

Fish is Brain Food

A DIVE INTO MENTAL HEALTH & DEPRESSION



Depression and anxiety are the most common mental health conditions in the world. Anxiety and depression affect at least 6% of adults in the United States – or 1 in 17 – with twice as many women as men affected, and it occurs across all ages.^{1,2}

When we are depressed or anxious, we naturally resist self-care, including preparing and eating nutritious food. But good nutrition is more important than ever for those suffering from depression. **Research shows that our daily food choices influence our mental health, and evidence is strong that seafood is brain food.**

Feelings of anxiety and stress can be eased by regular consumption of fish.^{3,4}

WELLNESS CHECK

Improving nutrition takes time. When we change our diet, it can take weeks to feel any significant improvement. Other self-care is important, too, such as physical activity, getting fresh air, connecting with friends and family, rest and sleep.



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- **People who regularly eat fish are 20% less likely than their peers to have depression.**⁵⁻¹⁰ Over the past 20 years, dozens of studies evaluating more than 20,000 cases of depression have shown that eating 8-12oz. of fish per week (about 2-3 servings) and/or consuming omega-3 fish oil supplements significantly reduces risk for major depression.^{5,6} In fact, the American Psychiatric Association endorsed the fats in fish as an effective part of depression treatment.¹¹
- **Fish is like a multivitamin for your brain.** Fish is more than just an excellent source of lean protein and essential omega-3s, it provides other vitamins and minerals important for mental health. The nutrients that tend to be low in people who are depressed – vitamin D, magnesium, and zinc – are found in fish.¹²⁻¹⁷
- **If you are taking anti-depressant medication, research reports the nutrients in fish may make them work better.** Mental health medications work better in people with better nutrition. Getting complete protein from fish, along with omega-3s EPA + DHA and zinc, for example, have been shown to improve response to anti-depressants.^{5,9,18,19} The American Psychiatric Association recommends that all Americans eat fish two or more times a week, preferably fatty fish such as salmon or trout.¹¹
- **Eating fish shows promise for reducing migraine headaches.** Increasing omega-3s EPA + DHA while lowering omega-6 intake (often found in junk food containing soybean and vegetable oils) has been shown to significantly reduce frequency, duration, and severity of migraine headaches.²⁰

SIMPLE TIPS TO SWAP SOME SEAFOOD

1. **Make a delicious seafood pasta.** Swap ground meat for your favorite fish or shellfish – just poach the fish in the sauce, or sprinkle in canned tuna. Don't forget to add veggies for extra nutrients and flavor.
2. **Switch it up.** Try salmon or mahi mahi burgers at your family table for a tasty brain-boost of omega-3s!
3. **A different kind of steak.** Fresh swordfish, salmon or tuna steaks are wonderful sources of lean protein with the added benefits of having omega-3 fatty acids and being very low on saturated fat. These options are tasty and satisfying.

MUSSELS IN GARLIC BROTH

Recipe by Chef Kelly Armetta

Servings: 4
Prep Time: 5 minutes
Cook Time: 10 minutes
Total Time: 15 minutes

INGREDIENTS:

1 tsp. olive oil
4 garlic, cloves sliced
2 Tbsp. onions, chopped
2 lbs. mussels, cleaned
½ lemon, juiced
½ tsp. basil, dried
½ tsp. thyme, dried
¼ cup clam juice (optional)
2-14.5 oz. canned tomatoes, chopped
2 Tbsp. butter, unsalted
Salt and pepper, to taste



INSTRUCTIONS:

1. Heat large pot with olive oil and sliced garlic and onions.
2. When aroma is released, add mussels.
3. Add lemon juice, herbs and clam juice (optional), and gently toss.
4. Add tomatoes. Cover and simmer over medium heat until mussels are steamed open, generally 3 to 6 minutes.
5. Remove pot from heat. Discard unopened mussels.
6. To finish mussels, add butter and swirl to make broth thicker.
7. Optional: Serve with crusty bread for dipping in broth.

Omega-3s EPA + DHA
per serving: **665 mg**

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⁴ Su KP, et al. Association of Use of Omega-3 Polyunsaturated Fatty Acids With Changes in Severity of Anxiety Symptoms: A Systematic Review and Meta-analysis. JAMA Netw Open, 2018; 1(5):e182327

⁵ Grosso G, et al. Dietary n-3 PUFA, fish consumption and depression: A systematic review and meta-analysis of observational studies. J Affect Disord, 2016;205:269-281.

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⁹ Hibbeln JR. Fish consumption and major depression. Lancet, 1998;351:1213.

¹⁰ Sánchez-Villegas A, et al. Seafood Consumption, Omega-3 Fatty Acids Intake, and Life-Time Prevalence of Depression in the PREDIMED-Plus Trial. Nutrients 2018, 10(12), 2000.

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¹³ Swardfager W, et al. Zinc in depression: A meta-analysis. Biol Psychiatry, 2013;74(12):872-878.

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¹⁶ Wilkins, CH, et al. Vitamin D deficiency is associated with low mood and worse cognitive performance in older adults. Am J Geriatr Psychiatry, 2006;14(12):1032-1040.

¹⁷ Polak MA, et al. Serum 25-hydroxyvitamin D concentrations and depressive symptoms among young adult men and women. Nutrients, 2014;6(11):4720-4730.

¹⁸ Gertsik, L, et al. Omega-3 fatty acid augmentation of citalopram treatment for patients with major depressive disorder. J Clin Psychopharmacol, 2012;32(1):61-64.

¹⁹ Ranjbar E, et al. Effects of zinc supplementation on efficacy of antidepressant therapy, inflammatory cytokines, and brain-derived neurotrophic factor in patients with major depression. Nutr Neurosci, 2014;17(2):65-71.

²⁰ Ramsden, CE, et al. Targeted alteration of dietary n-3 and n-6 fatty acids for the treatment of chronic headaches: A randomized trial. Pain, 2013;154(11):2441-2451.