Dynamic Chiropractic

HERBS/ TEAS & HOMEOPATHY

Natural Supplements for Migraine Prevention: Butterbur and Feverfew

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Migraine headaches afflict one in 19 adults, of which 75 percent are women. Migraines also occur in an estimated 3 percent to 7 percent of children. Overall, one in four households has a resident who is a migraine sufferer. Migraines are most often described as one-sided, severe, pulsating headache pain that lasts from four to 72 hours. Other symptoms that often occur during a migraine attack include nausea, vomiting and extreme sensitivity to light and noise.

Unfortunately, many drugs used to prevent and treat migraines can produce significant side effects, addiction and dependency. As a result, many migraine sufferers seek help from more natural, nontoxic solutions, such as chiropractic care, acupuncture, dietary modifications and nutritional supplements. In recent years, human clinical trials have shown that supplementation with specific dosages of the herbs butterbur and feverfew can reduce the frequency of migraine attacks by at least 50 percent in migraine sufferers.

Butterbur

Butterbur is an herb that contains active constituents (petasin and isopetasin) that block key steps in the production of migraine headaches. These active constituents inhibit the synthesis of inflammatory chemicals such as leukotrienes and prostaglandin E2, which can trigger migraines. Petasin and isopetasin have an antispasmodic effect on vascular walls and appear to have an affinity for cerebral blood vessels. Butterbur extract also appears to act as a natural beta blocker, stabilizing normal flow of blood to the brain. This action helps control blood pressure and prevents spasm of blood vessels, which are also key processes in preventing the onset and progression of migraines.

In a double-blind study published in *Neurology*, researchers gave 202 migraine sufferers butterbur extract or a placebo for a three-month period.[1] After 12 weeks, the butterbur-supplemented group reported approximately 50 percent fewer migraines than usual. In a 12-week, double-blind study published in *Headache*, 58 migraine sufferers were given butterbur extract or a placebo twice daily. The butterbur group had 50 percent fewer migraines than usual, while the placebo group's migraines declined by only 10 percent.[2]

Butterbur supplementation also was shown to lower the incidence of migraines in children and adolescents by 77 percent, according to a four-month trial published in *Headache*.[3] The effective daily dosage for adults is reported to be 75 mg (standardized to minimum 15 percent sesquiterpenes as petasines), twice per day. A single dosage of 75 mg per day can be used for children six years and older, as well as teenagers.

Feverfew

Feverfew, a member of the sunflower family, has been used for centuries in European folk medicine as a remedy for headaches and other conditions. The migraine-relieving activity of feverfew is believed to be due to parthenolide, an active compound that helps relieve smooth muscle spasms. In particular, it helps prevent the constriction of blood vessels in the brain (one of the leading causes of migraine headaches). Like butterbur, parthenolide also inhibits the production of prostaglandin hormones that cause inflammation of blood vessels. Feverfew inhibits excessive aggregating of platelets, which also normalizes blood flow - an effect credited for reducing migraine frequency and severity.

Recent clinical studies published in *Clinical Drug Investigations* and *Headache* showed that supplements containing a standardized extract of feverfew reduced migraine attacks by 50 percent in chronic migraine sufferers.[4-5] To be most effective, feverfew should be standardized to contain the maximum amount of parthenolide, which has been shown to account for the herb's anti-inflammatory and other medicinal properties. As such, I recommend supplementation with feverfew at 325 mg (standardized grade of parthenolide concentration of 0.7 percent), twice daily,

which is the highest yield presently available in the marketplace.

As an aside, the parthenolide fraction of feverfew has also been explored for its anti-cancer properties due to its ability to reduce nuclear factor kappa beta, an important transcription factor in the proliferation of many cancer cells. Parthenolide also demonstrates other impressive anti-cancer properties such as inducing programmed cell death of cancer cells via up-regulation of tumor necrosis factor stimulation.

A Combination Approach

In conjunction with chiropractic adjustments, soft-tissue techniques, acupuncture, stress-reduction programs, the removal of foods from the diet that act as triggers, and other treatments shown to be useful in migraine control, the addition of a twice-daily supplement containing the effective doses of butterbur and feverfew should also be included in an evidence-based approach to treating migraines. In the early stages of a migraine attack, the patient can try taking three to four capsules as a single dose in an attempt to abort the migraine. If this effort fails to halt the migraine, other standard pharmaceutical drugs designed for migraine control can be used as a rescue medication.

Here is an example of a combination supplement containing butterbur and feverfew, which contains optimal amounts of their medicinal ingredients. One capsule contains: butterbur root 75 mg (standardized to minimum 15 percent sesquiterpenes as petasines; feverfew 325 mg (standardized grade of parthenolide concentration of 0.7 percent). Adults: take one capsule twice per day for migraine prevention. At the first sign of a migraine, consider taking three to four capsules as a single dose to help abort or minimize the attack. Children ages 10 and up should take one capsule per day for migraine prevention.

Cautionary Notes

To derive the best possible prophylactic effect for migraine patients, it is best to recommend a supplement that contains both butterbur and feverfew, at the dosages and standardized grades proven to reduce the frequency and severity of migraine attacks. It is important to make sure that the butterbur extract does not contain pyrrolizidine alkaloids, which are toxic to the liver and may cause other serious problems.

Provided the pyrrolizidine alkaloid compounds have been removed from butterbur, the only reported side effects involve burping or mild gastrointestinal discomfort in rare cases. Butterbur does not have any reported drug-nutrient interactions and has an excellent safety profile to date.

Feverfew also has an impressive safety record. It may inhibit the activity of platelets; thus, individuals taking blood-thinning medications (such as aspirin and warfarin) should have their INR monitored during the early stages of supplementation to ensure that platelet clotting behavior remains within the desired range. Some infrequent side effects of feverfew include abdominal pain, indigestion, flatulence, diarrhea, nausea, vomiting and nervousness. Individuals with allergies to chamomile, ragweed, or yarrow are likely to be allergic to feverfew. Pregnant and nursing women, as well as children under age 6, should not take a supplement containing feverfew and butterbur.

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