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; decreases in supply, such as exports and industrial uses, are subtracted. 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.

Estimated U.S. per capita consumption of fish and shellfish was 15.5 pounds (edible meat) in 2015. This total is an increase of 0.9 pounds from the 14.6 pounds consumed in 2014, which in turn is primarily due to an increase in the consumption of fresh and frozen seafood. These data represent the second consecutive year with such an increase, with the current level of fresh and frozen consumption of 11.5 pounds a full pound higher than the 2013 estimate. There was also an increase in consumption of canned seafood products driven by an increase in canned salmon production in 2015. Because the model used to calculate consumption does not take into account inventories of products on hand at the beginning and end of the year, all production is assumed to be consumed in the year it is produced. Because the primary salmon that is canned, pink salmon, generally has a large harvest every other year, small fluctuations in the consumption of canned products will result.

Per capita consumption of fresh and frozen products was 11.5 pounds, an increase of 0.6 pounds from 2014. Fresh and frozen finfish accounted for 6.5 pounds, while fresh and frozen shellfish consumption was 5.0 pounds per capita.

Consumption of canned fishery products was 3.7 pounds per capita in 2015, up 0.3 pounds from 2014. Cured fish accounted for 0.3 pounds 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 and reflects the increase in imported seafood. Using the same model assumptions, the corresponding figure for 2015 would be 90 percent. However, NMFS 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 calculate this edible meat weight standard, and the accuracy and variability of these factors are 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. NOAA Fisheries plans to investigate better ways to report consumption and indicate the Nation's dependence on imported seafood.

PER CAPITA USE

Per capita use is based on the supply of fishery products, both edible and nonedible (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 2015 was 66.6 pounds, up 0.6 pounds compared with 2014.

WORLD CONSUMPTION

The FAO calculation for apparent consumption is also based on a disappearance model, but with slightly different assumptions and based on a round-weight standard. The 3-year average considers a country's landings, imports, and exports. The average data from 2011 to 2013, and 2012 population figures, indicate that the U.S. now ranks as the second largest consumer of seafood in the world after China and before 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, 1910-2015

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
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
2013	314.9	10.5	3.7	0.3	14.5
2014	317.6	10.9	3.4	0.3	14.6
2015	**320.2**	**11.5**	**3.7**	**0.3**	**15.5**

(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: Fresh & Frozen -- 12.3,2006; Canned--5.8, 1936; Cured--4.0, 1909.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1985-2015

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
	Pounds					
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
2013	0.4	0.2	2.3	0.4	0.4	3.7
2014	0.1	0.2	2.3	0.4	0.4	3.4
2015	**0.3**	**0.2**	**2.2**	**0.5**	**0.5**	**3.7**

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1985-2015

Year	Fillets and Steaks (1)	Sticks and Portions	Shrimp, All Preparations
	Pounds (2)		
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
2013	5.9	0.6	3.6
2014	5.9	0.6	4.0
2015	**5.9**	**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 year

PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2011-2013 AVERAGE

Region and Country	Estimated Live Weight Equivalent	
	Kilograms	Pounds
North America:		
Bermuda	42.1	92.9
Canada	22.4	49.3
Greenland	86.4	190.5
Saint Pierre & Miquelon	72.8	160.4
United States	21.4	47.2
Caribbean:		
Anguilla	49.6	109.4
Antigua and Barbuda	54.0	119.0
Aruba	47.1	103.9
Bahamas	30.5	67.2
Barbados	39.5	87.0
British Virgin Islands	33.9	74.8
Cayman Islands	16.4	36.1
Cuba	5.5	12.1
Dominica	21.4	47.3
Dominican Republic	8.2	18.1
Grenada	28.6	63.0
Guadeloupe	21.2	46.7
Haiti	4.9	10.8
Jamaica	24.1	53.2
Martinique	12.2	27.0
Montserrat	26.9	59.2
Puerto Rico	0.4	0.8
Saint Kitts & Nevis	37.4	82.4
Saint Lucia	23.4	51.5
Saint Vincent	18.5	40.8
Trinidad & Tobago	24.0	52.8
Turks & Caicos	49.1	108.1
U.S. Virgin Islands	5.9	13.0
Latin America:		
Argentina	6.3	13.9
Belize	14.0	30.9
Bolivia	2.2	4.9
Brazil	9.6	21.2
Chile	13.7	30.2
Colombia	6.2	13.8
Costa Rica	13.1	28.9
Ecuador	8.3	18.3
El Salvador	7.2	15.8
Falkland Islands	36.9	81.3
French Guiana	15.9	35.0
Guatemala	1.3	2.9
Guyana	31.3	69.0
Honduras	4.1	9.0
Mexico	12.0	26.4
Nicaragua	4.9	10.7
Panama	13.2	29.2
Paraguay	3.7	8.3
Peru	21.4	47.2
Suriname	16.6	36.6
Uruguay	7.0	15.5
Venezuela	7.9	17.4
Europe:		
Albania	5.2	11.5
Armenia	3.7	8.1
Austria	14.0	30.8
Azerbaijan	2.2	4.8

continued

Region and Country	Estimated Live Weight Equivalent	
	Kilograms	Pounds
Belarus	17.5	38.5
Belgium	25.5	56.2
Bosnia-Herzegovina	6.0	13.1
Bulgaria	6.2	13.6
Croatia	19.1	42.1
Czech Republic	9.2	20.3
Denmark	23.0	50.8
Estonia	14.7	32.3
Faroe Islands	86.1	189.8
Finland	36.5	80.5
France	34.0	75.0
Georgia	10.6	23.3
Germany	13.5	29.8
Greece	19.1	42.2
Hungary	5.1	11.3
Iceland	91.9	202.6
Ireland	22.3	49.1
Italy	25.8	56.9
Kazakhstan	5.4	11.9
Kyrgyzstan	2.3	5.2
Latvia	27.9	61.4
Lithuania	43.7	96.3
Luxembourg	33.5	73.9
Macedonia	5.7	12.6
Malta	30.4	66.9
Moldova	12.8	28.3
Montenegro	11.4	25.2
Netherlands	22.6	49.8
Norway	52.8	116.3
Poland	10.2	22.5
Portugal	54.1	119.3
Romania	6.2	13.7
Russian Federation	23.0	50.8
Serbia	7.5	16.5
Slovakia	8.0	17.7
Slovenia	10.6	23.4
Spain	41.9	92.4
Sweden	30.9	68.0
Switzerland	17.6	38.8
Tajikistan	0.5	1.1
Turkmenistan	3.7	8.2
Ukraine	15.2	33.4
United Kingdom	20.5	45.1
Uzbekistan	0.7	1.6
Near East:		
Afghanistan	0.1	0.2
Bahrain	10.1	22.3
Cyprus	22.0	48.6
Egypt	22.2	49.0
Iran	9.6	21.1
Iraq	3.3	7.2
Israel	22.7	50.0
Jordan	5.5	12.1
Kuwait	14.5	31.9
Lebanon	11.0	24.3
Oman	24.7	54.3
Qatar	23.0	50.7
Saudi Arabia	12.6	27.8
Syria	2.8	6.1
Turkey	6.3	13.9
United Arab Emirates	23.3	51.3
Yemen	2.5	5.6

