

Khat: Origin and Pharmacology

U. S. Forces in Somalia have been coming into contact with local use of "khat," a plant which contains a form of amphetamine. Khat (or qat) is botanically known as *catha edulis*. It is an evergreen shrub that grows in Somalia, Yemen, Ethiopia, and the Arabian peninsula. (1) Several million people use it within that geographical area, and residents who travel or live abroad go to considerable trouble to obtain it. (1)

The khat plant has fleshy brownish-green leaves with serrated edges and glossy upper surfaces. (2) It has been used socially for hundreds of years in the countries of Northeast Africa and Arabia in much the same way that coffee is used in North America. Khat leaves or twigs are usually chewed in social gatherings of men. (1,2) In 1989, khat users in Rome reported the price of a 400-gram bundle of khat twigs at about \$50. (3)

Cathinone, the main active alkaloid of the khat plant, closely resembles amphetamine in its chemical structure. While cathinone can be isolated from the plant material, it is chemically unstable and degrades rapidly. (3) For this reason, khat bark or twigs must be chewed while still green and fresh from the plant to have a pharmacological effect.

Subjectively, khat chewing increases alertness, concentration, friendliness and talkativeness. (1) Occasional khat use in traditional social settings yields only minor adverse effects. However, khat dependence does occur wherever it is used. In several cases, Yemeni and Somali nationals living abroad have used khat continuously and developed amphetamine-like psychoses with grandiose or paranoid delusions. (1) In reported cases, psychoses ceased completely 5 hours to 6 weeks after cessation of khat use. (1) In Eastern Ethiopia, khat psychoses and delusions are common enough to have the term "jezba" associated with them. (2) Side effects from chronic use include stained gums and teeth, constipation, raised blood pressure and impotence. (2)

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