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 and industrial uses are subtracted out. The remaining total is divided by the U.S. population 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 14.4 pounds (edible meat) in 2012. This total was 0.6 pounds less than the 15.0 pounds consumed in 2011. Primarily this decrease resulted from a decrease in the domestic landings utilized for food (as opposed to industrial purposes) and a 0.7 percent increase in the U.S. population from 2011. While domestic production of canned tuna was largely unchanged from 2011, per capita consumption of canned tuna decreased from 2.6 pounds in 2011 to 2.4 pounds in 2012 due to a decrease in imports and an increase in exports.

Per capita consumption of fresh and frozen products was 10.5 pounds, a decrease of 0.4 pounds from 2011. Fresh and frozen finfish accounted for 5.6 pounds, while fresh and frozen shellfish consumption was 4.9 pounds per capita.

Consumption of canned fishery products was 3.6 pounds per capita in 2012, down 0.2 pounds from 2011. Cured fish accounted for 0.3 pound per capita, the same as in previous years.

In previous volumes of Fisheries of the United States, NOAA has reported the percent of edible seafood consumption that is made up of imports. This measure has been rising in recent years reflecting the increase in imported seafood. Using the same model assumptions the corresponding figure for 2012 would be 94 percent. However, NOAA Fisheries believes that the existing model may overestimate this percentage. The calculation is made by converting all imports, exports, domestic landings, and domestic processing into a common standard, edible meat weight. Numerous conversion factors are used to get to this edible meat weight standard, and the accuracy and variability of these various factors is likely to effect the overall calculation. In addition, this figure may include a substantial amount of domestic catch that was exported for further processing and returned to the United States as an import in a processed form. Therefore, while seafood imports do appear to be rising, the exact figure is difficult to know precisely. NOAA Fisheries plans to investigate better ways to report consumption and indicate our dependence on imported seafood.

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 2012 was 66.1 pounds, down 1.6 pounds compared with 2011.

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 2008-2010 average data indicates that the U.S. ranks as the third largest consumer of seafood in the world after China and Japan.

Per Capita 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 exports, divided by the civilian resident population of the United States as of July 1 of each year.

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1910-2012

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
1985	236.2	9.8	5.0	0.3	15.1
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
2004	292.4	11.8	4.5	0.3	*16.6
2005	295.3	11.6	4.3	0.3	16.2
2006	298.2	*12.3	3.9	0.3	16.5
2007	300.5	12.1	3.9	0.3	16.3
2008	302.9	11.8	3.9	0.3	16.0
2009	305.8	12.0	3.7	0.3	16.0
2010	308.4	11.6	3.9	0.3	15.8
2011	310.4	10.9	3.8	0.3	15.0
2012	**312.7**	**10.5**	**3.6**	**0.3**	**14.4**

(1) Resident population is used for 1910 and 1920 and civilian resident population is used since 1930.
(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, 1984-2012

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
	Pounds					
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
2004	0.3	0.1	3.3	0.4	0.4	4.5
2005	0.4	0.1	3.1	0.4	0.3	4.3
2006	0.2	0.2	2.9	0.4	0.2	3.9
2007	0.3	0.2	2.7	0.4	0.3	3.9
2008	0.1	0.2	2.8	0.4	0.4	3.9
2009	0.2	0.2	2.5	0.4	0.4	3.7
2010	**0.2**	**0.2**	**2.7**	**0.4**	**0.4**	**3.9**
2011	0.2	0.2	2.6	0.4	0.4	3.8
2012	**0.2**	**0.2**	**2.4**	**0.4**	**0.4**	**3.6**

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1984-2012

Year	Fillets and steaks (1)	Sticks and portions	Shrimp, all preparation
	Pounds (2)		
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
2004	4.6	0.7	4.2
2005	5.0	0.9	4.1
2006	*5.2	0.9	*4.4
2007	5.0	0.9	4.1
2008	4.8	1.0	4.1
2009	4.6	0.7	4.1
2010	**5.0**	**0.9**	**4.0**
2011	5.0	0.9	4.2
2012	**5.6**	**0.7**	**3.8**

