

Exploring How Nutraceutical Products Impact Mental Health

A white paper collating the latest research on supplements for mental health



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Nutraceutical Products For Mental Health

Different substances impact our mood depending on their levels in the body. For instance, sugary foods deliver instant dopamine hits that eventually trigger a 'crash' in energy levels. Other types of food can cause both physical and mental health issues. For example, several trials have linked high-fat and high-sugar foods to depression and anxiety. A recent research study indicated that adults who consume a lot of junk food are most at risk of deteriorating mental health, especially if they hardly undertake physical activity.

Conversely, many types of nutraceutical products could be responsible for improving one's mental health.

An unhealthy diet will also hurt your mental wellbeing. For starters, healthy foods promote the activity of helpful gut bacteria, which produce neurotransmitters. Also, a dietary deficiency cripples your body's defense mechanisms against free radicals. Since many mental health conditions result from inflammation in the brain, you can avoid them by using anti-inflammatory foods. Lastly, nutrient-rich foods deliver loads of energy. Consequently, you are more likely to remain active, even through a depressive episode, since exercise can improve one's mental health.

Studies have linked anti-inflammatory products to improved mental health.

Some of the studies are surprising, as they even link overlooked products, such as turmeric, to reduced levels of depression and anxiety. Since many popular nutraceutical products help with inflammation, there are multiple options for one to consider.



We also discovered that some psychiatrists choose to use various types of low-dose supplements for their patients.

As it turns out, certain supplements may help reduce symptoms of depression and anxiety and may also reduce suicidal ideation. Many of these supplements can be used in relatively lower doses and are solid options for people who are struggling with treatment-resistant depression.

Lithium and Magnesium supplements are two of the best options

This whitepaper will cover a large number of nutraceuticals, but lithium and magnesium seem to be the best supplement options. Lithium is used clinically in larger doses for more serious types of mental illnesses, while magnesium is available in multiple types of supplement forms. Some psychiatrists recommend magnesium supplements for minor anxiety and depression, as well as low-dose lithium supplements to help with depression, anxiety, mood disorders, and suicidal ideation.

Deficiencies in key vitamins can also exacerbate mental health issues.

Vitamin D and Iron deficiency can lead to adverse mental health impacts and reduced cognitive function. While otherwise healthy adults may not experience an improvement in their mental health by taking additional supplements or modifying their diet, some people with Vitamin or mineral deficiencies could be more vulnerable to mental health issues.



Magnesium

If you are looking for natural solutions for issues related to mental health, it is crucial to note that magnesium can help with mental health in a wide variety of ways. Magnesium can help you combat issues such as anxiety, low energy, and depression. While magnesium has also been shown to improve areas of one's physical health, including heart health, it is most popular because of its numerous mental health benefits.

Magnesium is essential for multiple metabolic reactions in the body.

The most prominent is energy production in the mitochondria. Additionally, your body needs magnesium to activate vitamin D, which is necessary for bone and muscle health. The mineral also helps with sleep and your body's immune system. The mineral mainly regulates multiple metabolic processes that are crucial for mental wellbeing. Firstly, magnesium binds to glutamate receptors and blocks the neurotransmitter. This action prevents overstimulation of cells that would cause mood changes. Furthermore, magnesium regulates melatonin to ensure you fall asleep fast and receive adequate rest time.

Magnesium is an essential macromineral that constitutes 25g of the adult human body. Like most minerals, it is responsible for a wide range of bodily functions, the most prominent being energy production.

Our mental health is very connected to our body's well-being. Have you ever noticed that depression makes you feel fatigued? Low magnesium levels won't just bring about depression, but it can also result in other common health issues such as diabetes. In some cases, low magnesium could even be partially responsible for causing a stroke, according to some studies.



Magnesium plays a very crucial role in the healthy functioning of our brain. Magnesium impacts the brain in the following ways:

Binds the activity of more stimulating neurotransmitters while binding to calming receptors, leading to a more peaceful and resting state.

It helps to regulate the release of stress hormones such as cortisol which acts as the "brakes" on the human nervous system.

Low levels of magnesium have been linked to depression, anxiety, migraines, insomnia, and fatigue. Some of these undesirable effects can be reduced by adding magnesium to your diet or by taking magnesium supplements.

Higher instances of anxiety can be traced to lower levels of magnesium in the body. This condition could be attributed partly to the activity in the hypothalamic-pituitary-adrenaline (HPA) axis, which controls our reaction to stress.

Many types of mental health issues, including mental fatigue, do occur because of magnesium deficiency.

What is currently in question is how effective magnesium supplements are compared to other traditional types of treatment, as studies are limited and show conflicting results. While the health benefits of magnesium are clear, and it is also clear that magnesium deficiency negatively impacts one's mental health, magnesium supplements are certainly not a one-stop shop for alleviating the symptoms of depression and anxiety.



