



National Institute
on Drug Abuse

DrugFacts

www.drugabuse.gov

Kratom

What is kratom?

Kratom is a tropical tree (*Mitragyna speciosa*) native to Southeast Asia, with leaves that contain psychoactive (mind-altering) opioid compounds. The tree's bitter leaves are consumed for mood-uplifting effects and pain relief and as an aphrodisiac.

Kratom is not currently an illegal substance and has been easy to order on the Internet in recent years. It is sometimes sold as a green powder in packets labeled "not for human consumption." It is also sometimes sold as an extract or gum.



Photo by DEA/www.dea.gov/pr/multimedia-library/publications/drug_of_abuse.pdf#page=84

In recent years, some people have used kratom as an herbal alternative to medical treatment in attempts to control withdrawal symptoms and cravings caused by addiction to other opioids or to other addictive substances such as alcohol. There is no scientific evidence that kratom is effective or safe for this purpose (see "Medication-Assisted Treatment").

Kratom sometimes goes by the following names:

- Herbal Speedball
- Biak-biak
- Ketum
- Kahuam
- Ithang
- Thom

Medication-Assisted Treatment

Evidence-based, government-approved medications exist and are effective at treating opioid use disorders and alcohol use disorders. Read more about medication-assisted treatment at www.drugabuse.gov/publications/drugfacts/treatment-approaches-drug-addiction.

How do people use kratom?

Some people chew kratom leaves or brew the dried or powdered leaves as a tea. Sometimes the leaves are smoked or eaten in food.

How does kratom affect the brain?

Two compounds in kratom leaves, *mitragynine* and *7-hydroxymitragynine*, interact with opioid receptors in the brain, producing sedation, pleasure, and decreased pain, especially when users consume large amounts of the plant. However, there can be uncomfortable and sometimes dangerous side effects.

Mitragynine may also interact with other receptor systems in the brain to produce stimulant effects. When kratom is taken in small amounts, users report increased energy, sociability, and alertness instead of sedation.

What are the health effects of kratom?

Reported health effects of kratom use include:

- sensitivity to sunburn
- nausea
- itching
- sweating
- dry mouth
- constipation
- increased urination
- loss of appetite

Psychotic symptoms have been reported in some users.

Kratom by itself is not associated with fatal overdose, but commercial forms of the drug are sometimes laced with other compounds that have caused deaths.

Is kratom addictive?

Like other opioid drugs, kratom may cause dependence (feeling physical withdrawal symptoms when not taking the drug), and some users have reported becoming addicted to kratom. Withdrawal symptoms include:

- muscle aches
- insomnia
- irritability
- hostility
- aggression

- emotional changes
- runny nose
- jerky movements

Behavioral therapies and medications have not specifically been tested for treatment of kratom addiction.

Points to Remember

- Kratom is a tropical tree native to Southeast Asia, with leaves that contain psychoactive opioid compounds.
- The tree's bitter leaves are consumed for mood-uplifting effects and pain relief and as an aphrodisiac.
- Kratom is not currently an illegal substance and has been easy to order on the Internet in recent years.
- Some people chew kratom leaves or brew the dried or powdered leaves as a tea.
- Sometimes the leaves are smoked or eaten in food.
- Two compounds in kratom leaves, *mitragynine* and *7-hydroxymitragynine*, interact with opioid receptors in the brain, producing sedation, pleasure, and decreased pain.
- Mitragynine may also interact with other receptor systems in the brain to produce stimulant effects.
- Reported health effects of kratom use include:
 - sensitivity to sunburn
 - nausea
 - sweating
 - loss of appetite
 - psychotic symptoms
- Commercial forms of kratom are sometimes laced with other compounds that have caused deaths.
- Some users have reported becoming addicted to kratom.
- Behavioral therapies and medications have not specifically been tested for treatment of kratom addiction.

Learn More

For more information about kratom, visit: www.drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts

www.dea.gov/pr/multimedia-library/publications/drug_of_abuse.pdf#page=84

For more information about medication-assisted treatment, visit: www.drugabuse.gov/publications/drugfacts/treatment-approaches-drug-addiction

This publication is available for your use and may be reproduced **in its entirety** without permission from NIDA. Citation of the source is appreciated, using the following language:

Source: National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.

February 2016