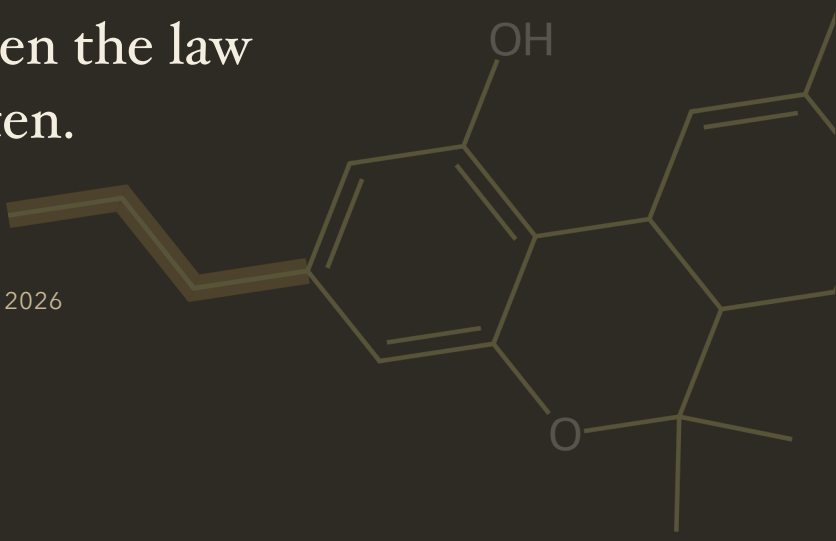
Nature gives us options. Science helps us choose wisely.

THCV

THE 2026 EVIDENCE
AND LEGAL GUIDE

An illustrated field guide to a minor cannabinoid in a year when the law around it is being rewritten.



SECOND EDITION · 2026.2 · ILLUSTRATED

Regulatory and scientific content verified 21 August 2026

Charles Henry Calfat

FOUNDER, SWISS VITALIS USA

Before You Read This

Legal and medical disclaimer

This guide is educational. It is not medical, legal, or dietary advice, and nothing in it is intended to diagnose, treat, cure, or prevent any disease. Cannabinoids can interact with medications. Do not use if pregnant or nursing. Talk to a qualified clinician before starting any supplement.

Cannabinoid law in the United States is mid-transition as of the publication date of this edition. Section 781 of Public Law 119-37 changes the federal definition of hemp and has a scheduled effective date of 12 November 2026. Every legal statement in this guide carries the date on which it was verified. Confirm the current rule in your state and country before you buy, use, carry, or travel with any hemp product.

What changed since the 2025 edition

The first edition of this guide was written in a stable legal environment. That environment no longer exists. This edition rebuilds the guide around three changes, and the illustrated 2026.2 printing adds a fourth.

- **The federal definition of hemp is being rewritten.** Section 781 replaces the delta-9-only threshold with a total-THC standard and adds a 0.4 mg per-container ceiling. It is enacted law with a scheduled effective date, not a proposal. Chapter 9 explains what that means for minor cannabinoids, including this one.
- **The dosing math has been corrected.** The 2025 edition used an industry rule of thumb of roughly 50 drops per millilitre. Measured against an actual Swiss Vitalis dropper, the real figure is forty. Everything in Chapter 13 is now expressed in millilitres against a graduated dropper, with drops given only as a secondary conversion. If you dosed by the old table, read Chapter 13 first.
- **The evidence section has been rebuilt with citations.** Chapter 5 names the studies, the doses used, and the size of each trial, including the ones that found less than the marketing around this molecule suggests.
- **New in 2026.2: the guide is illustrated.** More than fifty figures, from the molecule's structure to an annotated real laboratory report, and two legal-status maps — one covering all fifty states and the District of Columbia, one covering fifty-five countries — each stamped with the date it was verified. The maps are snapshots. Current versions are published at **swissvitalisusa.com**, under the legal-status material.

> HOW TO READ THE FIGURES
>
> Every figure is numbered by chapter (Figure 4.2 is the second figure in Chapter 4). Colour is consistent throughout: **gold is THCV**, **clay is THC and warnings**, **sage is CBD and plant matters**, **slate is law and regulation**. Where a drawing is conceptual rather than measured, it says so in the figure.

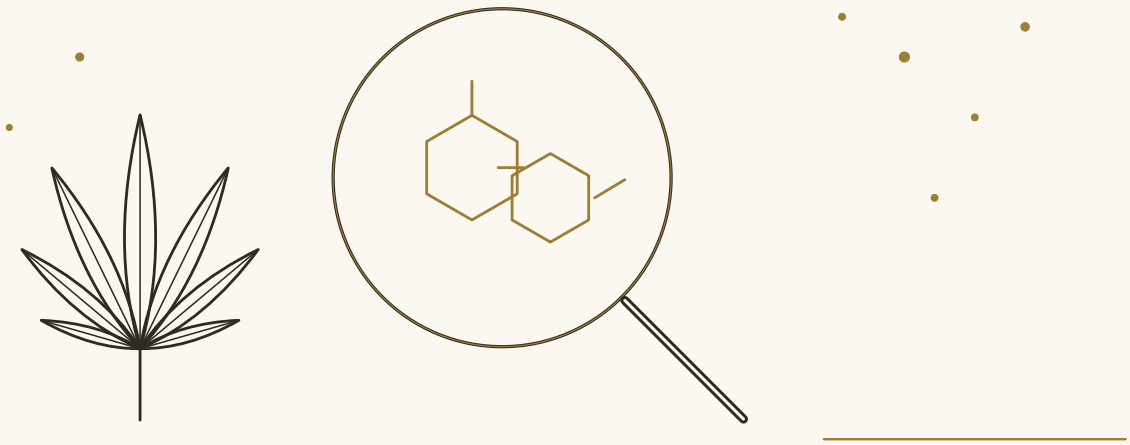
Contents

The nickname compares a prescription medication backed by phase-3 trials in thousands of patients against a wellness ingredient with one small combination study showing about 4 kg in ninety days, in ten people. Those are different categories of thing.

PART I

The Molecule

What THCV is, where it comes from in the plant, how it behaves at the receptor, and what the human evidence does and does not show. Read this part before you read anything else on the internet about this molecule.



PART I · THE MOLECULE

I Why Minor Cannabinoids Matter in 2026

For most of the last decade the cannabinoid conversation had two words in it: THC and CBD. That has changed for a practical reason. Extraction and chromatography got good enough, and cheap enough, to isolate compounds the plant makes in tiny quantities. What used to be a footnote in a botany paper is now something you can hold in a bottle and measure to the milligram.

Tetrahydrocannabivarin, THCV, is the most interesting of that group for anyone whose problem is daytime function rather than evening recovery. It sits at an unusual intersection: clear-headed at the doses most people use, oriented toward morning rather than night, and unusual among cannabinoids in that it tends to reduce appetite rather than provoke it.

It is also the minor cannabinoid facing the most regulatory uncertainty in the United States right now, which is why this edition puts the law before the dosing, and why it now carries two maps.

1970
Year THCV was first isolated. It then stayed obscure for fifty years because the plant makes very little of it.

2
Carbon atoms separating THCV from THC: a three-carbon propyl chain instead of a five-carbon pentyl one.

13 wk
Length of the longest randomised, placebo-controlled human trial of purified THCV (5 mg twice daily). It is longer than GWDM1302 by one week, and much smaller.

12 Nov
2026: the day the U.S. federal definition of hemp changes under Section 781 (a one-month extension is pending).

Who this guide is written for

- People looking for a daytime alternative to caffeine or conventional stimulants.
- People experimenting with intermittent fasting or appetite structure who want a tool, not a crutch.
- Athletes and active people who want energy without a stimulant load.
- Professionals and students who want sustained attention without intoxication.
- Retailers, formulators and clinicians who need a current, sourced picture of where this molecule stands.

One honest framing before you continue

THCV is a wellness ingredient with a small but real body of human research behind it. It is not a medication, not a weight-loss drug, and not a substitute for sleep, protein, training or medical care. The most useful thing it does is make an existing habit slightly easier to keep.

> *The most useful thing THCV does is make an existing habit slightly easier to keep. Everything else in this book is detail on how, how much, and where it is lawful.*

2 What Is THCV?

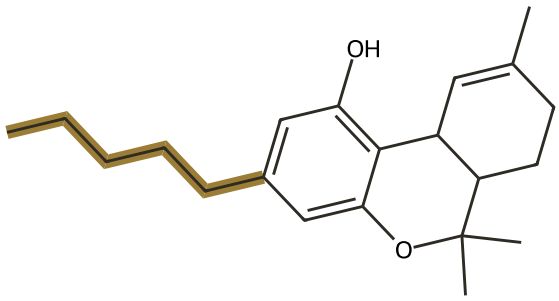
AT A GLANCE

- A naturally occurring cannabinoid found in select cannabis and hemp cultivars, historically associated with southern African landraces and with South and Southeast Asian material.
- Differs from THC by two carbon atoms in the side chain; that is enough to reverse its behaviour at the CB1 receptor at low doses.
- Made by the plant on its own biosynthetic line (the varin line), parallel to the THC line, not downstream of it.
- Reaches the market by two routes, plant extraction or chemical conversion, which are chemically identical and legally different.

THCV is a naturally occurring cannabinoid found in select cannabis and hemp cultivars, historically associated with southern African landraces and with South and Southeast Asian material. It was first isolated in 1970. It stayed obscure for fifty years for one reason: the plant makes very little of it.

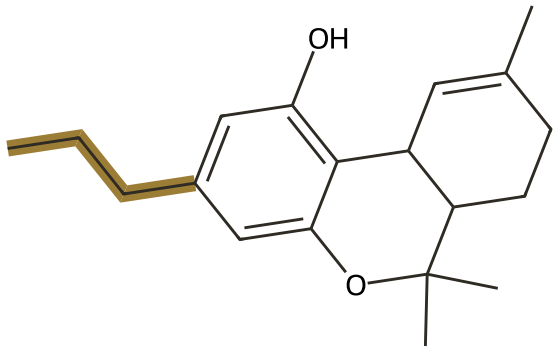
The structural difference

THC and THCV are close relatives that differ in one place. THC carries a five-carbon pentyl side chain. THCV carries a three-carbon propyl side chain. Two carbons, two methylene units. That is the entire structural difference, and it is enough to reverse the compound's behaviour at the CB1 receptor at low doses.



Δ9-THC

C21H30O2 · five-carbon pentyl chain (highlighted)



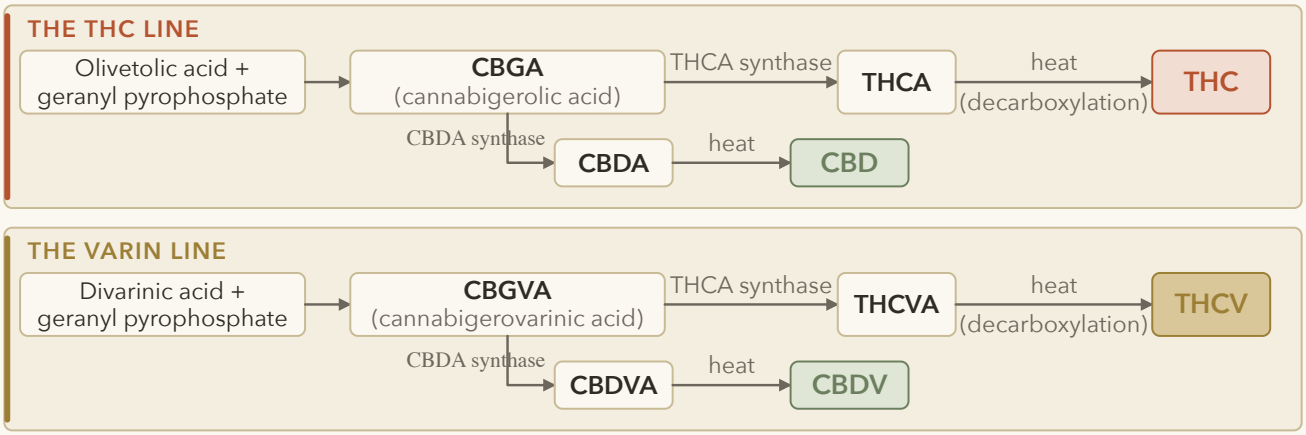
Δ9-THCV

C19H26O2 · three-carbon propyl chain (highlighted)

Figure 2.1 The same tricyclic dibenzopyran core, the same phenol, the same ring closure. Only the alkyl chain on the aromatic ring differs: pentyl (C5) in THC, propyl (C3) in THCV. Structures drawn from the published connectivity; the highlighted bonds are the side chain.

The biosynthetic pathway

This is the part the 2025 edition got wrong in one of its diagrams, so it is worth stating cleanly. THC and THCV come from two separate precursor lines. They are parallel routes, not one route branching late.



Parallel routes, not one route branching late.
THCV does not come from THC. No conversion into THC has been demonstrated in humans.

The "V" (varin) cannabinoids carry a three-carbon propyl side chain; their pentyl relatives carry five.

Figure 2.2 Two parallel lanes. The pentyl line runs from CBGA to THCA and, with heat, THC; the varin line runs from CBGVA to THCVA and THCV. Neither line feeds the other. There is no evidence the body turns THCV into THC; one laboratory study using liver microsomes and hepatocytes reported THC among THCV's metabolites (Rao 2023), unreproduced and never shown in a person.

