



Migraine Headaches

- Decker Weiss, NMD, AACVPR

ADHD/ASD

ANTIAGING

CARDIOVASCULAR

CHRONIC FATIGUE

DETOXIFICATION

DIGESTION

IMMUNE HEALTH

METABOLISM

MENS HEALTH

MUSCULOSKELETAL

PODIATRY

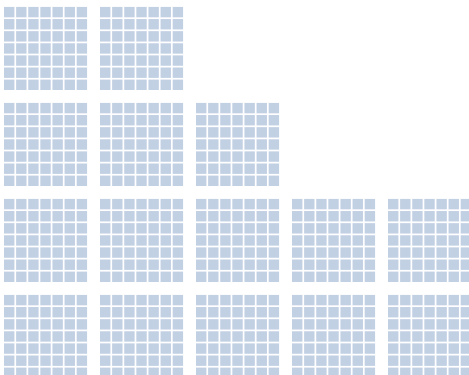
NEUROLOGICAL

SEXUAL HEALTH

WOMEN'S HEALTH

Integrative Interventions is a third-party literature series that addresses concerns and answers questions often posed by patients about specific health issues. They contain comprehensive information and in-depth, well-referenced studies prepared and written by distinguished scientists and medical professionals. These articles may be downloaded and viewed at no charge.

Any information supplied through the *Integrative Interventions* series or through this website is for educational purposes only and does not constitute medical or other professional advice. Health-related information provided through the *Integrative Interventions* series is not a substitute for medical advice and it is important that you not make medical decisions without first consulting your personal physician or health care practitioner.



If you suffer from migraine headaches, you know how painful and disruptive they can be. You may have been forced to explain to your boss and co-workers why you sometimes need to leave early or take days off from work. You might have missed social events, disappointing family and friends. You have probably tried many medications to try to stop the throbbing pain, nausea, and light sensitivity experienced in a migraine attack. And you may have tried to stop the migraines from happening in the first place by taking a preventative prescription medication.^{1,2}

However, many of the prescription medications commonly used to prevent migraines can also cause troubling side effects including: weight gain, dizziness, low blood pressure, decreased sex drive, dry mouth, nausea, and insomnia. And if you have a co-existing health problem, such as high blood pressure or diabetes, some preventive medicines may actually be dangerous for you to take.²

However, there is very good news regarding migraine prevention. Standardized Butterbur Extract, an all-natural nutritional supplement, can effectively prevent migraines without serious side effects. This powerful herbal extract has been used in Germany for many years to successfully prevent migraines. Now available in America, standardized Butterbur Extract's effectiveness has been validated in clinical studies. In fact, a recently completed large multi-center study involving hundreds of migraine headache sufferers determined that standardized Butterbur Extract significantly prevented migraine headaches with no serious side effects.³⁻⁵

This issue of *Integrative Interventions* will discuss migraine headaches and how to prevent them with powerful, all-natural, and safe standardized Butterbur Extract.

Q. What exactly is Butterbur and how is it standardized?

A. Butterbur is the common name of *Petasites hybridus*, a member of a large family of flowers, herbs, and shrubs. Petasin is one of the key compounds found in Butterbur. It is believed that Butterbur's beneficial effect for migraine prevention is related to the anti-spasmodic and anti-inflammatory activity of petasin.^{6,7} The clinical trials of Butterbur have all used an extract standardized to contain 7.5 mg petasin per 50 mg of the extract, and to be free of pyrrolizidine alkaloids. We will talk more about the importance of a pyrrolizidine alkaloid free extract later in this issue.

Q. What is the difference between migraines and tension headaches?

A. According to the Journal of the American Medical Association Migraine Education Center, there are several differences in the two headache types.² The chart on page 2 illustrates the differences.

Q. What causes migraines?

A. Migraine headaches are caused by expansion of the blood vessels in the brain and inflammation of the surrounding tissue. While researchers know what happens in the brain during an attack, there is still debate and ongoing research regarding the underlying causes of migraines. Some feel it is related to sudden changes in blood vessel constriction; recently, more focus has been on the electronic changes that are more similar to seizures. Most people with migraines have family members who also have the disorder. Migraines often reoccur, meaning it's very rare to only suffer with one single migraine headache episode. The attacks tend to become less severe as people get older.^{1,8}

Migraine sufferers sometimes have unique symptoms with individual variations. About 20% of individuals who have migraines experience an "aura" prior to an attack. Most auras are visual, appearing as flashing lights or zigzagging lines. These disturbances make it difficult to read a page or see a person's entire face. The disturbance lasts 15 to 60 minutes before fading, only to be followed by a migraine headache.^{1,2}

There are certain foods, events, and changes called "trigger factors" that can initiate migraines. These include dietary factors such as chocolate, alcohol, and skipping meals; sensory triggers such as very bright lights and strong odors; environmental triggers like weather changes; stress triggers such as job loss or divorce; and hormonal factors related to menstruation. Trigger factors are different for each individual with migraine headaches.^{1,2}

Q. How does standardized Butterbur Extract prevent migraines?

A. Scientists have discovered that standardized Butterbur Extract contains active compounds that not only prevent the blood vessel expansion of a migraine, but also prevent the inflammation, as well.³⁻⁵

To see how well standardized Butterbur Extract works for actual migraine sufferers, randomized, placebo-controlled, double blind

studies have been completed. These types of studies provide the most accurate and verifiable results, and are considered the gold standard for valid scientific conclusions.

