

Depression “When I wrote many papers early in my career, they were considered pretty good as long as they did not say anything, like most psychiatric papers today.” —DR. ABRAM HOFFER

Depression affects close to 20 million American adults. Those of us that have experienced the depths of clinical depression know just how awful it really is. When you are in the bag, it is hard to think out of the bag. But there is a way out. You have already begun. If you are making the effort of reading this, your depression can't be beyond help. Let's put the positive right out front. A reader says: “I'm twenty years old now, but my depression started when I was in seventh grade. I went to the doctor at age eighteen, and I was diagnosed with bipolar, depression, and anxiety. I was on lamictal and wellbutrin for two years, and I just wasn't seeing any improvement. I weaned off the medicine and found myself feeling even worse for the next year. Checking Doctor Yourself out from the library changed my life. In the past two weeks, I've changed my diet to mostly raw foods and started taking a multivitamin, B12 and 300 mg of niacin a day. I feel like the person I've always wanted to be. I went out last week for the first time in a year. I've literally been too scared to leave the house having been bombarded with terrible social anxiety. It's all gone away. I feel more productive and energized then I ever have in my life. I just wish I would have found out sooner, and not had to suffer for the last eight years. Thank you so much for the large wealth of information, and thank you for changing my outlook on life.” Now on with it: what you can you do to help eliminate depression without drugs?

Exercise You'll rust out faster than you wear out. You probably already know that. So get moving! My “Evading Exercise” chapter is fun to read, contains nudity, and may serve as motivation to get you started. Or start laughing, as the case may be. Niacin, Thiamin, and B6 Depression may be caused by a deficiency of all or a deficiency of just one of these vitamins. Ample amounts of B-complex vitamins, especially B1, B3 and B6 (pyridoxine) must be present for your body's normal, depression-fighting chemical reactions to occur. Niacin and thiamin are added to many foods in small quantities, but not nearly enough. The RDA of niacin is under 20 mg. We need several hundred milligrams a day at least. I take 3,000 mg/day, in divided doses. Vitamin B6 deficiency is very common in Americans, and that “deficiency” is measured against an already ridiculously low U.S. RDA of only two milligrams. The amount of B6 needed for clinical effectiveness in, say, rabbits, is the human dose equivalent of 75 mg daily. That is over 35 times more than the RDA! The RDA for thiamin is also in the neighborhood of two milligrams, and it too is absurdly low. Instead, 75 mg/day is much more reasonable. Try these numbers and see how it helps you. Another reader says: “I am thirty-eight years old and I've suffered from severe anxiety, depression, mood swings, social phobias, and so much more, for most of my life. Three years ago, I was prescribed medication for my depression and another drug for my mood swings. After one month on these medicines I became so manic I couldn't sleep and I suffered from horrible nightmares. I truly felt I was losing my mind and that there was nothing left to do. I have been taking Zoloft and Ativan for the last two years. Then, about a month ago, I looked into nutrition therapy and I figured, why not? So I started off on niacin, vitamin C, and a multivitamin. I can't believe the results. I feel perfectly normal and happy for the first time in my life. I am amazed at how much energy I have and how great I sleep, and I wake up so rested in the mornings! This is truly the best thing that's ever happened to me. Thank you so much for getting this information out there. You have helped give my husband back his wife, my daughter her mother, and me a life.” There are virtually no known side effects with thiamin supplementation. Really enormous doses of B6 taken alone have produced temporary

neurological side effects. It usually takes between 2,000 and 5,000 mg daily for symptoms of numbness or tingling in the extremities. Some side effects have been reported as low as 500 mg daily, but these are very rare indeed. Therapeutic doses between 100 and 500 milligrams daily are commonly prescribed by physicians for PMS relief. A daily total of a few hundred milligrams of individual B6, especially if taken in addition to the entire B-complex to ensure balance, is very safe indeed. Niacin characteristically causes a warm “flushing” of cheeks, neck and extremities. It is harmless, but can be annoying. You can select flush-free niacin if you prefer. As for me, I live in the very-Northern US, just across the lake from Canada. For me, warm is good. Water Believe it or not, drinking more water can improve mood. (And talk about economical . . .)

According to Dr. Hugh Riordan, an expert on depression, “As we get older, one of the major problems is dehydration. When we were young, the ratio of water inside the cell to outside the cell [was] 1.2 to 1. There is more water inside the cell than there is outside. By the time we are 60, the ratio is 0.8 to 1. Even if you are drinking enough water, you are dehydrating all the time. So the goal is to drink sufficient water.” Reference Overcoming Depression, Hugh D. Riordan, M.D. Health Hunters, February 2003, Vol 17, No. 2, p 1.