Route	Precursor acid	Cannabinoid acid	Neutral form after heat
THC line	CBGA (cannabigerolic acid)	THCA	THC
THCV line	CBGVA (cannabigerovarinic acid)	THCVA	THCV

The varin line, the "V" compounds, all descend from CBGVA rather than CBGA. That is why THCV travels with CBDV and CBGV in plants that make it, and why a lab report showing THCV alongside a trace of CBDV is chemically coherent.

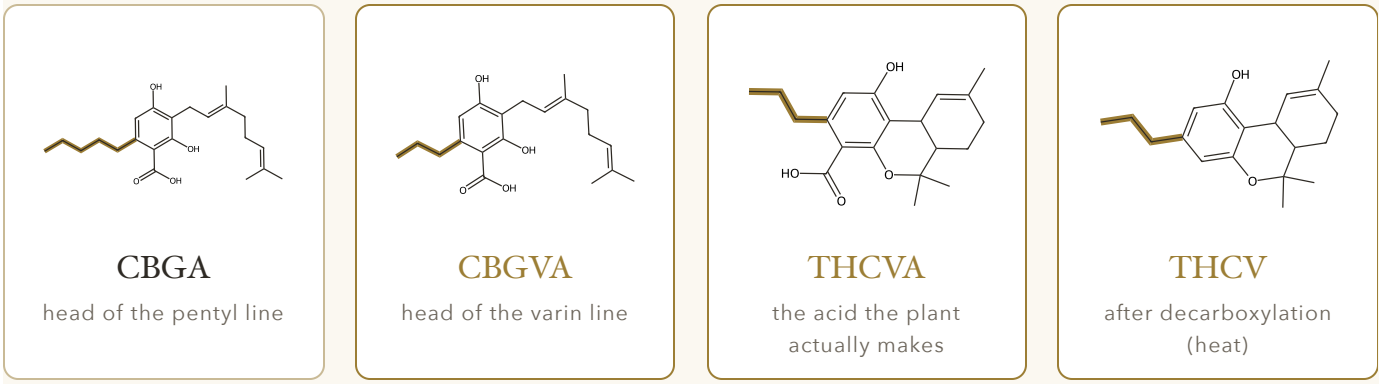


Figure 2.3 The varin line in three steps. The plant makes the acid form (THCVA); heat removes the carboxyl group (the –COOH at the bottom of the ring) to give THCV. The same step turns CBGA into the pentyl-chain series.

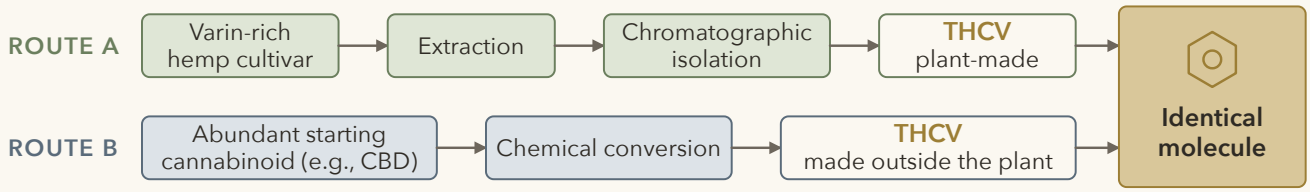
Why it feels different from THC

- **At low doses, THCV behaves largely as a CB1 antagonist.** It occupies the receptor without switching it on, which is the opposite of what THC does. The subjective result most people describe is clarity, no intoxication, and a quiet appetite.
- **At higher doses, preclinical work shows the profile shifting toward partial CB1 agonism.** This is the biphasic behaviour that makes quantity matter more with THCV than with CBD. Where the transition sits has not been established in humans.

Sourcing, and the question you should ask your supplier

THCV reaches the market by two routes. It can be extracted and chromatographically isolated from varin-rich plant material, or it can be produced by chemical conversion from a more abundant starting cannabinoid. Both routes yield the same molecule. They do not carry the same legal status under the framework described in Chapter 9, where cannabinoids produced outside the plant are treated differently from cannabinoids extracted from it.

Two routes to the same molecule.



Same molecule, not the same legal status.
Under Section 781 (effective 12 Nov 2026) cannabinoids synthesised or converted outside the plant are excluded from the federal definition of hemp.

ASK ANY BRAND, IN WRITING:
Plant-extracted or chemically converted, and from what starting material?
A COA reports what is in the bottle, not how the molecule got there.

Figure 2.4 Extraction and conversion arrive at an identical molecule. A certificate of analysis cannot tell them apart; only your supplier's written answer can.

Ask any brand, including this one, a direct question in writing: is this material plant-extracted or chemically converted, and from what starting material? A COA reports what is in the bottle. It does not report how the molecule got there. In 2026 that gap matters.

3 THCV vs. THC and CBD

	THC	CBD	THCV
Intoxicating	Yes	No	No at typical doses
Primary receptor action	CB1 and CB2 agonist	Indirect ECS modulator	CB1 antagonist at low dose, partial agonist at high dose
Effect on appetite	Increases	Broadly neutral	Decreases, dose-dependent
Subjective character	Euphoria, sedation	Calm, recovery	Clear, alert, appetite-quiet
Best window	Evening	Any	Morning and early afternoon
Human trial evidence	Extensive	Extensive	Limited but real

THCV is not weak THC, and it is not an energising CBD. It is a mechanistically distinct compound.

Figure 3.1 Six ways the three best-known cannabinoids differ. The right-hand column is the one that matters for the rest of this book.

	THC	CBD	THCV
Intoxicating	Yes	No	No at typical doses
Primary receptor action	CB1 and CB2 agonist	Indirect ECS modulator	CB1 antagonist at low dose, partial agonist at high dose
Effect on appetite	Increases	Broadly neutral at wellness doses; decreased appetite is a common adverse effect at pharmaceutical doses	Decreases, dose-dependent
Subjective character	Euphoria, sedation	Calm, recovery	Clear, alert, appetite-quiet
When people use it	Evening	Any	Daytime, on the consistent report that late use disturbs sleep
Human trial evidence	Extensive	Extensive	Limited but real, see Chapter 5

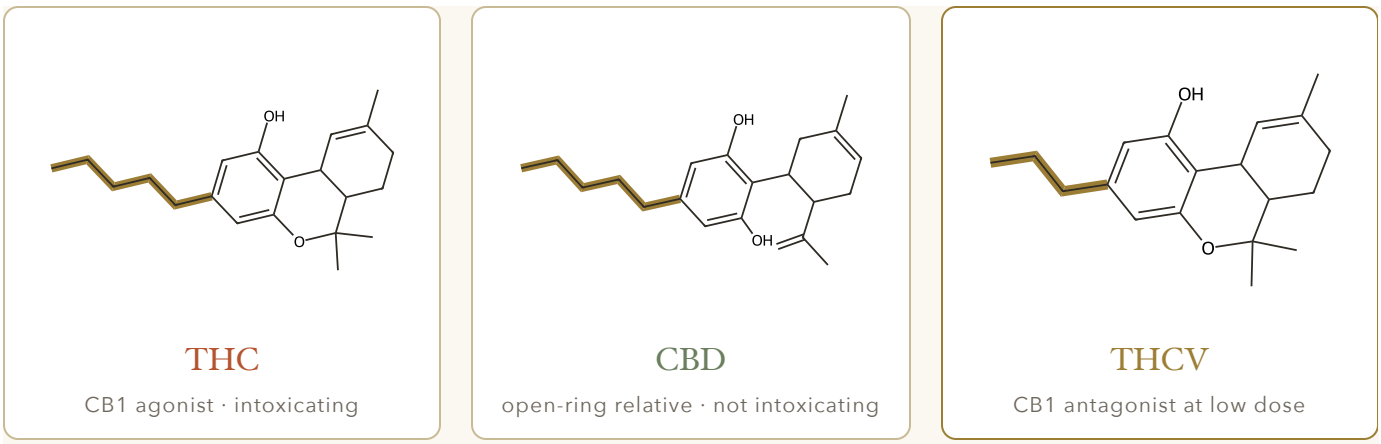


Figure 3.2 Three structures, three behaviours. CBD keeps its two rings open; THC and THCV close the pyran ring; THCV shortens the side chain. Small differences in shape, large differences at the receptor.

The takeaway

THCV is not weak THC, and it is not an energising version of CBD. It is a mechanistically distinct compound that happens to share a molecular family with both. Functionally it behaves closer to a daytime cognitive tool than to either a sedative or a relaxant.

4 How THCV Works in the Body

The endocannabinoid system, ECS, is a signalling network that helps regulate mood, appetite, pain, immune activity, metabolism, sleep and cognition. It runs on two main endogenous messengers, anandamide and 2-AG, which bind cannabinoid receptors and are then broken down by two enzymes, FAAH and MAGL respectively. Those enzymes are the off switch, not the delivery route. The 2025 edition of this guide had a diagram that implied otherwise; it has been replaced with Figure 4.1.

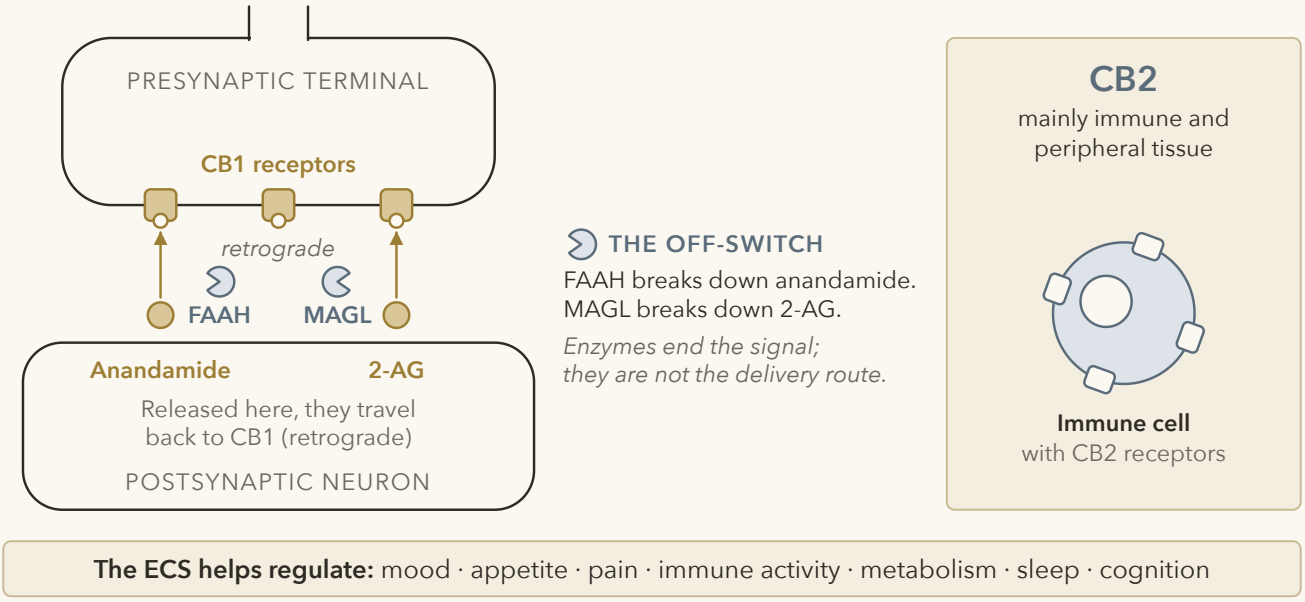
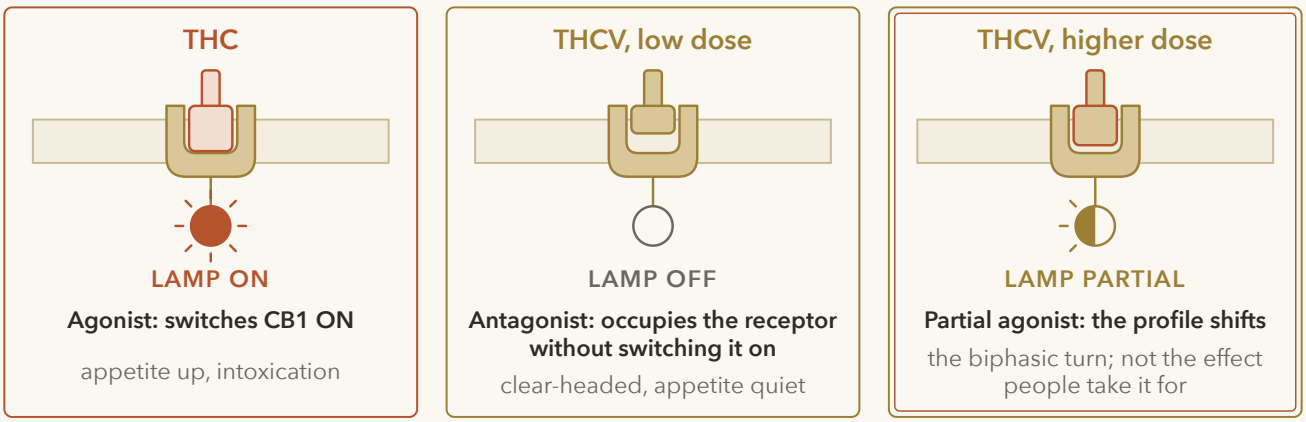


Figure 4.1 The ECS in one picture. The messengers travel backwards across the synapse to CB1; FAAH and MAGL end the signal. CB2 sits mainly on immune and peripheral tissue.