(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

PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2008- 2010 AVERAGE

Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds
North America:		
Bermuda	37.0	81.5
Canada	22.7	50.0
Greenland	87.2	192.2
Saint Pierre & Miquelon	71.9	158.5
United States	21.9	48.4
Caribbean:		
Anguilla	60.1	132.6
Antigua and Barbuda	54.6	120.3
Aruba	39.1	86.2
Bahamas	31.1	68.6
Barbados	41.2	90.8
British Virgin Islands	34.8	76.8
Cayman Islands	15.3	33.8
Cuba	7.7	16.9
Dominica	33.8	74.4
Dominican Republic	9.2	20.3
Grenada	38.9	85.9
Guadeloupe	21.9	48.4
Haiti	4.0	8.8
Jamaica	26.0	57.4
Martinique	14.6	32.1
Montserrat	27.1	59.7
Netherland Antilles	20.1	44.4
Puerto Rico	0.5	1.1
Saint Kitts & Nevis	38.2	84.1
Saint Lucia	30.6	67.5
Saint Vincent	18.1	39.9
Trinidad & Tobago	19.7	43.4
Turks & Caicos	34.5	76.1
U.S. Virgin Islands	9.4	20.6
Latin America:		
Argentina	6.4	14.1
Belize	10.5	23.1
Bolivia	2.1	4.6
Brazil	8.3	18.2
Chile	22.9	50.5
Colombia	5.5	12.2
Costa Rica	9.8	21.6
Ecuador	7.9	17.5
El Salvador	5.8	12.9
Falkland Islands	38.6	85.1
French Guiana	18.1	39.8
Guatemala	1.8	3.9
Guyana	21.9	48.2
Honduras	4.6	10.1
Mexico	12.7	28.0
Nicaragua	5.1	11.2
Panama	14.0	30.8
Paraguay	1.1	2.4
Peru	22.4	49.4
Suriname	16.7	36.7
Uruguay	9.3	20.5
Venezuela	13.7	30.1
Europe:		
Albania	6.0	13.3
Armenia	3.2	7.0
Austria	13.9	30.7
Azerbaijan	2.1	4.7
Belarus	17.7	39.1
Belgium	26.0	57.3

Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds
Bosnia-Herzegovina	6.3	13.9
Bulgaria	6.3	14.0
Croatia	19.0	42.0
Czech Republic	10.3	22.7
Denmark	22.8	50.2
Estonia	16.5	36.3
Faroe Island	92.5	203.9
Finland	34.7	76.5
France	33.8	74.6
Georgia	7.8	17.3
Germany	15.6	34.4
Greece	20.6	45.4
Hungary	5.4	12.0
Iceland	91.4	201.5
Ireland	22.4	49.3
Italy	25.0	55.0
Kazakhstan	4.5	9.8
Kyrgyzstan	2.1	4.6
Latvia	17.5	38.5
Lithuania	40.5	89.3
Luxembourg	27.3	60.1
Macedonia	6.2	13.6
Malta	31.6	69.7
Moldova	14.7	32.4
Montenegro	10.7	23.5
Netherlands	22.7	50.0
Norway	53.1	117.1
Poland	10.9	23.9
Portugal	61.5	135.6
Romania	6.4	14.2
Russian Federation	22.3	49.2
Serbia	5.6	12.4
Slovakia	7.9	17.4
Slovenia	10.8	23.8
Spain	42.8	94.3
Sweden	32.1	70.7
Switzerland	17.5	38.6
Tajikistan	0.3	0.7
Turkmenistan	3.4	7.6
Ukraine	17.0	37.5
United Kingdom	21.1	46.6
Uzbekistan	0.5	1.0
Near East:		
Afghanistan	0.0	0.1
Bahrain	14.7	32.5
Cyprus	22.0	48.5
Egypt	18.6	41.1
Iran	7.4	16.4
Iraq	3.0	6.7
Israel	21.4	47.3
Jordan	7.1	15.7
Kuwait	18.1	39.8
Lebanon	10.7	23.5
Libya	12.0	26.5
Oman	28.8	63.4
Qatar	18.3	40.4
Saudi Arabia	8.3	18.3
Sudan	1.8	3.9
Syria	3.3	7.3
Turkey	7.5	16.4
United Arab Emirates	27.4	60.3
Yemen	3.0	6.6

PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2008- 2010 AVERAGE

Region and Country	Estimated live weight equivalent	
	Kilograms	Pounds
Far East:		
Bangladesh	18.4	40.6
Bhutan	5.0	11.1
Brunei	24.5	54.0
Burma	50.8	111.9
Cambodia	34.1	75.1
China	31.9	70.2
China - Hong Kong	71.1	156.8
China - Macao	57.7	127.2
China - Taipei	30.4	67.1
India	5.9	13.1
Indonesia	26.0	57.3
Japan	55.2	121.7
Laos	17.2	37.8
Malaysia	58.9	129.9
Maldives	145.7	321.2
Mongolia	0.4	0.9
Nepal	1.8	3.9
North Korea	10.8	23.8
Pakistan	1.9	4.2
Philippines	35.7	78.6
Singapore	46.0	101.5
South Korea	59.8	131.7
Sri Lanka	23.2	51.1
Thailand	25.7	56.8
Timor-Leste	3.5	7.7
Viet Nam	33.8	74.4
Africa:		
Algeria	4.6	10.1
Angola	16.1	35.6
Benin	14.7	32.5
Botswana	3.2	7.1
Burkina Faso	3.5	7.7
Burundi	2.2	4.9
Cameroon	18.0	39.8
Cape Verde	23.9	52.7
Central African Republic	8.4	18.5
Chad	3.7	8.2
Comoros	29.4	64.7
Congo (Brazzaville)	5.4	11.9
Congo (Kinshasa)	18.6	40.9
Côte d'Ivoire	18.2	40.1
Djibouti	17.2	38.0
Equatorial Guinea	25.9	57.2
Eritrea	0.5	1.1
Ethiopia	0.2	0.5
Gabon	34.5	76.1
Gambia	27.8	61.3
Ghana	25.1	55.4
Guinea	9.6	21.2
Guinea-Bissau	2.3	5.1
Kenya	3.4	7.6
Lesotho	0.7	1.6
Liberia	2.9	6.5
Madagascar	6.2	13.6
Malawi	5.3	11.7
Mali	7.9	17.5
Mauritania	11.5	25.4
Mauritius	22.5	49.5
Morocco	12.8	28.1
Mozambique	6.5	14.4
Namibia	12.9	28.4
Niger	2.2	4.8
Nigeria	14.7	32.5
Rwanda	1.9	4.1
Saint Helena	60.0	132.4
Sao Tome and Principe	28.2	62.2
Senegal	27.0	59.5
Seychelles	54.3	119.6
Sierra Leone	34.6	76.3
Somalia	3.1	6.7
South Africa	6.9	15.2
Swaziland	2.4	5.4
Tanzania	5.7	12.5
Togo	7.3	16.1
Tunisia	13.2	29.1
Uganda	13.2	29.2
Zambia	7.1	15.7
Zimbabwe	1.3	2.9
Oceania:		
American Samoa	4.2	9.3
Australia	26.0	57.3
Cook Islands	64.7	142.7
Fiji	35.1	77.5
French Polynesia	48.0	105.9
Kiribati	75.1	165.6
Marshall Islands	16.7	36.9
Micronesia	43.8	96.6
Nauru	22.0	48.5
New Caledonia	26.7	58.8
New Zealand	26.0	57.3
Palau	67.7	149.2
Papua New Guinea	17.0	37.4
Samoa	48.7	107.3
Solomon Islands	31.9	70.4
Tonga	32.1	70.8
Tuvalu	42.3	93.2
Vanuatu	32.7	72.2
Wallis & Futuna	53.6	118.1
World	**18.5**	**40.8**

Note: Data are preliminary and refer to per capita consumption of fish, crustaceans and mollusks.

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

Per Capita Consumption

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, 1964-2012 (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		
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
2004	293.9	20,373	32.8	36.5	69.3
2005	296.9	20,529	32.4	36.7	69.1
2006	299.8	20,960	31.6	38.3	69.9
2007	302.0	20,484	30.6	37.3	67.9
2008	304.5	19,252	27.3	35.9	63.2
2009	307.4	18,900	26.1	35.4	61.5
2010	310.1	19,748	26.5	37.1	63.6
2011	312.0	21,106	31.6	36.1	67.7
2012	**314.3**	**20,757**	**30.7**	**35.4**	**66.1**

(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.