

Mood Vitamins

Fish oil, B-vitamins and vitamin-D

Omega-3 Fatty Acids

Omega-3 fatty acids (also called fish oil) make up 30% of the human brain and are naturally obtained from dietary sources like salmon and dark green vegetables. They coat brain cells and enhance brain growth. When people with bipolar disorder take them, their neurons appear more flexible and less brittle on brain scans.

When dosed correctly, omega-3's have a small but real benefit in bipolar and depression. Their power is a little less than half that of medication, so they're usually not enough to treat depression on their own. They reduce irritability in all kinds of people. For example, two groups that are prone to conflict – married couples and prison inmates – had fewer fights when they took omega-3's.

They also help ADHD, memory, schizophrenia, autism, and borderline personality disorder. Medical benefits include reduced cholesterol, blood pressure, and inflammation. They lower the risk of cancer, stroke, osteoporosis, psoriasis, inflammatory bowel disease, liver disease, macular degeneration, and asthma.

Dietary Sources of Omega-3

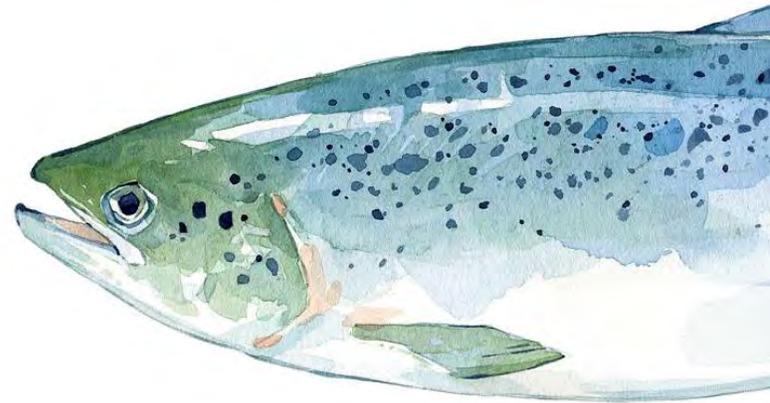
Salmon is the best source of omega-3's, and you could get a good dose by eating 1.3oz of farm-raised salmon a day (3.4oz/day for wild salmon). Other fish with decent amounts are herring (1.8oz/day), albacore tuna (4oz/day), swordfish (4.3oz/day), golden bass (3.9oz/day), anchovies (1.7oz/day), and mackerel (2.9oz/day). Although the American Heart Association recommends eating two servings of fish each week, there are concerns that some fish may have high levels of mercury which could be harmful, particularly to

pregnant women. Fish with higher mercury content include shark, swordfish, tilefish and king mackerel.

Other sources of omega-3 include wheat germ, walnuts, canola oil and dark greens like spinach and kale. The Mediterranean diet is abundant in omega-3's and other health benefits.

Side effects of Omega-3

The main side effects are burping, stomach distress or a fishy after-taste. These vary by brand and can be reduced by storing it in the fridge and



taking it at night or with food.

There is a potential for omega-3's to increase bleeding-time, so you may need to stop them before surgery. There is also concern for mercury contamination, which is most relevant to pregnant and nursing mothers. Several investigations of commercial products have not turned up significant mercury levels so far.

How to take Omega-3

There are two types of omega-3: EPA (ethyl eicosapentaenoic acid) and DHA (docosahexanoic acid). Among these, EPA is the most important for depression. Choose a brand that has at least 2 times as much EPA as DHA.

The dose 1,000-10,000mg daily (this is the amount of EPA + DHA, not just the "fish oil"). Most studies used 1,000-3,000mg, with the optimal dose on average 1,500mg (higher, 3,000mg doses work better for people with obesity). Smaller doses are used to prevent heart disease (1,000mg/day), or for general health (500mg/day), and larger doses of psoriasis (4,000-6,000mg/day).

To calculate your dose, add the amounts of EPA and DHA on the back of the bottle. Then figure out how many capsules you would need to get at least 1,000mg of EPA+DHA. For example, suppose the back of the bottle reads:

Serving size = 2 capsule
Fish oil per serving: 2,000mg
DHA per serving: 400mg
EPA per serving: 800mg

This product has 1,200mg of omega-3's (EPA + DHA) in each serving. Note that we ignore the "fish oil per serving" because it's only the EPA and DHA that count. The amount of EPA is twice as much as the DHA, so it's a good ratio (brands with no DHA and 100% EPA will also work). It takes 2 capsules to equal a serving, so for this product you could take between 2-5 capsules a day to get the recommended dose of 1,000mg – 3,000mg daily.

A Few Good Brands

Omega-3's are available in capsule and liquid forms. Odor-neutralized and enteric coated products reduce the fishy taste, and there products with flavors as varied as lemon, coffee and cotton candy. Expensive brands are not necessarily better. The best is one that you can afford and tolerate.

It can be difficult to find products with the correct EPA:DHA ratio, so we've listed good sources on the back.

For a smaller pill size, try OmegaBrite (www.omegabrite.com, \$1.50/day) or OmegaVia (\$0.48/day). If you have stomach upset, try an enteric version (Member's Mark Triple Strength, Kirkland's at Costco, or OmegaVia Pharm-Grade). Gummy forms usually do not have enough omega-3's and may be bad for your teeth.

There are vegetarian options, but they are expensive, require 5-10 capsules a day and most do not have the right EPA ratio. Ovega-3 is made from plants but does not have enough EPA. Prescription versions include Vascepa, Lovaza and Epanova, but these may not be covered by insurers and only Vascepa has the ingredients needed for depression.