One of these studies examined Butterbur Extract standardized to contain 7.5 mg petasin in 58 people who experienced at least 3 migraines a month. The patients received either the standardized Butterbur Extract (50 mg) or a placebo twice a day for 12 weeks.⁵

Compared to the placebo, standardized Butterbur Extract significantly reduced the frequency of migraine attacks, the number of migraines experienced per month (see figure 1), as well as the frequency of accompanying nausea and dizziness. Patients who took the standardized Butterbur Extract had 46% fewer migraines at the 4th week of the study and 50% fewer migraines after 12 weeks.⁵

Most importantly, when each groups' members were asked how they felt during the study, 74% of the patients taking standardized Butterbur Extract stated that it successfully prevented their migraines, compared to 27% of the placebo group.⁵

The results of a larger study were presented at the 54th meeting of the American Academy of Neurology held recently. Researchers compared Butterbur Extract standardized to contain 7.5 mg petasin to placebo in 202 migraine sufferers. On the average, these participants experienced at least 3 migraines a month prior to entering the study.³

Once the individuals were recruited into the study, they stopped taking all of their current migraine medicines. This so-called "washout period" eliminated the possibility of any effect from other migraine treatments.³

The participants were divided into two groups. Half got the standardized Butterbur Extract and half got a placebo. Those in the standardized Butterbur Extract group received either 50 mg twice a day (100 mg total) or 75 mg twice a day (150 mg total). The treatment period of the study lasted 16 weeks.³

Figure 2 represents the number of attacks each group experienced, per month, both at the beginning and at the conclusion of the study.

	Tension Headaches	Migraine Headaches
Duration	Hours to days	4 to 72 hours
Location in Head	Over the entire head	Often one-sided but not always
Intensity of Pain	Mild to moderate	Often severe
Nature	Dull, pressing	Pounding, throbbing, increases with activity
Other Symptoms	Minimal to none	Nausea, vomiting, sensitivity to light, sound, and odors

For the individuals taking 150 mg of standardized Butterbur Extract per day, this meant a 62% reduction in the number of migraine attacks they experienced each month.³

Even more importantly, when the people taking the 150 mg of standardized Butterbur Extract per day did experience a migraine, it did not last as long as those people in the placebo group. The average number of days the migraine lasted in the 150 mg group dropped to 1.6 compared to the placebo group who were experiencing 2.2 days.³

Based on the results of these studies, the recommended dosage of standardized Butterbur Extract is 150 mg per day for the first month (which can be taken as 50 mg three times per day), and then 100 mg per day (divided into two doses of 50 mg each) thereafter.

Q. Can I take standardized Butterbur Extract with other migraine medications?

A. Yes, standardized Butterbur Extract can be taken with other migraine medicines, even prescription medications used to prevent migraine attacks.^{3,5} Because migraine sufferers often take several medications, standardized Butterbur Extract is an excellent addition to your migraine regimen because it has very few side effects.

However, you need to be patient. Standardized Butterbur Extract prevents migraines from happening, so it takes a little time to be effective. Generally, people see results after 4 weeks.

Q. What if I only have one migraine a month? Would standardized Butterbur Extract work for me?

A. While the previously discussed studies examined the effectiveness of standardized Butterbur Extract as a preventative for people who experienced three or more migraines a month, researchers are also investigating its ability to help people who have migraines once a month or less. Preliminary data suggests that the following dosage is helpful in treating an acute migraine attack. Take 100 mg of the

standardized Butterbur Extract as soon as you feel a migraine developing. This is followed by 50 mg of the extract every two hours (but not exceeding 250 mg in one day). On the second day, take 50 mg three times a day.

This method of taking standardized Butterbur Extract is useful even if you only have one or two migraine headaches a year.

Q. The herb feverfew is well known for migraine prevention. Is Butterbur as effective as feverfew?

A. To date, there have been no studies that have directly compared feverfew and standardized Butterbur Extract for migraine prevention. However, the studies of feverfew in the prevention of migraines have been mixed.^{9,10} The double-blind, placebo controlled studies of feverfew reported less effectiveness in migraine attack frequency than were found in the standardized Butterbur Extract studies.¹¹ Feverfew is not nearly as potent as standardized Butterbur Extract.

Q. Is standardized Butterbur Extract safe?

A. Butterbur Extract standardized to 7.5 mg petasin is very safe; there are very few side effects. In one of the studies, mild gastrointestinal upset was noted in a few of the patients.