Where THCV acts

- **CB1, mainly central nervous system.** Antagonist at low dose, which is where appetite modulation and the clear-headed quality come from. Partial agonist at higher dose.
- **CB2, mainly immune and peripheral tissue.** Partial agonist, associated in preclinical work with inflammatory balance.
- **Other targets under investigation.** TRPV1 in pain and inflammation signalling, PPAR-gamma in metabolic signalling, GPR55 in inflammatory pathways. This work is preclinical. Treat it as a research direction, not a claim.

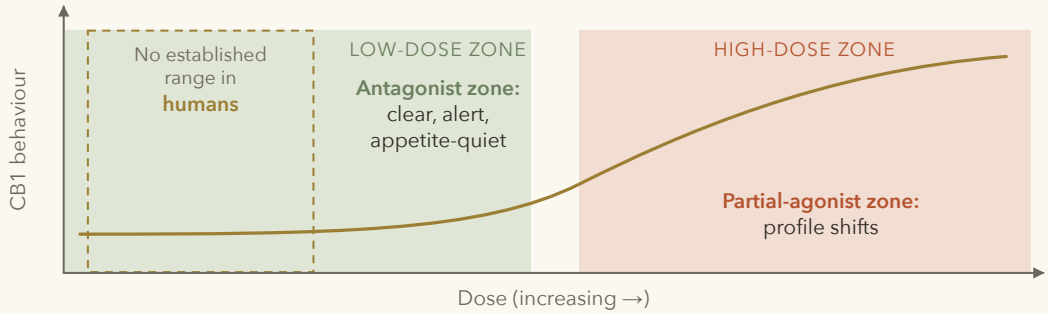


Same lock, three different keys. Dose decides which key THCV is.

Figure 4.2 Same lock, three keys. THC switches CB1 on; low-dose THCV occupies it without switching it on; higher-dose THCV begins to switch it partly on. Dose decides which key THCV is.

Why "biphasic" is the word that matters

A biphasic compound produces different, sometimes opposite, effects at different doses. With THCV the practical consequence is that going up is not simply getting more of the same thing. Past a certain point the receptor behaviour changes and so does the experience. Where that point sits has not been established in humans, and this edition prints no range.



Schematic, not to scale. The transition point has not been established in humans.

Going up is not more of the same. The transition point is unknown in humans.

Figure 4.3 A conceptual sketch, not a measured curve. Neither the transition point nor any usable dose range has been established in humans; the shape is the claim, not the numbers.

ONE CORRECTION FROM THE 2025 EDITION

An earlier diagram in this guide showed arrows running between THCV and THC after hepatic metabolism, which implied that THCV converts into THC in the body. It does not, as far as anyone has shown in a person. They are separate molecules on separate biosynthetic lines (Figure 2.2). One 2023 laboratory study using human liver microsomes and mouse hepatocytes reported THC among THCV's metabolites; it has not been reproduced, it has not been shown in a human being, and it is hard to square with the chemistry, since THC's side chain is two carbons longer than THCV's. What *has* been shown in people is different and matters more: THCV's own breakdown products cross-react with the antibody screens used to detect THC (Chapter 21). That is a testing problem, not a conversion. The diagram was wrong and has been removed.

5 What the Evidence Actually Says (2016–2026)

This chapter is deliberately structured as three tiers, because the difference between them is where most cannabinoid marketing goes wrong. Full citations are in Appendix C.

THE WHOLE OF THE CONTROLLED HUMAN EVIDENCE, IN ONE PARAGRAPH

Six controlled experiments reported across seven papers and records, and the largest of them is the one nobody cites. Four tested purified delta-9-THCV: a single-dose crossover brain-imaging experiment in twenty healthy volunteers, reported in two analyses (Tudge 2015; Rzepa 2015, nineteen analysed), five days of dosing before an intravenous THC challenge in ten men (Englund 2016), thirteen weeks at 5 mg twice daily in sixty-two patients with type 2 diabetes (Jadoon 2016), and twelve weeks at 4, 10 or 30 mg a day in **207** patients with type 2 diabetes, which is larger than the other three unique delta-9 experiments combined and which found no HbA1c benefit at any dose (GWDM1302, unpublished, results posted 2018). A sixth gave single acute doses of the *delta-8* isomer, 12.5 to 200 mg, to eighteen healthy adults (Peters 2023). A seventh gave THCV combined with CBD as a daily strip for ninety days to forty-four adults with obesity (Smith 2025). No trial has run longer than thirteen weeks. No trial has tested isolated delta-9-THCV in healthy adults for consumer focus or energy outcomes; Peters tested those outcomes acutely with oral delta-8-THCV, at doses far above what a tincture delivers.

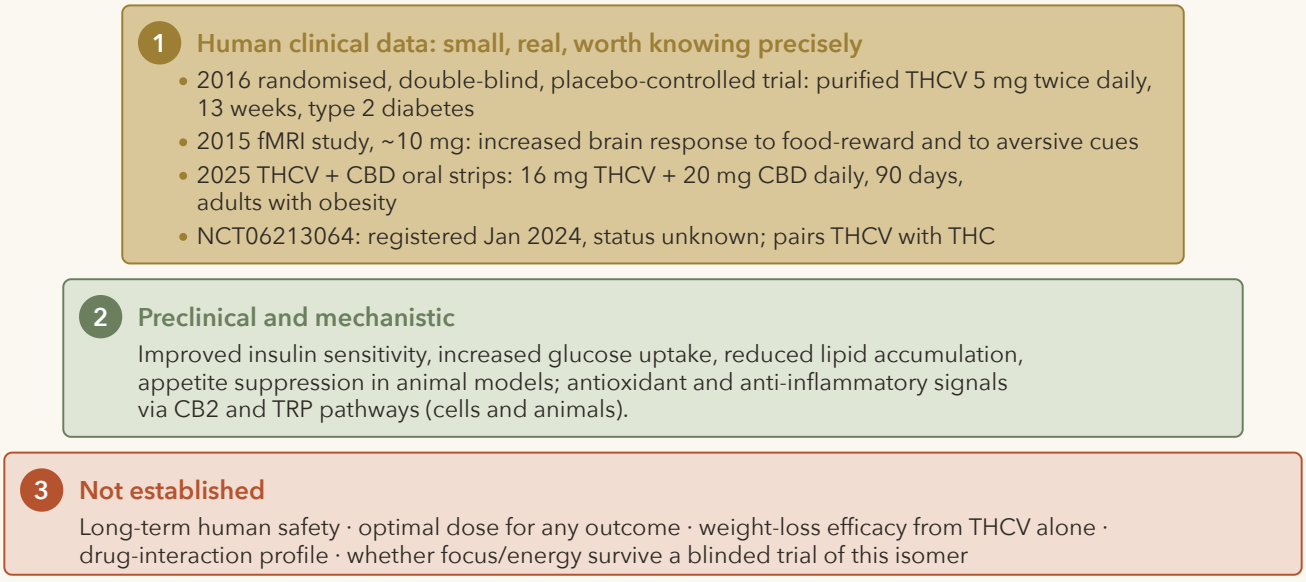


Figure 5.1 Three tiers. The top tier is small and real; the middle tier is a reason to run trials; the bottom tier is the list of things nobody should claim yet.

Tier 1 — Human clinical data

SMALL. REAL. WORTH KNOWING PRECISELY.

Figure 5.2 Four of the human studies, chosen because each one is quoted or misquoted most often. The full list is in the paragraph above and in Appendix C. Read the tags: the 2016 trial is the one everyone quotes; the 2018 result is the one nobody does; the 2015 study is mechanism; the 2025 study combined two cannabinoids.

Glycaemic control in type 2 diabetes (2016)

A randomised, double-blind, placebo-controlled **pilot** study in 62 people with non-insulin-treated type 2 diabetes ran **five parallel arms** for thirteen weeks: CBD alone, purified THCV at 5 mg twice daily (10 mg per day), two CBD-plus-THCV combinations, and placebo. That leaves roughly a dozen people in the THCV arm. The study **missed its primary endpoint**, which was HDL cholesterol. Among the secondary endpoints, fasting plasma glucose in the THCV arm fell from roughly 7.4 to 6.7 mmol/L against placebo drifting in the wrong direction, with signals of improved pancreatic beta-cell function, and tolerability was good. It is the longest trial by a week, and for ten years it was read as the most encouraging. It is not the best-controlled one, and the study that outclasses it is the subject of the next section. Read Jadoon for what it is: a dozen people, on a secondary endpoint, in a study that missed its primary one.

The largest trial ever run on THCV, and it was negative (2013–2018)

WHY YOU HAVE PROBABLY NEVER SEEN THIS STUDY

It was never published in a journal. As of August 2026 a PubMed search for its drug code, its ClinicalTrials.gov number and its internal name returns nothing at all. Its results exist in one place: the European Union Clinical Trials Register, where they were posted on 23 September 2018 and have sat ever since. ClinicalTrials.gov carries the protocol but no results. That is why the only trial larger than every other delta-9-THCV study put together is absent from the review articles, the marketing and, until this edition, from this guide.

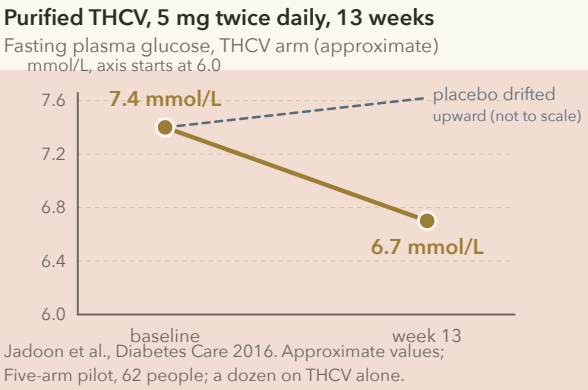


Figure 5.3 The number that built the reputation, drawn with an honest axis. A dozen people, a secondary endpoint. Approximate values; Jadoon et al., *Diabetes Care* 2016.

GW Pharmaceuticals, the company that later brought Epidiolex to market, ran **GWDM1302** (NCT02053272 / EudraCT 2013-001140-61): a randomised, **quadruple-blind**, placebo-controlled, dose-ranging phase 2 trial of purified delta-9-THCV as an add-on to metformin in adults with type 2 diabetes. **207 were randomised and 193 completed.** Three active arms received 2, 5 or 15 mg twice daily, which is 4, 10 or 30 mg per day, for twelve weeks. **159 people received THCV and 48 received placebo**, and the arm at the top dose held 52. No arm contained CBD. This was THCV alone, at up to three times the daily amount in Jadoon. Set it side by side on like terms. Per arm: about 52 people on each active dose here against roughly a dozen on THCV in Jadoon, so a little over four times. Whole trial against whole trial: 207 against 62, so 3.3 times.

The prespecified primary endpoint was the change in HbA1c. **It was null at every dose.** Against placebo the differences were −0.01, 0.00 and −0.06 percentage points, with p = 0.96, p = 0.983 and p = 0.677. The placebo group itself fell 0.16 of a point, and so did every active group, which is what a trial looks like when the drug is doing nothing and the trial itself is doing something. Three secondary endpoints have results posted on the registry, and none of them carries a statistical analysis: the register records “no statistical analyses for this end point” against each. So no secondary benefit is established, and none is refuted either. The posted numbers are flat, with fasting plasma glucose numerically favouring placebo, but a number without an analysis is not a finding.

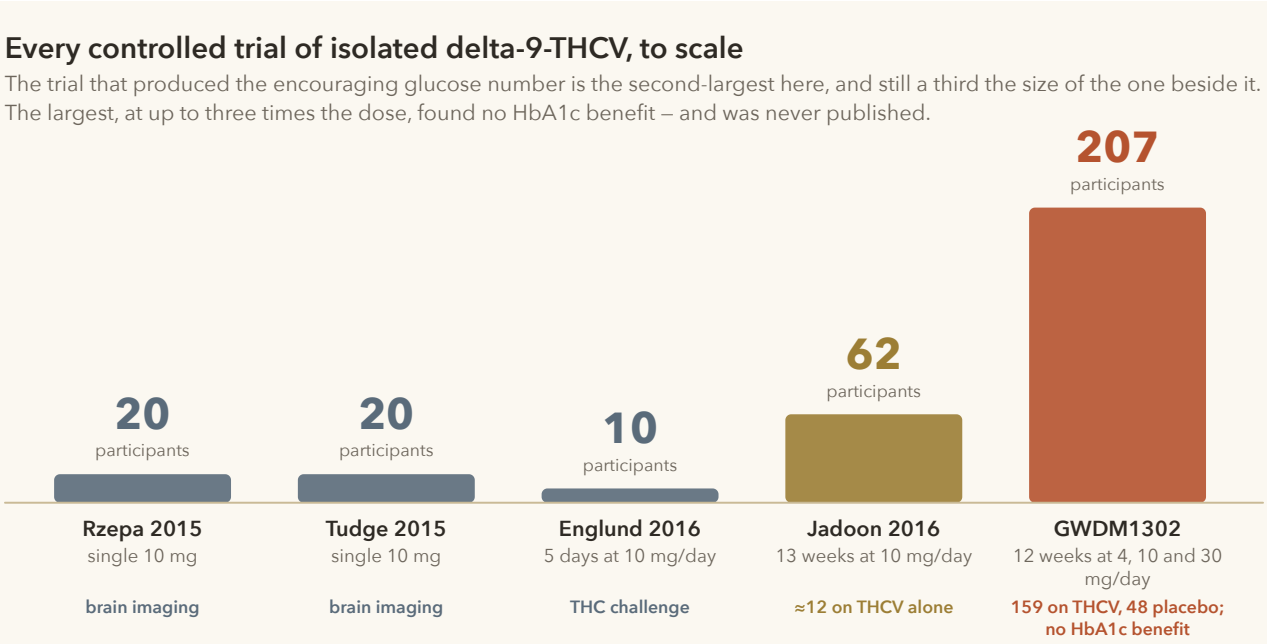


Figure 5.4 Every controlled trial of delta-9-THCV, drawn to scale by participants. The trial that produced the encouraging glucose number is the second-largest, and it is still a third the size of the one beside it. The largest one, at up to three times the dose, found no benefit on the endpoint it was built to measure.

