



# Cannabis Education

**HARM REDUCTION PRESENT IN ALL AREAS**

Every consumption choice must be responsible and well-informed—  
marijuana is no exception.





# How does marijuana work in the body?

Have you heard of the endocannabinoid system (ECS)?

This intercellular network allows marijuana to interact with the body in a unique way. Known as our “universal regulator,” the ECS helps keep all bodily systems running smoothly. It is made up of three main components:

Receptors, signaling molecules known as endocannabinoids (“endo” means “inside”), and enzymes.

Almost every cell in the body contains cannabinoid receptors, which are the sites where our endocannabinoids bind to trigger physiological changes. They play a role in regulating nearly all bodily functions, such as neurotransmitter activity, skin health, and bone density.

Interestingly, marijuana also contains cannabinoids—these are called phytocannabinoids (“phyto” means “plant”). In fact, the discovery of phytocannabinoids is what led to the identification of the ECS.

In short, phytocannabinoids bind to the body’s cannabinoid receptors because they are structurally similar to endocannabinoids.

You’ve probably heard of THC, the main psychoactive component in cannabis. This molecule binds to CB1 receptors in the brain. Every time you consume it, you are introducing molecules that influence the function of one of the body’s most important systems.



## Are CBD and THC the same?

The answer is clear: No.

They are substances derived from the same plant, and many people confuse them, but in reality, they are not the same.

CBD, or cannabidiol, is a non-psychoactive compound found in both marijuana and hemp. It does not produce a high and has been studied for its potential medicinal properties.

THC, on the other hand, binds to cannabinoid receptors in the human body, affecting various systems in both the body and the brain—including the central nervous system. As a result, THC has psychoactive effects that alter perception and influence mood.

Meanwhile, CBD does not have psychoactive effects.

Before consuming, be sure to educate yourself through reliable sources and act responsibly.

## Is marijuana dangerous?

This question doesn't have a simple answer. Cannabis can both help and harm.

While this plant has the potential to worsen mental health conditions and cause adverse physical reactions in some individuals, many users tolerate it well.

However, cannabis can be fatal in exceptional circumstances, though these deaths are not linked to a typical overdose.

At least two deaths have been documented in patients with cannabinoid hyperemesis syndrome (CHS)—a condition that causes a toxic reaction to THC, leading to repeated vomiting and severe abdominal pain. This condition is likely related to a genetic predisposition.





# Is marijuana addictive?

Cannabis addiction, known as marijuana use disorder, is a real diagnosis.

Some people are able to maintain a healthy relationship with cannabis for decades without becoming addicted. However, others may develop dependence after a relatively short period of use.

People who develop this disorder often begin by using cannabis functionally.

But this behavior pattern can quickly turn into abusive and irresponsible consumption.

These individuals start prioritizing cannabis over everything else, eventually smoking every few hours. This makes it difficult for them to complete daily tasks and causes them to neglect personal relationships.

# Why vaporize herbs?

Vaporization primarily avoids combustion and occurs at lower temperatures that provide enough heat to vaporize cannabinoids and other compounds without burning the plant material.

As a result, consumers are exposed to much fewer harmful chemicals, while still enjoying an onset of effects as rapid as smoking.





# Is a vape pen the same as a dry herb vaporizer?

E-liquids are consumed using specific nicotine vape pens—these devices heat the liquid and turn it into vapor. Unlike smoking, this process does not involve combustion. The main advantage is that no tar or carbon monoxide—two harmful byproducts of tobacco use—are produced.

E-liquids are typically made with a base of propylene glycol (PG) and vegetable glycerin (VG), to which manufacturers add food-grade flavorings and, in some cases, nicotine.

Dry herb vaporization involves vaping unprocessed cannabis flowers. The buds are usually ground before being placed into the chamber of devices designed specifically for that purpose. The herb can be vaporized at controlled temperatures to extract specific cannabinoids and terpenes from the plant material.

Dry herb vaporizers use different heating mechanisms. Convection models circulate hot air through the plant material, while conduction models use a heating element in direct contact with the herb.

Vaporization mainly avoids combustion and occurs at lower temperatures, which provide enough heat to vaporize cannabinoids and other compounds without burning the plant. As a result, users are exposed to far fewer harmful chemicals, while still enjoying an onset of effects as fast as smoking.



# DRY HERB, THC, AND CBD VAPORIZERS

## DIFFERENCES, BENEFITS, AND DRAWBACKS

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Cannabis vaporizers have become increasingly popular in recent years as an alternative to smoking, especially among young people in Latin America.

Below, we clearly and professionally explain the differences between a dry herb vaporizer, a THC vaporizer, and a CBD vaporizer, along with their respective benefits and drawbacks.

