# **Supplements for Depression**

by Heather Juergensen Host, The Depression Summit



# **Supplements for Depression:** A critical piece; but not the only piece

There are many good supplements available that give you a leg up when healing depression. Some help dampen anxiety; others increase mental focus or feelings of well-being; others give a needed energy boost.

The important thing to keep in mind when contemplating starting on a supplement program is that a supplement is just one piece of the larger puzzle of biological balance and mental health. If you're eating a nutrient-poor, processed, inflammatory diet, not giving yourself proper appreciation and care, or skimping on exercise and sunshine, you may be fighting an uphill battle when you simply throw supplements into the mix. Ideally, supplements work synergistically with diet and lifestyle choices, each one helping the other work better, to achieve the desired results.

Before beginning any supplement regimen, it's useful to get a blood panel done, to know if you have certain nutrients in which you are deficient. For people who aren't yet working with a functional physician, I recommend going through Life Extension. You can order a blood panel with them and discuss it with your doctor; they also have staff who can help you analyze the results. While they can't diagnose or treat, they can help you understand what levels of different nutrients are normal, subpar, and optimal. Click on "Blood Testing" at <u>www.lifeextension.com</u>.

So let's look at some of the most commonly-used supplements in the treatment of depression. This list reflects supplements regularly recommended by functional physicians, nutritional therapists and holistic psychiatrists, because there is scientific data to support them and because they have shown good clinical results. See the SOURCES section at the end for further reading. This is also where you will find the scientific data underlying these recommendations.

**Note:** Please consult with your health professional before starting a new diet or supplement program.

### **Omega-3 Fats**

Omega-3 fatty acids are helpful for depression, anxiety and overall brain wellness. The American diet is too high in omega-6 fatty acids, and generally deficient in omega-3s. When our brain cells don't have enough omega-3 fats, they tend to scramble the messages of serotonin and dopamine, our two most important "feel good" chemicals. Omega-3s have also been shown to be anti-inflammatory, which makes them especially helpful, since more and more holistic doctors and psychiatrists are classifying depression as an inflammatory disorder.

Omega-3 fats are made up of two compounds, DHA and EPA (based on the research, EPA looks like the more potent of the two). Professional clinicians working with nutritional protocols for depression recommend between 1,500 and 3,000 mg per day (combined dose). You should aim for approximately a 3:2 ratio of EPA:DHA. So for example, if you take 1,500 mg of omega-3s per day, make it about 1,000 mg EPA and 500 mg DHA. Joseph Annibali, M.D. recommends 3,000 mg. per day.

Emily Deans M.D., a psychiatrist specializing in nutritional therapies for mental health, has written, "fish oil supplements weighted towards

EPA... "have replicated, high quality evidence supporting their use... for adjunctive treatment of depression, with very little in the way of side effects."

Fish oil or krill oil are the best sources to supplement with, because the oils are very concentrated and you only need a few capsules a day (Krill is a small crustacean similar to shrimp). If you use fish oil, look for a molecularly distilled variety to be sure that impurities and contaminants have been removed. Bulletproof's Dave Asprey and Joseph Mercola M.D. both sing the praises of krill oil over fish oil, because they're concerned about the alarming levels of dangerous heavy metals and contaminants in most fish and poor manufacturing practices that often over-promise on purity. You can find high-quality options for both at Amazon. Mercola.com produces their own krill oil, which receives high marks for manufacturing purity.

Note: It's helpful to take Vitamin C with fish oil. Vitamin C acts as a natural anti-oxidant and prevents free radicalization of the oils. Also please note that fish oil is a blood thinner. If you're already on blood thinning medication, you can still take fish oil, but check with your physician regarding dosages before doing so.

### **L-Theanine**

L-Theanine is a wonderful supplement that helps with a feeling of calmness and mood modulation. It's an amino acid that is made naturally in the body (and also found in tea), that promotes alpha wave brain production. A typical dose is 200 mg two to four times per day. It supports a relaxed and focused mindset; there are no known side effects. In her book *A Mind of Your Own*, Kelly Brogan M.D. refers to L-Theanine as "meditation in a capsule." (Pregnant and nursing women should avoid L-Theanine.)