Two things follow, and they point in opposite directions. The first is unwelcome: **GWDM1302 found no HbA1c benefit at any dose, and its public record neither establishes nor refutes the secondary endpoints.** Jadoon's fasting-glucose movement was a secondary endpoint in a dozen people; GWDM1302 measured fasting glucose too, in far more people, and posted a flat number with no analysis attached. That is not a refutation, and it is not support either. Anyone selling THCV on its metabolic story now has to account for this trial, and the honest position is that the metabolic case is weaker in 2026 than it looked in 2016.

The second is reassuring, and it is the reason this section is not simply bad news. **Tolerability at 30 mg a day for twelve weeks was good.** Serious adverse events were rare and balanced across arms, at one on 2 mg twice daily, none on 5 mg twice daily, one on 15 mg twice daily and one on placebo. There were no deaths. A hundred and fifty-nine people took this compound daily under quadruple-blind observation, 52 of them at 30 mg a day, and the safety signal was unremarkable. That is a stronger safety dataset than existed for THCV in any other source, and it comes from the same trial that removes the efficacy claim.

A negative trial is not a nothing. It narrows what can honestly be said: it does not show THCV is inert for everything, it shows that isolated delta-9-THCV at 4 to 30 mg a day for twelve weeks does not improve HbA1c in metformin-treated type 2 diabetes. The registry posts adjusted estimates for three secondary endpoints but no inferential analysis of any of them, so no secondary benefit is established on this evidence. It says nothing about focus, energy, appetite or body weight, because it did not measure them. But it is the closest thing to a real test that this molecule has ever received, and on the question it was built to answer the answer was no.

Food-cue brain response (2015)

A functional MRI study gave twenty healthy volunteers a single 10 mg dose and found **increased** brain responses both to rewarding food images and to aversive images, relative to placebo, with no change in how pleasant participants said the stimuli were. It is a mechanism study, not an outcome study, and it does *not* show that THCV blunts food cues. The authors read the pattern as a possible route to treating obesity without the mood side effects that sank rimonabant. It does not tell you anyone lost weight.

THCV with CBD, oral strips (2025)

A study published in the journal *Cannabis* in early 2025 followed adults with obesity using daily oral strips. The high-dose arm, 16 mg THCV with 20 mg CBD, showed a mean loss of about 4.1 kg over ninety days, with reductions in abdominal girth and in LDL cholesterol. The fall in systolic blood pressure reached significance only in the *lower*-dose arm, not this one. Four caveats that matter, and they are load-bearing: the high-dose arm was ten people; every active arm combined THCV with CBD in a fixed ratio, so the design cannot show what THCV does alone; significance was judged on one-tailed tests with no correction for multiple comparisons and only completers were analysed, which makes this exploratory rather than confirmatory; and the sole author is affiliated to the manufacturer of the tested product. It is also the study that urine-tested its participants, with the result described in Chapter 21.

Direct-to-consumer study on focus and energy (registered, then silent)

A study registered in January 2024, NCT06213064, set out to examine motivation, energy, focus and appetite in adults using commercial cannabinoid products. Three things a reader should know before counting on it. Its ClinicalTrials.gov record has not been updated since January 2024 and its status is listed as unknown, with an estimated completion date of June 2024 that has passed without results. It is observational, remote and app-based, with participants dosing themselves at home and every outcome self-reported. And its active product is 10 mg THCV *plus* 5 mg THC, compared against 5 mg THC alone and placebo — so it does not isolate THCV.

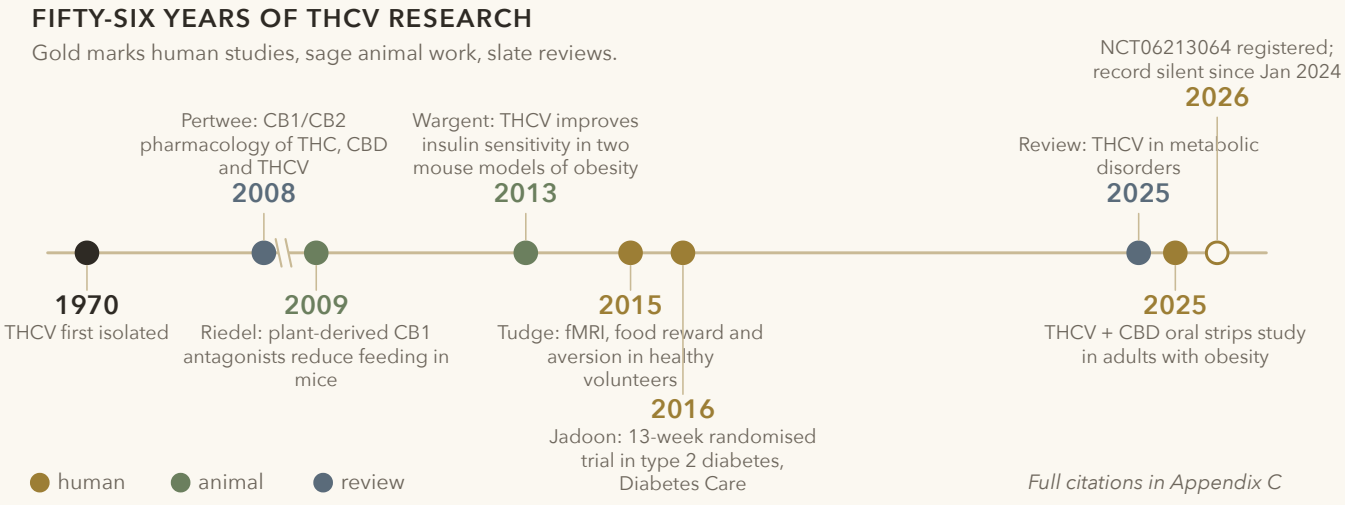


Figure 5.5 Fifty-six years in one line. Gold dots are human studies; sage dots are animal work; slate dots are reviews. Notice how recent, and how few, the gold dots are.

Tier 2 — Preclinical and mechanistic

A 2025 review of THCV in metabolic disorders summarises the animal and cell work: improved insulin sensitivity, increased glucose uptake, restored insulin signalling in metabolic tissue, reduced lipid accumulation and improved mitochondrial activity in adipocytes and hepatocytes, plus appetite suppression and protection against hepatic steatosis in animal models. Separate preclinical lines suggest antioxidant and anti-inflammatory activity through CB2 and TRP pathways.

Read that paragraph twice and notice what it does not contain: a human outcome. Preclinical results are a reason to run trials, not a reason to make claims.

Tier 3 — What is not established

- Long-term safety in humans beyond a few months of use.
- Optimal dose for any specific outcome, in any specific population.
- Weight-loss efficacy from THCV alone, isolated from co-administered cannabinoids and from the behaviour change that comes with participating in a study.
- Glycaemic benefit from THCV alone. This one has moved past "not established" for one endpoint: HbA1c was tested at scale and did not move (GWDM1302, above). The trial's public record does not establish or refute the secondary metabolic endpoints.
- Drug interaction profile. Enzyme-level interactions have not been mapped the way they have for CBD.
- Whether the focus and energy effects that users describe survive a blinded trial *of the isomer in consumer products, at the amounts people use*. One blinded trial has tested attention, and it used delta-8-THCV at 12.5 to 200 mg in single doses (Peters 2023): the attention signal did not scale with dose and "energetic" did not reach significance. Nothing equivalent exists for delta-9-THCV, and the one registered study of focus and energy pairs THCV with THC in every active dose.

> THE CLINICIAN'S VIEW, STATED PLAINLY
>
> Reviews aimed at clinicians in 2026 land in the same place: human evidence for THCV remains sparse and preliminary, most data come from animal or in vitro models, and commercial products lack standardised dosing and robust safety data. If you are a patient managing a metabolic condition, THCV is not a substitute for established treatment and your prescriber needs to know you are taking it.

THCV Is Not a GLP-1 Drug

THCV picked up a nickname online: "nature's Ozempic." It is a good headline and a bad description, and because it is now one of the most common ways people arrive at this molecule, it deserves a direct answer rather than a polite silence.

	GLP-1 receptor agonists	THCV
What it is	Prescription medication	Non-prescription wellness ingredient
Mechanism	GLP-1 receptor agonism; slows gastric emptying; acts on hypothalamic satiety signalling	CB1 antagonism at low dose; modulates endocannabinoid appetite signalling
Evidence base	Multiple phase 3 trials, thousands of participants, years of follow-up	One 12-week trial, 159 on THCV, 48 placebo: no HbA1c benefit at up to 30 mg/day, and unpublished. Three smaller studies besides.
Typical reported weight change	~15% semaglutide; ~21% tirzepatide for tirzepatide, a dual GIP/GLP-1 agonist	About 4 kg over 90 days in one small combination study
Medical supervision	Required	Not a treatment and not supervised; tell your clinician anyway

• • •

orders of magnitude apart (illustrative)

THCV appears to make appetite easier to ignore. It does not remove it, and it does not do the work for you.

Figure 6.1 Not the same category of thing. The dot field on the left is illustrative of trial populations in the thousands; the handful on the right is the human THCV literature.

	GLP-1 receptor agonists	THCV
What it is	Prescription medication	Non-prescription wellness ingredient
Mechanism	GLP-1 receptor agonism; slows gastric emptying, acts on hypothalamic satiety signalling	CB1 antagonism at low dose; modulates endocannabinoid appetite signalling
Evidence base	Multiple phase 3 trials, thousands of participants, years of follow-up	One 12-week randomised trial in 207 people at up to 30 mg/day that **missed its primary endpoint at every dose and was never published**; one 13-week randomised trial at 10 mg/day in 62 people; one fMRI study; one small 90-day combination study

Typical reported weight change	Roughly 15 percent of body weight for semaglutide 2.4 mg at 68 weeks; up to about 21 percent for tirzepatide 15 mg at 72 weeks, though tirzepatide is a dual GIP/GLP-1 agonist rather than a pure GLP-1 drug. Older agents in the class average closer to 8 percent	About 4 kg over 90 days in one small combination study, in ten people
Medical supervision	Required	Not a treatment and not supervised; tell your clinician anyway

The comparison got harder for THCV in the course of writing this edition. The one properly powered metabolic trial of the molecule, described in Chapter 5, found no HbA1c benefit at any dose, which is the outcome the GLP-1 column never had. The honest positioning is narrower and more useful than the hype. THCV appears to make appetite easier to ignore. It does not remove it, and it does not do the work for you. Users consistently describe the experience as being able to *choose* not to eat rather than being unable to eat. If you want a tool that lowers the friction on a fasting window or a snack habit you already intend to change, that is a reasonable fit. If you want a pharmaceutical outcome, you want a pharmaceutical, and that is a conversation with a doctor.

> *THCV appears to make appetite easier to ignore. It does not remove it, and it does not do the work for you.*

PART I · THE MOLECULE

7 What People Report

REPORTS, NOT INSTRUCTIONS

This chapter describes what people who use THCV say about it. None of it has been tested in a controlled trial, none of it is a recommendation, and this edition prints no volumes and no times of day. Where it names a combination, it does so because people report it, never as something to try. Where a report matters for safety rather than for effect, it is in Chapter 15.

What users consistently describe

Three things recur across user reports, and they are worth separating from what has been demonstrated. People describe alertness without the peak-and-crash shape of caffeine; they describe appetite becoming easier to ignore rather than absent; and they describe the effect as clear-headed rather than intoxicating. The 2016 pilot listed appetite among its secondary and tertiary endpoints without establishing a benefit, and it measured none of the rest, and the 2015 imaging study points in a direction that complicates the appetite story (Chapter 5). One blinded trial *has* looked at attention, and it used the other isomer: Peters and colleagues (2023) gave eighteen healthy adults single oral doses of delta-8-THCV from 12.5 to 200 mg. Three of the five doses shortened the fastest completion time on a sustained-attention task, the effect did not increase with dose, and ratings of feeling energetic did not reach significance. Nothing comparable has been run on the delta-9 isomer in this product, and nothing at the amounts people actually use.

One report is consistent enough to act on, and it is a caution rather than a benefit: **late use disturbs sleep.** That is the observation behind every "daytime compound" description of THCV, and it is the reason Chapter 15 treats timing as a safety question.