Q. What are PAs, and why should I be concerned about them?

A. Pyrrolizidine alkaloids, or PAs, are toxic compounds that can harm the liver. Some lab studies have suggested PAs might be linked to cancer. PAs are found in the plant family to which the butterbur plant belongs, so it is essential to make sure the standardized Butterbur Extract you buy is free of PAs.

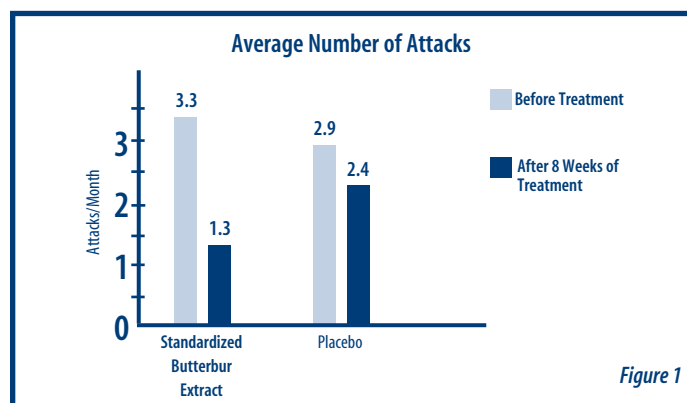


Figure 1

	150 mg standardized Butterbur Extract (per day)	100 mg standardized Butterbur Extract (per day)
Beginning of Study	3.47	3.66
End of Study	1.72	2.03

Figure 2

Q. How long should I take standardized Butterbur Extract?

A. You should take standardized Butterbur Extract for 4 to 6 months and then stop. Standardized Butterbur Extract continues to work even though you aren't taking it. If your migraines return, you can once more resume taking the standardized Butterbur Extract for another 4 to 6 month cycle.

Conclusion

According to the Migraine Education Center, migraines affect between 11 to 18 million Americans.¹ While there is no known cure, there are treatments available to help manage the problem. Standardized Butterbur Extract is both safe and effective and can be a part of your migraine treatment regimen. You have nothing to lose except the pain.

References:

1. Journal of the American Medical Association. Migraine Information Center. Accessed February 20, 2002. Available at: www.ama-assn.org/special/migraine/migraine.htm.
2. American Council for Headache Education. Prevention of Migraine Headaches: What Every Patient Should Know. Accessed on February 20, 2002. Available at: www.achenet.org/prevention/.
3. Lipton RB, Gobel H, Wilkes K, Mauskop A. Efficacy of petasites 50 and 75 mg for prophylaxis of migraine: results of a randomized, placebo-controlled study. *Der Schermerz* 2000;15:S61.
4. Monograph. Petasites hybridus. *J Altern Med Rev*. 2001;6:207-209.
5. Mauskop A, Grossman WM, Schmidramsl H. Petasites hybridus (Butterbur root) extract is effective in the prophylaxis of migraines: results of a randomized, double blind trial. *Headache*. 2000;40:420.
6. Mauskop A. Petasites hybridus: ancient medicinal plant is effective prophylactic treatment for migraine. *Townsend Letter*. May, 2000 (Issue 202).
7. Thomet OAR, Weismann UN, Schapowal A, Bizer C, Simon H-U. Role of petasin in the potential anti-inflammatory activity of a plant extract of petasites hybridus. *Biochem Pharmacol*. 2001;61:1041-1047.
8. Hamelsky SW, Stewart WF, Lipton RB. Epidemiology of migraine. *Curr Pain Headache Rep*. 2001;5:189-194.
9. Murphy, J.J., Heptinstall, S., and Mitchell, J.R.A. Randomised double-blind placebo-controlled trial of feverfew in migraine prevention. *Lancet*. 1988;23:189-192
10. Palevitch, D., Earon, G., and Carasso, R. Feverfew (Tanacetum parthenium) as a prophylactic treatment for migraine: A double-blind placebo-controlled study. *Phytotherapy Res*. 1997; 11:508-511
11. Ernst E, Pittler MH. The efficacy and safety of feverfew (Tanacetum parthenium L.): an update of a systematic review. *Public Health Nutr*. 2000;3:509-514.

Decker Weiss, NMD, AACVPR



Dr. Weiss is a member of both the Enzymatic Therapy and PhytoPharmica Scientific Advisory Boards and is considered an expert in integrative cardiology. Dr. Weiss performed many hours of internship, and a cardiology residency at the Arizona Heart Institute. Dr.

Weiss continues his work in cardiology becoming one of the first Naturopathic physicians to have hospital privileges in a conventional medical facility by being assigned to the Department of Medicine in 1998 as a consulting staff physician at the Arizona Heart Hospital. Dr. Weiss continues his work by maintaining his hospital privileges and by seeing patients and training interns and residents at the Southwest College of Naturopathic Medicine. Dr. Weiss is adjunct faculty of the Canadian College of Naturopathic Medicine.