Iron for Mental Health

Iron is a prominent component of oxygen distribution systems in the body. Moreover, the mineral is necessary for optimum mental health. Your body uses iron to produce dopamine, regulate neurotransmitters, and produce energy. It is no wonder, then, that some of the symptoms of iron deficiency include anxiety, poor concentration, depression, and fatigue.

Iron affects certain vulnerable people, which can increase the chance that they have issues with depression.

While there are several reasons why women are more likely to suffer depression than their male counterparts, their biological makeup stands out. However, their menstrual cycle robs women of precious minerals like iron which play an essential role in mental health. Other people at risk of iron deficiency are those on acid-blocking medication since iron absorption requires stomach acid.

Iron-rich foods like fish, chicken, and leafy vegetables can help counter iron deficiency. Also, include nutrients like vitamin C, which assist with iron availability.

In other cases, supplements may be a more appropriate choice for most people, especially people in developing countries who sometimes are more likely to have an iron deficiency because of their diet. Moreover, older people and women may need to take iron supplements as well.

Several studies have focused on how iron can help to improve one's mental health.

A 2000-2012 study found that iron deficiency anemia was associated with psychosocial consequences and psychiatric morbidity. The study also found that iron supplementation could help individuals who were experiencing an iron deficiency.

Another 2013 study found that low iron levels could cause cognitive and mental health issues for younger kids and adolescents.



Zinc for Mental Health

Depression is a global scourge that is responsible for catastrophic suicide rates annually. What's notable is that zinc deficiency is a standard marker of depression. Moreover, other psychiatric conditions such as Alzheimer's, ADHD, and Parkinson's disease are associated with depleted zinc serum levels.

Your body needs adequate zinc for multiple bodily functions such as cell division, protein synthesis, and the production of various enzymes. Additionally, zinc has anti-inflammatory properties that prevent oxidation in the brain tissue. Low zinc serum levels are closely related to increased inflammation and low immunity.

Zinc interacts with brain-derived neurotrophic factor (BDNF) in the hippocampus.

BDNF conducts neurogenesis, repair, and differentiation of nerve cells. Therefore, low zinc levels tend to drop hippocampal activity, resulting in underdeveloped neurons. Additionally, zinc deficiency triggers more NMDA receptors which open up glutamate receptors. Glutamate causes brain cells to overstimulate and induce mood changes.

Zinc may be able to play a role in reducing the symptoms of depression and other serious mental health conditions.

A 2017 NCBI study noted that lower zinc levels were associated with a variety of neurological conditions, as well as multiple mental health conditions including depression and psychosis. Some studies have also indicated that lower zinc levels may be one of the many factors that result in an increased risk of psychosis.



Vitamin D

Vitamin D is commonly known for its impact on skeletal structure development.

Nevertheless, this nutrient is critical for the health of the central nervous system. Vitamin D deficiency affects about half of all American teenagers. More importantly, adolescents who suffer mental complications such as depression and social anxiety tend to have low Vitamin D levels.

Vitamin D is essential for the development of the brain in a fetus. Vitamin D deficient rat mothers gave birth to babies with similar characteristics as people with schizophrenia, such as poor growth factor manifestation in the nervous system. Other studies report that vitamin D is a crucial neuroendocrine factor in the hypothalamus. Generally, low vitamin D is associated with a range of mental health problems. However, you can correct a deficiency by getting plenty of sunshine, proper dieting, and eliminating certain risk factors such as obesity.

While most people focus on the physical health benefits of vitamin D, it is also worth noting that vitamin d could also play a role in assisting your mental health.

Vitamin D is also helpful in potentially preventing various mental health symptoms. Many of these health issues actually occur because of Vitamin D deficiency. Symptoms of vitamin d can mimic typical depression symptoms such as fatigue, depression, hopelessness, anxiety, and trouble sleeping. Vitamin D, along with other supplements such as magnesium, could be one of many methods used to combat depression or anxiety. We have also covered how nutraceutical products, including lion's mane and valerian root tea, can help relieve mental health symptoms. While vitamin d alone is certainly not a remedy for mental health issues, It is well worth monitoring to ensure that you are taking care of your physical and mental health.



Various studies_have been conducted to help shed more light on how Vitamin D can potentially help improve your mental health, given that nearly one million people suffer from Vitamin D deficiency.

Studies have shown how Vitamin D is an important supplement for maintaining mental health, along with others such as Magnesium, St. John's Wort, and others. Studies have also shown that proper Vitamin D levels in earlier life may be responsible for helping to reduce the risk of developing certain mental disorders, including major depressive disorder and schizophrenia. Overall, studies are mixed though and it seems that Vitamin D may be best for maintaining one's physical health, while its contribution to mental health is not guaranteed. Overall, studies are mixed, and it seems that Vitamin D may be best for maintaining one's physical health, while its contribution to mental health is not guaranteed. One randomized control trial that included over 18,000 adults in 2010 concluded that Vitamin D supplementation did not help to reduce the symptoms compared to a placebo group.



