

## DEPRESSION & MENTAL HEALTH

Mental health is just as important as physical health. Common mental disorders include depression, anxiety and attention deficit/hyperactivity disorder (ADD/ADHD). Nutrition and supplements can support mental health. Studies show that a lack of certain dietary nutrients can contribute to the development of mental disorders.<sup>1</sup>

Depression is one of the most prevalent mental disorders and cause of disability in the United States.<sup>1</sup> According to the National Institute of Health, clinical depression will affect up to 25 percent of women and up to 12 percent of men in their lifetimes.<sup>2</sup> Depression is different from normal, occasional feelings of sadness or low mood in that these feelings are persistent and interfere with normal functioning and daily life.

Depression can occur when certain chemicals in the brain (neurotransmitters)—including serotonin, dopamine and norepinephrine—are out of balance.<sup>3,4</sup> Scientists studying depression have found that these chemicals are involved in regulating mood.<sup>5</sup> Serotonin, together with dopamine, regulates appetite and aggression.<sup>4</sup> Antidepressant drugs are a common conventional treatment for depression. These medications increase brain levels of neurotransmitters associated with mood. Many natural products also seem to affect these neurotransmitters and brain biochemistry.<sup>4</sup>

St. John's wort (*Hypericum perforatum*) has been used for centuries to support healthy mood. Phytochemicals in St. John's wort—including hypericin, hyperforin, adhyperforin and other related compounds—appear to modulate serotonin, dopamine and norepinephrine, making these mood-enhancing neurotransmitters more available to the brain.<sup>6</sup> Studies indicate that St. John's wort works as well as certain antidepressant medications but without some of the common side effects they have.<sup>6</sup> Studies have found that St. John's wort may also be helpful for people who suffer from seasonal affective disorder (SAD), a type of depression that occurs during the winter months.<sup>6,7</sup>

SAMe (S-adenosylmethionine) occurs naturally in the body but its levels decrease with age.<sup>4</sup> SAMe plays a role in many important processes in the body, including immune system function, cell membrane maintenance, and in the synthesis of melatonin, dopamine and serotonin.<sup>8</sup> SAMe has been reported to be beneficial for mood support. Some research indicates that SAMe is as effective as antidepressant medications for mood support but without the side effects associated with the medications, which include loss of libido, insomnia and headaches.<sup>8</sup>

5-HTP (5-hydroxytryptophan) is made in the body from the amino acid tryptophan and is the precursor to serotonin. Supplementation with 5-HTP increases serotonin levels in the brain.<sup>4,9</sup> Serotonin has a positive effect on mood, sleep and anxiety.<sup>9</sup> Scientific evidence suggests that 5-HTP might be comparable to SSRI antidepressant medications for improving mood.<sup>4</sup>

The brain requires a lot of energy and nutrients for optimum health and function.

Nutritional supplements that support cognitive function in general can improve mood, concentration and focus.

Essential fatty acids such as those found in fish oil, flaxseed oil (omega-3 fatty acids) and in evening primrose and borage oils (omega-6 fatty acids) play a key role in normal brain function.<sup>10</sup>

B vitamins are important for healthy nervous system function. Emotional instability, irritability, fatigue, poor memory and insomnia are some of the signs of B vitamin deficiencies. Vitamin B6 is required for the body to make neurotransmitters, including dopamine, serotonin and norepinephrine.<sup>10</sup> Vitamin B12 is vital for maintaining healthy nerve cells.<sup>11</sup> Folic acid (vitamin B9), works with vitamin B12 to produce S-adenosylmethionine (SAME) in the body<sup>11</sup> and plays an important role in mental and emotional health.<sup>12</sup> B vitamins can be depleted by physical or emotional stress. Supplementing with B vitamins can help to combat the negative effects of stress.

Some supplements combine protective herbs, antioxidants and phospholipids that favorably impact age-related memory loss, boost mental acuity and curb free radical damage to the brain. Other supplements provide nutrients that encourage balanced mental activity and support neurotransmitter levels in the brain.

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