### **L-Tyrosine**

The amino acid L-Tyrosine increases production of what are called catecholamines in the brain. The major catecholamines are dopamine, norepinephrine and adrenaline. When your brain is producing optimal levels of catecholamines, you feel energized, motivated and alert. Studies at MIT have demonstrated that supplementation with L-Tyrosine increases catecholamine levels in the brain, and many clinicians like to use L-Tyrosine for what we call "apathetic depression." In her book *The Mood Cure*, Julia Ross refers to Tyrosine as "a truly phenomenal natural anti-depressant." Typical dosage recommendations are 500 mg taken before breakfast, at mid-morning and mid-afternoon – always on an empty stomach. This dose can be increased to 1,000 mg or 1,500 mg. If you feel over-activated at higher doses, simply resume a lower dose. It's advisable not to take L-Tyrosine late in the day, as it may make you too alert at bedtime.

## Vitamin D

Depressed people tend to have dangerously low levels of vitamin D, the critical nutrient (which is actually a hormone) responsible for the proper functioning of hundreds of bodily processes. Vitamin D is antiinflammatory, so based on the emerging theory that depression is an inflammatory disease, supplementation with vitamin D is a must in any depression treatment protocol.

You might see recommendations of 2,000 IU of vitamin D per day, but doctors I trust feel this is still somewhat too low, and given how low most Americans are in this nutrient, the growing consensus is that we should be aiming for 5,000 to 10,000 IU per day. This is a good nutrient to test for if you are planning to supplement with it. Stephen S. Ilardi, Ph.D., in his book *The Depression Cure*, recommends a testing company called Nutrasource Diagnostics, at www.nutrasource.ca.

You can also get vitamin D produced in the body through sunshine. How many minutes of sunshine per day depends on where you live, your skin tone and other factors.

## **The B-Vitamins**

B-Vitamins are one of the body's most important raw materials for synthesizing mood-building biochemicals. They are thiamin (B<sub>1</sub>), riboflavin (B<sub>2</sub>), niacin (B<sub>3</sub>), pyroxidine (B<sub>6</sub>), folate (B<sub>9</sub>), vitamin B<sub>12</sub>, biotin, and pantothenic acid (B<sub>5</sub>). In *A Mind of Your Own*, Kelly Brogan M.D. refers to a large 2010 study at Rush University which "looked at more than 3,500 adults and showed that higher intakes of B6, B9 and B12 - whether through foods or supplementation - was associated with a decreased likelihood of depression for up to twelve years of follow-up." Dr. Brogan's recommendation is to find folate in the form of 5-methyltetrahydrofolate or folinic acid and B12 as methylcobalamin. (I have found Life Extension to be an excellent source of precise forms of the B-vitamins.) As is becoming increasingly common in the field of nutritional therapy, in her own practice Dr. Brogan favors administering B<sub>12</sub> by injection. As she puts it, "For some patients, it's the last antidepressant they ever need."

# Magnesium

Many Americans test deficient in magnesium, due to all of us getting less of it in our food due to the mineral-depleted soil of industrial farming. In her book *The Magnesium Miracle*, Carolyn Dean, M.D. writes, "Each year millions of people are introduced to the merry-go-round of psychiatric drugs and psychological counseling for symptoms that may in fact be rooted in magnesium deficiency... All treatment protocols should begin with adequate doses of this valuable mineral." Dr. Dean's supplement regimen for depression includes 300 mg of magnesium citrate twice a day, accompanied by a daily 500 mg dose of calcium citrate, as well as the B-complex vitamins, 5-HTP and St. John's Wort.

### SAMe

Chemical messengers like serotonin or norepinephrine are necessary to maintain a positive mood, and their synthesis in brain cells is largely controlled by the B-Vitamins and an amino acid known as SAMe (s-adenosylmethionine). In Europe, SAMe has been prescribed as a nutraceutical antidepressant for more than 30 years. It's recommended to be taken before breakfast and lunch on an empty stomach, at dosages of 200 to 400 mg/day. In *Reclaim Your Brain*, Dr. Joseph Annibali says some patients require as much as 1,600 or more per day. Note: people with bipolar disorder or manic depression need to exercise caution with SAMe, because it can cause elevated mood.

