

What You Need to Know About Youth & Kratom

WHAT IS KRATOM?

Kratom (pronounced KRAT-um, rhyming with “atom”) is a tropical tree found in Southeast Asia, with leaves that contain compounds that can have mind altering, or psychotropic, effects.¹ It is frequently marketed and sold in the United States as an herbal extract or dietary supplement to boost energy and mood and relieve pain.²

HOW IS KRATOM USED?

Typically, kratom is orally ingested in the form of a tablet, capsule or extract.¹ The leaves can also be chewed, or dried, crushed, or brewed and consumed as a tea.¹ The leaves can also be smoked or mixed and consumed in food.¹

WHAT ARE THE EFFECTS OF KRATOM?

Kratom can elicit responses similar to both opioids and stimulants.¹ Small amounts of kratom activate receptors in the brain that produce increased feelings of energy, alertness and talkativeness – similar to the effects of stimulants.²⁻³ When taken in large doses, two of the compounds within kratom interact with the brain’s opioid receptors, producing feelings of sedation, pleasure and lower levels of pain, mimicking the effects of opioids.¹

Kratom in both small and large doses can incite nausea, itching, sweating, dry mouth, constipation, high blood pressure, vomiting, insomnia and seizures.²⁻³ There are also reports of psychotic symptoms as a result of kratom use, such as confusion, delusions and hallucinations.³

IS KRATOM ADDICTIVE?

Yes. Kratom affects the same brain receptors as opioids, putting individuals who use kratom at risk for addiction.⁴

IS KRATOM SAFE?

The research on kratom is still developing, but initial reports have identified safety concerns such as abnormal brain function when taken with prescription medications and symptoms such as muscle aches, aggression, runny nose and jerky movements, similar to opioid withdrawal.¹⁻² Additionally, because kratom is not regulated by the Food and Drug Administration (FDA), it can contain other chemicals or substances that may impact health outcomes.¹⁻²

From July 2016 through December 2017, 152 victims of overdose deaths tested positive for kratom; in 91 of the cases, kratom was determined to be the cause of death. Multiple substances were also detected in almost all deaths — fentanyl and fentanyl analogs were the most frequently identified co-occurring substance and heroin was the second most frequent substance listed as a cause of death, followed by benzodiazepines, prescription opioids and cocaine.⁵

IS KRATOM LEGAL?

Kratom is legal, as it is not controlled under the Controlled Substances Act; however, some states and cities have regulations or prohibitions against possession or use of kratom. Legality and availability of kratom does not equate to safety.⁴ The FDA has not approved it for any type of use and the agency is actively evaluating scientific research to determine its safety.⁶ The Drug Enforcement Administration has listed kratom as a Drug and Chemical of Concern.³

REFERENCES

1. National Institute on Drug Abuse. (2019, April 8). *Kratom drugfacts*. <https://www.drugabuse.gov/publications/drugfacts/kratom>.
2. Mayo Clinic. (2020, June 3). *Kratom: Unsafe and ineffective*. <https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/kratom/art-20402171>.
3. Drug Enforcement Administration. (April 2020). *Drug fact sheet: Kratom*. https://www.dea.gov/sites/default/files/2020-06/Kratom-2020_0.pdf.
4. McCance-Katz, E. (2019). Urgent and emerging issues in prevention: Marijuana, kratom, e-cigarettes [PowerPoint]. Substance Abuse and Mental Health Administration. https://www.samhsa.gov/sites/default/files/samhsas_15th_annual_prevention_day_afternoon_plenary_recording.pdf.
5. O'Malley Olsen, E., O'Donnell, J., Mattson, C.L., Schier, J.G., Wilson, N. Notes from the field: Unintentional drug overdose deaths with kratom detected – 27 states, July 2016 – December 2017. *MMWR Morb Mortal Wkly Rep*. 2019; 68(14): 326-327. doi: 10.15585/mmwr.mm6814a2.
6. United States Food & Drug Administration. (2019, September 11). *FDA and kratom*. <https://www.fda.gov/news-events/public-health-focus/fda-and-kratom>.

This project is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$2,000,000 with 100% funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS or the U.S. Government.