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## I. WHAT ARE KRATOM AND 7-OH, AND WHAT ARE THEIR EFFECTS ON THE BODY?

Kratom is a tree native to Southeast Asia. Mitragynine and 7-OH (or 7-hydroxymitragynine) are the main naturally occurring compounds found in the kratom plant that cause a “high.”

Some products sold as kratom or 7-OH contain artificially elevated amounts of synthetic or semi-synthetic 7-OH. Naturally occurring levels of 7-OH are relatively low in kratom. Products sold as kratom or 7-OH may also contain other additives or contaminants because the industry is not regulated and lacks product testing or oversight.

Neither kratom nor 7-OH are currently considered controlled substances under federal law,\* though some states have added them to their own controlled substance schedules. This makes it illegal to manufacture, sell, or possess kratom and 7-OH in those jurisdictions. Other states have taken steps to regulate the marketing and sale of kratom and 7-OH!

Today in the United States, products labeled as kratom and 7-OH come in many forms. These include powders, capsules, leaves, or extracts. These products are often sold in gas stations, convenience stores, vape shops, and online. Since products sold as kratom and 7-OH have varying levels of potency, they can sometimes affect the body in different and often unpredictable ways.

In lower doses, products sold as kratom can produce stimulant-like effects like increased energy and alertness. They can increase heart rate, anxiety, and blood pressure and have other stimulant-like adverse effects. Higher doses of products sold as kratom can produce sedative or opioid-like effects such as relaxation and pain relief. Consuming large amounts of kratom products may cause nausea, constipation, drowsiness, loss of consciousness, and overdose. Kratom is not an opioid, but it partially interacts with the same receptor sites in the brain that opioids do.

Products containing higher levels of 7-OH have more opioid-like effects on the brain and body. These products come with greater risk of physical dependence and overdose since they are significantly stronger than kratom in its natural form.

Rates of kratom use in the United States are significantly lower than other drugs, although there is a growing number of people who use the substance.<sup>2</sup> Even fewer people use 7-OH products. The research on short and long-term health impacts of kratom and 7-OH is limited—this is still an emerging area of study, and these drugs are relatively new in the drug supply.<sup>3</sup>

\*In 2016, the Drug Enforcement Administration (DEA) issued a notice of intent to temporarily schedule mitragynine and 7-OH into Schedule I. DEA rescinded this notice after receiving numerous public comments. In 2018 Department of Health and Human Services opposed scheduling, pausing the debate. Mason Marks, “Separation of Drug Scheduling Powers,” *Yale Law Journal* 134 (2025): 1005–06, available at [https://yalelawjournal.org/pdf/MarksYJForumEssay\\_v5sfzv87.pdf](https://yalelawjournal.org/pdf/MarksYJForumEssay_v5sfzv87.pdf). In July of 2025, the Food and Drug Administration (FDA) requested that the DEA add 7-OH to the list of Schedule I controlled substances. As of the time of publication, the DEA has not retried to schedule kratom, mitragynine, or 7-OH. U.S. Food & Drug Admin., “FDA Takes Steps to Restrict 7-OH Opioid Products Threatening American Consumers,” July 29, 2025, <https://www.fda.gov/news-events/press-announcements/fda-takes-steps-restrict-7-oh-opioid-products-threatening-american-consumers>.

## 2. ARE THERE ANY MEDICAL USES OF KRATOM AND 7-OH?

The U.S. Food and Drug Administration (FDA) has not approved kratom or 7-OH for any purpose. These products cannot be legally marketed as treatments for any medical condition or as dietary supplements.

For centuries, people in Southeast Asia have used kratom in its original form for spiritual, religious, and medicinal purposes.<sup>4</sup> The use of products sold as kratom and 7-OH has gained increased attention in recent years across the United States for recreational and medicinal purposes. Many people report that these products can support self-treatment of anxiety and pain.<sup>5</sup> Others claim they help manage opioid use disorders and addiction by relieving the effects of opioid withdrawal. More research is needed to understand how and why people use kratom and 7-OH products, as well as determine the extent to which these products are safe and effective for these purposes.

Although people report using kratom and products containing 7-OH for opioid use disorders, there are currently 3 FDA-approved medications to treat opioid use disorder in the United States. These are methadone, buprenorphine (e.g., Suboxone), and naltrexone (e.g., Vivitrol). These medications reduce opioid cravings, withdrawal symptoms, and overdose risk. However, there are many barriers to accessing these medications, preventing people from benefiting from the “gold standard” of treating opioid use disorder.

