



Nutri-Facts

Issue #23, July 2003

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Greetings all!

Kava (also called kava kava) is an herb that is widely marketed as an alternative treatment option for anxiety. More recently, the herb has gained attention in the scientific literature as several cases of liver failure have been reported in persons taking kava.

This issue features general information about kava, recent research findings, and news from the Food and Drug Administration warning about the use of kava and the risk of liver failure. The issue includes information for Agents, a consumer fact sheet and a news release.

As always, I appreciate any comments/suggestions for future issues of Nutri-Facts.

Eat Well,
Jenna

Agent information sheet - Nutri-Facts #23, July 2003

Introduction

According to the National Institutes of Mental Health, anxiety disorders are a group of mental illnesses that affect approximately 4 million American adults. Anxiety disorders are not the same as the mild, brief anxiety and worry caused by a stressful event like a major exam, going to the dentist, or a job interview. Instead, people with anxiety disorders worry constantly, are unable to relax, and often fear the worst. If untreated, the disease can progressively worsen. It should also be noted that anxiety could be a symptom of other illnesses or a side effect of certain medications. Therefore, anyone who experiences frequent anxiety should see their physician.

There are a number of treatment options available for individuals who have anxiety disorders. This issue of Nutri-Facts, however, is not about anxiety the illness. Instead, this issue features the herb kava (or kava kava) which is frequently marketed as an alternative treatment for anxiety.

What is Kava?

Kava is a botanical product derived from the roots and rhizomes of the shrub *Piper methysticum*. This shrub is native to the South Pacific and the consumption of kava beverages during social events is common on the islands of Fiji, Tonga, and Vanuatu. The active ingredients in kava (kavalactones or kavapyrones) are said to have a calming effect. Traditionally, the root is chewed or mashed and then mixed with water or coconut milk to make the beverage.

Kava has been used in folk medicine to treat a variety of conditions including headaches, colds, upper respiratory infections, tuberculosis, rheumatism, and leprosy.

The popularity of kava has risen over the years because of its potential use as a treatment for anxiety. Clinical studies that have reported promising results along with creative marketing techniques and numerous sources of information about kava (to date there are more than 180,000 web sites for kava and at least 18 books on the herb that have been published) have made kava popular and profitable. Presently, kava sales represent approximately 4% of all herbal supplements sold in the U.S.. In 1998 sales of kava products, which include tablets, capsules, beverages, extracts, and tinctures, were estimated at \$17 million.

Kava as an anti-anxiety agent: what does the research say?

The effectiveness of kava as an anti-anxiety agent is promising but far from conclusive. A 2002 paper published in the *International Clinical Psychopharmacology* journal found that kava was not any better than a placebo for treating Generalized Anxiety Disorder (GAD). However, the authors did find that the herb was better than a placebo for mild cases of anxiety. Another study of 129 people concluded that kava was just as effective as two well-known prescription medications for treating GAD. Also, a meta-analysis of 11 clinical trials concluded that "kava is relatively safe for short-term treatment (1 to 24 weeks), although more information is required." However, the authors also noted that "rigorous investigations, particularly into the long-term safety profile of kava are warranted."

Keep in mind that while these results may seem promising, it is not a "green light" to start using kava. Some experts argue that there are just not enough long-term studies with a large enough participant size to safely recommend the herb. Also, it is important to consult a physician to rule out or determine medical causes for anxiety.

Potential side effects of Kava

As with many herbs, kava has known side effects. These include headache, dizziness, and impairment of motor reflexes. Driving under the influence (DUI) citations have been given to individuals for driving erratically after drinking large amounts of kava tea. Use of high doses of kava over a long-term period has been linked with the development of yellow, flaky and dry skin known as kava dermatopathy. It is thought that this condition is reversible once kava use is stopped. Chewing kava can cause numbness of the mouth.

Over the past few years, there have been several reports of liver toxicity and liver failure among individuals using kava. This has prompted the restriction of sales of kava-containing products in several countries including Australia, Canada, Germany, France, and Switzerland. At the present, kava is still available in the United States but the Food and Drug Administration has issued a consumer advisory warning that kava use might be associated with severe liver injury. To date, kava is still available for sale in the U.S. To read the FDA consumer advisory, click on the following link: <http://vm.cfsan.fda.gov/~dms/addskava.html>.

Interactions between Kava Kava and other supplements and medications

According to the Natural Medicines Comprehensive Database, the use of kava along with herbs that have sedative characteristics can enhance their proposed therapeutic and adverse effects. These herbs include, but are not limited to, German chamomile, Siberian ginseng, goldenseal, St. John's wort, valerian, and saffron. Combining kava with alcohol, barbiturates, or benzodiazepines (a class of medications that includes Xanax® and Valium®) can increase both the effect of the drug and the risk of their adverse effects.