Note: While vaping reduces certain risks compared to smoking, it is not a 100% harmless practice. Keep in mind that these products and methods are intended for adults only.

### What is a dry herb vaporizer (herb heater)?

*A portable dry herb vaporizer next to cannabis buds. These devices heat the flower without burning it, releasing active compounds in the form of vapor.*

A dry herb vaporizer is an electronic device designed to heat cannabis to a controlled temperature below the point of combustion. This allows the release of active compounds—such as THC, CBD, and terpenes—in the form of inhalable vapor, without burning the plant material.

Since there is no combustion, it avoids producing smoke filled with tar, carbon monoxide, and other harmful toxins associated with smoking.

Dry herb vaporizers typically have a chamber where the ground herb is placed and a battery-powered heating element that activates the vaporization process.





## Benefits:

- Less harmful than smoking: Vaporizing does not involve combustion, which significantly reduces the inhalation of toxic byproducts from smoke. This makes vaping cannabis less damaging to the lungs than smoking a joint—though it is not completely harmless.
- Better flavor and efficiency: Vaporization preserves the plant's terpenes more effectively, delivering a cleaner and purer flavor than combustion. It also extracts cannabinoids more efficiently with less material, making better use of the herb.
- Less odor and more discretion: Cannabis vapor tends to dissipate quickly and smells much less than burned herb. Clothes and surroundings don't retain the smell as strongly, offering greater discretion when consuming. (Note: with portable dry herb vaporizers, some odor may still be noticeable—especially if the device is still warm.)
- Temperature and effect control: These devices allow users to adjust the heating temperature, making it possible to release more psychoactive compounds (like THC) or milder ones depending on the preference. This gives the user greater control over the dose and overall experience, unlike traditional smoking.





## Drawbacks:

- Initial cost and maintenance: A quality dry herb vaporizer is not cheap. In addition, it requires some upkeep: charging batteries, cleaning the chamber regularly, and replacing parts as needed to ensure proper function.
- Learning curve and accessories: New users must learn how to properly operate and load the device (e.g., grinding the herb, not overpacking the chamber, etc.). Incorrect use—such as overheating or overfilling—can burn the herb or damage the device. You'll also need a herb grinder to prepare the cannabis for optimal vaporization.
- Defective devices or quality risks: A low-quality vaporizer may overheat and partially burn the herb (producing unwanted smoke). Some cheap models have been found to contain heavy metals like cadmium, nickel, or lead, as well as other contaminants. It's essential to choose reliable, well-made devices to minimize these risks. (In rare cases, defective vape batteries have exploded, causing burn injuries.)
- Not harmless to your health: While vaporizing reduces toxic byproducts from combustion, you are still inhaling foreign substances into your lungs. Long-term effects are not fully known, so it should not be considered 100% safe.
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# What is a THC vaporizer (cannabis oils or concentrates)?

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A THC vaporizer refers to devices used to consume concentrated cannabis extracts that are high in THC (tetrahydrocannabinol).

Unlike dry herb vaporizers, these use THC-infused e-liquids instead of flower. The most common format seen in Latin America is disposable cartridges.

These cartridges typically contain highly concentrated THC (60–90%), often blended with diluents and terpenes, making them significantly more potent than cannabis in its natural form.

When the user inhales, the device heats the liquid using a small electric coil, producing a vapor that is inhaled through the mouthpiece.





## Benefits:

- No smoke or combustion: Just like with dry herb vaporization, THC oils are heated without burning. This avoids the toxic byproducts of traditional smoke (like tar, etc.), resulting in less harm to the lungs and throat compared to smoking flower or concentrates. Many medical and recreational users view this as a harm reduction alternative to smoking cannabis.
- Potency and fast dosing: THC cartridges are usually high in purity, so just a few puffs can deliver strong and immediate effects. This is useful for therapeutic purposes (e.g., quickly relieving nausea or intense pain) and for experienced recreational users seeking a quick high. Since the effects are felt almost instantly, it's easier to dose gradually—the user can take 1–2 hits, pause, and assess the effects before consuming more.
- Variety of options (in legal markets): In regions where cannabis is legal and regulated, there are THC cartridges available in different flavors, strains, and cannabinoid ratios. This allows consumers to select products based on terpene profiles or balanced THC/CBD content, depending on their preferences. These products are also generally free of contaminants in legal markets, offering greater confidence to consumers.
- (In Latin America, with the exception of Uruguay and some limited medical programs, this point is mostly theoretical, as recreational THC cartridges are not legally available.)





## Drawbacks:

- Risks from adulterated products: In most Latin American countries, THC cartridges come from the illegal market, with no health regulation or quality control. This poses serious risks. In 2019, many illicit vape cartridges were found to contain vitamin E acetate as an additive, triggering a wave of severe lung injuries (EVALI) and even deaths.