www.riordanclinic.org/education/newsletter/89025108.pdf. Omega-3 Fatty Acids (in fish oils) Japan and Korea have very little incidence of depression. Again, from Dr. Riordan: “Japanese and Koreans eat fish. The omega-3 fat in most fish manipulates brain chemicals in ways that boost mood.” Make Your Own Neurotransmitters Rather than give a synthetic drug to block or mimic the body’s chemical nerve messengers (neurotransmitters), it is possible nutritionally to encourage the body to make its own natural ones. If we are what we eat, then our nerves also depend on what they are fed. Here is tremendous potential for the alleviation of depression and related disorders. Norepinephrine A depletion of the neurotransmitter called norepinephrine may result in poor memory, loss of alertness, and clinical depression. The chain of chemical events in the body resulting in this substance is: L-phenylalanine (from protein foods) —> L-tyrosine (made in the liver) —> dopa —> dopamine —> norepinephrine —> epinephrine This process looks complex but actually is readily accomplished, particularly if the body has plenty of vitamin C. Since one’s dietary supply of the first ingredient, L-phenylalanine, is usually adequate, it is more likely to be a shortage of vitamin C that limits production of norepinephrine. Physicians giving large doses of vitamin C have had striking success in reversing depression. It is a remarkably safe and inexpensive approach to try. Dr. Riordan said: “Many years ago, I had a lady who was a teacher and she was profoundly depressed. She had profound fatigue and was barely able to function at all. Testing revealed she had no detectable vitamin C in her, so we gave her 500 milligrams of vitamin C a day—not very much by our standards. In a couple of weeks, she thought a miracle had occurred. No miracle had occurred. She was low on vitamin C and depression is the natural consequence of that. If you are depressed, vitamin C is worth considering.” Acetylcholine Acetylcholine is the end neurotransmitter of your parasympathetic nerve system. This means that, among other things, it facilitates good digestion, deeper breathing, and slower heart rate. You may perceive its effect as “relaxation.” Your body will make its own acetylcholine from choline. Choline is available in the diet as phosphatidyl choline, found in lecithin. Lecithin is found to a modest extent in egg yolks. But that is not enough. Three tablespoons daily of soya lecithin granules provide about five grams (5,000 milligrams) of phosphatidyl choline. Long-term use of this amount was favorably mentioned in The Lancet (February 9, 1980). Lecithin supplementation has no known harmful effects whatsoever. In fact,

your brain by dry weight is almost one-third lecithin! How far can we go with this idea of simply feeding the brain what it is made up of? In *Geriatrics* (July 1979) lecithin was considered as a therapy to combat memory loss. Studies at MIT show increases in both choline and acetylcholine in the brains of animals after just one lecithin meal. Lecithin is good for you. How good? Each tablespoon (7.5 grams) of lecithin granules contains about 1,700 mg of phosphatidyl choline, 1,000 mg of phosphatidyl inositol, and about 2,200 mg of essential fatty acids as linoleic acid. It also contains the valuable fish-oil-like, omega-3 linolenic acid. It is the rule, not the exception, for one or more of these valuable substances to be undersupplied by our daily diet. Lecithin tastes crummy. How crummy? Well, the lecithin that is available in capsules is the most popular. These are sold at health food stores and are admittedly convenient, but are also expensive. In order to get even one tablespoon of lecithin, you would have to take eight to twelve capsules! Since a normal supplemental dose is three or more tablespoons daily, that's a lot of capsules to swallow. Much less costly is liquid lecithin. A taste for liquid lecithin has to be acquired, shall we say. It is easier to take if you first coat the spoon with milk or molasses. After taking liquid lecithin, it is wise to have a "chaser" of any dairy product or, again, molasses. Beef and sheep brains are also an excellent source of lecithin, but don't expect me to recommend them. Probably the best way to get a lot of lecithin easily is to take lecithin granules. Stir the granules quickly into juice or milk. They won't dissolve, but rather will drift about as you drink. Lecithin granules can also be used as a topping on any cold food. Ice cream comes to mind. Also, they are not bad if stirred into yogurt. If you put lecithin granules on hot food, they will melt and you will then have liquid lecithin. If that "brains" comment a while back is still bothering you, please bear in mind that all supplemental forms of lecithin are made from soy beans. An alternate non-soy source is egg yolk. Generally, maximum benefit is obtained when you eat the yolk lightly cooked (such as in a soft-boiled egg). By the way, the correct pronunciation of "lecithin" is "LESS-A-THIN. This is easy to remember because you are probably less-a-thin than you used-to-a-be. A reader says about panic attacks: "I have coped for years with regular panic attacks and severe depersonalization episodes. I've done the therapist routine (fifteen different therapists in the course of twenty years). I have found other approaches (acupuncture, meditation) to be of limited value. I definitely wanted to avoid psychotropic drugs, but it was not looking good. For months I went through a period where the attacks were coming every few days and might last for days. Finally, in desperation, I started taking B vitamins(B-100 complex, 2 to 3 times daily), vitamin C to help with the metabolism of tryptophan-rich foods (which I have tended to crave without knowing why), and daily doses of lecithin (2 to 4 tablespoons/day). "The change feels almost miraculous. I still have episodes, but they are much more manageable. I can maintain some sane perspective and can see them as episodes rather than as something unbearable that feels like it will go on forever. I am convinced that it is not only the nutritional substances that are making the difference but also the fact that I managed—with your help—to take agency in my own healing." Serotonin Before the FDA removed tryptophan supplements from the market due to a temporary, and now corrected, industrial manufacturing error, millions of people had safely taken regular supertime doses of this amino acid, usually 500–2,000 mg, to help them sleep. Inside you, tryptophan is broken down into anxiety-reducing, snooze-inducing niacin. Even more important, tryptophan is also made into serotonin, one of your body's most important neurotransmitters. Serotonin is responsible for feelings of well-being and mellowness. It has such a profound effect that Prozac, Paxil, and similar antidepressants

