# **Mood Support SAP**

#### Science-based formulation for mood balance

Mood disorders such as depression and anxiety have become increasingly common worldwide. Various factors can contribute to mood imbalances, such as food and environmental factors, age, occupation, as well as previous illnesses and surgeries. Although anxiolytic, antidepressant medications and sedatives are available for these ailments in allopathic medicine, these medications are associated with less desirable side effects. A natural therapeutic approach is thus preferred. Several herbs have been used in traditional medicine for the treatment of common disorders such as insomnia and anxiety. Recently these herbs have been studied clinically for their therapeutic efficacy and dose determination.

**Mood Support SAP** is a synergistic formulation of key evidence-based botanicals that can help promote healthy mood balance and relieve sleep disturbances. **Mood Support SAP** can help relieve nervousness and anxiety by eliciting GABA currents in hippocampal neurons. **Mood Support SAP** helps promote sleep quality.

#### **ACTIVE INGREDIENTS**

#### Each non-GMO vegetable capsule contains:

**Other ingredients:** Vegetable magnesium stearate and silicon dioxide in a vegetable capsule composed of vegetable carbohydrate gum and purified water.

Contains no: Gluten, soy, wheat, eggs, dairy, yeast, citrus, preservatives, artificial flavour or colour, starch, or sugar.

#### This product is non-GMO.

Mood Support SAP contains 90 capsules per bottle.

#### **DIRECTIONS FOR USE**

Adults: Take 1 capsule twice daily or as directed by your healthcare practitioner.

**For improved benefits:** Take 1 capsule twice daily of **Mood Support SAP** in combination with 1 softgel of **Lavendar SAP** daily with food. Consult a healthcare practitioner for use beyond 18 weeks. Use for a minimum of 1 week to see beneficial effects.

#### **INDICATIONS**

#### Mood Support SAP:

- · Can help promote healthy mood balance.
- · Can help relieve sleep disturbances associated with mood imbalance.
- · Helps relieve anxiety and has a calming and sedative effect.
- · Helps alleviate menopausal symptoms and improve glucose tolerance.
- · Can help alleviate anxiety induced symptoms such as heart palpitations.

#### **CAUTIONS AND WARNINGS**

Consult a healthcare practitioner prior to use if you are pregnant or breast-feeding. Consult a healthcare practitioner if symptoms persist or worsen. Consumption with alcohol, other medications, or natural health products with sedative properties is not recommended. Consult a healthcare practitioner prior to use if you are taking antianxiety medications, seizure medications, antihistamines, bronchodilators, muscle relaxants, and/or opiates. Sleep Aid: Consult a healthcare practitioner if sleeplessness persists continuously for more than 3 weeks (chronic insomnia).

Contraindications: Avoid prolonged exposure to sunlight, ultraviolet light (UV), or UV therapy. Do not use if you are taking anticancer medications, blood thinners, antidepressant medications [e.g. selective serotonin reuptake inhibitors (SSRI)], anti-HIV agents, cardiovascular medications, immunosuppressants, and/or contraceptive medications.

Known adverse reactions: Hypersensitivity, such as an allergy, has been known to occur; in which case, discontinue use. Some people may experience drowsiness, mild gastrointestinal disturbances, nausea, restlessness and/or headaches. Exercise caution if operating heavy machinery, driving a motor vehicle, or involved in activities requiring mental alertness within 2 hours of consumption.

#### **PURITY, CLEANLINESS, AND STABILITY**

All ingredients listed for each Mood Support SAP lot number have been tested by an ISO 17025 accredited third-party laboratory for identity, potency, and purity.



Scientific Advisory Panel (SAP): adding nutraceutical research to achieve optimum health



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### **Mood Support SAP**

## Research Monograph

According to the World Health Organization, depression is a common ailment affecting people of all ages worldwide, with more than 300 million people suffering from depression in 2017.[1] Between 1990 and 2013, an almost 50% increase in number of people suffering from depression and anxiety has been observed, and 30% of the global non-fatal disease burden is attributed to mental disorders.[2] Although cognitive behavioural therapy is used in the treatment of mental disorders, oral therapy mostly includes chemical depressants, hypnotics and anxiolytics. These treatments however are accompanied with other side effects and complications.[3] Therefore, nutraceutical plant extracts have been gaining more attention in the treatment and management of depression, mood imbalances, anxiety and sleep disturbances.

