



Stress-J

Stock #1084-1 (100 capsules)
Stock #3163-3 (2 fl. oz.)

Stress-J contains a combination of herbs that promote relaxation and reduce mild anxiety to help relieve nervousness, restlessness and nervous tension. Stress-J also provides herbs that have been shown to relax intestinal cramping and soothe inflammation of the gastrointestinal tract. Stress-J contains:

Passion flower (*Passiflora incarnata*) is commonly used to promote relaxation to relieve nervousness, tenseness, restlessness, irritability and insomnia, and to treat anxiety disorders, seizures and morphine addiction. Research has confirmed the anxiolytic (anti-anxiety) and central nervous system (CNS) sedative properties of passion flower. Animal studies also suggest that passion flower may be useful for treating nicotine addiction. In addition, passion flower has demonstrated some benzodiazepine receptor agonist activity and thus, may be helpful in the treatment of benzodiazepine (i.e. Xanax, Valium, Ativan, etc.)

withdrawal symptoms. Chrysin, one of the herb's active constituents, has been shown to provide GABA(A)-benzodiazepine receptor activity—this action is believed to be at least one of the mechanisms by which passion flower decreases anxiety. Furthermore, passion flower has been shown to inhibit the growth of *Helicobacter pylori* in vitro—*H. pylori* is the primary causative factor for the development of gastritis (inflammation of the stomach lining) and peptic ulcer disease and is also associated with chronic gastritis, gastric carcinoma (stomach cancer) and primary gastric B-cell lymphoma (a rare type of stomach cancer). Incidentally, passion flower is a rich source of magnesium and is approved by the German Commission E for the treatment of nervous restlessness. However, passion flower is not recommended for pregnant or nursing women and excessive doses may potentiate MAOI (monoamine oxidase inhibitor) therapy.¹⁻¹⁵

Fennel seeds (*Foeniculum vulgare*) are approved by the German Commission E for digestive disorders such as dyspepsia (indigestion) and flatulence (intestinal gas), as well as mild spastic, or cramping, gastrointestinal complaints such as spastic colon, also known as irritable bowel syndrome. Fennel seeds contain a volatile oil that reduces intestinal spasms and enhances the passage of gas through the small intestine to relieve flatulence, as well as infantile colic. Fennel seeds have also been shown to be a safe and effective herbal remedy for primary dysmenorrhea (painful menstruation). In addition, animal research has confirmed that fennel seeds exhibit hypotensive (blood pressure lowering) activity by means of their diuretic and natriuretic (causing the excretion of an excessively large amount of sodium in the urine) properties. Furthermore, fennel seeds have been shown to inhibit the growth of *Helicobacter pylori* in vitro—*H. pylori* is the primary causative factor for the development of gastritis (inflammation of the stomach lining) and peptic ulcer disease and is also associated with chronic gastritis, gastric carcinoma (stomach cancer) and primary gastric B-cell lymphoma (a rare type of cancer in the stomach).^{1,3,15-23}

Feverfew (*Tanacetum parthenium*) Feverfew has been used throughout history for a variety of aches and pains, menstrual disorders, and even nervousness and hysteria. Feverfew has demonstrated anti-inflammatory activity in both in vitro and animal studies, supporting the herb's historical use for arthritis and rheumatic disorders—any of several conditions of the muscles, tendons, joints, bones, or nerves, characterized by discomfort and disability. Recent research also suggests that feverfew induces mild sedation as a result of its affinity to the GABA(A)-benzodiazepine receptor in the brain—this may be one of the mechanisms by which feverfew helps promote relaxation. However, feverfew is best known for its use in the prevention and treatment of migraine headaches. Feverfew has been shown to be effective for the prevention of migraine headaches in at least two clinical trials, as evidenced by a reduction in migraine attacks and symptoms associated with migraines such as nausea and vomiting. Furthermore, some studies investigating the herb's effects on migraines indicate that feverfew may also lower blood pressure. Feverfew is not recommended during pregnancy.^{1,4,18,24-32}

