

Social Anxiety Disorder Linked to High Serotonin Levels, Throwing Treatment with SSRIs into Serious Question

Depression and other mental health problems are at epidemic levels judging by the number of [antidepressants](#) prescribed each year.

According to CDC data,¹ one in 20 Americans over the age of 12 report some form of depression, and 11 percent of the US population over the age of 12 is on antidepressant medication.²

This despite overwhelming evidence showing that antidepressants do not work as advertised.

At best, antidepressants are comparable to placebos. At worst they can cause devastating side effects, including deterioration into more serious mental illness, and suicidal or homicidal tendencies.

Virtually all of the school and mass shooters, for example, have been on antidepressants. Antidepressants are also prescribed to pregnant women, which can have serious repercussions for the child.

Research³ shows boys with autism are three times more likely to have been exposed to antidepressants known as selective serotonin reuptake inhibitors (SSRIs) in utero than non-autistic boys. Those whose mothers used SSRIs during the first trimester were found to be at greatest risk.

Recent research into the mechanisms driving anxiety and social phobias now turn conventional drug treatment with SSRIs on its ear.

Turns out these mental health problems are *not* due to low serotonin levels as previously thought. They're linked to *high* levels! If these findings are taken as seriously as they should be, the mental health field is in for a major overhaul.

The Low Serotonin Theory Was Never Proven True, Yet Spawned a Booming Market of SSRIs

Prozac was released in 1987 in the US, giving rise to an entire new antidepressant therapy class known as selective serotonin reuptake inhibitors (SSRIs). Some of the most popular ones include:

- Prozac (fluoxetine)
- Celexa (citalopram)

- Zoloft (sertraline)
- Paxil (paroxetine)
- Lexapro (escitalopram)

SSRIs work by preventing the reuptake (movement back into the nerve endings) of the neurotransmitter serotonin. This makes more serotonin available for use in your brain, which is thought to improve your mood.

Most people have heard of the "chemical imbalance" theory, which states that [depression](#) and anxiety disorders are due to low serotonin levels. Most believe this theory to be true. But the theory was just that—a theory. It *sounds* scientific, but there was actually no hard evidence behind it.

Fermented Foods May Help Social Anxiety Disorder, Study Finds

The impact of your [gut microbiome on your brain function](#) has been confirmed by a number of studies, and research is moving rather swiftly in this area. One of the reasons for why the bacterial makeup of your gut would have an influence on your mental and emotional health relates to the fact that your gut actually works much like a second brain.

Your central nervous system (composed of your brain and spinal cord) and your enteric nervous system (the intrinsic nervous system of your gastrointestinal tract) are created from identical tissue during fetal development. One part turns into your central nervous system while the other develops into your enteric nervous system. These two systems are connected via the vagus nerve, the tenth cranial nerve that runs from your brain stem down to your abdomen. It is now well established that the vagus nerve is the primary route your gut bacteria use to transmit information to your brain. Even more interesting, serotonin is produced in your gut as well as your brain, by specific bacteria. In fact, the greatest concentration of serotonin is found in your *intestines*, not your brain.

It's not so surprising then that researchers keep finding positive correlations between gut health and improved mental health. Most recently, researchers found that [fermented foods](#) and drinks helped curb social anxiety disorder in young adults. The study,^{12,13} published in *Psychiatry Research*, involved 710 psychology students at the College of William and Mary.

The participants filled out questionnaires rating their level of worry and anxiety, and documented their fermented food consumption over the past 30 days. Other factors such as healthy diet and exercise were also addressed. Among those who rated themselves as having a high degree of neurotic feelings, eating more fermented foods was linked to fewer symptoms of social anxiety. Meaning, the relationship between fermented foods and decreased social anxiety was strongest among those who tended to be more neurotic.

Key Factors to Overcoming Anxiety and/or Depression Without Drugs

It's important to realize that your diet and general lifestyle are foundational factors that must be optimized if you want to resolve mental health problems such as depression or anxiety, because your body and mind are so closely interrelated. Compelling research demonstrates just how interconnected your mental health is with your gastrointestinal health for example. While many think of their brain as the organ in charge of their mental health, your *gut* may actually play a far more significant role. The drug treatments available today for depression are no better than they were 50 years ago.