Lithium and Mental Health

Lithium supplements are one of several nutraceutical products that can provide significant mental health benefits for people with anxiety, depression, and other mental health disorders. Doctors often prescribe Lithium (lithium carbonate) as a mood stabilizer for mood disorders like bipolar disorder. However, a low-dose lithium supplement (lithium orate) can provide relief for various mental health issues, and some mental health professionals even prescribe low-dose lithium supplements to their patients. Low-dose lithium supplements may be effective in alleviating symptoms of anxiety, depression, and even suicidal ideation. People struggling with milder mental health issues may benefit from taking low-dose lithium supplements. Lithium, like many other elements, is already commonly found in various foods and the water we drink. Lithium may be one option to consider if you are looking for a natural solution to mental health symptoms.

Mood Disorders

Lithium may be most effective in its ability to soothe the symptoms of various mood disorders, most notably bipolar disorder. Lithium was approved by the FDA in 1970 and is still commonly prescribed today when other medications such as antidepressants, antipsychotics, or other mood stabilizers do not work or cause serious side effects such as tardive dyskinesia. Although the amount of lithium found in clinically prescribed lithium carbonate is much higher (300mg or higher), some psychiatrists have also explored the option of low-dose lithium supplements used to treat depression, anxiety, and milder mood disorders. Notably, the side effects associated with lower doses of lithium are generally low and uncommon. For those taking therapeutic doses, side effects are much more common, and it is necessary for you to have quarterly blood tests to ensure that you are not at risk of health issues such as hypothyroidism or kidney damage.



Depression

Lithium supplements may be able to help reduce depression symptoms. Lithium is also commonly combined with antidepressants to help stabilize a patient's mood and to relieve symptoms of depression. Because lithium is primarily used for mood disorders, which include a combination of manic and depressive symptoms, it is not completely clear how effective lithium is in preventing depression. Other types of medication are used to treat depression and mania in combination with mood stabilizers. Further studies could shed more light on this topic. But there seems to be enough evidence that lithium is worth a shot if antidepressants and other solutions have not proved to be useful. Lithium can also be useful in treating certain types of personality disorders, where some of these symptoms are present, but not easily treated with most types of medication.

Suicide

Research from NCBI showed that lithium was helpful in lowering the risk of suicide for a variety of patients, including patients with bipolar and unipolar depressive disorder. This is an important bonus given that suicide is common in more serious mood disorders. Some types of medication commonly used for depression can actually cause intense side effects such as mania and even suicidal ideation for some individuals. Lithium, on the other hand, is much safer in this sense and some of the main side effects are limited to physical side effects, including diarrhea, nausea, and vomiting in severe cases. Lithium could be a silver lining for patients who have had bad experiences with traditional medication or those with suicidal ideation who have not benefitted from antidepressants or other mood stabilizers.

One recent study showed that lithium levels traced in the local water source were associated with lower suicide levels. Brighton and Sussex Medical School conducted this study in response to the fact that around 800,000 die by suicide every year. This shows how naturally occurring lithium is crucial for the general population, not just those with mental health issues. There may be more health benefits of lithium than we currently fully understand.



Probiotics and Mental Health

Most people associate probiotics with gut health, as this is one of the top health benefits of probiotics. Nevertheless, these essential microbes also play an important role in your mental health. Your stomach and brain are intimately connected, and whatever you eat can affect your mood. Multiple biochemical signals transmitted between your stomach and the central nervous system (CNS) serve this gut-brain interconnection. We have all experienced a 'gut feeling' at one point in our lives. Scientists today have substantiated the 'feeling' to originate from the enteric nervous system (ENS). The ENS is the body's second brain and is interlinked with the CNS to form the gut-brain axis (GBA). Generally, the microbes living inside your gut do more than just facilitate digestion. These organisms affect your mood, sleep, stress response, and cognitive abilities.

Current Studies have demonstrated that probiotics can also improve one's mental health.

The available research shows that probiotics have a positive impact on our mood. Additionally, these microbes can enhance our cognitive ability and improve productivity.

Further studies show that probiotics can help with psychiatric conditions such as depression and anxiety. Furthermore, a rich presence of gut microbes tends to improve sleep which benefits your cognitive performance. Harvard Health even recently posted an article showing how probiotics may be able to help bipolar patients after they are hospitalized, by reducing the risk of them relapsing.

The microbes in your body produce different neurotransmitters that affect our sleep, appetite, and feelings. These microorganisms actively decrease the extent of inflammation which is a significant cause of depression. For this reason, anti-inflammatory nutraceutical products such as turmeric may also help with depression. The ongoing research on how probiotics could be used to treat autism also looks promising. The trials have a multi-pronged approach. In one instance, doctors could accurately determine which patients would benefit from probiotics or alternate treatments.



Lion's Mane and Mental Health

Lion's mane is gaining traction in North American markets, as lion's mane can help with depression and anxiety. Lion's mane originates from Asia, where people used it for culinary and medicinal purposes. Lion's mane is now very popular globally and is also present in many types of nutraceutical products. One 2012 study found that lion's mane was ranked 4th out of 14 mushroom products in terms of its antioxidant contents, which makes it superior to many types of mushroom products. While lion's mane can help with many types of physical health issues, one intriguing thing to note is that lion's mane can help with depression and anxiety.