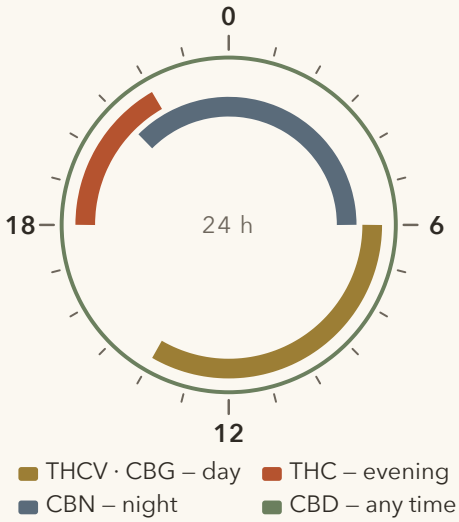
What people combine it with

Users report pairing THCV with CBD, CBG, L-theanine and rhodiola. This edition does not print those as protocols, because no combination has been tested and because a printed pairing is a recommendation however it is captioned. Two interactions do belong here as cautions, and Chapter 16 covers both: stimulants, where the combined effect is stronger than either alone, and THC, where low-dose THCV can blunt the characteristic effect.

THE HONEST SUMMARY

THCV does not create motivation, does not compensate for poor sleep, inadequate food or dehydration, and has not been shown to do any of the things in the first paragraph. What the user reports establish is that people find it worth repeating — which is a fact about people, not about the compound.

THCV vs. Other Minor Cannabinoids



Cannabinoid	Window	Intoxicating	Core use	Reported with
THCV	Day	No at typical doses	Focus, appetite structure, clean energy	CBD, CBG
CBD	Any	No	Calm, recovery, sleep support	THCV, CBG, CBN
CBG	Day	No	Gut and mood support, clarity	THCV, CBD
CBDV	Any	No	Trial did not beat placebo (neurology research)	CBD
CBN	Night	Mild	Sleep wind-down; made by conversion	CBD
THC	Evening	Yes	Relaxation, appetite stimulation	CBD, CBN

The pattern users report: THCV and CBG earlier, CBD anywhere, CBN and THC later. None of it has been tested.

Figure 8.1 The cannabinoid clock. THCV and CBG earlier, CBD anywhere, CBN and THC later. Build from your goal and the time of day, not from what is in stock.

Cannabinoid	Window	Intoxicating	Core use	Reported alongside
THCV	Day	No at typical doses	Focus, appetite structure, clean energy	CBD, CBG
CBD	Any	No	Calm, recovery, sleep support	THCV, CBG, CBN
CBG	Day	No	Gut and mood support, clarity	THCV, CBD
CBDV	Any	No	Under investigation; the largest controlled trial to date (162 adults, focal epilepsy) did not beat placebo	CBD
CBN	Night	Mild, and only at high doses	Sleep wind-down	CBD
THC	Evening	Yes	Relaxation, appetite stimulation	CBD, CBN

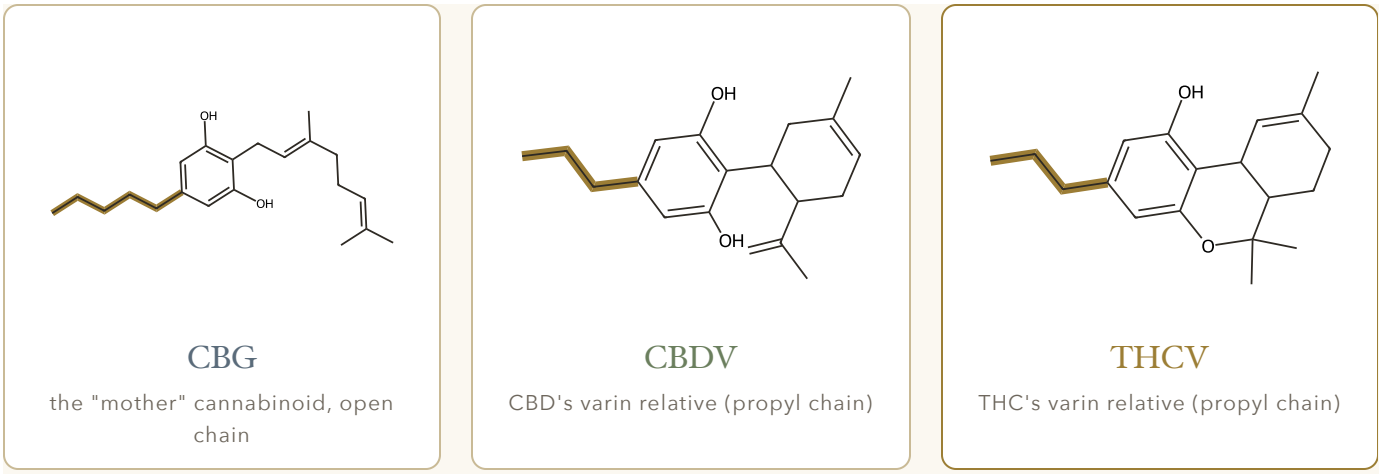


Figure 8.2 Three minors. CBDV and THCV share the short propyl chain that defines the varin family; CBG is the open-chain precursor the plant builds everything else from.

The pattern reported by users is THCV and CBG earlier, CBD at any time, CBN and THC later. None of it has been tested against an outcome, and this edition prints no schedule.

Core use describes how each compound is commonly used, not what has been shown in controlled human trials. Outside THC and CBD the human evidence for these uses ranges from small to absent; CBG's is preclinical and survey-based.

A 2026 NOTE ON AVAILABILITY

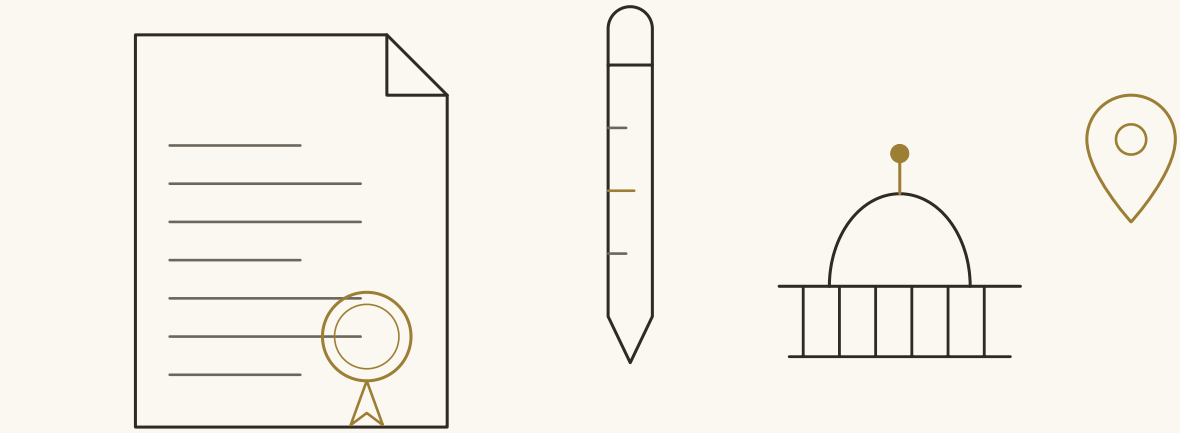
Under the framework described in Chapter 9, non-intoxicating cannabinoids that the plant naturally produces sit in a materially better position than converted or intoxicating ones. CBG and CBD are the most likely of this group to remain widely available in the United States through the transition. If you are building a routine you want to keep, that is worth factoring in.

One name in the table above does not belong to that group. CBN is not produced enzymatically by the plant. It forms when THC oxidises, and commercial CBN is almost always made by chemical conversion from THC or CBD. Under the framework in Chapter 9 it sits with the converted cannabinoids, not with CBD and CBG — which makes it the least durable ingredient in the table to build a routine around.

PART II

Law, Labels and Lab Reports

Where THCV stands under a federal definition that changes on 12 November 2026, how all fifty states and fifty-five countries treat it, and how to read a certificate of analysis in the total-THC era. Every statement here is dated.



9 U.S. Legality in 2026: Section 781

STATUS AS VERIFIED ON 21 AUGUST 2026

Section 781 of Division B of Public Law 119-37 was signed on 12 November 2025 and takes effect one year later, 12 November 2026. On 8 August 2026 the Senate passed a continuing resolution (H.R. 6500), 90 to 6, that would move most of Section 781 to 11 December 2026. The House had passed its own continuing resolution (H.R. 9770), which contains no hemp delay, and had not voted on the Senate's version as of this date. The extension does not cover cannabinoids that cannot be naturally produced by the plant; that exclusion still lands on 12 November regardless.

Confirm the current position before acting on anything in this chapter. Law of this kind changes on a legislative calendar, not an annual one. The current tracker is published at **swissvitalisusa.com**.

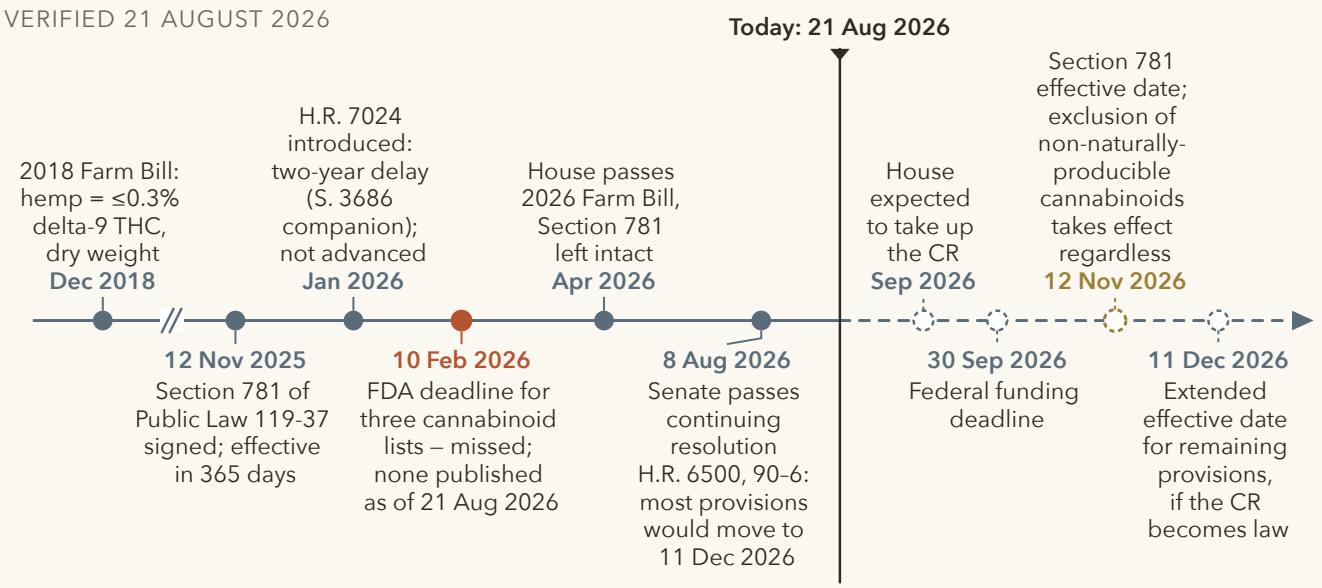


Figure 9.1 From the 2018 Farm Bill to the two dates that matter this winter. Hollow nodes are in the future; the clay node is a deadline the FDA missed.

What the 2018 rule said

The 2018 Farm Bill defined hemp as Cannabis sativa L. with no more than 0.3 percent delta-9 THC by dry weight, and removed it from the federal controlled substances definition. It measured one molecule. Everything else the plant produced, and everything that could be made from what the plant produced, sat outside the test.

"FEDERALLY LAWFUL" IS NARROWER THAN IT SOUNDS

Falling outside the Controlled Substances Act is not the same as being authorised for sale. The FDA's published drug-exclusion conclusions address **THC and CBD**: those may not lawfully be added to food or marketed as dietary supplements. The agency has published no THCV-specific conclusion, so the categorical answer does not transfer automatically. A THCV food or supplement would still need its own ingredient, safety and product analysis under every applicable requirement of the FD&C Act, and no such authorisation exists. So a compliant hemp-derived cannabinoid can be simultaneously *not a controlled substance* and *not lawfully sellable as a supplement*. Throughout this chapter, "federally lawful" means the first thing only. The second is a separate regime and it has not moved.

What the new rule says

Section 781 rewrites that definition in three ways.