Hops (*Humulus lupulus*) has long been used in traditional European medicine as a mild sedative and is approved for use by the German Commission E for the treatment of anxiety and restlessness. Hops has also been used to relieve insomnia and to help wean patients off prescription sedatives. Previous research has confirmed the sedative effect of hops, while more recent animal studies have shown that hops also exerts an antidepressant activity. In addition, a standardized hops extract was shown to selectively inhibit COX-2—an enzyme responsible for the formation of hormone-like compounds called prostaglandins, which cause inflammation and pain—indicating its potential for use in inflammatory disorders and/or for inflammatory pain. Hops is not recommended for use with prescription sleep-aids, central nervous system (CNS) depressants or antipsychotic drugs, as this may cause additive effects. Due to the herb's potential estrogenic activity, hops is contraindicated during pregnancy and for those with estrogen-dependent tumors such as breast, cervical or uterine cancer.^{1,2,3,17,19,33-37}

Chamomile (*Matricaria recutita*) may be one of the most widely used herbal medicines in the world, especially in

children as a mild sedative and for the treatment of indigestion, diarrhea and colic. Chamomile is also used for general stress, anxiety, restlessness and mild sleep disorders. Apigenin, an important flavonoid found in chamomile, appears to be responsible for the herb's anxiolytic (anti-anxiety) activity, especially given that it demonstrates an affinity to the same receptor sites that benzodiazepine drugs such as Valium do. In addition, a chamomile extract was found to significantly decrease sleep latency (the time it takes to fall asleep) in sleep-disturbed rats. Researchers have also confirmed that chamomile provides potent anti-inflammatory activity, as well as antispasmodic (muscle-relaxing), analgesic (pain-relieving), antimicrobial effects and wound-healing effects. Such data confirm chamomile's long history of use for gastrointestinal disorders. In fact, chamomile is approved by the German Commission E for the treatment of stomach disorders such as gastrointestinal cramps and spasms and for inflammatory diseases of the gastrointestinal tract such as colitis (inflammation of the colon), gastritis (inflammation of the stomach lining), and Crohn's disease.^{1,3,4,15,18,38-42}

Marshmallow (*Althaea officinalis*) is well-known for its ability to soothe inflamed mucous membranes and facilitate healing, due in large part to its mucilage content. Mucilage coats the internal mucosa, protecting it from local irritation and inflammation. According to the German Commission E, marshmallow also stimulates phagocytosis—the ingestion of bacteria or other foreign bodies by phagocytes (a type of white blood cell). Such anti-inflammatory, anti-irritant and immune-stimulant properties support the use of mucilages, like marshmallow, for the treatment of gastrointestinal tract inflammation and irritation. Furthermore, new research has shown that marshmallow affects the microbial metabolism of *Escherichia coli*, thus demonstrating antibacterial activity against this common cause of food-borne illness and other gastrointestinal infections.^{1,3,4,19,43-45}

Stress-J liquid extract contains the above herbal ingredients in an alcohol-free vegetable glycerin base.

References:

