

THE ANTIDOTE

News and Notes from the Blue Ridge Poison Center

Be In The Know: What is “7-OH?”

7-OH is the latest in a long line of supplements sold in non-pharmacy places which promise to improve your health and well-being but are actually dangerous--and sometimes even deadly.

7-OH, short for *7-Hydroxymitragynine*, is a chemical compound that comes from the kratom plant. Other street names for 7-Hydroxymitragynine include 7-Hydroxy, 7-OHMG, and ‘7.’ It is sold as a dietary supplement in smoke shops, gas stations, corner shops, and online. It comes in many forms including tablets, gummies, powdered drink mixes, liquids, and even vape cartridges. Some of the products look just like candy or other harmless treats, especially to kids.



Image: Blue Ridge Poison Center

How does 7-OH affect users?

7-OH is *psychoactive*, meaning it has effects on the mind and body. It binds to the same receptors in the brain as opioids. At low doses 7-OH can act as a stimulant, increasing energy and alertness. At higher doses it can have opioid-like effects including pain relief, euphoria, and relaxation. Some people think it’s a “natural” and legal way to manage the symptoms of opioid withdrawal. But using 7-OH can lead to its own dependence (meaning your body gets used to it), withdrawal symptoms when you stop, and even overdose. Across the U.S., there have been numerous reports of serious illness, hospitalizations, and even deaths after using 7-OH.

What are the concerns?

While the 7-OH compound occurs naturally in very small

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POISON TRIVIA

What role does nicotine play in the tobacco plant?

- A. Helps the plant use sunlight.
- B. Defends the plant by poisoning pests who try to feed on it.
- C. Makes the plant smell good.

Answer on page 3



amounts in kratom leaves, the versions sold in stores are synthetic and highly concentrated—much stronger than what is found in nature. In fact, **7-OH is reported to be 13 times more powerful than morphine.**

7-OH is not FDA-approved for medical use, and has not been proven to be safe or effective. Furthermore, products are unregulated, meaning there’s no testing for safety and no control over how strong they are or what other ingredients might be included. In fact, products are often found to contain dangerous contaminants including other addictive drugs, heavy metals and harmful bacteria.

Symptoms reported after 7-OH use may include:

- Nausea and vomiting
- Agitation
- Confusion
- Sweating
- Rapid heart rate
- High blood pressure
- Trouble breathing
- Sleepiness or loss of consciousness
- Seizures



Protect yourself and your family:

- Check labels carefully. Avoid buying any product that lists 7-OH or “7-Hydroxy” on the label.
- Any product containing 7-OH (or kratom) should always be kept up high, out of the sight and reach of children and pets.
- Talk to your doctor if you’re struggling with pain, addiction, or anxiety. Safe, effective treatments are available.
- If someone used 7-OH and is sick or unresponsive, call 9-1-1 right away. You can also call the Poison Help Line at 1-800-222-1222 for guidance.



Image: A sampling of 7-OH products available, including some that look like candy or other treats and may be especially attractive to children. Source: [U.S. Food and Drug Administration](#)

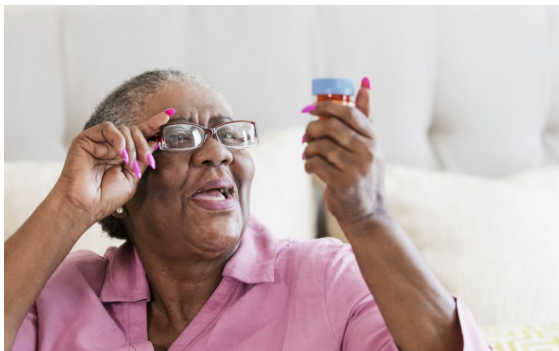
The Bottom Line

7-OH may look harmless and natural, but it’s actually dangerous and addictive. Don’t be fooled by its packaging or marketing.

Preventing The Next Wave of the Opioid Epidemic: **What You Need to Know About 7-OH**

Check out this brochure from the U.S. Food and Drug Administration: [Preventing The Next Wave of the Opioid Epidemic: What You Need to Know About 7-OH](#)

Medicine mistakes are common. Here’s how we can help.