#### **NUTRACEUTICALS IN THE MANAGEMENT OF** STRESS AND INSOMNIA

#### St John's Wort (Hypericum perforatum)

Several studies have elucidated the impact of St John's Wort (Hypericum perforatum) on mood improvement and depression. A prospective non-interventional study in 1300 patients showed administration of 600 mg of St John's wort once daily for 8-10 weeks reduced the depression symptoms by 50% on the Hamilton depression scale.[4] Similar results were observed in an observational study with 1541 participants who showed reduced symptoms of depression and showed improved clinical assessments after 12 weeks.[5] Clinical trials have further confirmed these findings. In an 8-week double-blind, placebo controlled randomized trial with 200 patients suffering from atypical depression, St John's wort extract of 600 mg daily showed significant improvement in the depression rating scale compared to placebo treatment.[6] Antidepressive treatment for reactivity to stress in patients with irritable bowel syndrome with 300 mg St John's wort extract thrice a day for 8 weeks showed significant improvement in stress reactivity of the autonomic nervous system, observed in 30 women diagnosed with irritable bowel syndrome.[7] St John's wort extract may also have other benefits such as alleviation of menopausal symptoms and improvement of glucose tolerance.[8,9]

Recent studies have used a hydroalcoholic extract of St John's wort, which has shown efficacy with depression symptoms. In a double-blind, randomized, placebo controlled trial, 186 patients were given 300 mg of hydroalcoholic St John's wort extract thrice a day for 6 weeks. Patients given the treatment showed lower scores of depression and depression related symptoms compared to the placebo.<sup>[10]</sup> Another study looked at a stabilized dry St John's wort extract with a drug-to-extract ratio of 3-7:1. The extract showed significant lowering of depression scores compared to administration of the antidepressant paroxetine, with a dose of 300 mg thrice a day for 6 weeks, in a study conducted with 64 participants.[11]

#### Passionflower (Passiflora incarnata)

The benefits of passionflower extract as an anxiolytic are well documented, and recent clinical trials have added further evidence to these claims. Studies suggest Passionflower extracts may elicit GABA currents in hippocampal neurons, and show anxiogenic and anticonvulsant effects.[12] Passionflower extract has been most recently tested for anxiety management prior to administration of spinal anesthesia. In a trial with 60 participants scheduled for spinal anesthesia, oral administration of 500 mg/5ml aqueous Passionflower extract significantly reduced preoperative anxiety compared to placebo.[13] The therapeutic efficacy of passionflower extract is comparable to that of oxazepam, a well known benzodiazepine anxiolytic. In a double-blind randomized trial with 36 patients, administration of 45 drops per day of passionflower extract for 4 weeks showed the same efficacy as 30 mg/day oxazepam in management of anxiety, and in fact did not show side effects such as impaired job performance which were observed with oxazepam. Comparable to oxazepam, Passionflower extract administration showed a reduction in the Hamilton Anxiety Rating scale, which also includes assessment of cardiovascular symptoms such as tachycardia and palpitations [14] Recent evidence suggests passionflower extract may play a supportive role in detoxification in opiate withdrawal. Supplementation with 60 drops passionflower extract daily in addition to clonidine for 14 days showed better management of mental symptoms of opiate withdrawal compared to clonidine alone, in 65 opiate addict participants. [15]

In addition to alleviating anxiety and restoring mood balance, studies suggest Passionflower extract may ameliorate sleep quality. A double-blind, placebo-controlled trial in 41 participants consuming passionflower tea showed a significant improvement in sleep quality [16].

#### Valerian root (Valeriana officinalis)

Anxiolytic and sedative effects of valerian have been studied for a long time,

and recent studies focus on its ability to modulate cortical excitatory circuits in humans. A double-blind, randomized, crossover, placebo controlled study with 15 participants showed consumption of 900 mg of valerenic acid (0.8%) significantly reduced intracortical excitation without any changes in other aspects of motor cortex excitability.[17] Valerenic acid in particular has been hypothesized to be the primary contributor in the anxiolytic effect of Valerian, where affinity of valerian extract to benzodiazepine binding site and overall anxiolytic activity was diminished with the addition of acetoxy valerenic acid.

Although valerenic acid has been studied as the main beneficial constituent of valerian root, other constituents of the valerian root such as sesquiterpenes are known to have sedative effects as well. A double blind study looking at the effect of valerian preparation primarily containing sesquiterpenes on sleep reported 44% participants as having perfect sleep, and 89% having improved sleep from the preparation, and no side effects were reported.[19] A number of other studies elucidate the benefits of whole valerian root. Consumption of 1 capsule in the first week and 3 capsules in the second week containing 470 mg valerian root significantly improved sleep in 23 participants suffering from insomnia  $^{[20]}$  Similar results were seen in a group of 18 participants who consumed 450 mg and 900 mg valerian root weekly for 4 weeks, where a dose dependent effect was observed, and valerian root appeared to reduce perceived sleep latency and wake time after sleep onset.[21] Interestingly, this sedative effect of valerian root does not appear to compromise alertness and concentration. Consumption of 600 mg valerian extract on two separate occasions in two weeks did not affect the reaction time, alertness and concentration in participants the following morning, in a trial conducted with 102 participants.<sup>[22]</sup> In fact, 1060 mg valerian root extract daily for 8 weeks improved post-operative cognitive status of 61 patients undergoing coronary artery bypass graft surgery.<sup>[23]</sup>

#### SYNERGISM FOR OPTIMAL EFFICACY

Research evidence suggests that supplementing a combination of key herbs such as St John's Wort extract, passionflower extract, valerian root extract and valerian root can promote healthy mood balance, minimize sleep disturbances and regulate sleep.[3]

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