Clearly, we need a new approach, and your diet is an obvious place to start. Research tells us that the composition of your gut flora not only affects your physical health, but also has a significant impact on your brain function and mental state, and your gut microbiome can be quickly impacted by dietary changes—for better or worse. Research has also revealed there are a number of other safe effective ways to address depression and anxiety that do *not* involve hazardous drugs. So, if you suffer from an anxiety- or depression-related disorder, please consider addressing the following diet and lifestyle factors before you resort to drugs:

Dramatically decrease your consumption of processed foods, sugar (particularly fructose), grains, and GMOs	High sugar and starchy carbohydrates lead to excessive insulin release, which can result in falling blood sugar levels, or hypoglycemia. In turn, hypoglycemia causes your brain to secrete glutamate in levels that can cause agitation, depression, anger, anxiety, and panic attacks. Additionally, sugar fans the flames of inflammation in your body.
	In addition to being high in sugar and grains, processed foods also contain a variety of additives that can affect your brain function and mental state,

especially MSG, and artificial sweeteners such as aspartame. There's a great book on this subject, *The Sugar Blues*, written by William Dufty more than 30 years ago, that delves into the topic of sugar and mental health in great detail.

Recent research also shows that [glyphosate](#), which is used in large quantities on genetically engineered (GE) crops like corn, soy, and sugar beets, limits your body's ability to detoxify foreign chemical compounds. As a result, the damaging effects of those toxins are magnified, potentially resulting in a wide variety of diseases, including brain disorders that have both psychological and behavioral effects.

Increase consumption of traditionally fermented and cultured foods

Reducing gut inflammation is imperative when addressing mental health issues,¹⁴ so optimizing your gut flora is a critical piece. To promote healthy gut flora, increase your consumption of probiotic foods, such as fermented vegetables, kimchee, natto, kefir, and others.

Get adequate vitamin B12

[Vitamin B12 deficiency](#) can contribute to depression and affects one in four people.

Optimize your [vitamin D levels](#)

Vitamin D is very important for your mood. In one study, people with the lowest levels of vitamin D were found to be 11 times more prone to depression than those who had normal levels.¹⁵ Remember, SAD (Seasonal Affective Disorder) is a type of depression that we know is related to sunshine deficiency, so it would make sense that the perfect way to optimize your vitamin D is through sun exposure or a tanning bed. If neither are available, an oral vitamin D3 supplement is highly advisable. Just remember to also increase your [vitamin K2](#) when taking oral [vitamin D](#). Your brain is 60 percent fat, and DHA, an animal-based [omega-3](#) fat, along with EPA, is crucial for good brain function and mental health.¹⁶ Research has shown a 20 percent reduction in anxiety among medical students taking omega-3s.¹⁷

Get plenty of animal-based [omega-3 fats](#)

Unfortunately, most people don't get enough from diet alone, so make sure you take a high-quality omega-3 fat, such as [krill oil](#). Dr. Stoll, a Harvard psychiatrist, was one of the early leaders in compiling the evidence supporting the use of animal based omega-3 fats for the treatment of depression. He wrote an excellent book that details his experience in this area called *The*

Omega-3 Connection.

Evaluate your salt intake

Sodium deficiency actually creates symptoms that are very much like those of depression. Make sure you do NOT use processed salt (regular table salt), however. You'll want to use an all natural, unprocessed salt like Himalayan salt, which contains more than 80 different micronutrients.

Get adequate daily exercise

Exercise is one of the most effective strategies for preventing and overcoming depression. Studies have shown there is a strong correlation between improved mood and aerobic capacity. So there's a growing acceptance that the mind-body connection is very real, and that maintaining good physical health can significantly lower your risk of developing depression in the first place.

Get enough sleep

Exercising creates new GABA-producing neurons that help induce a natural state of calm. It also boosts your levels of serotonin, dopamine, and norepinephrine, which help buffer the effects of stress.

You can have the best diet and exercise program possible but if you aren't sleeping well you can easily become depressed. Sleep and depression are so intimately linked that a sleep disorder is actually part of the definition of the symptom complex that gives the label depression.