A study in Chile found confiscated cartridges containing up to 51% vitamin E and 60% THC, a dangerous combination that can cause acute lung damage, heart attacks, and strokes.

In unregulated markets, there are no guarantees about the contents: some cartridges may include toxic solvents (like PEG or oils not meant for inhalation), or may not contain real THC at all, but instead contain harmful synthetic cannabinoids.

- Intense side effects: Concentrated THC can produce much stronger psychological and physical effects than regular cannabis flower. Users with low tolerance or high sensitivity may experience paranoia, anxiety, panic attacks, or hallucinations if they overconsume.

In adolescents and young people, frequent use may negatively affect brain development, leading to issues with memory, learning, or emotional regulation.





- Tolerance and dependence: Due to its high potency, it's easy to develop a tolerance to THC with regular vaping. The user may require increasing doses to achieve the same effect. This also raises the risk of psychological dependence on cannabis.

The discreet design of vape pens (no odor, no preparation) encourages frequent use, which can reinforce addictive habits if not used in moderation.

- Legal issues and consequences: With few exceptions, recreational THC is illegal in most of Latin America. Possessing or using a THC oil vaporizer can lead to serious legal penalties, similar to other forms of cannabis.

Moreover, because of its high concentration, some countries impose harsher penalties for extracts than for raw cannabis flower. This puts the user at greater legal risk.

Even in regions where medical cannabis is legal, THC cartridges are not always permitted. Additionally, buying these products often supports the black market, with all the associated dangers.

- Device quality concerns: As with dry herb vaporizers, hardware quality matters. Poorly made cartridges can leach heavy metals into the vapor. Some batteries can overheat the oil, burning it partially and creating irritating byproducts.

There's also a risk of electrical malfunctions or liquid leaks. All of these can negatively affect the experience—or worse, cause harm to your health.

It's recommended to use devices from trustworthy sources and avoid suspiciously cheap products.

- Recurring cost: Cannabis oil cartridges are typically expensive per gram of THC. When used regularly, they represent a higher ongoing cost than buying dry herb.

On average, the cost per milligram of THC in oil can be two to three times higher than that of flower, due to the extraction and formulation process.

For frequent users, this can be a significant limitation.



## What is a CBD vaporizer?

A CBD vaporizer is essentially similar in format to a THC vape, but it is filled with extracts rich in cannabidiol (CBD) instead of THC.

CBD is another cannabinoid found in the cannabis plant, but it is non-psychoactive—it is not hallucinogenic and does not alter consciousness.

The CBD oils or liquids used in vaporizers are typically derived from industrial hemp (cannabis varieties with very low THC content). They come in cartridges or refillable bottles designed for vape devices, and are often mixed with diluents such as propylene glycol (PG) and vegetable glycerin (VG) to achieve the right consistency.

Vaping CBD works similarly to vaping nicotine or other e-liquids: the battery powers a heating coil, which vaporizes the liquid, and the user inhales the resulting aerosol.

In the market, you can find disposable CBD vape pens, pre-filled cartridges compatible with standard vape batteries, and also more advanced devices (mods) for using bottled CBD e-liquids.

It's worth noting that CBD-rich hemp flower can also be vaporized using a dry herb vaporizer, just like regular cannabis, allowing for combustion-free CBD use. However, the term “CBD vaporizer” typically refers to e-cigarette-style devices used for vaping CBD liquids.





## Benefits:

- Therapeutic effects without euphoria: The main advantage of CBD is that it offers potential medicinal benefits without producing a “high.”

CBD is used to relieve anxiety, chronic pain, inflammation, and even seizures in rare forms of epilepsy—all without impairing the mind or daily functioning.

Vaping CBD allows for rapid absorption into the bloodstream through the lungs, providing almost immediate relief in cases of acute anxiety or panic attacks.

Many users turn to CBD vaping as a way to relax or manage stress without the intoxicating effects of THC.

- Discreet and easy to use: Like THC pens, CBD vapes are discreet, portable, and simple to operate. The vapor has little to no smell (and is sometimes flavored), making it possible to medicate in public without drawing attention.

Additionally, since CBD is not considered a recreational “high” substance, its use for wellness purposes is more socially accepted in settings where nicotine vaping is common.

- Lower risk of abuse or dependence: According to the World Health Organization, CBD is not addictive and does not cause significant withdrawal symptoms.

People can use it regularly for symptom management without developing chemical dependence.

Unlike nicotine—or even THC—it does not create a rewarding, compulsive craving that reinforces continued use.

This makes CBD vaping relatively safer in terms of addiction risk.

(That said, psychological habituation to the act of vaping for stress relief is still possible.)





- Legal product (in many places): In much of Latin America, CBD products derived from hemp (with less than 0.3% THC) are legal or tolerated for therapeutic use—unlike THC.