Keep in mind that all herbal supplements are not created equal. Kava is no exception. In the United States, dietary supplements are not tightly regulated; therefore, the effects and side effects of kava products manufactured and imported in this country may vary. Also, a 2003 report from the Office of the Inspector General noted that current surveillance systems capture less than 1% of adverse reactions to dietary supplements.

So, what do consumers need to know about kava (i.e. talking points)?

First, anyone who is experiencing frequent, persistent or a change in anxiety frequency or severity should be seen by their physician.

Second, Texas Cooperative Extension does not endorse the use of herbal supplements. While there is evidence that short-term kava **may** be beneficial in addressing anxiety, the research is not conclusive and more controlled studies need to be done. The long-term efficacy (as well as safety) of kava is not known.

Third, the reported cases of liver toxicity and liver failure cannot be overlooked. We don't know why these cases have occurred - poor quality supplements and a possible interaction with other medications are two possibilities. However, the potential for liver damage is another reason why people should talk to their physician before using this or any other type of herbal supplement. Remember, the quality of herbal supplements sold in the U.S. is not controlled in the same manner as prescription medications.

References:

- National Institute of Mental Health. Facts About Anxiety Disorders. Publication No. OM-99 4152 Printed January 1999. Accessed 7/9/03 at <http://www.nimh.nih.gov/anxiety/adfacts.cfm>.
- Bent S, Tiedt TN, Odden MC, Schlipak MG. The relative safety of ephedra compared with other herbal products. *Ann Intern Med.* 2003; 138:468-471.
- U.S. Department of Health and Human Services, Office of the Inspector General. Adverse event reporting for dietary supplements: an inadequate safety valve. OEI-01-00-00180. Washington, DC, U.S. Department of Health and Human Services; 2001. Accessed at <http://oig.hhs.gov/oei/reports/oei-01-00-00180.pdf> on July 14th, 2003.
- Moulds RFW and Malani J. Kava: herbal panacea or liver poison? *MJA* 2003; 178:451-453.
- Ernst E. Second thoughts about Kava. *Am J Med.* 2002;113:347-348.
- Cairney S, Maruff P and Clough AR. The neurobehavioural effects of kava. *Aust N Z J Psychiatry* 2002; 36:657-662.
- Ernst E. The risk-benefit profile of commonly used herbal therapies; Ginkgo, St. John's wort, Ginseng, Echinacea, Saw Palmetto, and Kava. *Ann Intern Med.* 2002; 136:42-53.
- Boerner RJ, Sommer H, Berger W, Kuhn U, Schmidt U, and Mannel M. Kava-kava extract LI 150 is as effective as Opipramol and buspirone in Generalised Anxiety Disorder - An 8-week randomized, double-blind multi-centre clinical trial in 129 out-patients. *Phytomedicine.* 2003; Supplement IV: 38-49.
- Connor KM and Davidson JRT. A placebo-controlled study of Kava kava in generalized anxiety disorder. *Int Clin Psychopharmacol.* 2002; 17:185-188.
- Pittler MH and Ernst E. The efficacy of kava extract for treating anxiety: systematic review and meta-analysis. *J Clin Psychopharmacol.* 2000; 20:84-89.
- Pittler MH and Ernst E. Kava extract for treating anxiety (Cochrane Review). In: *The Cochrane Library, Issue 2, 2003.* Oxford: Update Software.
- Jellin JM, Gregory P, Batz F, Hitchens K, et al. *Pharmacist's Letter/Prescriber's Letter Natural Medicines Comprehensive Database.* 3rd ed. Stockton, CA: Therapeutic Research Faculty; 2000: pg 625-627.

Kava Kava

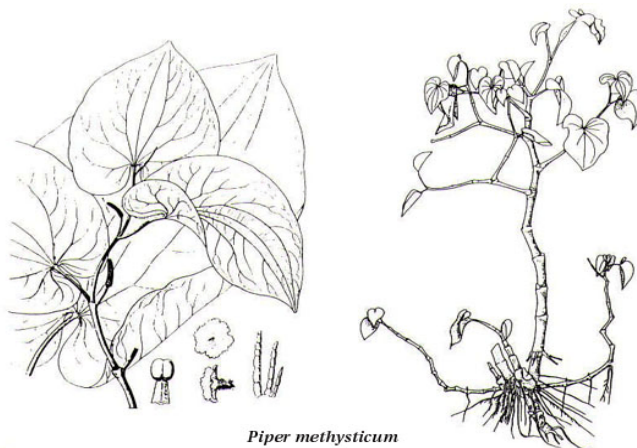
What is kava kava?