artificially keep the body's own serotonin levels high. They are called selective serotonin reuptake inhibitor (SSRI) drugs. You can accomplish something very similar through your diet. Self-medication with food is not uncommon. You might as well do it right. And no one can tell us that good, natural foods are toxic if you eat a lot of them! Some foods that naturally increase your serotonin levels are beans, avocados, pineapple, eggplant, plums, bananas, walnuts, peas, cheese, nuts, sunflower seeds, and good ol' wheat germ. Any and all of these help enhance how you feel if you are depressed. People often feel better in general when they've eaten. There are many reasons for this, of course, but here is a reason that is underappreciated. A meal with plenty of carbohydrates helps tryptophan get to where it does the most good: your brain. In order to cross the blood-brain barrier and get in, carbs are required. So cheese and crackers provides a better effect than the cheese standing alone. Cover your ears, animal friends, for I am also about to condone eating the occasional dead bird. Poultry, especially the dark meat, is a rich (yet very cheap) source of tryptophan. Add potatoes or stuffing, and you have the reason everybody is sprawled out and snoring up a storm after a typical Thanksgiving food orgy. But to be able to look your parakeet in the eye after the fourth Thursday in November, you can stay vegetarian and still get tanked up on tryptophan. Consider that five servings of beans, a few portions of cheese or peanut butter, or several handfuls of cashews provide 1,000–2,000 mg of tryptophan, which will work as well as prescription antidepressants—but don't tell the drug companies. Some skeptics think that the pharmaceutical people already know, and that is why the FDA is less than enthusiastic about tryptophan supplements. Here are two quotes in evidence: "Pay careful attention to what is happening with dietary supplements in the legislative arena. . . . If these efforts are successful, there could be created a class of products to compete with approved drugs. The establishment of a separate regulatory category for supplements could undercut exclusivity rights enjoyed by the holders of approved drug applications." —FDA Deputy Commissioner for Policy David Adams, at the Drug Information Association Annual Meeting, July 12, 1993

"The task force considered many issues in its deliberations including to ensure that the existence of dietary supplements on the market does not act as a disincentive for drug development." —FDA Dietary Task Force Report, released June 15, 1993 Remember that tryptophan is one of the ten essential amino acids you need to stay alive. By law it is added to liquid feedings for the elderly and to all infant formulas. This says a great deal about its safety, as well as its importance. You can buy L-5-hydroxytryptophan (5-HTP), a nonprescription tryptophan derivative, at health food stores and on the Internet. 5-HTP is quite costly, however. The good news is that plenty of inexpensive vitamin C enables your body to convert dietary tryptophan into your own 5-HTP, and then on into serotonin. And, tryptophan is really quite easy to get directly and cheaply from the good foods listed below. So go, eat, and be happy! Foods High in the Amino Acid L-Tryptophan (In milligrams per 100-gram (3.5 ounce) portion, about the size of a deck of playing cards. That is not a large serving, and in a single meal you might easily double or triple the figures listed here.) Beans Lentils 215 Dried peas 250 Navy 200 Pinto 210 Red kidney 215 Soy 525 Nuts and Seeds Brazil nuts 185 Cashews 470 Filberts 210 Peanuts 340 Peanut butter 330 (natural, not commercial) Pumpkin seeds 560 Sesame seeds 330 Tahini (ground sesame seeds) 575 Sunflower seeds 340 Other nuts generally provide at least 130 mg per small serving; usually more. Grains Wheat germ 265 Cheese Cheddar 340 Swiss 375

Parmesan 490 Other cheeses tend to be lower in tryptophan, but are still very good sources. Eggs 210 Poultry 250 (Note how vegetarian sources are as good as, and often much better than, flesh sources.) Brewer's Yeast 700 (Source: USDA, Amino Acid Content of Foods) Meats are generally regarded as a good source of tryptophan, organ meats supposedly being the highest. However, most meats are in the range of 160–260 mg/100 g, with organ meats ranging between 220 and 330. These figures certainly do not compel meat eating. They compel split pea, cheese, and cashew eating!

Another reader says: "Having discovered that vitamin B complex, vitamin C, and zinc cured my postnatal depression (I was on lots of medication), I decided that this was something the whole world had to know about. Well, needless to say, I have since discovered that the world doesn't want to know or isn't listening properly. My pastor didn't even believe me. Sometimes I get really discouraged, but then sometimes I discover something like this and I feel reinvigorated. One just has to keep on going, never losing faith. I'm working on my sister, who's a psychiatrist. Maybe one day she'll prescribe supplements instead!"

Saul Ph.D., Andrew W.. Doctor Yourself (pp. 222-233). Turner Publishing Company. Kindle Edition.