The health benefits of lion's mane are extensive and include reduced inflammation & improved cognitive and cardiovascular health. Supplements containing lion's mane extract are available at health food stores, and both the fungus and its extracts have many health benefits. The following section discusses the potential advantages of lion's mane mushrooms and the potential dangers and side effects of their usage. Although lion's mane can boost your physical health, lion's mane can also help with depression and anxiety in some cases.

Lion's mane may also be able to help with depression and anxiety.

Extracts from the lion's mane mushroom may have anti-anxiety and antidepressant properties. Although lion's mane is currently well known for numerous types of physical health benefits, which we have previously discussed in other blog posts, researchers are beginning to pay more attention to lion mane's ability to alleviate symptoms of depression and anxiety.

Luckily, lion's mane has been studied in detail in the past decade, and this product has been used for centuries for physical and mental health in other countries. New studies, on both animals and humans, have shown that lion's mane can help with depression and anxiety. One study conducted in 2010 concluded that consuming lion's mane could help to reduce the symptoms of anxiety and depression during a four-week study of 30 individuals.



This conclusion is not very surprising, given that many nutraceutical products used to decrease mental health symptoms have anti-inflammatory properties. It is possible that nutraceuticals such as turmeric and lion's mane will be increasingly recognized for their ability to help with depression. While there are several possible reasons for anxiety or depression, chronic inflammation may play a significant role. Lion's mane mushroom extract contains anti-inflammatory properties that can help alleviate anxiety and depression based on human and animal studies.

Other animal studies have discovered that lion's mane extract can also help repair brain cells and enhance the hippocampus's function. This part of the brain is involved in memory processing and emotional reactions. The researchers hypothesize that enhanced hippocampal function may account for the decrease in anxious and depressed behaviors observed in mice given these extracts. This decrease may be one of the main reasons that lion's mane helps with depression and anxiety. While these animal findings are encouraging, human studies on the mental health benefits of lion's mane are more limited. At the moment, it is clear that lion's mane can help with depression and anxiety, but its anti-inflammatory properties may be one of the main reasons. Although most research on lion's mane mushrooms has been conducted on animals, it appears to be helpful to consume the mushrooms in moderation, as many humans do in many places around Asia. The safety and efficacy of lion's mane supplements are less clear, as dietary supplements are not regulated in the same way as food and pharmaceutical products.

Inflammation and Oxidative Stress

Chronic inflammation with oxidative stress is thought to be at the core of many contemporary diseases, including cardiovascular disease, cancer, and autoimmune disorders. This is one of the main reasons why many types of nutraceutical products offer similar health benefits. Lion's mane mushrooms have been shown to have potent anti-inflammatory and antioxidant components that may help mitigate the effects of various diseases. The results shown so far are pretty encouraging, although there have not been enough human studies. Notably, lion's mane may prove to be useful in preventing various types of neurodegenerative diseases, although this possibility has not been studied in detail. This is encouraging, as lion's mane could be one of several nutraceutical products that could be used to reduce the symptoms of conditions such as Alzheimer's or dementia.



Turmeric Can Help with Depression

You have probably heard of the numerous health benefits of turmeric, but did you also know that turmeric can help with depression?

Turmeric is a very popular nutraceutical product, which is able to help with numerous health conditions because of its anti-inflammatory properties. Turmeric has been shown to improve many types of physical health conditions, including arthritis. However, turmeric's health benefits may also extend to include mental health benefits, as several new studies have shown promising results about the potential of turmeric to help with depression and other mental health conditions. Because of this, turmeric supplements have become popular with consumers who are trying to enjoy the health benefits of turmeric.

Tumeric's anti-inflammatory properties may also help with depression.

Turmeric has already been used for centuries for a variety of health conditions, and it has even already been used for stress relief in countries such as China or India. Ayurvedic Medicine uses turmeric, among other products, to help to relieve symptoms of stress, anxiety, and depression. In western countries, people also add turmeric to their foods or drinks, and also occasionally take turmeric supplements.

The main reason that turmeric can help with depression is that it is an anti-inflammatory product. Studies have shown that inflammation can cause both depression and fatigue. This could both cause symptoms or exacerbate the symptoms of a person that is struggling with mental health issues such as depression. Notably, one of the benefits of antidepressant medication includes its ability to lower inflammation.

What is currently unclear is how turmeric interferes with other medications used to treat depression. For this reason, it is often best to naturally include turmeric in your diet instead of taking turmeric supplements. The recommended daily dose of turmeric is 500mg/day (around 2.5 teaspoons), while turmeric supplements may contain more than 1,000mg.



How Does Turmeric Work?

Numerous studies have focused on how turmeric can help with depression. At the very least, it is clear to see that turmeric can help with depression. However, it is unclear whether turmeric alone can be used as a treatment for major depressive disorder or other mental health conditions. At best, turmeric may only be able to help relieve some of the symptoms and would likely need to be taken with other traditional forms of medication.