Kava kava (also known as kava) is a botanical product made from the roots and rhizomes of the shrub *Piper methysticum*. The shrub is native to the South Pacific, where the consumption of kava beverages during social events is common. Traditionally, the root is mashed, then mixed with water or coconut milk to make the beverage.

Is kava kava useful for treating anxiety?

In the U.S., kava is often marketed as an alternative therapy for treating anxiety disorders. The active ingredients in kava are believed to have a calming effect.

The usefulness of kava is promising but more research is needed. At least one study reported that the herb was just as effective as two prescription medications for treating generalized anxiety. More recently, an analysis of eleven studies led to the conclusion that kava appeared to be effective for short-term use. However, the long-term effects of this herb are not known.



Piper methysticum

What are the side effects of kava?

Side effects of kava include headache, dizziness, and impairment of motor reflexes. Use of high doses over long-term periods has been linked to dermopathy, a condition in which the skin becomes yellow, flaky and dry. Using the herb with alcohol, herbs with sedative-like properties, anti-anxiety medications, and other sedatives may increase their effects and side-effects.

In recent years, there have been reports of liver toxicity and liver failure among individuals using kava. While kava is available in the United States, the Food and Drug Administration has issued a consumer advisory warning that kava use might be associated with severe liver injury.

Conclusion

In the U.S., dietary supplements are not regulated the same way as prescription medications; therefore, the quality, the effects, and side effects of kava products sold in this country may vary. While there is evidence that the short-term use of kava may be helpful in the treatment of anxiety, the research is not conclusive and more controlled studies need to be done. Anxiety may be the symptom of a disease or the side effect of medications. **Therefore, individuals who choose to use herbal supplements should always check with their physician first.** Anyone who experiences frequent, persistent anxiety or a change in frequency or severity of anxiety should be seen by their physician to rule out medical conditions.

The information in this fact sheet is for educational purposes only. It is not meant to be a substitute for medical advice.



Prepared by Jenna Anding, Ph.D., R.D., L.D., assistant professor & Extension nutrition specialist, 8/03.

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News release, July 2003

People may be familiar with anxiety as a major component of anxiety disorder but did you know that anxiety could also be a symptom of another disease or even a side affect of certain medications? For people with anxiety disorders, worry and fear are a constant part of everyday life. The disease, which affects nearly 4 million Americans each year, is common but can worsen if it is not treated. Treatment options for anxiety disorders vary and include the use of prescription medications and cognitive therapy. Some people, however, are choosing an alternative method of addressing anxiety in the form of the herb kava, also known as kava kava.

Kava kava (*Piper methysticum*) is a shrub that is native to the South Pacific. Traditionally, kava is mashed or chewed then mixed with water or coconut milk to make a relaxing beverage. The beverage is often consumed during social and ceremonial events. In folk medicine, the herb has been used to treat a variety of conditions including headaches, colds, upper respiratory infections, tuberculosis, rheumatism, and leprosy. The popularity of kava has risen over the years because of its purported use as a treatment for anxiety. Presently, kava sales represent approximately 4% of all herbal supplements sold in the U.S. In 1998, sales of kava products which include tablets, capsules, beverages, extracts, and tinctures, were estimated at \$17 million.

But does the herb really work? "Based on the research that is available, kava may have some benefits, but it is too early to tell for sure," says Jenna Anding, Ph.D., R.D., L.D., assistant professor and Extension nutrition specialist with Texas Cooperative Extension. "Also, we definitely need more studies, including studies that look at the long-term effects of the herb."

While kava may have potential for treating anxiety, the herb is not without some side effects. These include headache, dizziness, and impairment of motor reflexes. In addition, using kava in high doses over long periods of time can cause dermopathy, a condition in which the skin becomes yellow, flaky and dry. This condition usually resolves itself when the herb is no longer used. Anding also notes that mixing the herb with alcohol, herbs with sedative-like properties, anti-anxiety medications, and other sedatives may increase their effects and side-effects.

But that is not all. In recent years, there have been reports of liver failure among individuals who have taken kava. This has prompted the Food and Drug Administration to issue a consumer advisory warning that kava use might be associated with severe liver injury.

So, should people try kava? "I certainly would not recommend any herbal supplement without first consulting with a physician, cautions Anding. Many herbal supplements have drug-like properties and the risk for interactions with other herbs and prescription medications definitely exists. Plus, herbal supplements are not regulated in the same manner as prescription medications." The advice "buyers beware" is certainly true in this case. Finally, Anding adds that anyone who experiences frequent, persistent anxiety or a change in anxiety frequency or severity should be seen by their physician.

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