

Nutrition: Anxiety, Depression and Cognitive Disorders - Part 5

When it comes to addressing anxiety, depression, and cognitive and mood and behavioral disorders, of course, lifestyle is going to play a huge role: getting adequate amounts of sleep, appropriate exposure to light during the day and controlling exposure to artificial light at night, getting regular amounts of exercise, and preferably outdoor exercise. Cultivating a strong network of social support is absolutely essential. Many studies suggest that this can be more significant than antidepressants or exercise, not surprisingly, because in many cases, depression is not just an individual problem. It's a social or cultural problem, and it arises out of a dysfunctional relationship of the individual with the world around him or her, so sometimes these problems can't be solved in isolation. Managing stress and addressing HPA axis dysregulation, of course, is very important, and then minimizing exposure to environmental toxins.

As far as circadian rhythm sleep disruption, there's a mountain of evidence linking impaired sleep to various mental health disorders. Chronic sleep deprivation significantly affects mood, concentration, and vulnerability to stress. Fifteen to 20 percent of people with insomnia go on to develop depression. There's a 20 times higher risk of panic disorder in patients with insomnia, which is just incredible. And as we've discussed ad nauseum now, seven to nine hours of sleep per night is suggested for optimal health overall and certainly for optimal mental health. If the patient has, again, inadequate exposure to light during the day and too much exposure to light at night, that disrupts the circadian rhythm and increases the risk of depression, and so all of the recommendations that I've made elsewhere would be applicable here for light and circadian entrainment.

Seasonal affective disorder is a common cause of depression in the winter months, and bright light therapy is a good treatment modality for seasonal affective disorder. Exposure to 10,000 lux of light in the morning for about 20 to 30 minutes can be as effective as antidepressant medication. You can get these light machines on Amazon and many other places. They're only about \$40 or \$50. You just have the patient turn it on in the morning and sit in front of it for 20 minutes or a half hour. It's a good option for indoor workers who can't get exposure to natural light throughout the day or people who live in far northern or southern latitudes and it's dark when they go to work and it's dark when they come home from work.

Nature deficit disorder is another possible cause of anxiety, ADD, or ADHD. There's a lot of research going into this and using nature therapy as a way of addressing this, particularly in children. Going outside regularly and staying in contact with nature is another important part of addressing these disorders.

Exercise, not surprisingly, and just physical activity overall plays an important role. The public health dose of exercise, 150 minutes of moderate intensity exercise per week, is a good starting place, but as we've discussed elsewhere, reducing the amount of time that's spent sitting and just

getting more non-exercise physical activity is important, as well. I recommend a combination of steady-state aerobic exercise like walking, jogging, biking, etc., and also resistance training, so strength training, and as I said before, exercising outdoors may play a particularly important role in addressing depression and anxiety, just for the exposure to sunlight and the production of vitamin D. Vitamin D deficiency is associated with mental health disorders, but also being outdoors, more of a connection with nature, and then exercising socially with other people is probably more beneficial for people suffering from mental health disorders.

Stress triggers HPA axis dysfunction and inflammation, and as we've talked about, inflammation is at the root of depression in many cases. Cortisol dysregulation, either chronically high or chronically low, or disrupted diurnal production of cortisol is associated with many different types of mental health conditions. Trauma from stressful life events causes depression, anxiety, addiction, memory and cognitive dysfunction, and mental instability, so you want to follow the recommendations I'm making elsewhere for stress management, things like yoga, mindfulness-based stress reduction, tai chi, qigong, deep breathing, progressive relaxation, etc. There are a lot of options there, but the key is to get the patient on a regular routine.

Social support: Human beings, for the vast majority of our evolutionary history, lived in highly social environments and close-knit tribal groups, and it's only been really in the last 50 to 75 years in the US and the industrialized world that we've moved away from that. I'm sure even in our grandparents' time or great-grandparents' time a lot of extended families still lived together, and in many parts of the world that's still the case. It's really just the industrialized world in the last 75 years that has changed. Social support has been shown to increase resilience in the face of stress, and lack of social support is strongly associated with depression, anxiety, and other mental health conditions.

Women are especially prone to the adverse effects of inadequate social support, although both sexes are affected. The research is a little bit mixed here, but some studies have shown that women require regular interaction with others to reduce psychological stress, whereas that hasn't been shown as clearly in men. Other studies have shown that men experience better mental health when they're married, whereas those effects aren't observed with women, but it's clear that both men and women need social support to be optimally healthy and to have optimal mental health.

Some ideas for helping your patients to build social support would be volunteering. I think this is a particularly good one because if you volunteer for a cause you believe in, there's a higher probability that you'll meet others that you share values with, and also studies have shown that when you volunteer and provide social support to others, that has benefits above and beyond just receiving social support and being in contact with other people. Those who volunteer have lower rates of depression, and this is especially true in people that are 65 and older. Volunteering provides a source of purpose, as well, and also increases gratitude, which has been shown to have health benefits. One to two hours a week of volunteering is the amount that's been shown to be required for significant health benefits.

Religion and faith, of course, can also have a big impact. Religious practice is associated with improved mental health, reduced depression and anxiety, and better ability to cope with stress. Research shows that those being treated for mental health issues respond better to treatment if they believe in God. Strong faith in God or a higher power can re-establish a sense of belonging and support and provides a sense of purpose, hope, and meaning in life despite negative experiences. Prayer and spirituality allow us to understand suffering in a wider and more empowering context, and there is some research that shows that negative religious beliefs, like the idea that God is punishing you if things aren't going your way, can actually increase the risk of depression, so like everything else, it depends on our perspective. My goal here is not to promote any particular type of religion and faith or a spiritual practice, but I think the overarching idea here is that having a broader perspective that expands beyond yourself is an important aspect of mental health.

Physical touch is also important, and some things like massage have been shown to reduce cortisol, decrease sympathetic nervous system activity, increase serotonin and dopamine. The same is true for sexual activity. Acupuncture and acupressure can reduce stress hormone release and have shown positive effects similar to cognitive behavioral therapy and medication for depression.

Having a pet significantly reduces the risk of depression. It provides social support, opportunity for outdoor exercise, experience of unconditional love, and physical touch. There are really a lot of studies showing how interaction with pets increases production of certain hormones, like oxytocin, and this can be really good for patients who don't get physical touch from humans as often, people who are single or widowed or living alone.

Play is something that's also written into our human DNA. Unstructured play is an important part of good mental health. Inadequate opportunities for play can increase depression and anxiety in both children and adults. Increased pressure to perform in school or work and belief that play is a waste of time could be contributing to rising rates of depression and other mood disorders in the industrialized world. As Dr. Stuart Brown says, "The opposite of play is not work, but rather depression." That's a pretty powerful quote to keep in mind. Play allows for stress management, improves mood, and reduces anxiety and depression. Options for play are numerous, of course, but some of the best would be games or organized sports, dance, music, and of course, hanging out with children. They're experts in play, so if you spend time with children, you can't really help but play.