Products to Avoid

Flaxseed oil contains a different kind of omega-3 called n-omega-3 (e.g. alpha linolenic acid or ALA). Only 10% of these omega-3's make it to the brain, so they aren't a good substitute. Flaxseed also has more risks than fish oil, as ALA can raise the risk of prostate cancer while DHA and EPA lower that risk. You should also avoid products with Omega-6, as that type has a few health risks including increased inflammation.

ConsumerLabs tests natural products for purity and integrity. Most products have not been tested by this lab, but we've labeled the ones that have with a ⚡ on the back. The following brands did not pass: OceanBlue, Metagenics, Bioglan.

Folate, B-vitamins, and Vitamin D

Folate is a B-vitamin that can help antidepressants and the mood stabilizer valproate (Depakote) work better. Folate is the natural form, and folic acid the synthetic form of the vitamin. Try to get folate, as the synthetic form may have health risks. For example, folic acid may interfere with lamotrigine's (Lamictal's) benefits. The folate dose for mood is:

Women: 0.8-1.0mg (800-1,000mcg) per day

Men: 1.6-2.0mg (1,600-2000mcg) per day

People taking valproate (Depakote): 3mg (3000mcg) per day

Other B vitamins that help depression include B₆ and B₁₂. A good dose is vitamin B₁₂ 500 mcg daily with vitamin B₆ 25mg daily.

Vitamin D is important for bone health, cancer prevention, and brain function. Supplementation with Vitamin D₃ 600 IU per day is recommended for most people, and higher doses are needed if a deficiency is diagnosed.

Omega-3 in the Stores

All the products below have the right ingredients. The *daily dose* is the minimum number of daily capsules needed (for 1,000mg/day. Note many people need 1,500-3000 mg/day). Use the ASIN to search for the product on Amazon. Viva Naturals is rated “best” because it is lost-cost, highly concentrated, and well-tested.

If you eat a lot of fish (such as 2 servings of salmon a week or daily servings of any fish) or take Lovaza (a prescription omega-3), it’s best to get the bolded 🎯 products (these are higher in EPA). Fish and Lovaza are richer in DHA so you'll need these high-EPA products to bump up your ratio (Lovaza = 375mg DHA + 465mg EPA).

Brand	DHA	EPA	Ratio	# Caps	Price	Daily Dose	Daily Price	ASIN (use this # to look up on Amazon)
Jarrow Formulas EPA-DHA Balance	200	400	2.0	240	\$20.23	2-3	\$0.17	B0013OQFEM
Best overall: Viva Naturals 2,200mg ⚡	240	700	2.9	180	\$33.20	1-2	\$0.18	B014LDT0ZM
Nutraneis Triple Strength	215	430	2.0	180	\$17.51	2-3	\$0.19	B01459HK54
InnovixLabs Pharma-Grade	135	366	2.7	200	\$19.99	3	\$0.40	B00F5ZV6W6
Spring Valley triple strength enteric	253	647	2.6	60	\$8.93	2	\$0.29	B0170GISCS, Walmart
Trader Joe's Omega-3 ⚡	200	400	2.0	90	\$9.99	3	\$0.33	B004TVDMN8
Member's Mark Triple Strength (at Sam's Club, also <i>enteric</i> version) ⚡	253	647	2.6	150	\$23.00	2 ⁺	\$0.30	B006XI8DYS, Sam's Club
Nutrigold Triple Strength Gold ⚡	250	750	3.0	180	\$41.03	2	\$0.46	B004O2I9JO
GNC Triple Strength	734	266	3.7			2	\$0.50	
Pure Alaska Clinical Strength ⚡	144	356	2.5	180	\$23.99	3	\$0.41	B005NWKPOA
Prohealth Ultra EPA	250	500	2.0	90	\$18.49	2 ⁺	\$0.49	B001GSIRUA
Nature Made Ultra (enteric) ⚡	278	647	2.3	90	\$19.96	2 ₊	\$0.44	B00DS5BI78, Target
🎯 Country Life Mood 2000mg ⚡	75	500	6.7	180	\$31.22	3	\$0.53	B001LCQYMY
OmegaVia PharmaGrade <i>enteric</i> ⚡	260	780	3.0	60	\$28.89	2	\$0.96	B00CJJK1E
🎯 OmegaVia EPA Only ⚡ [small pills]	0	500	n/a	120	\$28.89	3	\$0.72	B00D37S0HC
Carlson Elite EPA Gems ⚡	16.5	1000	60			2	\$1.00	
Vitacost Super EPA	150	600	4			3	\$0.75	At vitacost.com
Garden of Life Minami Platinum	228	756	3.3	60	\$32.15	2	\$1.08	B00BQHUZWO
Biothriveslabs Pure	215	430	2.0	60	\$17.27	3	\$0.87	B00S2U44M0
🎯 Barlean's Organic Oils Fresh ⚡	50	537.5	10.8	60	\$20.89	3	\$1.05	B002VLZ8B2
Nordic Naturals EPA Xtra ⚡	150	530	3.5	60	\$33.96	3 ⁺	\$1.7	B015RZ83BA, Whole Foods

LIQUID OPTION: Nordic Naturals ProOmega-D ⚡ (Ratio = 2, B005WAXN4I, \$0.73/day)

⚡ Brand was tested and approved for purity and safety by ConsumerLabs or LabDoor.

🎯 These bolded products are higher in EPA and recommended if you eat fish regularly.

—Chris Aiken, M.D., updated 9/25/2023, adapted from *Bipolar, Not So Much* (Aiken & Phelps, WW Norton, 2017)