# St. John's Wort

This is an herb that has been used to treat depression since antiquity, when the disorder was referred to as "melancholia." The herb contains red oils that are warming, and it was traditionally considered an herb that "unfroze the heart." (It's interesting that a side-effect of this herb is increased susceptibility to sunburn; doctors recommend using sunscreen when taking it.) Research suggests St. John's Wort is more effective for mild depression than for severe depression, and I suspect it might be more effective for depressions that are emotional in cause rather than biological. Up to 900 mg per day is a recommended dose.

#### **5-HTP**

The amino acid 5-Hydroxytryptophan is the precursor in the body to serotonin. Tryptophan is found naturally in things like poultry, cashews and chia seeds, and many Americans don't get enough of this vital amino acid in their diet. Supplementing with 5-HTP can insure a greater production of natural serononin in the brain. In The Mood Cure, nutritional specialist Julia Ross states, "As an antidepressant, 5-HTP is so effective that it has repeatedly matched or *outperformed* many of the most established antidepressant drugs, including Prozac, without the negative side effects so often associated with these drugs. A typical clinical dose to start at 50 mg twice a day, to be increased after several days to 100 mg or 150 mg twice daily. Results are usually seen quickly with 5-HTP.

# Conclusion

This is only a partial list of the many different nutrients and building blocks in the body required to build and maintain our natural system of healthy mood-modulation. Because it is by no means comprehensive, please consider this list a starting point for your research.

The evolutionary psychiatrist Emily Deans M.D. has said, "since it's unlikely serotonin itself is the real issue with major depressive disorder (the so-called monoamine hypothesis or 'chemical imbalance' hypothesis of depression)... now major depression is considered a disease of overlong and ineffective stress response combined with genetic vulnerability and neuroinflammation."

Therefore, what we're really trying to do when we use supplements to alleviate depression, is strengthen stress resiliency and reduce inflammation. Many supplements for depression, to again quote Dr. Deans, "tend to help the body along the way with either energy production, reducing inflammation, making neurotransmitters, or helping tone down the stress response system." So it's wise not to look at any one supplement as a "magic bullet," but as one component in your task of building a strong and resilient body free of inflammation.

If you're wondering which of these different supplements you might do well to experiment with, I highly recommend the quiz contained within Julia Ross' excellent book *The Mood Cure*. It breaks down depression into its different "types," and helps guide you to which supplement has been shown to have the greatest clinical success with your particular type of depression.

A NOTE ON ANTIDEPRESSANTS: If you are already taking antidepressant medication, and think you might like to try nutritional supplementation instead, it's acceptable to experiment with supplements alongside medication under the guidance of your health care professional. If you decide you would like to stop taking medication altogether, *it's very important to taper off antidepressants gradually*, under the care of a doctor. Abrupt cessation of psychiatric drugs can make you feel worse and lead to distressing symptoms.



Reclaim Your Brain by Joseph A. Annibali, M.D. A Mind of Your Own by Kelly Brogan, M.D. The Magnesium Miracle by Carolyn Dean, M.D. The Depression Cure by Stephen S. Ilardi, Ph.D. The Mood Cure by Julia Ross, M.A.

The Case for Supplements in Treating Depression by Emily Deans, M.D. https://www.psychologytoday.com/blog/evolutionary-psychiatry/201605/the-case-supplements-in-treating-depression

**New Human Study Confirms Potent Antidepressant Effects of SAMe** http://www.lifeextension.com/magazine/2010/12/new-human-study-confirms-potentantidepressant-effects-of-same/page-01

Krill Oil vs. Fish Oil: Battle of the Omega-3 Fatty Acids https://blog.bulletproof.com/video-omega-3s-is-krill-oil-better-than-fish-oil/