- ¹Fetrow PharmD, C. & Avila Pharm D, J. *Professional's Handbook of Complementary & Alternative Medicines*. Springhouse, PA: Springhouse Corp., 1999.
- ²Miller PharmD, L. & Murray PhD, W. *Herbal Medicinals: A Clinician's Guide*. Binghamton, NY: Pharmaceutical Products Press, 1998.
- ³*Herbal Medicine: Expanded Commission E Monographs*. Integrative Medicine Communications, 2000.
- ⁴Newall, C., et. al. *Herbal Medicines*. London, England: The Pharmaceutical Press, 1996.
- ⁵Krenn, L. [Passion Flower (*Passiflora incarnata* L.)—a reliable herbal sedative]. *Wiener Medizinische Wochenschrift*, 2002, 152(15-16):404-406.
- ⁶Werneke, U., et. al. "Complementary medicines in psychiatry: review of effectiveness and safety." *The British Journal of Psychiatry*, 2006, 188:109-121.
- ⁷Sarris, J. "Herbal medicines in the treatment of psychiatric disorders: a systematic review." *Phytotherapy Research*; 2007, 21(8):703-716.
- ⁸Nassiri-Asl, M., et. al. "Anticonvulsant effects of aerial parts of *Passiflora incarnata* extract in mice: involvement of benzodiazepine and opioid receptors." *BMC Complementary and Alternative Medicine*; 2007, 7:26.
- ⁹Dhawan, K. "Drug/substance reversal effects of a novel tri-substituted benzoflavone moiety (BZF) isolated from *Passiflora incarnata* Linn.—a brief perspective." *Addiction Biology*; 2003, 8(4):379-386.
- ¹⁰Carlini, E.A. "Plants and the central nervous system." *Pharmacology, Biochemistry and Behavior*; 2003, 75(3):501-512.
- ¹¹Dhawan, K., et. al. "Passiflora: a review update." *Journal of Ethnopharmacology*; 2004, 94(1):1-23.
- ¹²Leigh, E. "Phytotherapy Aids in Benzodiazepine Withdrawal." *HerbalGram*; 2000, 42:19.
- ¹³Dhawan, K., et. al. "Nicotine reversal effects of the benzoflavone moiety from *Passiflora incarnata* Linneaus in mice." *Addiction Biology*; 2002, 7(4):435-441.
- ¹⁴Brown, E., et. al. "Evaluation of the anxiolytic effects of chrysin, a *Passiflora incarnata* extract, in the laboratory rat." *AANA Journal*; 2007, 75(5):333-337.
- ¹⁵Mahady, G.B., et. al. "In vitro susceptibility of *Helicobacter pylori* to botanical extracts used traditionally for the treatment of gastrointestinal disorders." *Phytotherapy Research*; 2005, 19(11):988-991.
- ¹⁶Bensky, D. & Gamble, A. *Chinese Herbal Medicine Materia Medica, Revised Ed.* Seattle, WA: Eastland, 2003.
- ¹⁷*PDR for Herbal Medicines, 2nd Ed.* Montvale, NJ: Medical Economics Company, 2000.
- ¹⁸Presser PharmD, A. *Pharmacist's Guide to Medicinal Herbs*. Petaluma, CA: Smart Publications, 2000.
- ¹⁹Mills, S. & Bone, K. *Principles and Practice of Phytotherapy*. London: Churchill Livingstone, 2000.
- ²⁰Alexandrovich, I., et. al. "The effect of fennel (*Foeniculum Vulgare*) seed oil emulsion in infantile colic: a randomized, placebo-controlled study." *Alternative Therapies in Health and Medicine*; 2003, 9(4):58-61.
- ²¹Namavar Jahromi, B, et. al. "Comparison of fennel and mefenamic acid for the treatment of primary dysmenorrhea." *International Journal of Gynaecology and Obstetrics*; 2003, 80(2):153-157.
- ²²El Bardai, S., et. al. "Pharmacological evidence of hypotensive activity of *Marrubium vulgare* and *Foeniculum vulgare* in spontaneously hypertensive rat." *Clinical and Experimental Hypertension*; 2001, 23(4):329-343.
- ²³Wright, C.I., et. al. "Herbal medicines as diuretics: a review of the scientific evidence." *Journal of Ethnopharmacology*; 2007, 114(1):1-31.
- ²⁴Kwok, B.H., et. al "The anti-inflammatory natural product parthenolide from the medicinal herb Feverfew directly binds to and inhibits I κ B kinase." *Chemistry & Biology*; 2001, 8(8):759-766.
- ²⁵Jain, N.K., Kulkarni, S.K. "Antinociceptive and anti-inflammatory effects of *Tanacetum parthenium* L. extract in mice and rats."