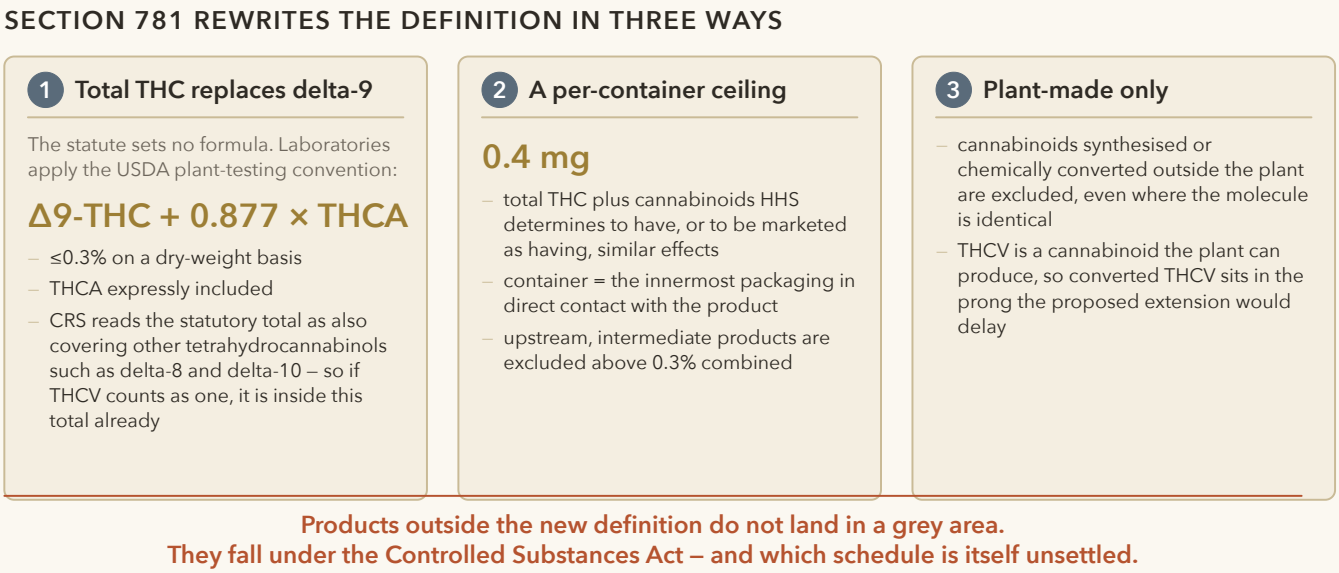


Figure 9.2 Three changes: the measure (total THC), the ceiling (0.4 mg per container) and the origin test (plant-made only).

1. **Total THC replaces delta-9 THC.** Hemp becomes cannabis with a total tetrahydrocannabinols concentration, expressly including THCA, of not more than 0.3 percent on a dry weight basis. The statute gives no formula. Laboratories today apply the USDA plant-testing convention, delta-9 plus 0.877 times THCA, but the Congressional Research Service reads the new statutory total as also covering other tetrahydrocannabinols such as delta-8 and delta-10. That reading matters here: if tetrahydrocannabivarin counts as a tetrahydrocannabinol, THCV is inside "total THC" on the face of the statute, without waiting for any FDA list.
2. **A per-container ceiling arrives.** Final hemp-derived cannabinoid products are limited to 0.4 milligrams per container of total THC combined with other cannabinoids that HHS determines to have, or to be marketed as having, similar effects. "Container" means the innermost packaging in direct contact with the product for retail sale. A second limit applies upstream: intermediate products, anything not yet in final consumer form, are excluded above 0.3 percent combined total THC and similar-effect cannabinoids. That is

the limit a bulk distillate or isolate has to meet, which is why the production-route conversation with a supplier is also a compliance conversation.

3. **Cannabinoids made outside the plant are excluded.** Anything synthesised or chemically converted rather than produced by the plant falls outside the definition, even where the resulting molecule is identical to a naturally occurring one.

Products that fall outside the new definition do not land in a grey area, but neither are they scheduled by that fact alone. They lose the hemp exclusion and must then be analysed under the Controlled Substances Act. If a THCV material falls within the Schedule I tetrahydrocannabinols class (21 C.F.R. § 1308.11(d)(31)), it is controlled unless some other exception or schedule applies; losing hemp status is the step before that question, not the answer to it. Which schedule the class itself sits in is also in motion. Following an executive order of 18 December 2025, a final order effective 28 April 2026 (91 FR 22714) moved two categories from Schedule I to Schedule III: marijuana contained in an FDA-approved drug product, and marijuana subject to a qualifying state medical-marijuana licence. Every other form — recreational marijuana, unlicensed bulk material and extracts — remains in Schedule I, and the broader question of rescheduling marijuana as a whole is still before the DEA, whose hearing closed on 15 July 2026 with post-hearing briefs due 17 August 2026 and no decision as of this date. An ordinary hemp-derived THCV tincture sold at retail is caught by neither category, so the April order does not move it. The qualifier matters, though: the same extract distributed *inside* a qualifying state medical-marijuana system could fall within the second category. The route the product travels decides this, not the molecule.

The lists that do not exist yet

Section 781 required the FDA, within ninety days of enactment, to publish three lists: cannabinoids the plant can naturally produce, THC-class cannabinoids that occur naturally in the plant, and other cannabinoids with effects similar to the THC class. It also required additional specificity on what counts as a container. The deadline was 10 February 2026. As of 21 August 2026 none of those lists had been published.

Those lists are the interpretive backbone of the whole provision. Until they exist, anyone telling you with certainty where a specific minor cannabinoid lands after the effective date is estimating. That includes this guide.

Where THCV sits, honestly

THCV occupies an ambiguous position with three separate exposures. They are worth understanding as three, not one, because they resolve differently.

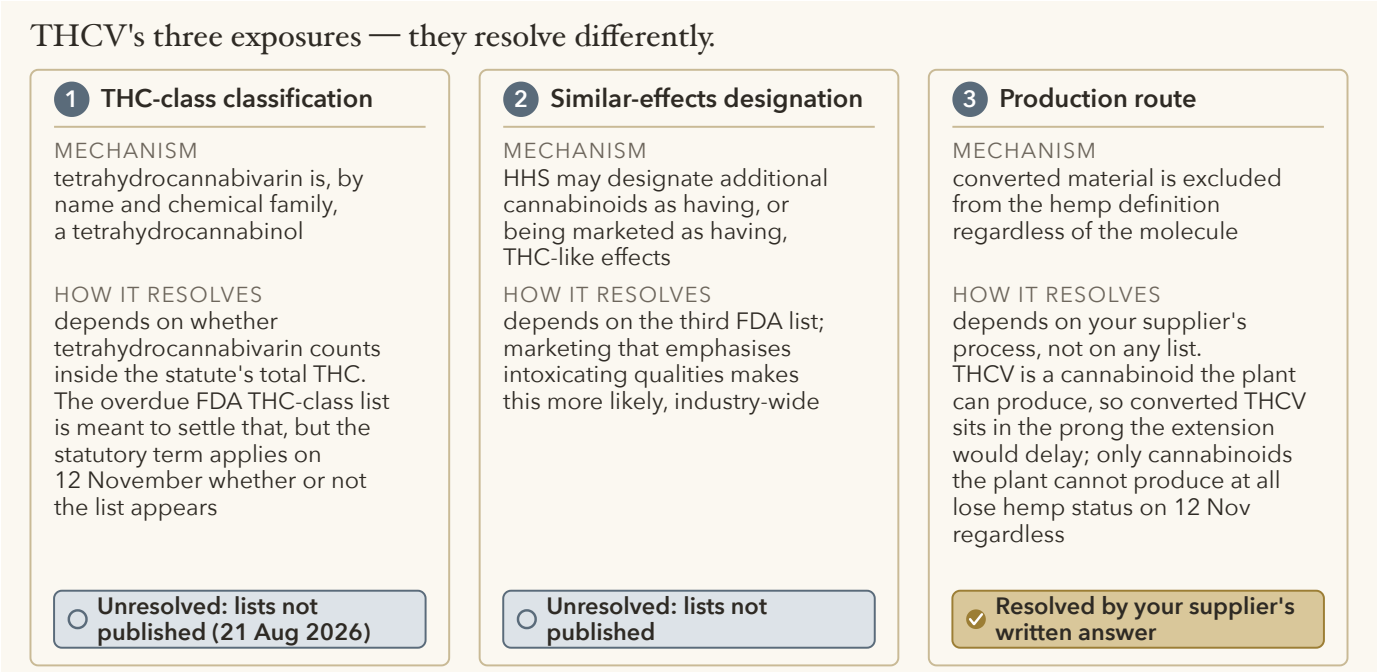


Figure 9.3 Two of the three exposures wait on FDA lists that are overdue. The third is answered by your supplier, today, in writing.

For scale: a 30 mL tincture containing 1,000 mg of a cannabinoid holds two thousand five hundred times 0.4 milligrams. If THCV is captured by either list, the current product format does not survive in the United States without reformulation. That is not a prediction about what the FDA will decide. It is arithmetic about what happens if it decides one way.

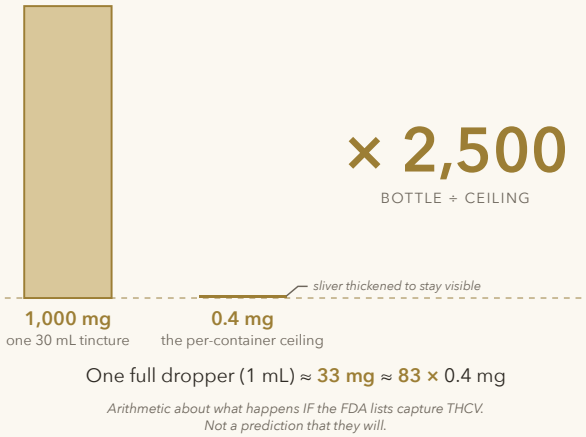


Figure 9.4 The arithmetic of the ceiling. A 1,000 mg tincture holds 2,500 times 0.4 mg; a single full dropper holds 83 times.

What is moving in Congress

- **H.R. 7024 (119th Congress),** the Hemp Planting Predictability Act, introduced 13 January 2026 by Rep. Jim Baird. It works by replacing the implementation clause's "365 days" with "3 years", which reads as three in the bill text and lands as a *two-year* delay against the date now on the books, moving it from 12 November 2026 to 12 November 2028. Both descriptions are correct, and they are the same amendment. A Senate companion, S. 3686 (Klobuchar, Paul, Merkley), followed on 15 January 2026, and two further delay-or-repeal bills exist: H.R. 7010, a parallel two-year delay, and H.R. 6209, a repeal. A fourth takes a different route: **H.R. 9830, the Lawful Hemp Protection Act**, introduced 22 July 2026 by Reps. Barr and Craig, would repeal Section 781 outright, redefine hemp at no more than **1 per cent total THC** on a dry-weight basis, and build an FDA-regulated category whose product definition names oral tinctures and sublinguals explicitly, deeming them food. It is the only pending bill that would put a product like this one

inside a designed federal framework rather than outside a definition. None of the four had advanced beyond committee as of 21 August 2026.

- The House passed its version of the **2026 Farm Bill** (H.R. 7567) on 30 April 2026, 224 to 200, and left Section 781 intact. The Senate Agriculture Committee's companion package had not reached the floor as of August 2026.
- The **appropriations route** is where movement actually happened, which is the one-month extension described at the top of this chapter.

Dates to watch

Date	What happens
September 2026	House takes up the Senate continuing resolution; decides whether the December extension becomes law
30 September 2026	Federal funding deadline that forces the question
12 November 2026	Section 781 effective date; exclusion of non-naturally-producible cannabinoids takes effect regardless of the extension
11 December 2026	Extended effective date for the remaining provisions, if the continuing resolution becomes law

State law is a separate question, and it moves faster

Federal legality has never been permission to sell or ship into a given state. Several states already apply a total-THC standard, per-serving caps, or outright prohibitions that operate independently of the federal change. The 2025 edition printed a colour-coded map that was accurate on the day it was made and wrong within a season, so the 2026.1 printing removed it. Readers asked for it back. This printing restores it, on two conditions that are printed on the map itself: it is a snapshot verified on a stated date, and the live page is the authority.