Medical professionals have been exploring alternative treatments, including anti-inflammatory products, as these products may combat some of the symptoms of major depressive disorder. This area is especially worth exploring, given that non-compliance is an issue, as patients sometimes avoid taking medication in the long term because of undesirable side effects. Turmeric, on the other hand, can easily be added to one's diet, and turmeric supplements are also very affordable and have limited undesirable side effects.

Other 8-week trials have revealed that people with depression stand to benefit from consuming turmeric and that these effects tend to show up after the first four weeks. Turmeric was able to reduce depression because of its anti-inflammatory and antioxidative properties. People with depression tend to have inflammation and oxidative stress, so combating these two symptoms may be one of several important steps to reduce the symptoms of depression.

It is clear that turmeric can help with depression, but is still not reliable enough to use on its own because of the lack of research in this area. Furthermore, turmeric is one of many nutraceutical products that help to reduce inflammation and oxidative stress. It is worthwhile to also consider other alternatives and to improve your health through your diet and exercise. In our view, other nutraceutical products such as lithium or magnesium may be more reliable for alternative treatments for mental health disorders. Turmeric, on the other hand, should be used as a holistic approach to both your physical and mental health.

Turmeric supplements may be necessary for some individuals, although it is certainly easy to consume 500mg+/day of turmeric naturally in your food and in drinks. It is unclear how much turmeric is necessary to fully alleviate mental health symptoms, so it is best to focus on taking the standard amount used for general health purposes.



St. John's Wort

Most people are already aware of the health benefits of St. John's wort. St. John's Wort is a type of natural product that can help reduce the symptoms of depression. This supplement can be purchased online or at health food stores without a prescription. However, it is crucial to note that there are definitely more risks with this product, and it may interfere with other medications. Research published in the journal Clinical & Experimental Pharmacology & Physiology in 2015 found that it was not necessarily risk-free, with similar adverse side effects as antidepressants. Furthermore, it is crucial to note that St. John's Wort may not mix well with other drugs such as antidepressants. It is definitely best to talk to your doctor before considering St. John's Wort, as this is not a typical, lower-risk supplement.

Even though St. John's wort is considered an invasive plant in many countries, it has been used medicinally for thousands of years globally. St. John's wort, which got its name from the fact that it blooms on St. John the Baptist's feast, is a perennial herb whose advantages are constantly being researched, most commonly for its mental health benefits. Furthermore, St. John's Wort also has various antibacterial, antiviral, and antioxidant properties, which means it may be able to help with many physical health conditions.

Many studies have focused on how St. John's Wort is able to help to improve one's mood, including symptoms of depression.

St. John's wort's antidepressant properties are perhaps the most well-known impacts of this product. The herb has long been used to treat depression symptoms, and it is now commonly prescribed by doctors and psychiatric professionals. Serotonin, dopamine, or norepinephrine are neurotransmitters inhibited or delayed in their reuptake by a unique mix of antidepressant molecules found only in this medication.

The health benefits of St. John's Wort go beyond depression to include anxiety and mood swings as well. St. John's wort helps with insomnia, irritability, and chronic exhaustion by helping to restore the body's hormonal balance. This, in turn, helps the metabolism or internal clock get back on track. This can also help to improve one's physical health, given that excess stress can harm many organs in the body.



Reduces Mood Swings

Premenstrual syndrome and menopause are two times in a woman's sexual health when mood swings might be problematic. Both menopause and postmenopause women can benefit from St. John's wort, which may help alleviate menopausal symptoms, including mood swings and anxiety. As an added benefit, they lessen the intensity of cramps and premenstrual symptoms like anxiety and sadness.

Antiviral Properties

St. John's wort's active components, in addition to its antidepressant properties, also significantly impact the body's hormone regulating system. One of the most frequent thyroid problems is hypothyroidism. Research shows that this herb can help alleviate its symptoms while also assisting the thyroid gland in reestablishing normal hormone levels. This fact is useful for people who are taking medications for mood disorders that can cause issues with the thyroid.

Reduces the Symptoms of Withdrawal

St. John's wort appears to be effective in lessening cravings or withdrawal symptoms associated with quitting smoking, drinking, or using other addictive drugs. Recovery from addiction is difficult. Therefore, it may be beneficial for some people to consider St. John's Wort instead of other limited alternatives. However, there is certainly a need for more investigation into this advantage.

Reduces Inflammation

We have mentioned how inflammation can cause or exacerbate symptoms of many mental health issues. Turmeric is an excellent anti-inflammatory nutraceutical product, which can help reduce symptoms of depression. St. John's Wort is also very similar, which is why people take it for mental health conditions. Anti-inflammatory and antioxidant components found in St. John's wort allow it to relieve joint and muscular pain from arthritis and gout. St. John's wort decreases inflammation in the cardiovascular system, the skin, and stomach, helping to lower blood pressure and relieve stress on the heart.