- Journal of Ethnopharmacology*; 1999, 68(1-3):251-259.
- ²⁶Harrison, A.P., Bartels, E.M. "A Modern Appraisal of Ancient Etruscan Herbal Practices." *American Journal of Pharmacology and Toxicology*; 2006, (2):26-29.
- ²⁷Setty, A.R., Sigal, L.H. "Herbal medications commonly used in the practice of rheumatology: mechanisms of action, efficacy, and side effects." *Seminars in Arthritis and Rheumatism*; 2005 Jun;34(6):773-784.
- ²⁸Jäger, A.K., et. al. "*Journal of Ethnopharmacology*; 2006, 105(1-2):294-300.
- ²⁹Clinton-Helms, J.M. "Substance-related Anxiety Disorder and how Amino Acids and Herbs may be utilized in treatment." *Journal of Addictive Disorders*; 2004. <<http://www.breining.edu/jad04jc.pdf>>. Accessed December 2007.
- ³⁰Pittler, M.H., Ernst, E. "Feverfew for preventing migraine." *Cochrane Database of Systematic Reviews*; 2004, (1):CD002286.
- ³¹Ernst, E., Pittler, M.H. "The efficacy and safety of feverfew (*Tanacetum parthenium* L.): an update of a systematic review." *Public Health Nutrition*; 2000, 3(4A):509-514.
- ³²Yao, M., et. al. "A reproductive screening test of feverfew: is a full reproductive study warranted?" *Reproductive Toxicology*; 2006, 22(4):688-693.
- ³³Butterweck, V., et. al. "Hypothermic effects of hops are antagonized with the competitive melatonin receptor antagonist luzindole in mice." *The Journal of Pharmacy and Pharmacology*; 2007, 59(4):549-552.
- ³⁴Schiller, H., et. al. "Sedating effects of *Humulus lupulus* L. extracts." *Phytomedicine*; 2006, 13(8):535-541.
- ³⁵Zanolli, P., et. al. "New insight in the neuropharmacological activity of *Humulus lupulus* L." *Journal of Ethnopharmacology*; 2005, 102(1):102-106.
- ³⁶Hougee, S., et. al. "Selective inhibition of COX-2 by a standardized CO2 extract of *Humulus lupulus* in vitro and its activity in a mouse model of zymosan-induced arthritis." *Planta Medica*; 2006, 72(3):228-233.
- ³⁷Lee, J.C., et. al. "Humulone inhibits phorbol ester-induced COX-2 expression in mouse skin by blocking activation of NF-kappaB and AP-1: I kappa B kinase and c-Jun-N-terminal kinase as respective potential upstream targets." *Carcinogenesis*; 2007, 28(7):1491-1498.
- ³⁸Gardiner, P. "Complementary, holistic, and integrative medicine: chamomile." *Pediatrics in Review*; 2007, 28(4):e16-18.
- ³⁹Viola, H., et. al. "Apigenin, a component of *Matricaria recutita* flowers, is a central benzodiazepine receptors-ligand with anxiolytic effects." *Planta Medica*; 1995, 61(3):213-216.
- ⁴⁰Shinomiya, K., et. al. "Hypnotic activities of chamomile and passiflora extracts in sleep-disturbed rats." *Biological & Pharmaceutical Bulletin*; 2005, 28(5):808-810.
- ⁴¹McKay, D.L. & Blumberg, J.B. "A review of the bioactivity and potential health benefits of chamomile tea (*Matricaria recutita* L.)." *Phytotherapy Research*; 2006; 20(7):519-530.
- ⁴²Nayak, B.S., et. al. "Wound healing activity of *Matricaria recutita* L. extract." *Journal of Wound Care*; 2007; 16(7):298-302.
- ⁴³Lininger Jr, S., et. al. *The Natural Pharmacy, 2nd Ed.* Rocklin, CA: Prima Publishing, 1999.
- ⁴⁴Wurges, J. "Marsh Mallow." *Gale Encyclopedia of Alternative Medicine*; 2001. <http://www.findarticles.com/p/articles/mi_g2603/is_0005/ai_2603000509>. Accessed August 2005.
- ⁴⁵Watt, K., et. al. "The detection of antibacterial actions of whole herb tinctures using luminescent *Escherichia coli*." *Phytotherapy Research*; 2007, 21(12):1193-1199.