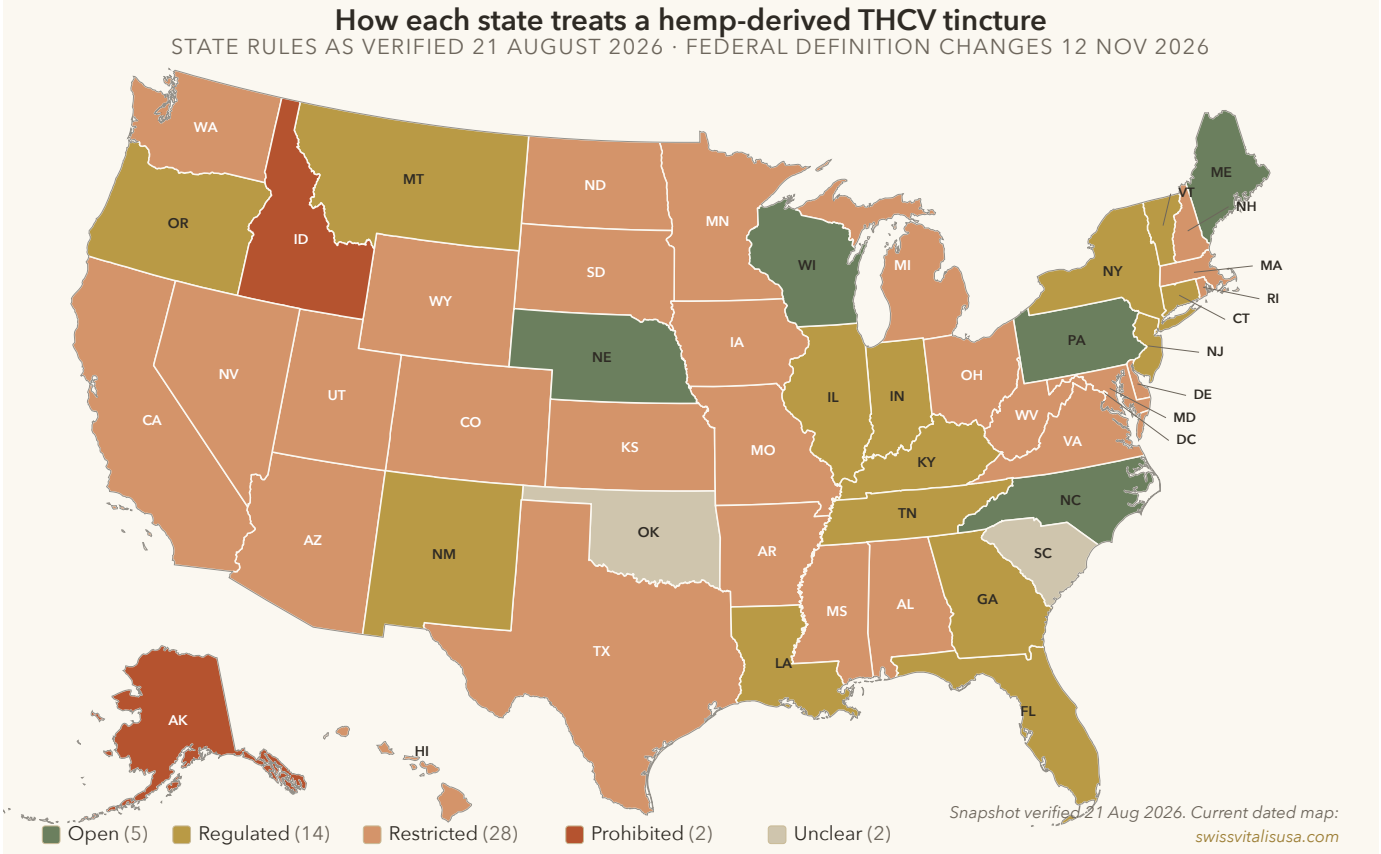


Figure 9.5 How each state treats a hemp-derived, non-intoxicating THCV tincture, as verified on 21 August 2026. Snapshot only; the current dated map is published at swissvitalisusa.com.

"Verified" on this map means checked against sources on the stated date — not certified correct. The map shows how each state treats a hemp-derived, non-intoxicating THCV tincture *today*, not what the federal change will do in November. Most state statutes never name THCV — it is named in only three of the sources behind this table — so the classification rests on how each state defines THC (delta-9 only, or all tetrahydrocannabinols), what it bans (intoxicating, synthetic or converted cannabinoids), and what it caps (milligrams per serving or per package). Where that reasoning is an inference rather than the statute's words, the row says so.

WHAT THE FOUR LABELS MEAN

- **Open** — the state follows the federal definition; no specific state restriction would block a non-intoxicating THCV tincture. Age limits alone do not change this.
- **Regulated** — lawful if compliant with state rules: a total-THC standard, per-serving or per-package caps, seller licensing, testing and labelling, age 21+, or online-sale restrictions.
- **Restricted** — the state bans intoxicating, synthetic or converted cannabinoids, or defines THC broadly enough that THCV is plausibly captured, or routes the product through licensed dispensaries only. Availability is doubtful or partial.
- **Prohibited** — THC-class hemp products are prohibited outright and there is no lawful consumer route.
- **Unclear** — sources conflict or are too thin to classify. Treat as unresolved rather than permissive.

Confidence reads: *high* — a primary source was read and the status is unambiguous; *medium* — a reputable secondary source, or some inference from the statutory THC definition; *low* — thin or conflicting sources, *or* a row on which every citation is secondary and no statute, regulation, gazette or agency page was read. A source sweep on 23 August 2026 moved 34 rows into this band on that second ground alone, which is why the low band is large: 40 of 56 countries and 24 of 51 US rows. A low-confidence row is a prompt to call a lawyer, not a licence.

State by state, verified 21 August 2026

State	Status	Where THCV stands, and what is moving	Confidence
Alabama	RESTRICTED	ABC-licensed retail only since 1 Jan 2026: 10 mg total THC/serving, 40 mg/package, no online sales or direct shipment *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500) - 0.4 mg total THC per container is far stricter than Alabama's 10 mg/serving. A TRO challenge to the smokable ban (Mellow Fellow, Tasty Haze, Humble Hemp Shack, Seedless Green) was denied in Montgomery Circuit Court.*	low
Alaska	PROHIBITED	THCV is named by the Division of Agriculture as a cannabinoid it will not endorse, so a THCV tincture cannot be sold as a hemp product *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). Alaska did not join the ~40-state attorney general letter to Congress on intoxicating hemp.*	high
Arizona	RESTRICTED	AG enforcement position: only ADHS-licensed dispensaries may sell any THC-infused edible or beverage, hemp-derived or not *Coming: Litigation challenging the AG's enforcement position is pending (outcome and case name not verified). Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500).*	medium
Arkansas	RESTRICTED	Act 629 ban on intoxicating hemp cannabinoids fully enforceable since the 8th Circuit ruling; only non-intoxicating CBD survives *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500) largely aligns federal law with the Arkansas posture. Further preemption suits are possible; none pending was verified.*	low

California	RESTRICTED	AB 8 (Phase 1, 1 Jan 2026): hemp extract in food/supplements must be >99% pure and contain no tetrahydrocannabinols *Coming: AB 8 full implementation 1 Jan 2028 (cannabis licensing, METRC, 15% excise, dispensary-only). Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500): 0.4 mg total THC per container plus an FDA 'similar-effect' cannabinoid list on which THCV could be placed.*	medium
Colorado	RESTRICTED	Hemp retail is confined to a CDPHE safe harbour of ~1.75 mg THC/serving at a 15:1 CBD:THC ratio; anything above goes to MED dispensaries *Coming: Possible CDPHE/MED rulemaking classifying additional cannabinoids as intoxicating (statutory authority under SB 23-271); a feasibility analysis for a standing cannabinoid-evaluation committee was directed by the same act. Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500).*	medium
Connecticut	REGULATED	Total THC = (THCA x 0.877) + delta-9 THC; 'high-THC hemp products' are dispensary-only, so a delta-9-ND THCV oil sits outside *Coming: 1 Oct 2026: new infused-beverage caps and potency changes take effect. Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500).*	medium
Delaware	RESTRICTED	Only non-intoxicating industrial hemp products are lawful in general retail; intoxicating cannabinoids are dispensary-only *Coming: HB 395 and HS 1 for HB 98 pending in the General Assembly. Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500).*	medium
District of Columbia	RESTRICTED	OAG opinion says the Farm Bill did not legalise hemp CBD or delta-8 in the District; ABCA enforces against unlicensed hemp retail *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). No District hemp bill identified.*	low
Florida	REGULATED	Lawful as a registered consumable hemp extract: no mg cap, but FDACS registration, COA/QR, child-resistant packaging and 21+ *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500): 0.4 mg total THC per container plus an FDA 'similar-effect' list that could name THCV. No state bill pending that was verified.*	low
Georgia	REGULATED	Licensed consumable-hemp market under SB 494: total delta-9 THC test, 21+, licensed retail; THCV not counted as THC *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). No pending Georgia bill verified.*	medium
Hawaii	RESTRICTED	DOH permits every hemp processor and caps total THC per serving and per container; tinctures exempt from retailer registration *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). Adult-use legalisation proposals continue in the Legislature; none enacted.*	low
Idaho	PROHIBITED	Zero-THC state: tetrahydrocannabinols are Schedule I and manufactured hemp products must test 0.0% THC *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026) would not loosen Idaho law - the state standard is already stricter. No liberalising bill found; the Legislature advanced a 2025 resolution aimed at limiting future controlled-substance ballot initiatives.*	low

Illinois	REGULATED	21+ statewide since 12 Jun 2026; from 12 Nov 2026 intoxicating hemp >0.4 mg THC/container moves to licensed dispensaries *Coming: 12 Nov 2026: hemp products >0.4 mg THC per container become dispensary-only. IDOA enforcement guidance pending. Federal Section 781 overlay same date (possibly 11 Dec 2026 per H.R. 6500).*	medium
Indiana	REGULATED	Federal 0.3% delta-9 standard still applies; no mg cap and no retail licence, but smokable hemp is banned and SB 250 died in Feb 2026 *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500) will bind Indiana even without state action. SB 250-style legislation is expected to return in the 2027 session.*	medium
Iowa	RESTRICTED	HF 2605 caps consumable hemp at 4 mg total THC per serving and 10 mg per container; inhalation is a serious misdemeanor *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500): the 0.4 mg per-container federal cap is ten times stricter than Iowa's 10 mg container limit.*	medium
Kansas	RESTRICTED	K.S.A. 2-3901 caps finished hemp products at 0.3% 'tetrahydrocannabinol concentration' (THC plus optical isomers, salts and acids); whether a propyl homologue such as THCV is counted is unresolved. *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). No Kansas hemp bill verified as pending.*	low
Kentucky	REGULATED	Lawful only if the exact SKU is on the CHFS Approved Hemp-Derived Cannabinoid Product Registry; 21+; retail flower banned *Coming: Federal Section 781 overlay 12 Nov 2026 (possibly 11 Dec 2026 per H.R. 6500). Kentucky's total-THC direction already aligns with the federal test, but the 0.4 mg per-container cap is far stricter than anything in HB 544 and would strand most registered products.*	low
Louisiana	REGULATED	Lawful only as an ATC-permitted, LDH-registered non-inhalable consumable hemp product within 5 mg total-THC/serving caps *Coming: Federal challenge to Act 752 (Hemp Association of Louisiana / Cypress Hemp, M.D. La., filed Oct 2024) still pending, no injunction as of Aug 2026. Federal Section 781 overlay (12 Nov 2026, possibly 11 Dec 2026 per H.R. 6500) would impose 0.4 mg total THC per container nationally.*	low
Maine	OPEN	Maine statute names THCV a 'nonintoxicating cannabinoid'; no mg cap, no retail licence; 21+/packaging rules only for intoxicating products *Coming: Federal Section 781 overlay (12 Nov 2026 / possibly 11 Dec 2026): 0.4 mg total THC per container and FDA 'similar-effect' list could affect THCV products regardless of Maine law; FDA lists not published as of 21 Aug 2026.*	low
Maryland	RESTRICTED	Hemp products >0.5 mg THC/serving or >2.5 mg/package are cannabis (dispensary-only); appellate court upheld in Sept 2025 *Coming: Federal Section 781 overlay (12 Nov 2026 / possibly 11 Dec 2026). No pending state bill found.*	low

Massachusetts	RESTRICTED	No hemp-THC retail framework; hemp cannabinoids banned in food/beverages/supplements (2024 notice); tinctures a gray zone *Coming: CCC hemp study report due 15 Dec 2026 (pending). Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium
Michigan	RESTRICTED	Since 2021 'THC' means any tetrahydrocannabinol + isomers + THCA; THC-bearing hemp products routed to CRA-licensed cannabis retail *Coming: SB 599-602 reported pending in the Michigan House with possible CRA rulemaking (per cannabisregulations.ai; status not verified). Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	low
Minnesota	RESTRICTED	OCM hemp-edible regime: 5 mg THC/serving; 'intoxicating cannabinoid' includes any tetrahydrocannabinol, so THCV likely counts unless OCM designates it *Coming: OCM rulemaking under the 2026 omnibus; possible THCV petition/designation; federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium
Mississippi	RESTRICTED	Intoxicating/converted hemp THC scheduled and AG-enforced; non-intoxicating hemp sold with 21+ rule; THCV never addressed *Coming: Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026. Legislature expected to revisit hemp regulation; no bill identified.*	low
Missouri	RESTRICTED	Open until 12 Nov 2026, when HB 2641 (signed 23 Apr 2026) makes anything over 0.4 mg 'tetrahydrocannabinols' per container marijuana; the change is signed, dated and not contingent on the federal timetable. *Coming: HB 2641 effective 12 Nov 2026. The federal Section 781 overlay lands the same day.*	low
Montana	REGULATED	Strictest hemp THC caps (0.5 mg/serving, 2 mg/package) plus detectable-delta-9 ban; THCV not named, delta-9-ND product plausibly fits *Coming: Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium
Nebraska	OPEN	No state hemp-THC statute yet (LB 316 stalled); AG enforcement and a pending zero-THC food rule raise risk *Coming: NDA adulterated-food rule pending approval (would impose zero-THC standard for food/beverages/drops); LB 316 may return in 2027; federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium
Nevada	RESTRICTED	SB 356 (2025) confines intoxicating hemp to CCB dispensaries; one reading limits non-dispensary hemp to CBD/CBG only *Coming: CAC report and legislative recommendations due 9 Nov 2026 for the 2027 session (possible dispensary-only framework); federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	low
New Hampshire	RESTRICTED	Hemp products with >0.3% THC 'in any formulation' not authorized (RSA 439-A:4); SB 624 adds 0.4 mg/container cap from 1 Jan 2027 *Coming: SB 624 provisions effective 1 Jan 2027 (pending effect); SB 461 status pending; federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium
New Jersey	REGULATED	Since 13 Apr 2026 hemp products must be <=0.4 mg total THC/container or they are cannabis (CRC-only); online hemp sales barred *Coming: 13 Nov 2026: hemp beverages >0.4 mg total THC become cannabis; CRC rulemaking; federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	medium

