Khat (pronounced “cot”) is a stimulant drug derived from a shrub (Catha edulis) that is native to East Africa and southern Arabia. The khat plant itself is not scheduled under the Controlled Substances Act; however, because one of the mind-altering chemicals found in it, cathinone, is a Schedule I drug (a controlled substance with no recognized therapeutic use), the Federal Government considers khat use illegal.

How Does Khat Affect the Brain?

The main psychoactive ingredients in khat are cathinone and cathine. These chemicals are structurally similar to amphetamine and result in similar stimulant effects in the brain and body, although they are less potent. Like other stimulants, cathinone and cathine stimulate the release of the stress hormone and neurotransmitter norepinephrine and raise the level of the neurotransmitter dopamine in brain circuits regulating pleasure and movement.

Chewing khat leaves is reported to induce a state of euphoria and elation as well as feelings of increased alertness and arousal. The effects begin to subside after about 90 minutes to 3 hours, but can last 24 hours. At the end of a khat session, the user may experience a depressed mood, irritability, loss of appetite, and difficulty sleeping.

What Are the Other Health Effects of Khat?

In addition to its psychological effects, khat users can also experience physiological effects typically produced by stimulants, including an increase in blood pressure and heart rate.

How Is Khat Used?

Leaves of the khat shrub are typically chewed and held in the cheek, like chewing tobacco, to release their stimulant chemicals.
There are a number of adverse physical effects that have been associated with heavy or long-term use of khat, including tooth decay and periodontal disease; gastrointestinal disorders such as constipation, ulcers, inflammation of the stomach, and increased risk of upper gastrointestinal tumors; and cardiovascular disorders such as irregular heartbeat, decreased blood flow, and heart attack.

There is also consistent epidemiologic evidence for a weak association between chronic khat use and mental disorders. Although there is no evidence that khat use causes mental illness, chewing khat leaves may worsen symptoms in patients who have pre-existing psychiatric conditions.

It is unclear whether khat causes tolerance, physical dependency, addiction, or withdrawal, but long-term users have reported mild depression, nightmares, and trembling after ceasing to chew khat.

Learn More

For more information on khat, visit www.deadiversion.usdoj.gov/drug_chem_info/khat.pdf.