hungary	4.1	9.0
Cuba	12.4	27.3	Iceland	91.5	201.7
Dominica	35.2	77.6	Ireland	14.8	32.6
Dominican Republic	9.5	20.9	Italy	23.1	50.9
Grenada	29.7	65.5	Kazakhstan	3.4	7.5
Guadeloupe	22.9	50.5	Kyrgyzstan	0.6	1.3
Haiti	2.6	5.7	Latvia	11.9	26.2
Jamaica	19.4	42.8	Lithuania	40.5	89.3
Martinique	16.1	35.5	Macedonia	4.2	9.3
Netherlands Antilles	14.5	32.0	Malta	33.5	73.9
Puerto Rico	1.0	2.2	Moldova	4.5	9.9
Saint Kitts and Nevis	31.4	69.2	Netherlands	21.9	48.3
Saint Lucia	30.2	66.6	Norway	50.0	110.2
Saint Vincent	14.7	32.4	Poland	9.6	21.2
Trinidad-Tobago	9.9	21.8	Portugal	57.4	126.5
Turks & Caicos	33.0	72.8	Romania	2.6	5.7
U.S. Virgin Islands	2.6	5.7	Russian Federation	19.1	42.1
			Slovakia	6.7	14.8
Latin America:			Slovenia	7.0	15.4
Argentina	9.4	20.7	Spain	43.9	96.8
Belize	14.2	31.3	Sweden	26.0	57.3
Bolivia	2.1	4.6	Switzerland	15.4	34.0
Brazil	6.5	14.3	Tajikistan	0.1	0.2
Chile	15.3	33.7	Turkmenistan	2.1	4.6
Colombia	4.1	9.0	Ukraine	12.8	28.2
Costa Rica	6.3	13.9	United Kingdom	20.2	44.5
Ecuador	5.8	12.8	Uzbekistan	0.4	0.9
El Salvador	3.0	6.6	Yugoslavia	2.7	6.0
French Guiana	34.2	75.4			
Guatemala	1.5	3.3	Near East:		
Guyana	51.5	113.5	Afghanistan	0.0	0.0
Honduras	2.2	4.9	Bahrain	13.9	30.6
Mexico	10.4	22.9	Cyprus	24.7	54.5
Nicaragua	4.1	9.0	Egypt	14.1	31.1
Panama	10.5	23.1	Iran	4.7	10.4
Paraguay	4.8	10.6	Iraq	1.0	2.2
Peru	20.1	44.3	Israel	20.9	46.1
Suriname	18.0	39.7	Jordan	4.0	8.8
Uruguay	8.4	18.5	Kuwait	8.2	18.1
Venezuela	16.8	37.0	Lebanon	9.2	20.3
			Libya	6.6	14.6
Europe:			Oman	25.8	56.9
Albania	3.2	7.1	Qatar	14.7	32.4
Armenia	0.9	2.0	Saudi Arabia	6.8	15.0
Austria	11.1	24.5	Sudan	1.8	4.0
Azerbaijan	0.9	2.0	Syria	1.8	4.0
Belarus	10.0	22.0	Turkey	7.1	15.7
			United Arab Emirates	26.0	57.3
			Yemen Republic	6.1	13.4