## 3. HOW LONG DOES KRATOM AND 7-OH STAY IN THE SYSTEM?

The effects of products sold as kratom or 7-OH can last for several hours, depending on how much is consumed. Lack of research makes it difficult to know how long these drugs stay in the body and could result in a positive drug test. Most standard drug tests do not currently test for kratom or 7-OH.

## 4. WHAT HAPPENS IF YOU MIX KRATOM OR 7-OH WITH OTHER DRUGS?

Using products sold as kratom or 7-OH alongside other drugs can be risky. Almost all cases of kratom-involved fatalities<sup>6</sup> or serious adverse effects<sup>7</sup> reported in the U.S. have involved other drugs. The risk of overdose increases when these products are taken with opioids or sedative drugs. When taken with stimulants, they can increase the risk of cardiovascular or other health risks. Depending on the amount or combination of drugs, people can experience intense effects, toxicity, or even organ damage.<sup>8</sup>

Even if people believe they are consuming a product containing only kratom or 7-OH, there is still a chance that these products could be adulterated or contaminated, have unknown chemical contents, or vary in potency from batch to batch. This is due to the lack of regulatory oversight for kratom and 7-OH product manufacturing, labeling, and quality control.<sup>9</sup>

## 5. CAN YOU OVERDOSE ON KRATOM OR 7-OH?

Yes, you can overdose on products sold as kratom and 7-OH.<sup>10</sup> While not all overdoses are fatal, even non-fatal overdoses can have lasting health effects.

Fatal overdoses from kratom use alone are very rare. Most cases of kratom-involved fatalities<sup>11</sup> or serious adverse effects<sup>12</sup> reported in the United States have involved other drugs.

Kratom and 7-OH appear to respond to naloxone, the opioid overdose reversal medication.<sup>13</sup> It is important for people to never use alone and for bystanders to have access to naloxone so they can respond to an overdose.

People can overdose on products containing kratom or 7-OH by taking too much or more than they anticipated. People with no opioid tolerance are at higher risk for an overdose if they accidentally consume large amounts of these products. However, people with established opioid tolerance are still at risk. They may not know what they are taking or how much since these products are not regulated or tested for adulterants or contaminants. This means people may accidentally consume high doses or mixed products without their knowledge. The risk of an overdose is higher if products are consumed with other opioids or depressant drugs like alcohol, benzodiazepines, or tranquilizers.

## **6. CAN YOU BECOME ADDICTED TO KRATOM OR 7-OH AFTER USING IT FOR THE FIRST TIME?**

No, you cannot become addicted to kratom, 7-OH, or any drug after using it only one time.

### **PHYSIOLOGICAL DEPENDENCE IS DIFFERENT FROM SUBSTANCE USE DISORDER**

People can develop physiological dependence to kratom or 7-OH if they use it repeatedly for several days or weeks in a row.<sup>14</sup> Physiological dependence means that someone has developed an increased tolerance for a drug, so they need to use more to get the desired effect. They may experience physical withdrawal symptoms if they suddenly stop using. Withdrawal from kratom may be similar to opioid withdrawal but is generally milder.<sup>15</sup> There is no FDA-approved medication for kratom or 7-OH dependence. There are no established protocols for managing kratom or 7-OH withdrawal symptoms.

### **ADDICTION AND SUBSTANCE USE DISORDER**

A person only meets the criteria for a substance use disorder if they continue to use a drug repeatedly despite experiencing numerous harms and negative consequences. There are some people who use kratom or 7-OH and have developed an addiction or substance use disorder.

## **7. WHAT ARE TREATMENT OPTIONS FOR PEOPLE WHO USE KRATOM OR 7-OH?**

There are no FDA-approved medications for kratom or 7-OH addiction. More research is still needed to understand which treatments may be most effective for people addicted to these substances. It is possible that people with kratom or 7-OH use disorders could benefit from treatment, similar to people with other substance use disorders. Substance use disorder treatment involves professionally delivered psychosocial treatment intended to reduce problematic drug use and improve health and quality of life.

Since high doses of kratom have opioid-like effects and products containing 7-OH act like opioids in the brain and body, it is possible that medications for opioid use disorder (MOUD) could be effective in treating addictions to these substances. There is some research to suggest that people with kratom addictions have responded well to buprenorphine.<sup>16</sup>

## **8. WHAT ARE HARM REDUCTION STRATEGIES FOR PEOPLE WHO USE KRATOM OR 7-OH?**

There are several important harm reduction strategies for people who use products sold as kratom or 7-OH.

