



# Calming Support

- Concentrated Blend of Traditional Botanicals for Stress Support
- Promotes a State of Calmness
- Helps Induce Relaxation

## MOOD SUPPORT

Calming Support is a synergistic blend of botanicals historically used to support a sense of tranquility by reducing overstimulation and scattered thoughts. Formulated for ease and compliance, Calming Support includes a powerful blend of standardized botanicals, including 200 mg of Kava Rhizome extract, 50 mg of chamomile flower extract, 50 mg of passionflower extract, and 50 mg of valerian root extract, as well as 50 mg of hops strobile extract.

### Overview

The ingredients in Calming Support work in synergy to induce relaxation by increasing gamma-aminobutyric acid (GABA) activity in the central nervous system (CNS). GABA is primarily an inhibitory (calming) neurotransmitter in the CNS that promotes a sense of tranquility and counteracts the effects of stress. While many traditional anxiety solutions that exert GABA agonist effects may cause dependency over time, the ingredients in Calming Support are non-habit-forming.

### Kava Rhizome Extract†

Kava (*Piper methysticum*) is a perennial shrub native to the South Pacific. Kava extracts have been traditionally prepared as drinks by combining the rhizomes (underground stems) with water to address a number of health issues including stress, irritability and restlessness, muscular spasms and menstrual discomfort.<sup>1</sup> The therapeutic effect of kava is based on the activity of the kavalactones.<sup>2</sup> Kavalactones exert a calming effect by increasing the activity of GABA while simultaneously reducing excitatory neurotransmitter release. This results in a feeling of relaxation without producing negative effects on cognition.<sup>3</sup> Several reviews and meta-analyses have revealed statistically significant

evidence for the use of Kava Rhizome extract for fighting stress and restlessness when compared to placebo.<sup>4</sup>

### Valerian Root Extract†

Valerian (*Valeriana officinalis*) is well-known for its calming and sleep-supporting properties. More than 150 constituents have been identified in valerian, many of which act synergistically to produce its stress-buffering effects.<sup>5</sup> Compounds in valerian extract have been found to modulate GABA-A receptors producing a dose-dependent release of GABA.<sup>6,7</sup> Valerian also decreases the enzyme-induced breakdown of GABA in the brain.<sup>8</sup> In a double-blind study of 48 adults examining the effects of social stress, valerian was shown to reduce the sensation of stress and agitation without causing sedation.<sup>9</sup>

### Passionflower Extract†

*Passiflora incarnata*, also called the maypop, has long been used in herbal remedies for its calming effects. Numerous flavonoid components function as active ingredients,<sup>10</sup> most by binding to the GABA receptor.<sup>11,12</sup> A randomized, placebo-controlled trial including 60 people aged 25-55 scheduled for spinal anesthesia, showed those given passionflower experienced a significantly greater sense of calm before being administered anesthesia.<sup>13</sup>

### Chamomile Flower Extract†

Used as a natural calming remedy for thousands of years, bioactive compounds in chamomile have the ability to bind to GABA receptors, modulate monoamine neurotransmission and also display neuroendocrine effects.<sup>14</sup> In vitro animal studies of German chamomile and hops showed significant inhibition of



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glutamic acid decarboxylase (GAD) activity, exerting a calming effect.<sup>15</sup> A randomized, double-blind, placebo-controlled study including 57 participants given either 220 mg chamomile or placebo for symptoms of low mood, observed significantly better scores related to a sense of calmness and relaxation in those receiving chamomile.<sup>16</sup>

### Hops Strobile Extract

The hops plant, *Humulus lupulus*, is a perennial climbing vine that has been used for centuries for its relaxing properties, among other health benefits. Only the female hops, which produce flowers known as strobiles, are used for medicinal purposes. The active ingredients in hops include a volatile oil, valerianic acid, tannins and flavonoids. A full understanding of the biochemical mechanism of hops has yet to be achieved. However, preliminary research points to involvement of the GABA-A receptor.<sup>17</sup>

### Directions

1 capsule per day or as recommended by your health care professional.

### Does Not Contain

Gluten, yeast, artificial colors and flavors.

### Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts <sup>v4</sup>		
Serving Size 1 Capsule		
Servings Per Container 60		
1 capsule contains	Amount Per Serving	% Daily Value
Kava Rhizome Extract (Standardized to contain 30% Kavalactones)	200 mg	*
Chamomile Flower Extract (Standardized to contain 1% Apigenin-7-Glucoside)	50 mg	*
Hops Strobile Extract	50 mg	*
Passionflower Extract (Aerial Portion) (Standardized to contain 3.5% Flavonoids)	50 mg	*
Valerian Root Extract (Standardized to contain 0.8% Valerenic Acids)	50 mg	*
* Daily Value not established		

### References

1. Singh YN. Kava: an overview. *J Ethnopharmacol.* 1992;37(1):13–45.
2. Mathews JM, Etheridge AS, Valentine JL, et al. Pharmacokinetics and disposition of the kavalactone kawain: interaction with kava extract and kavalactones in vivo and in vitro. *Drug Metab Dispos.* 2005;33:1555–63.
3. Savage KM, Strough CK, Byrne GJ, et al. Kava for the treatment of generalized anxiety disorder (K-GAD): study protocol for a randomized trial. *Trials.* 2015; 16:493.
4. Pittler MH, Ernst E. Efficacy of kava extract for treating anxiety: systematic review and meta-analysis. *J Clin Psychopharmacol.* 2000; 20: 84.89.
5. Houghton PJ. The scientific basis for the reputed activity of valerian. *J Pharm Pharmacol.* 1999;51:505-512.
6. Neuhaus W, Trauner G, Gruber D. Transport of GABAA receptor modulator and its derivatives from *Valeriana officinalis* L.s.l. across an in vitro cell culture model of the blood-brain barrier. *Planta Med.* 2008 Sep;74 (11): 1338-44.
7. Ortiz JG, Nieves-Natal J, Chavez P. Effects of *Valeriana officinalis* extracts on [3H] flunitrazepam binding, synaptosomal [3H] GABA uptake, and hippocampal [3H] GABA release. *Neurochem Res.* 1999; 24:1373-1378.
8. Reidel E, Hansel R, Ehrke G. Inhibition of gamma-aminobutyric acid catabolism by valerianic acid derivatives. *Planta Med.* 1982; 46:219-220. [Article in German]
9. Kohnen R, Oswald WD. The effects of valerian, propranolol, and their combination on activation, performance, and mood of healthy volunteers under social stress conditions. *Pharmacopsychiatry.* 1988;21:447-448.
10. Dhawan K, Kumar S, Sharma A. Anti-anxiety studies on extracts of *Passiflora incarnata Linneaus*. *J Ethnopharmacol.* 2001 Dec;78(2-3):165-70.
11. Salgueiro JB, Ardenghi P, et al. Anxiolytic natural and synthetic flavonoid ligands of the central benzodiazepine receptor have no effect on memory tasks in rats. *Pharmacol Biochem Behav.* 1997 Dec;58(4):887-91.
12. Paladini AC, Marder M, et al. Flavonoids and the central nervous system: from forgotten factors to potent anxiolytic compounds. *J Pharm Pharmacol.* 1999 May;51(5):519-26.

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13. Aslanargun P, Cuvas O, Dikmen B, Aslan E, Yuksel MU. *Passiflora incarnata* Linneaus as an anxiolytic before spinal anesthesia. J Anesth. 2012 Feb;26(1):39-44. Epub 2011 Nov 3.
14. Sarris J, Panossian A, Schweitzer I, Stough C, Scholey A. Herbal medicine for depression, anxiety and insomnia: a review of psychopharmacology and clinical evidence. Eur Neuropsychopharmacol. 2011 Dec;21(12):841-60.
15. Awad R, Levac D, Cybulska P, Merali Z, Trudeau VL, Arnason JT. Effects of traditionally used anxiolytic botanicals on enzymes of the gamma-aminobutyric acid (GABA) system. Can J Physiol Pharmacol. 2007 Sep;85(9):933-42.
16. Amsterdam JD1, Shults J, Soeller I, Mao JJ, Rockwell K, Newberg AB. Chamomile (*Matricaria recutita*) may provide antidepressant activity in anxious, depressed humans: an exploratory study. Altern Ther Health Med. 2012 Sep-Oct;18(5):44-9.
17. Zanolli P, Zavatti M, Rivasi M, et al. Evidence that the beta-acids fraction of hops reduces central GABAergic neurotransmission. J Ethnopharmacol. 2007;109(1):87-92.