

Herbal agent limits alcohol absorption

A traditional Chinese herbal medicine, long rumored to squelch alcohol's intoxicating effects, appears to live up to its thousand-year-old reputation.

Masayuki Yoshikawa, a chemist at Japan's Kyoto Pharmaceutical University, reports that extracts from several Chinese plants and trees, when consumed by rats in the laboratory, indeed curb the absorption of ethanol.

By chemically separating components of the plant extracts, Yoshikawa's team identified the active ingredients as triterpene oligoglycosides, members of a class of sugar derivatives called saponins that have a tendency to produce soapy lathers.

Saponins appear in a variety of plants, particularly in the barks and roots of the Japanese angelica tree, the ovary of the soapnut tree, and the seeds of horse chestnuts and camellias.

Traditional Chinese and Japanese doctors use angelica root and bark to treat arthritis and diabetes, saving its decorative shoots as a culinary garnish. Horse chestnut extracts possess antiin-

flammatory properties, while soapnut derivatives yield an expectorant.

Yoshikawa and his colleagues prepared extracts from these plants and fed solutions containing different concentrations to rats. Then the researchers served the animals water spiked with as much as 20 percent ethanol, and monitored their blood-alcohol concentrations over the next several hours.

The saponins inhibited absorption of alcohol. The best extracts—from angelica bark—lowered the animal's blood alcohol levels by as much as one fifth in comparison to unmedicated animals, Yoshikawa reported this week in Chicago at a meeting of the American Chemical Society.

While the Japanese researchers have not yet determined the chemical mechanism by which saponins inhibit alcohol absorption, they have divided the inhibiting compounds into three classes according to their chemical structure. Examples of the three structural types of the alcohol-inhibiting saponins include elatoside,

escin, and senegasaponin.

Yoshikawa believes that further structural analysis will give researchers clues that would help them design other intoxication-fighting pharmaceuticals.

"While the [inhibition] mechanism itself is still somewhat mysterious, there does appear to be an effect," says Kazuo Yamasaki, a chemist at Hiroshima University in Japan. "We don't yet know if this effect is good for someone's health, but it looks promising."

Such compounds might help treat patients suffering from uncontrolled alcoholism or prevent acute alcohol toxicity. "Alcoholism, which is a major health problem in the world, causes as much trouble physiologically as it does socially," Yoshikawa says. "Excessive consumption of ethanol is known to affect profoundly nearly every organ in the body, particularly the endocrine system, heart, central nervous system, immune system, and liver."

Indeed, he argues, an agent for limiting alcohol toxicity "could prevent many alcohol-related deaths."

— R. Lipkin

Trauma survey delves into delayed recall

A spate of lawsuits surrounding recovered memories of childhood sexual abuse has bolstered the suspicion that these jolting blasts from the past occur mainly in white, middle-class women exposed to dubious memory-recovery techniques in psychotherapy.

But a national survey now finds that a substantial minority of both men and women who have survived a range of severe traumas report having had periods of partial or complete memory loss of their experiences. Moreover, many cases of delayed recall involve blacks and Hispanics who have never sought psychotherapy.

"The phenomenon of delayed recall of personal trauma occurs most often for violent and really distressing events encountered by both sexes," asserts survey director Diana M. Elliott of the University of California, Los Angeles, School of Medicine. "It's not primarily about white women in psychotherapy remembering sexual abuse."

Elliott presented her data in New York City this month at the annual meeting of the American Psychological Association.

Researchers who express skepticism about recovered memories, including D. Stephen Lindsay of the University of Victoria, Canada, argued at the meeting that sexually abused children rarely forget the violations they endure.

In the new survey, a majority of people who encountered severe trauma—child-

hood sexual abuse, military combat, or witnessing the murder or suicide of a loved one—indeed cited continuous recall of the events. But about 20 percent of severe trauma survivors noted a period of temporary amnesia for the entire experience, and another 20 percent said that at some time they had forgotten important details of the trauma.

Memory-disrupting traumas tended to occur repeatedly, to afflict children or adolescents, to include violent acts, and to cause high levels of self-reported distress, Elliott says.

Her sample consisted of 280 women and 225 men age 18 to 75 who responded to a mailed questionnaire. The participants, who came from various races, ethnic groups, and income levels, reported experiencing traumatic events at a rate that corresponds roughly to previous population estimates.

For instance, 27 percent survived an automobile accident; 23 percent lived through a natural disaster of some sort; 26 percent had been physically assaulted as an adult; and 20 percent cited childhood physical abuse. Among women, 11 percent said they had been raped as an adult, and 30 percent reported childhood sexual abuse. About 14 percent of men reported childhood sexual abuse.

Trauma survivors who consulted a psychotherapist at some time displayed the same rate of delayed recall as those who did not, Elliott says. Blacks and Hispanics cited more instances of delayed

recall of trauma than whites, she adds. This reflects the greater proportion of poverty in the black and Hispanic populations, which increases their likelihood of encountering such trauma, in the UCLA researcher's view.

Of participants who reported forgetting all or part of a trauma temporarily, most noted that an event triggered the recovery of their memory. More than half said that something they saw or read in the media prompted recall. Nearly one-third of victims of childhood sexual abuse recovered memories in connection with an instance of consensual adult sex. Other memory prods included experiencing an event similar to the original trauma, a conversation with a family member or friend, a dream or nightmare, and a physically violent encounter.

Psychotherapy was the least commonly noted cue for the return of traumatic memories, cited by 14 percent of the delayed-recall group.

Prior studies suggest that a small portion of those surveyed provided false reports of childhood sexual abuse or other traumas (SN: 9/18/93, p.184). A roughly equal number probably failed to report traumas they had actually experienced, Elliott says.

"These data are an important step forward and confirm what many clinicians have seen," holds Christine A. Courtois of the Psychiatric Institute of Washington (D.C.). "There are many cues to retrieving traumatic memories in our environments, and psychotherapy is not the strongest one." — B. Bower