- The label caught Ron’s eye as he returned the bottle to the medicine cabinet. He had just taken his wife’s Tramadol®, a prescription painkiller, instead of his Trazadone®, a prescription sedative.
- Ellen panicked after realizing she had mistakenly been giving her 12-year old son 6 teaspoons of cough medicine every 4 hours-- instead of 4 teaspoons every 6 hours --as the label indicated.
- Alma was preparing to take the dog for a walk when she noticed her heart felt like it was racing and her hands were jittery. Then it dawned on her: she had taken her prescription Wellbutrin® twice that morning after being interrupted by a phone call.

Ron, Ellen, and Alma (not their real names) were all helped by the Poison Center after their medicine mistake. And they weren’t alone. **In 2023, more than 345,000 people in the U.S. reached out to their regional poison center because of a mistake with medicine.**

Over 107,000 of those calls were about unintentional double-dosing. Andre Berkin, RN, BSN, CSPI, one of the specialists who answers calls at the Blue Ridge Poison Center, explains: “The most common mistake people make is taking their medicine twice. Something distracts you or interrupts you during your normal routine and you forget that you already took your medicine. It can happen to anybody.”

Other common mistakes include taking the wrong dose (56,000 calls), taking the wrong medicine (51,000 calls), or taking medicine the wrong way (19,000 calls). Example: “Spiriva® is an asthma medication that you inhale into your lungs,” Berkin explains. “The medicine comes in the form of a capsule that you load into an inhaling device, where it becomes aerosolized. Sometimes people get confused and swallow the capsule instead.”

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Andre Berkin, RN, BSN, CSPI, has been a nurse at the Blue Ridge Poison Center for 23 years!



POISON TRIVIA ANSWER: Nicotine is a toxin found naturally in tobacco plants. It defends the plant by poisoning insects or other animals who try to feed on it.



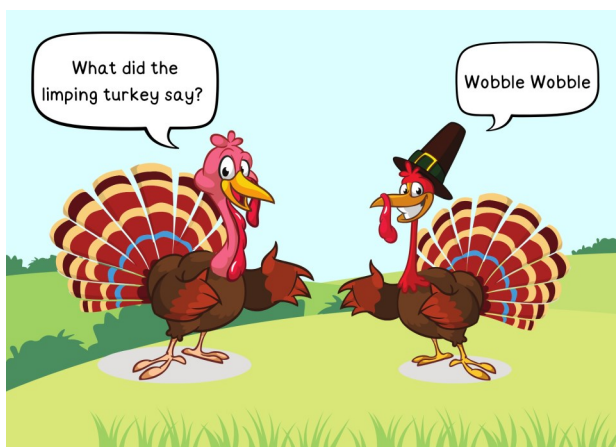
If you need glasses to read small print, put them on and check the label before taking any medicine.

Medicine mistakes are preventable:

- If possible, store medicines prescribed to different family members separately, such as on different shelves in a cabinet.
- In homes with more than one pill box user, write an individual's name clearly on each box (even better: avoid having identical boxes).
- Before you take or give any medicine, pause long enough to look at the label to make certain you are taking the correct product.
- Read the dosing instructions carefully. If taking or giving liquid medicine, use the measuring device that comes with the product instead of a kitchen spoon.

One last bit of advice: "Don't take any medicine in the dark," offers Berkin. "Always turn on the light and put on your glasses if you need them to see clearly."

Prevention does work. But if a mistake happens, specialists like Berkin are only a quick, free phone call away. "We want you to call us if, even if the person who made the mistake is not experiencing any symptoms at the moment." Berkin adds that callers who may be embarrassed by their mistake need not worry. "Poison center specialists are human, too. We all make mistakes. We are here to help. Also, your call is confidential." Call 1-800-222-1222 any time.



Happy Holidays from the Blue Ridge Poison Center!

The [Blue Ridge Poison Center](#) is part of University of Virginia Health. Other funding sources include the [Virginia Department of Health](#) and [HRSA](#). We are accredited by [America's Poison Centers](#). Proudly serving the Commonwealth since 1978. [Join the mailing list](#) to receive this quarterly newsletter.