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, 1999-2001 AVERAGE

Region and Country	Estimated live weight equivalent		Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds		Kilograms	Pounds
Far East:			Africa - Continued:		
Bangladesh	11.6	25.6	Malawi	4.0	8.8
Bhutan	0.2	0.4	Mali	8.3	18.3
Brunei	29.1	64.2	Mauritania	11.5	25.4
Burma	18.2	40.1	Mauritius	22.9	50.5
Cambodia	22.9	50.5	Morocco	8.4	18.5
China	25.4	56.0	Mozambique	2.5	5.5
China - Hong Kong	58.0	127.9	Namibia	14.0	30.9
China - Macao	35.7	78.7	Niger	1.0	2.2
China - Taipei	32.5	71.6	Nigeria	7.6	16.8
India	4.8	10.6	Reunion	5.6	12.3
Indonesia	20.2	44.5	Rwanda	0.9	2.0
Japan	66.1	145.7	Sao Tome	13.7	30.2
Laos	14.1	31.1	Senegal	29.2	64.4
Malaysia	60.0	132.3	Seychelles	57.6	127.0
Maldives	187.3	412.9	Sierra Leone	14.6	32.2
Mongolia	0.2	0.4	Somalia	2.1	4.6
Nepal	1.3	2.9	South Africa	6.9	15.2
North Korea	8.2	18.1	Saint Helena	85.4	188.3
Pakistan	2.4	5.3	Swaziland	5.7	12.6
Philippines	30.0	66.1	Tanzania	7.4	16.3
Singapore	29.3	64.6	Togo	11.1	24.5
South Korea	52.4	115.5	Tunisia	10.5	23.1
Sri Lanka	21.9	48.3	Uganda	8.1	17.9
Thailand	32.3	71.2	Zambia	6.8	15.0
Viet Nam	18.6	41.0	Zimbabwe	1.7	3.7
Africa:			Oceania:		
Algeria	3.6	7.9	American Samoa	1.8	4.0
Angola	14.6	32.2	Australia	21.7	47.8
Benin	8.8	19.4	Cook Island	53.4	117.7
Botswana	3.9	8.6	Fiji	32.8	72.3
Burkina	2.3	5.1	French Polynesia	48.8	107.6
Burundi	1.9	4.2	Guam	2.9	6.4
Cameroon	13.6	30.0	Kiribati	75.5	166.4
Cape Verde	21.9	48.3	Marshall Islands	9.4	20.7
Central African Rep	4.1	9.0	Micronesia	45.5	100.3
Chad	6.9	15.2	Nauru	33.3	73.4
Comoros	18.6	41.0	New Caledonia	23.5	51.8
Congo (Brazzaville)	18.3	40.3	New Zealand	25.5	56.2
Congo (Kinshasa)	6.0	13.2	Niue	100.0	220.5
Djibouti	1.3	2.9	Northern Mariana Islands	3.4	7.5
Equatorial Guinea	16.9	37.3	Palau	91.8	202.4
Eritrea	2.4	5.3	Papua New Guinea	15.6	34.4
Ethiopia	0.2	0.4	Solomon Islands	40.4	89.1
Gabon	44.1	97.2	Tokelau	200.0	440.9
Gambia	23.5	51.8	Tonga	46.3	102.1
Ghana	29.7	65.5	Tuvalu	41.3	91.0
Guinea	12.8	28.2	Vanuatu	31.2	68.8
Guinea-Bissau	2.1	4.6	Wallis and Futuna Islands	14.0	30.9
Ivory Coast	15.0	33.1	Western Samoa	63.9	140.9
Kenya	5.6	12.3			
Liberia	5.6	12.3			
Madagascar	7.6	16.8			
			World	16.1	35.5

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 exports.

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, 1960-2003 (1)

Year	Total population including armed forces overseas July 1	U.S. supply	Per capita utilization		
			Commercial landings	Imports	Total
	<u>Million persons</u>	<u>Million pounds</u>	----- Pounds -----		
1960	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
1970	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
1980	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
1990	249.9	16,349	37.6	27.8	65.4
1991	252.7	16,363	37.5	27.3	64.8
1992	255.5	16,106	37.7	25.3	63.0
1993	258.2	20,334	40.6	38.2	78.8
1994	260.7	19,309	40.1	34.0	74.1
1995	263.0	16,484	37.2	25.5	62.7
1996	265.3	16,474	36.1	26.0	62.1
1997	268.2	17,132	36.7	27.2	63.9
1998	270.6	16,897	34.0	28.5	62.5
1999	272.9	17,378	34.2	29.5	63.7
2000	282.3	17,338	32.1	29.3	61.4
2001	285.0	18,118	33.3	30.3	63.6
2002	288.4	19,028	32.6	33.4	66.0
2003	291.0	19,849	32.7	35.5	68.2

(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.