



References

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The Science Behind our Products

Passion flower (*Passiflora incarnate*)

Several species of passion flower have been used widely as a folk medicine because of its sedative and tranquilizer activities.¹ Amongst the 500 species, passion flower is the one which has extensive clinical applications throughout the world. Animal research has demonstrated its anxiolytic-like and sedative effects.^{2,3} A double-blind randomized trial compared the efficacy of passion flower extract with oxazepam on 36 outpatients suffering from generalized anxiety disorders. The results found that passion flower was comparable to 30 mg of oxazepam, minus the side effects.⁴ Scientific evidence has found a strong association between the presence of an anxiety disorder and migraine headaches.^{5,6} A recent randomized trial found that administering passion flower orally before surgery reduced preoperative anxiety in patients without causing sedation.⁷

Feverfew (*Tanacetum parthenium*)

During the last few decades, feverfew has been used for migraine prophylaxis.⁸⁻¹⁰ In fact, a more recent randomized, double-blind, placebo-controlled, multi-center, parallel-group design using feverfew suggested the herb may indeed reduce the frequency of migraine attacks.¹¹ Parthenolide has been thought to be the most active chemical component in feverfew and has been shown to interfere with both contractile and relaxant mechanisms of blood vessels.¹² However, although several mechanisms have been suggested to explain the therapeutic effect of feverfew in migraine, the mechanism of action of feverfew remains mostly unknown.

Milk Thistle (*Silybum marianum*)

Milk thistle has been used for centuries as an herbal medicine for the treatment of liver disorders. It contains silymarin, which is composed of the flavanolignans silybin, silydianin, and silychristine. Silymarin is a powerful antioxidant and has been shown to inhibit lipid peroxidation.^{13,14} It has been suggested that oxidative stress caused by free radicals and disturbances of lipid peroxidation processes may play a role in migraine pathogenesis.^{15,16} Silymarin also affects liver detoxification via inhibition of Phase I detoxification, enhances glucuronidation, and protects against depletion of glutathione.¹⁷⁻¹⁹



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