### **NEVER USE ALONE.**

People should avoid using kratom or 7-OH alone because these products can lead to adverse effects or an overdose. Kratom and 7-OH appear to respond to naloxone, the opioid overdose reversal medication.<sup>17</sup> Make sure naloxone is available and give it to anyone who is overdosing.

## **MONITOR BREATHING.**

When responding to a kratom or 7-OH-involved overdose, make sure the person is breathing. Place them in the recovery position, so they do not hurt themselves.

**If the person does not take at least 10 breaths a minute, call 911 for help and administer rescue breaths until help arrives.**

## **GO SLOW.**

People should “go slow” when using kratom or 7-OH by taking a little bit at a time to reduce the risk of adverse effects.

## **DON'T MIX.**

It is also advised that people do not take kratom or 7-OH in combination with opioids or depressant drugs, including alcohol. This can increase the risk of an overdose and other serious adverse effects.<sup>18</sup>

## **9. WHAT DRUG POLICIES HELP PEOPLE WHO USE KRATOM AND 7-OH STAY SAFE?**

Our collective safety and well-being depend on factual information so people can make safer choices and lives can be saved. Currently, much of the public information around kratom and 7-OH promotes fear and calls for more criminalization instead of public health approaches that address why someone may be struggling with drug use and connect them to support.

Kratom and 7-OH are not currently federally controlled substances. Scheduling kratom and 7-OH would criminalize possession and result in harsh penalties, including up to one year in federal prison for a first offense. Penalties at the state level could be even more severe. As we have seen with other drugs, criminalizing it does not stop people from using. It can lead to more dangerous methods of using drugs, using in secret, and feeling fearful to reach out for help. Fear of punishment can

prevent people from calling for help when someone is experiencing an overdose. They may be afraid of being prosecuted or facing a loss of employment, housing, or other basic needs.

A public health approach can help people who use kratom and 7-OH stay safe and get connected to support. This looks like public education, smart regulation, and health policies implemented at the local, state, and federal levels.

## **INVEST IN ADDICTION SERVICES.**

A wide range of addiction services—including counseling, medications, long-term treatment, and recovery housing—should be available to everyone. Personalized support reduces overdose risk and improves chances of recovery.

## **EXPAND ACCESS TO HEALTHCARE OPTIONS.**

For people using kratom or 7-OH to help control physical pain, we must expand access and options for pain management and treatment. For people using kratom or 7-OH as alternatives to psychiatric medications for depression or anxiety, we must expand access to affordable and accessible mental health care.

## **AUTHORIZE OVERDOSE PREVENTION CENTERS (OPC) ON THE STATE AND LOCAL LEVEL.**

These centers provide essential connections to care and can respond to an adverse health event or overdose at the earliest signs. They prevent overdose deaths, save lives, and promote recovery.

## **PROVIDE FACT-BASED PUBLIC EDUCATION.**

Accurate information provided in a nonjudgmental manner helps people make choices that reduce their risk of overdose and other negative consequences. It can also give them access to treatment and recovery options.

## IMPROVE DRUG CHECKING AND DATA COLLECTION.

This will help us better understand the current drug supply, issue warnings, and offer better solutions.

## FUND RESEARCH ON KRATOM, 7-OH, AND POLYSUBSTANCE USE.

Research is needed to better understand the effects of kratom and 7-OH and how to manage intoxication and withdrawal. Many people with substance use disorders use multiple drugs. Research and addiction services must account for polysubstance use to improve services and outcomes.

## EXPLORE SENSIBLE REGULATION OF KRATOM AND 7-OH MANUFACTURE AND SALE.

Regulating the possession, manufacturing, distribution, and/or sale of kratom and 7-OH can allow for greater oversight. Examples of regulations include:

- Imposing age limits or ID checks
- Restricting online sales
- Regulating retail sales (e.g., only available behind a counter)
- Approving products with lower risks of harm, including those with fewer added compounds
- Granting licenses to manufacturers and routinely monitoring and testing production facilities
- Approving packages and labels with adequate safety information and ensuring that there are no claims made for unverified uses
- Granting licenses to vendors and placing restrictions on signage and advertising
- Taxing products and using revenues for research

## END NOTES

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