Other Options

There are a plethora of other nutraceutical products that may also be able to help with mental health issues. This section will cover some of the lesser established options available for consumers.

L-theanine may be able to improve mental clarity and offer some mental health benefits.

Black or green tea is popular among people who believe it enhances mental focus, so it is not surprising that L-theanine can also produce similar results. According to a new study, people who took L-theanine made more minor mistakes in an attention exercise than those who took a placebo. L-theanine, combined with 50 mg of caffeine, also increased people's concentration.

Sipping on a hot cup of tea may help you relax, and study shows that it does so without making you feel sleepy. There was a correlation between L-theanine supplementation and decreased anxiety and stress in those exposed to stressful settings in an analysis of five randomized controlled studies. A 2011 randomized controlled trial research study focused on people with schizophrenia or schizoaffective disorder. L-theanine was proven to reduce anxiety and improve symptoms, according to this study.

Ginkgo Biloba may also help

Naturally, inflammation will occur in response to foreign materials in the body. However, prolonged inflammation can alter DNA and body tissues and lead to cancer. Nevertheless, Ginkgo Biloba seems to cut inflammation indicators in animal cells, so it may be able to reduce medical conditions triggered by inflammation. The anti-inflammatory characteristics of Ginkgo Biloba may also help with certain neurological disorders.



Ginkgo improves blood circulation around the body and the brain. The herb also alleviates neuron damage and can improve your memory, which can help people struggling with various mental health disorders. In Europe, Ginkgo Biloba extracts can treat Alzheimer's, dementia, and schizophrenia. The herb works well with other antipsychotic drugs to reduce the symptoms of schizophrenia. This product can also help alleviate common side effects of conventional antipsychotic medicines like thirst, constipation, and movement disorders.

Ashghwanda can Help with stress and anxiety

One of the most commonly known benefits of Ashwagandha is its ability to help people relax and feel less stressed after consuming it. Several trials have shown that it can significantly reduce stress and anxiety in participants. According to one study, Ashwagandha may help with sleep quality as well participants reported sleeping better with ashwagandha doses than with placebos. During one study, 46 adults were given Ashwagandha or a placebo daily for 60 days to see how this would alter their stress and anxiety levels. Cortisol levels dropped for the group that received ashwagandha, and more people reported a reduction in stress levels after 60 days. The reduction in cortisol is very significant, given that high cortisol levels can cause issues with heart health, stroke, diabetes, or other health conditions.

There is evidence that Ashwagandha may improve cognition, memory, and motor skills. Participants' reaction times during cognitive and psychomotor tests (which evaluate the ability to respond to instructions and carry out a suggested activity) improved significantly in small studies. According to one study, the participants' attention spans and short- and long-term memory increased dramatically after taking Ashwagandha. Other nutraceutical products that may have similar effects include magnesium, iron supplements, and quercetin to name a few. Ashwagandha may also help elderly individuals, who may be struggling with cognitive issues and looking for natural remedies. Withanamides, one of Ashwagandha's active constituents, have been proven to protect against Alzheimer's disease plaques caused by B-amyloid.



As a natural antioxidant, Ashwagandha is supposed to protect cells from free radical damage. According to the results of research, Ashwagandha may also potentially help prevent Parkinson's disease.

Omega 3 is well known for boosting cognitive abilities. However, it may also help improve various mental health conditions.

People who suffer from depression or a moderate decrease in cognitive function may benefit from consuming omega-3 fatty acids found in fish oil. Numerous nutraceutical products that help protect the brain from oxidative stress and inflammation can also improve mental health. Consequently, omega-3 supplementation could be useful as one of several types of treatments for mild depression or anxiety. However, a lot of clinical studies that have examined omega-3 have focused on groups that are already taking antidepressants.

A higher intake of omega-3 fatty acids may help cure depression by better regulating serotonin or dopamine transmission. Omega-3s can also help to reduce depression by reducing inflammation in the brain. Omega-3 may be one of several nutraceutical products that can help with depression.

SAMe may also help with depression

Depression leads to social withdrawal and a range of social and behavioral changes. These changes negatively impact one's quality of life. Extensive clinical studies have demonstrated the effectiveness of SAMe in treating depression. It acts faster than most commonly used antidepressants and works just as well. SAMe can also improve cognition in patients and reverse the sexual dysfunction caused by antidepressants. It is crucial to consult with your doctor if you are currently taking any medication for anxiety and depression, as it may not be safe to combine these with SAMe or to immediately stop taking one medication and



switch to SAMe. It is also important to avoid St. John's wort, another common nutraceutical product if you are taking SAMe supplements.

Milk thistle May Help with Neurological and Mental Health Conditions

Milk thistle may be able to help with some neurological conditions for a variety of reasons. Milk thistle has been used for a long time as a traditional treatment for neurological conditions such as Alzheimer's and Parkinson's disease. Its antioxidant and anti-inflammatory properties help protect the brain from age-related decline. In animal studies, Silymarin has been proven to prevent oxidative damage to brain cells. These studies also reveal that the herb can reduce the number of amyloid plaques in Alzheimer's test subjects. Amyloid plaques are deposits of amyloid protein that form in between nerve cells. The amyloid plaques are widespread in people who have Alzheimer's. Milk thistle may also be able to help with certain types of mental health conditions, as milk thistle can help to reduce oxidative stress.





