

Omega-3 Fatty Acid Content in Fish^ϕ

Species	Source	LNA* (18:3)	EPA* (20:5)	DHA* (22:6)	Total EPA + DHA	Total Ω-3 FAs	References ^δ
Lake Trout, Siscowet	freshwater	1.6	1.2	1.8	3.0	4.6	4
Mackerel, Atlantic	marine	0.1	0.9	1.6	2.5	2.6	2
Mackerel, King	marine	0.0	1.0	1.2	2.2	2.2	2, 3
Dogfish, spiny	marine	0.1	0.7	1.2	1.9	2.0	2
Mackerel, Chub	marine	0.3	0.9	1.0	1.9	2.2	2
Salmon, Atlantic, farmed	marine	0.1	0.6	1.2	1.8	1.9	2
Herring, Pacific	marine	0.1	1.0	0.7	1.7	1.8	2, 3
Herring, Atlantic	marine	0.1	0.7	0.9	1.6	1.7	2
Lake Trout	freshwater	0.4	0.5	1.1	1.6	2.0	2
Tuna, Bluefin	marine	0.0	0.4	1.2	1.6	1.6	2
Sturgeon, Atlantic	marine	trace	1.0	0.5	1.5	1.5	2
Chub	freshwater	1.1	0.7	0.8	1.5	2.6	4
Salmon, Chinook	both	0.1	0.8	0.6	1.4	1.5	2, 3
Sablefish	marine	0.1	0.7	0.7	1.4	1.5	2
Anchovy, European	marine	0.0	0.5	0.9	1.4	1.4	2
Tuna, Albacore	marine	0.2	0.3	1.0	1.3	1.5	3
Lake Whitefish	freshwater	0.2	0.3	1.0	1.3	1.5	2
Sprat	marine	0.0	0.5	0.8	1.3	1.3	2
Trout, Lean Lake	freshwater	0.9	0.4	0.8	1.2	2.1	4
Salmon, Coho, farmed	both	0.1	0.4	0.8	1.2	1.3	2
Bluefish, Atlantic	marine	0.0	0.4	0.8	1.2	1.2	2, 3
Herring, Round	freshwater	0.1	0.4	0.8	1.2	1.3	3
Salmon, Sockeye	both	0.1	0.5	0.7	1.2	1.3	2
Herring	freshwater	1.4	0.5	0.6	1.1	2.5	4
Capelin	marine	0.1	0.6	0.5	1.1	1.2	2
Whitefish	freshwater	0.8	0.5	0.5	1.0	1.8	4
Salmon, Pink	both	trace	0.4	0.6	1.0	1.0	2, 3
Sardines, canned	marine	0.5	0.4	0.6	1.0	1.4	2
Salmon, Chum	both	0.1	0.4	0.6	1.0	1.1	2
Halibut, Greenland	marine	trace	0.5	0.4	0.9	0.9	3
Bass, Striped	freshwater	trace	0.2	0.6	0.8	0.8	3
Pompano, Florida	marine	0.0	0.2	0.4	0.6	0.6	3
Smelt	both	0.5	0.3	0.2	0.5	1.0	4
Mullet, Striped	both	0.1	0.3	0.2	0.5	0.6	3
Pollock	marine	0.0	0.1	0.4	0.5	0.5	3
Trout, Rainbow (Steelhead)	freshwater	0.1	0.1	0.4	0.5	0.6	3
Tuna, unspecified	marine	trace	0.1	0.4	0.5	0.5	3
Sucker	freshwater	0.2	0.2	0.2	0.4	0.6	4
Catfish, Brown Bullhead	freshwater	0.1	0.2	0.2	0.4	0.5	3
Halibut, Pacific	marine	0.1	0.1	0.3	0.4	0.5	3
Carp	freshwater	0.3	0.2	0.1	0.3	0.6	3
Catfish, Channel	freshwater	trace	0.1	0.2	0.3	0.3	3
Cod, Atlantic	marine	trace	0.1	0.2	0.3	0.3	3
Croaker, Atlantic	marine	trace	0.1	0.1	0.2	0.2	3
Flounder	marine	trace	0.1	0.1	0.2	0.2	3
Grouper, Red	marine	0.0	trace	0.2	0.2	0.2	3
Haddock	marine	trace	0.1	0.1	0.2	0.2	3
Perch, Ocean	marine	trace	0.1	0.1	0.2	0.2	3
Plaice, European	marine	trace	0.1	0.1	0.2	0.2	3
Snapper, Red	marine	trace	trace	0.2	0.2	0.2	3
Swordfish	marine	0.0	0.1	0.1	0.2	0.2	3
Burbot	freshwater	0.0	0.1	0.1	0.2	0.2	4
Sole, European	marine	trace	trace	0.1	0.1	0.1	3

Other Foods^ϕ

Egg Yolk	0.7	0.1	0.7	0.8	1.5	3
Shrimp	0.0	0.3	0.2	0.5	0.5	1
Crab, Alaskan King	0.0	0.3	0.1	0.4	0.4	1
Crab, Blue, canned	0.0	0.2	0.2	0.4	0.4	1
Lobster, Spiny	0.0	0.3	0.1	0.4	0.4	1
Milk, Human	0.6	0.0	0.2	0.2	0.8	3
Clam	0.0	0.1	0.1	0.1	0.1	1
Walnut	10.4	0.0	0.0	0.0	10.4	3
Soybean	3.2	0.0	0.0	0.0	3.2	3

^ϕgrams fatty acid per 100 gram edible fish tissue or edible food

*LNA = α -linolenic acid; EPA = eicosapentaenoic acid; DHA = docosahexaenoic acid (only EPA and DHA are omega-3 fatty acids)

^ϕReferences:

1. Exler J. (1987) Composition of Foods: Finfish and Shellfish Products. Agriculture handbook No. 8-15. Washington, DC: USDA.
2. Nettleton JA. (1995) Omega-3 Fatty Acid and Health. Chapman & Hall, 115 Fifth Ave., New York, NY 10003, pp.21-30.
3. Spiller GA. (1996) Lipid in Human Nutrition Handbook, Manuals, etc. CRS Press, Inc., 2000 Corporate Blvd., NW., Boca Raton, FL 33431, P54.
4. Wang, YJ, Miller LA, Ferren M, Addis PB (1990) Omega-3 fatty acid in Lake Superior fish. Journal of Food Science Vol. 55(1): 71-73.