

Kava: Safety and Benefits

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Kava, also known as kava kava, has been used for medicinal and ceremonial purposes in the South Pacific for at least two thousand years. It is one of the world's most popular herbs. It is used by up to 90% of the population in many Pacific islands, and is one of the top selling herbs in Europe and the U.S. It is typically used in the West for anxiety, depression and insomnia. Studies have indicated that kava roots contain fiber, proteins, potassium, and compounds known as kavalactones, in addition to as yet unidentified compounds. In European studies, individuals taking kava consistently have shown reduction in feelings of nervousness as well as other symptoms of anxiety such as heart palpitations, chest pains, headache, dizziness, and stomach upset. Unlike benzodiazepines, alcohol and other drugs, kava does not depress mental function. In studies compared with oxazepam (a drug similar to valium), kava was better tolerated and was shown to improve mental function in contrast to the drug, which was shown to reduce mental function.

Recent studies conducted at Duke University show kava is safe and as effective as prescription drugs for treating stress and anxiety. Drs. Kathryn Connor, Jonathan Davidson and Erik Churchill reported, "Kava has several advantages over conventional pharmacological treatments for anxiety - in clinical settings, kava has been associated with better tolerant capability and lack of physiological dependence and withdrawal" (*Natural Foods Merchandiser*, New Hope Communications, Boulder, CO, page 10). Kava was as safe as a placebo (sugar pill) by comparing withdrawal symptoms, heart rate, blood pressure and sexual function. The conclusion was that kava could be safely and effectively used to treat anxiety disorders. An analysis of seven clinical trials published in the *Journal of Clinical Psychopharmacology* supported the beneficial effects of kava to relieve the symptoms of anxiety. No cases of liver toxicity were revealed.

This runs contrary to reports of liver toxicity reported in Germany and Switzerland. Approximately 30 cases of liver toxicity have been reported over the last 11 years. The key question is, how could an herb that has been safely used for centuries start showing liver toxicity in a small number of patients?

One explanation is the type of extract. European companies frequently use kava stem in the production of their kava products. While having a higher concentration of lactones, kava stem is considered mildly toxic by Fijian natives. Another explanation is that alcohol and acetone are used to extract constituents in the preparation of Swiss and German products, thus producing a much different and more drug-like product than what is traditionally used. It is possible that these non-traditional forms of kava yield products that are more toxic to the liver. Natives of the South Pacific consume kava almost exclusively as water extract of the whole root. It is often consumed in group settings after work, where people gather to relax, tell stories and drink kava. In these cultures kava is not consumed with alcohol, and pharmaceutical drug usage is considerably less than in more industrialized countries.

This is typically different than the highly individualized Western societies, where people use kava to help them cope with anxiety, and may be taking a host of other pharmacological substances such as alcohol, anti-anxiety drugs, antidepressants and other medications, and are not getting the

needed stress reduction, exercise or emotional support to help with their plight.

In 18 of the 30 cases reported in Europe, patients were concurrently taking prescription or over-the-counter drugs with known or potential liver toxicity along with kava preparations. The remaining cases were people using these potent extracts for long periods of time. To assure consumers and practitioners, the American Herbal Products Associations (AHPA) commissioned a toxicology report on kava. All currently available adverse reports were analyzed. According to Donald P. Waller, PhD, a professor of pharmacology and toxicology, "Kava, when taken in appropriate dosages for reasonable periods of time, has no scientifically established potential for causing liver damage."

Dr. Waller made his conclusions because after evaluating case reports, it appeared that the reported adverse reports were due to patients taking kava concurrently with medications with documented liver toxicity, or the cases had inadequate laboratory data. One cannot just assume that because a person takes kava, it is the cause of the hepatic abnormality. Medications, drug and alcohol use, and preexisting medical conditions are all vital in establishing a causal relationship. For example, one case report concerned a woman with multiple sclerosis (MS) who was taking kava along with St. John's wort extract. As there was no information about the patient's drug history, and as her condition usually necessitated medical intervention, one cannot identify kava as the casual agent. In fact, Dr. Waller examined two cases of chronic and high-dose consumption of kava that were not associated with liver damage. One case involved an individual consuming four prescription medications plus up to 300 kava pills a day (45,000 mg) without liver damage. Another involved a 13-year old girl who attempted suicide by taking 8-10 500 mg of kava tablets. She was admitted for observation in an intensive care unit, and was discharged the following morning with a complete recovery. According to Dr. Waller, "From a toxicologist perspective, these two cases provide some evidence that kava itself is not a direct hepatotoxin even in extremely high concentrations."

According to the latest statistics, the odds of having kava hepatotoxicity are one in four million. In the drug world this would be considered a favorable risk benefit ratio; however, many regulatory and medical authorities have a "zero risk" policy with regard to herbs. Previous to these reports, kava has been observed to cause a scaly skin rash, which typically only occurs with long-term heavy usage. Reduction or elimination of kava is the recommended treatment. It is always possible to have an idiosyncratic or hypersensitivity-related reaction with any food, herb or drug. This appears to be the case in the kava adverse reports.

How can kava be used safely and responsibly? First, like all herbs, it is best used under the direction and guidance of a health professional who is knowledgeable about herbs. For example, as a member of the pepper family, kava can be excessively warming and cause conditions described in Chinese medicine as being due to liver heat. These include headache, pressure behind the eyes, hot flashes, and a more dream disturbed sleep. This is why the author uses kava along with other herbs to heighten beneficial effects while minimizing negative reactions.

Kava should be avoided by people who have liver problems or who take drugs that have adverse effects on the liver, including alcohol. If symptoms of jaundice such as yellowing of the skin and eyes or dark urine occur, its use should be discontinued. For best results, kava preparations should be thought of as short-term adjuncts until the cause of the anxiety can be addressed; a person could also improve his or her coping skills through acupuncture, cognitive behavioral therapy or stress reduction techniques. Our current recommendation is not to use kava for more than 1-3 months without a break.

The following are commonly-used names for kava:

- ava
- lava root
- Piper methisticum
- kava-kava
- awa
- Yangona

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