continued

PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 2011-2013 AVERAGE

Region and Country	Estimated Live Weight Equivalent	
	Kilograms	Pounds
Far East:		
Bangladesh	20.5	45.2
Bhutan	5.9	13.0
Brunei	42.0	92.6
Burma	57.9	127.7
Cambodia	40.9	90.1
China	36.1	79.5
China - Hong Kong	68.2	150.4
China - Macao	56.4	124.3
China - Taipei	34.0	75.0
India	5.7	12.7
Indonesia	30.1	66.3
Japan	50.8	112.1
Laos	20.2	44.5
Malaysia	54.9	120.9
Maldives	161.0	354.9
Mongolia	0.7	1.5
Nepal	2.2	4.8
North Korea	9.4	20.7
Pakistan	2.0	4.3
Philippines	31.3	69.0
Singapore	47.9	105.7
South Korea	57.1	125.8
Sri Lanka	29.2	64.3
Thailand	26.2	57.7
Timor-Leste	5.8	12.9
Viet Nam	35.0	77.2
Africa:		
Algeria	4.0	8.8
Angola	18.5	40.8
Benin	13.2	29.2
Botswana	3.0	6.7
Burkina Faso	6.8	15.0
Burundi	1.8	3.9
Cameroon	16.1	35.5
Cape Verde	12.1	26.7
Central African Republic	9.1	20.1
Chad	4.9	10.8
Comoros	16.8	37.0
Congo (Brazzaville)	5.5	12.1
Congo (Kinshasa)	25.0	55.1
Côte d'Ivoire	16.9	37.2
Djibouti	3.5	7.7
Equatorial Guinea	25.2	55.6
Eritrea	0.4	1.0
Ethiopia	0.3	0.6
Gabon	35.0	77.1
Gambia	23.3	51.3
Ghana	26.3	58.1
Guinea	9.4	20.8
Guinea-Bissau	1.6	3.6
Kenya	4.4	9.7
Lesotho	0.8	1.9
Liberia	4.3	9.4
Libya	17.3	38.1
Madagascar	4.7	10.4
Malawi	7.1	15.6
Mali	7.5	16.6
Mauritania	9.3	20.6
Mauritius	22.9	50.6
Morocco	16.6	36.6
Mozambique	9.3	20.6
Namibia	11.6	25.7

continued

Region and Country	Estimated Live Weight Equivalent	
	Kilograms	Pounds
Niger	3.2	7.0
Nigeria	14.0	30.8
Rwanda	4.0	8.8
Saint Helena	89.2	196.6
Sao Tome and Principe	26.1	57.6
Senegal	23.9	52.6
Seychelles	59.1	130.3
Sierra Leone	33.3	73.4
Somalia	3.1	6.7
South Africa	6.5	14.3
South Sudan	3.3	7.4
Sudan	1.7	3.7
Swaziland	1.3	2.9
Tanzania	5.8	12.7
Togo	12.0	26.5
Tunisia	13.4	29.5
Uganda	12.9	28.5
Zambia	6.4	14.2
Zimbabwe	2.9	6.4
Oceania:		
American Samoa	6.0	13.1
Australia	26.3	58.0
Cook Islands	54.5	120.1
Fiji	36.6	80.7
French Polynesia	48.5	106.9
Kiribati	73.9	162.9
Marshall Islands	18.1	39.9
Micronesia	49.6	109.4
Nauru	51.9	114.3
New Caledonia	28.1	61.9
New Zealand	25.5	56.2
Palau	57.6	127.1
Papua New Guinea	15.8	34.8
Samoa	47.1	103.9
Solomon Islands	34.3	75.6
Tonga	23.7	52.2
Tuvalu	43.3	95.5
Vanuatu	31.7	69.9
Wallis & Futuna	64.9	143.2
World	**19.4**	**42.7**

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 to 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; per capita consumption is derived by using civilian resident population.

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1970-2015 (1)

Year	Total Population Including Armed Forces Overseas July 1	U.S. Supply	Per Capita Use		
			Commercial Landings	Imports	Total
	Million persons	Million pounds	Pounds		
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	20,412	32.8	36.5	69.3
2005	296.9	20,612	32.4	36.7	69.1
2006	299.8	20,960	31.6	38.3	69.9
2007	302.0	20,561	30.6	37.3	67.9
2008	304.5	19,201	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
2013	316.4	20,998	31.2	35.2	66.4
2014	318.9	21,050	29.7	36.3	66.0
2015	**321.4**	**21,426**	**30.2**	**36.4**	**66.6**

(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.