

Study finds herbal extract may curb binge drinking

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An extract of the Chinese herb kudzu dramatically reduces drinking and may be useful in the treatment of alcoholism and curbing binge drinking, according to a new study by McLean Hospital and Harvard Medical School researchers.

"Our study is further evidence that components found in kudzu root can reduce [alcohol consumption](#) and do so without [adverse side effects](#)," said David Penetar, PhD, of the Behavioral Psychopharmacology Research Laboratory at McLean Hospital, and the lead author of the study.

"Further research is needed, but this botanical medication may lead to additional methods to treat [alcohol abuse](#) and dependence."

In the study, published in the current issue of *Drug and Alcohol Dependence*, researchers in the Behavioral Psychopharmacology Research Laboratory at McLean Hospital looked at one of the major components of the kudzu root—the isoflavone puerarin—to determine whether it would reduce alcohol consumption in a laboratory simulation of an afternoon [drinking](#) session.

According to Penetar, puerarin was selected over other kudzu root components because its safety and efficacy have already been established in humans, particularly in China where it is approved for intravenous injection to treat coronary heart disease, myocardial infarction and angina. Puerarin is also less potent than other parts of the kudzu plant, so it has few side effects and has none of the estrogenic activity found in other components, making it safe for women.

In the study, Penetar and his colleagues looked at 10 men and women, all in their 20s and all reporting regularly consuming [alcohol](#) weekly. A laboratory at McLean Hospital was set up as an apartment, with TV, DVD player, reclining chair and other amenities. The unit was also stocked with a refrigerator full of each subject's favorite beer and other non-alcoholic beverages.

In an initial 90-minute session in the "apartment," each subject was allowed to consume as many beers as he or she wanted—up to a maximum of six. After the session, each was given either puerarin or a placebo and told to take it daily for a week. Then, each returned to do the experiment again. Two weeks later, the subjects returned for a third session to see if they had returned to their baseline drinking levels. After that, each subject was given the pill he or she didn't get the first time and told to take it for a week. Each then returned for a fourth and final drinking session.

The study showed that subjects taking puerarin drank significantly fewer beers—dropping from 3.5 beers on average to 2.4.

"This was a simulation of a [binge drinking](#) opportunity and not only did we see the subjects drinking less, we noted that their rate of consumption decreased, meaning they drank slower and took more sips to finish a beer," explained Penetar. "While we do not suggest that puerarin will stop drinking all together, it is promising that it appears to slow the pace and the overall amount consumed."

The Behavioral Psychopharmacology Research Laboratory at McLean Hospital has been involved in a series of research projects for more than 10 years, looking at the ability of extracts of the kudzu root and its components to reduce excessive drinking with very encouraging results.

Provided by McLean Hospital

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