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If you have any questions about our services or would like to begin your next project, feel free to contact us!

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Works Cited

Pavuka, Olga. "Listen to "Eating Junk Food Causes Depression"." *DeepH*, 17 January 2020, https://www.deeph.io/eating-junk-food-causes-depression/.

"The Effect of Magnesium Intake on Stroke Incidence: A Systematic Review and Meta-Analysis With Trial Sequential Analysis." NCBI, 7 August 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6692462/.

"Magnesium - Health Professional Fact Sheet." NIH Office of Dietary Supplements, 2 June 2022, https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/.

"Magnesium | The Nutrition Source | Harvard T.H. Chan School of Public Health." Harvard T.H. Chan School of Public Health, https://www.hsph.harvard.edu/nutritionsource/magnesium/.

"Iron and Mechanisms of Emotional Behavior - PMC." NCBI, 2 August 2014, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4253901/.

"Depression." WHO | World Health Organization, 13 September 2021, https://www.who.int/news-room/fact-sheets/detail/depression.

Lee, Herng, and Hsin Chao. "Psychiatric disorders risk in patients with iron deficiency anemia and association with iron supplementation medications: a nationwide database analysis - BMC Psychiatry." *BMC Psychiatry*, 11 May 2020, https://bmcpsychiatry.biomedcentral.com/articles/10.1186/s12888-020-02621-0.

HongChen, Mu. "Association between psychiatric disorders and iron deficiency anemia among children and adolescents: a nationwide population-based study." *NCBI*, 4 June 2013, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3680022/.

Ritchie, Hannah, et al. "Suicide." Our World in Data, https://ourworldindata.org/suicide.

Lopez, Francisco, and Camilo José Cela. "The Emerging Role for Zinc in Depression and Psychosis." *NCBI*, 30 June 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5492454/.

"Brain-Delivery of Zinc-lons as Potential Treatment for Neurological Diseases: Mini Review." *NCBI*, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3220161/.

"Zinc in diet." MedlinePlus, 11 March 2021, https://medlineplus.gov/ency/article/002416.htm.

"Glutamate as a neurotransmitter in the healthy brain." PubMed, https://pubmed.ncbi.nlm.nih.gov/24578174/.

Emans, Jean. "Prevalence of vitamin D deficiency among healthy adolescents." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/15184215/.

Vitamin D and Depression: Where is all the Sunshine?" NCBI, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908269/.

"Effects of Long Term Vitamin D Supplementation." *JAMA Network*, 19 April 2021, https://jamanetwork.com/journals/jama/fullarticle/2768978.

Chandra, Suruchi. "Low-Dose Lithium Supplements for Mental Health." *Suruchi Chandra M. D.*, 16 April 2021, https://www.chandramd.com/blog/low-dose-lithium-supplements.

"Table 1, FDA-approved medications for bipolar disorder - Treatment for Bipolar Disorder in Adults: A Systematic Review." *NCBI*, https://www.ncbi.nlm.nih.gov/sites/books/NBK532193/table/ch2.tab1/.

Casarella, Jennifer. "Tardive Dyskinesia: Definition, Symptoms, Causes, Treatment." *WebMD*, 1 December 2020, https://www.webmd.com/mental-health/tardive-dyskinesia#1.

"Lithium and Chronic Kidney Disease." National Kidney Foundation, https://www.kidney.org/atoz/content/lithium FUCKING stop

Cournoyer, J. "[Rapid response of a disorder to the addition of lithium carbonate: panic resistant to tricyclic antidepressants]." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/3085912/.

"Lithium Suicide Prevention: A Brief Review and Reminder." NCBI, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6380616/. Accessed 28 July 2022

"Can Probiotics Improve Your Mood?" *Johns Hopkins Medicine*, https://www.hopkinsmedicine.org/health/wellness-and-prevention/can-probiotics-improve-your-mood.

"Probiotics may help boost mood and cognitive function." *Harvard Health*, https://www.health.harvard.edu/mind-and-mood/probiotics-may-help-boost-mood-and-cognitive-function.

Wallace, Caroline JK, and Roumen Milev. "The effects of probiotics on depressive symptoms in humans: a systematic review - Annals of General Psychiatry." *Annals of General Psychiatry*, 20 February 2017, https://annals-general-psychiatry.biomedcentral.com/articles/10.1186/s12991-017-0138-2.

Campos, Marcelo. "Probiotics for bipolar disorder mania." *Harvard Health*, 25 June 2018, https://www.health.harvard.edu/blog/probiotics-for-bipolar-disorder-mania-2018062514125.

"The Promising Role of Probiotics in Managing the Altered Gut in Autism Spectrum Disorders." *NCBI*, 10 June 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7312735/.