Countries like Mexico, Colombia, Uruguay, and Argentina have eased restrictions on the importation or domestic production of CBD oils for treatment purposes.

This means consumers can often obtain CBD vaporizers through legal or low-risk channels, unlike THC products.

Furthermore, due to its legal status, it's easier to find lab-tested products with clear labeling and verified concentrations.

- No severe immediate side effects: In general, CBD is well tolerated.

Vaping moderate doses doesn't cause tachycardia, blood pressure spikes, or dysphoria. Its typical physical effects include relaxation, mild drowsiness, or reduced muscle tension.

There is no risk of dangerous overdose—if too much is consumed, the most common effects are fatigue or mild discomfort, not severe intoxication.

This gives a wide safety margin for new users. (Still, it's always wise to start with low doses to see how your body responds.)





## Drawbacks:

- Potential harm: Don't be misled—just because CBD is “natural” or used therapeutically doesn't mean that vaping it is harmless.
- Lack of regulation and inconsistent quality: Even though CBD may be legal, the market is not always well-regulated.

Many CBD products—especially those sold online or in non-specialized shops—may not contain the stated amount of CBD, or may include hidden THC, pesticides, residual solvents, or other impurities. Some so-called “CBD” cartridges have even been found to contain dangerous synthetic cannabinoids. In Latin America, regulatory oversight is often weak, and users may end up purchasing CBD liquids of unknown origin.

This makes it essential to buy from trustworthy sources with lab-tested products.

Without clear regulation, CBD vape quality is inconsistent, and consumers take on a real risk regarding product purity.

- Side effects and contraindications: While CBD doesn't get you high, it does have biological effects. High doses can cause drowsiness, low blood pressure, dry mouth, or diarrhea in some individuals. Vaping delivers CBD rapidly, which can intensify drowsiness if combined with other central nervous system depressants, such as alcohol or anti-anxiety medications.
- Cost per effective dose: High-quality CBD liquids are not cheap, and while inhalation offers rapid absorption, its effects don't last very long in the body.

The anxiolytic effects of vaporized CBD typically last only a couple of hours.

Someone managing chronic pain or anxiety may need to vape multiple times per day for consistent relief, which can lead to rapid consumption of the liquid.

Over time, this can become a significant expense.

Other forms of CBD—such as sublingual oils or capsules—may offer better cost-efficiency per mg absorbed, even if they act more slowly.



## TAKEAWAY

No form of vaping is completely harmless—especially for teenagers. Poor-quality products or improper use can seriously harm the consumer.

Be responsible and get informed before making a decision. Then, choose a trusted source that can provide accurate information.

In the absence of sensible regulation, you are ultimately responsible for your own safety.

For adults who choose to vape, the recommendation is to do thorough research. Rely on reputable sources, verify the quality of your devices and liquids, and stay aware of how your body reacts.

Listen to your body—if you experience chest discomfort, shortness of breath, or other unusual symptoms, stop vaping and seek medical attention.

And remember, in many parts of Latin America, possessing THC can have serious legal consequences. Always check your local laws before using these products.

**Always check your local laws regarding public use in your country or region to avoid legal trouble.**



## **RESPONSIBLE CONSUMPTION BASICS**

### **For Adults Only**

Young people should not consume alcohol or certain prescription medications. Many substances affect young bodies in different ways—and the same goes for cannabis.

Although many people reading this may have experimented with cannabis during their teenage years, marijuana negatively impacts brain development and can lead to mental health issues later in life.

### **Never drive after vaping cannabis**

Cannabis affects judgment, reaction time, and motor coordination, making it unsafe to use before getting behind the wheel.

Responsible users never drive after consuming cannabis, as doing so could put themselves and others at serious risk.

### **Avoid combining cannabis and alcohol**

Drinking alcohol before using cannabis intensifies the effects of THC, and mixing the two often increases the chances of having a negative experience.





## Respect the rights of others

Responsible cannabis users should understand that not everyone shares their views about cannabis, and they should consider how their use might affect others.

Using cannabis at a bus stop or in a public park may be perceived as intrusive by people who dislike the smell.

Be mindful of others when consuming cannabis—especially in public spaces.

## Do not use cannabis while taking certain medications

Up to 380 medications interact with cannabinoids, and 26 of them have serious interactions. Patients should consult their doctor before using cannabis if they are taking prescription medications.

## Do not use cannabis during pregnancy or while breastfeeding

Women should not use cannabis during pregnancy or while breastfeeding.

Cannabis compounds, including THC, can reach the fetus in the womb and the baby through breast milk.

Using marijuana during pregnancy may lead to cognitive, social, and motor development issues in the child.





## RESPONSIBLE AND INFORMED USE