"Lion's mane mushrooms: Benefits and side effects." *Medical News Today*, 22 October 2018, https://www.medicalnewstoday.com/articles/323400#

"Therapeutic Potential of Hericium erinaceus for Depressive Disorder." NCBI, 25 December 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6982118/.

Ohnuki, Koichiro. "Reduction of depression and anxiety by 4 weeks Hericium erinaceus intake." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/20834180/.

"Hericium erinaceus Improves Recognition Memory and Induces Hippocampal and Cerebellar Neurogenesis in Frail Mice during Aging." NCBI, 27 March 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6521003/.

"Lion's Mane Mushroom, Hericium erinaceus (Bull.: Fr.) Pers. Suppresses H2O2-Induced Oxidative Damage and LPS-Induced Inflammation in HT22 Hippocampal Neurons and BV2 Microglia." *MDPI*, https://www.mdpi.com/2076-3921/8/8/261.

Powell, Alyson. "Can Turmeric Help With Depression?" *WebMD*, 21 July 2020, https://www.webmd.com/depression/turmeric-depression.

Hoffman, Kurt Leroy, and Stefania Schiavone. "Curcumin in Depression: Potential Mechanisms of Action and Current Evidence—A Narrative Review." NCBI, 27 November 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7728608/.

Goel, Ajay. "Can Curcumin Solve Depression?" *Natural Medicine Journal*, 5 November 2014, https://www.naturalmedicinejournal.com/journal/can-curcumin-solve-depression.

Rodriguez, Tori. "Curcumin Shows Promise as Depression Treatment." *Psychiatry Advisor*, 14 December 2015, https://www.psychiatryadvisor.com/home/topics/mood-disorders/curcumin-shows-promise-as-depression-treatment/.

"A comparison of patterns of spontaneous adverse drug reaction reporting with St. John's Wort and fluoxetine during the period 2000–2013." *Wiley*, https://onlinelibrary.wiley.com/doi/abs/10.1111/1440-1681.12424?amp=1.

"St. John's Wort: Benefits, Side Effects & More." *Cleveland Clinic*, 16 May 2017, https://my.clevelandclinic.org/health/articles/9304-st--johns-wort.

"St. John's wort Information." Mount Sinai, https://www.mountsinai.org/health-library/herb/st-johns-wort.

"Relationship between psychotropic drugs and thyroid function: a review." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/9571980/.

Lake, James. "St. John's Wort for Managing Nicotine and Alcohol Withdrawal." *Psychology Today*, 7 November 2019, https://www.psychologytoday.com/us/blog/integrative-mental-health-care/201911/st-johns-wort-managing-nicotine-and-alcohol-withdrawal.

Liebert, Mary Ann. "Effects of l-Theanine on Cognitive Function in Middle-Aged and Older Subjects: A Randomized Placebo-Controlled Study." NCBI, 16 April 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8080935/.

Lerner, Vladimir. "L-theanine relieves positive, activation, and anxiety symptoms in patients with schizophrenia and schizoaffective disorder: an 8-week, randomized, double-blind, placebo-controlled, 2-center study." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/21208586/.

"Anti-inflammatory effects of Ginkgo biloba extract against trimethyltin-induced hippocampal neuronal injury." *PubMed*, 16 September 2017, https://pubmed.ncbi.nlm.nih.gov/28918573/.

Kirtas, Ozlem. "The effect of extract of ginkgo biloba addition to olanzapine on therapeutic effect and antioxidant enzyme levels in patients with schizophrenia." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/16401239/.

"A Prospective, Randomized Double-Blind, Placebo-Controlled Study of Safety and Efficacy of a High-Concentration Full-Spectrum Extract of Ashwagandha Root in Reducing Stress and Anxiety in Adults." *NCBI*, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3573577/.

"What Is Ashwagandha? – Cleveland Clinic." *Cleveland Clinic Health Essentials*, 5 May 2021, https://health.clevelandclinic.org/what-is-ashwagandha/.

"7 Science-Backed Health Benefits Of Ashwagandha – Forbes Health." *Forbes*, 24 June 2022, https://www.forbes.com/health/body/ashwagandha-benefits/.

"Withanolides: Biologically Active Constituents in the Treatment of Alzheimer's Disease." *PubMed*, https://pubmed.ncbi.nlm.nih.gov/26527154/.

Mischoulon, David. "Omega-3 fatty acids for mood disorders." *Harvard Health*, 3 August 2018, https://www.health.harvard.edu/blog/omega-3-fatty-acids-for-mood-disorders-2018080314414.

"S-adenosyl methionine (SAMe) for depression in adults." NCBI, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6457972/.

Surai, Peter F. "Silymarin as a Natural Antioxidant: An Overview of the Current Evidence and Perspectives." *NCBI*, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4665566/.

Surai, Peter F. "Silymarin as a Natural Antioxidant: An Overview of the Current Evidence and Perspectives." *NCBI*, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4665566/.