New Mexico	REGULATED	NMED Hemp Rule (permanent 28 Jan 2026) bans chemically manufactured cannabinoids and sets total-THC limits; THCV not named *Coming: Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026; no pending state bill found.*	low
New York	REGULATED	OCM Cannabinoid Hemp Program: licensed retail, 1 mg THC/serving, 10 mg/package, cannabinoid mg caps; THCV counts as a cannabinoid, not THC *Coming: Federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026 (0.4 mg total THC/container would be stricter than Part 114's 10 mg/package).*	medium
North Carolina	OPEN	Hemp-derived tetrahydrocannabinols permanently excluded from controlled substances (S.L. 2022-32); HB 328 crackdown stalled in House *Coming: HB 328 House vote pending (would align NC with federal 0.4 mg/container standard on 12 Nov 2026); federal Section 781 overlay 12 Nov 2026 / possibly 11 Dec 2026.*	low
North Dakota	RESTRICTED	ND applies total-THC at retail and bars delta-8/isomerised/chemically derived cannabinoids; THCV not named, availability doubtful. *Coming: Federal Section 781 overlay from 12 Nov 2026 (or 11 Dec 2026 if H.R. 6500 enacted).*	low
Ohio	RESTRICTED	Since 20 Mar 2026 (SB 56) any hemp product over 0.4 mg total tetrahydrocannabinols per container is marijuana, sold only through Division of Cannabis Control-licensed dispensaries to 21+. The DCC lists published 20 Mar 2026 name delta-9-THCV in the THC class. *Coming: DCC superintendent lists under ORC 928.031 were published 20 Mar 2026 and place delta-9-THCV in the tetrahydrocannabinol class by name. Federal Section 781 overlay 12 Nov / 11 Dec 2026 largely mirrors Ohio's rule.*	high
Oklahoma	UNCLEAR	Sources conflict: HB 3770 (2022), 63 O.S. 420A, routes intoxicating hemp cannabinoids to OMMA-licensed dispensaries, but whether a non-intoxicating THCV tincture is caught is unresolved; statutes not read directly. Treat as unresolved rather than permissive. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026; OMMA permanent rulemaking (medical programme) in 2026.*	low
Oregon	REGULATED	OLCC hemp regime: registry from 1 Jan 2026, total-THC mg caps, artificial cannabinoids banned; 'tetrahydrocannabinols' is an adult-use class. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026; OLCC rulemaking on registry continues.*	medium
Pennsylvania	OPEN	No state restriction yet; SB 49 (0.4 mg total-THC cap) failed 23-27 on 10 Jun 2026 but was kept alive; Philadelphia ordinance pending. *Coming: SB 49 possible re-vote in fall session (pending); Philadelphia ordinance effective with federal date if signed; federal Section 781 overlay 12 Nov / 11 Dec 2026.*	low
Rhode Island	RESTRICTED	CCC hemp rules cap total THC at 1 mg/serving, 5 mg/package; licensed sellers only; THC beverage framework still being designed. *Coming: Possible hemp-beverage legislation/rules following the CCC study (pending); federal Section 781 overlay 12 Nov / 11 Dec 2026.*	low

South Carolina	UNCLEAR	Sources conflict: no intoxicating-hemp statute confirmed in force and 2026 bills unresolved; statutes not read directly. Treat as unresolved rather than permissive. *Coming: Status of H.3924/S.137/H.4759 to be confirmed (pending/unknown); federal Section 781 overlay 12 Nov / 11 Dec 2026.*	low
South Dakota	RESTRICTED	HB 1125 (2024) bans chemically converted hemp cannabinoids (any THC isomer/analog/derivative); active seizures since 2025. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium
Tennessee	REGULATED	TABC licensing, total-THC, in-person sales only (no shipping) since 1 Jan 2026; any non-delta-9 hemp cannabinoid >0.1% is regulated. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026 (0.4 mg/container would go beyond TN's rules).*	high
Texas	RESTRICTED	From 31 Jul 2026 DSHS reinstated Schedule I 'tetrahydrocannabinols'; products with more than trace THCs may be detained; THCV plausibly caught. *Coming: DSHS intends to amend consumable hemp product rules (APA rulemaking) to incorporate the schedule definition (pending); federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium
Utah	RESTRICTED	Utah bans intoxicating THC analogs/isomers (HB 54, 2025), caps THC at 5 mg/serving, 150 mg/package; UDAF product registration. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026.*	low
Vermont	REGULATED	CCB Rule 2.17: hemp products over 1.5 mg THC/serving or 10 mg/package are cannabis (licensed retail only); converted cannabinoids banned. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium
Virginia	RESTRICTED	Total THC 0.3% AND 2 mg/package for hemp products; 25:1 CBD:THC escape hatch repealed 15 Aug 2026; hemp oversight moving to CCA. *Coming: CCA takeover of hemp enforcement; adult-use retail rollout; a federal lawsuit by Virginia hemp interests against the budget-bill ban is referenced in press (not verified); federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium
Washington	RESTRICTED	SB 5367 (2023): consumable products with any amount of THC go through licensed I-502 cannabis stores; hemp retail limited to THC-free CBD. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026.*	low
West Virginia	RESTRICTED	Delta-THCs scheduled (SB 546, 2023) with hemp carve-out; ABCA retail permits + WVDA product registration since 2025; 2026 bills unverified. *Coming: SB 484 / SB 808 status to confirm (pending/unknown); federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium
Wisconsin	OPEN	No state restriction on hemp-derived cannabinoids beyond 0.3% delta-9; total-THC and 'intoxicating cannabinoid' bills not enacted. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026 will bind WI businesses (Legislative Council brief); AB 503 / SB 644 not advanced.*	medium
Wyoming	RESTRICTED	SF 32 (2024) defines THC to include any THC isomer/analog with similar structure or effect and caps hemp at 0.3% THC; upheld by 10th Cir. *Coming: Federal Section 781 overlay 12 Nov / 11 Dec 2026.*	medium

TWO ACTION STEPS

1. Confirm your own state and municipality before purchase, use or travel. Being federally compliant is necessary and not sufficient.
2. Buy only from brands publishing recent, batch-matched third-party COAs, and read them the way Chapter 11 describes rather than the way you read them in 2024.

10 International Status

Two things determine whether you can legally hold a THCV product outside the United States, and most guides only discuss the first. The first is the status of the molecule. The second is the status of the format, which in Europe is often the binding constraint even where the molecule is permitted.

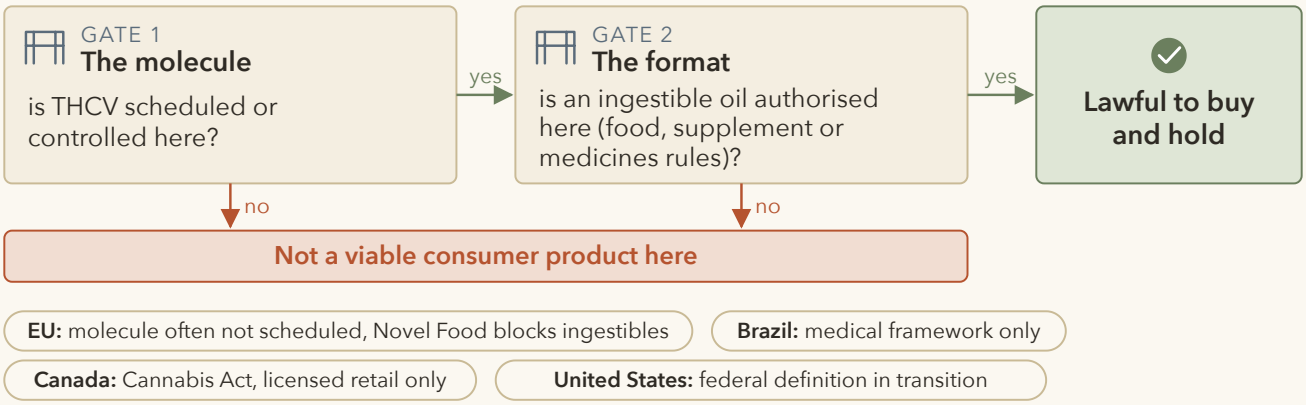


Figure 10.1 Two gates, not one. A country can leave the molecule unscheduled and still make an ingestible oil unsellable through food or medicines law.

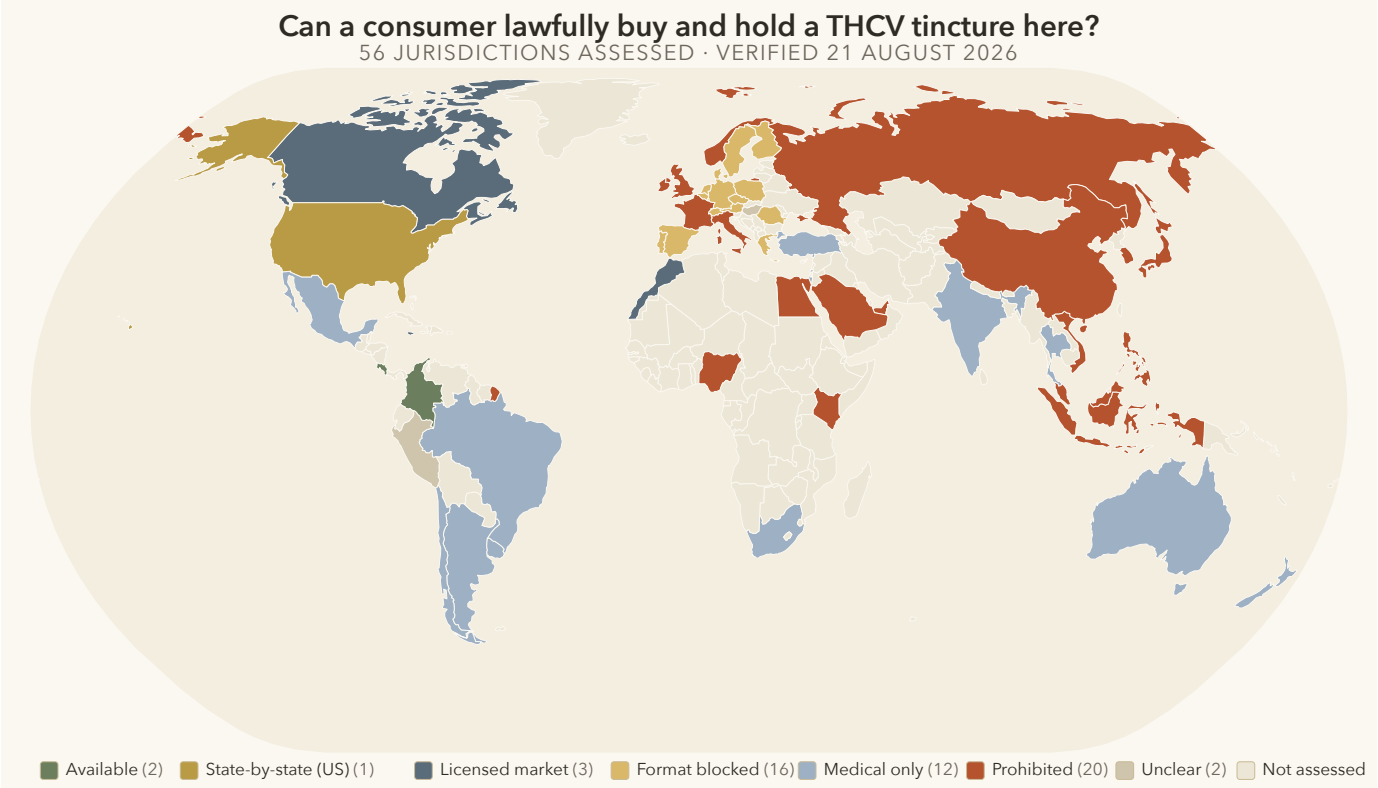


Figure 10.3 56 jurisdictions, one question: can a consumer lawfully buy and hold a non-prescription THCV tincture there? Verified 21 August 2026; pale countries were not assessed.

The map colours each country by the practical answer to one question: can a consumer lawfully buy and hold a non-prescription THCV tincture there? The table beneath it separates the two gates. Where sources disagree or a rule is in flux, the confidence column says so.

Country by country, verified 21 August 2026

Country	Status	The molecule	The format, and what is moving	Conf.
Argentina	MEDICAL ONLY	THCV not named; cannabis and derivatives controlled (Ley 23.737 narcotics regime, not re-read) with licensed medicinal/industrial channel under Ley 27.669.	No verified OTC route for cannabinoid tinctures; medicinal products via ANMAT/REPROCANN; industrial derivatives via ARICCAME licences.	low
Australia	MEDICAL ONLY	'Tetrahydrocannabinols and their alkyl homologues' Schedule 8/9 of the Poisons Standard; THCV (propyl homologue) expressly captured.	Prescription-only medicinal cannabis; no listed-medicine or food route for THC-class cannabinoids.	high
Austria	FORMAT BLOCKED	Not verified; possible capture by NPSV group definition claimed by one vendor source only.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference).	low
Belgium	FORMAT BLOCKED	Not verified; no primary Belgian text naming THCV was opened.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference).	low

Country	Status	The molecule	The format, and what is moving	Conf.
Brazil	MEDICAL ONLY	THCV not scheduled by name. THC ('tetraidrocanabinol') sits in Lista F2 of Portaria SVS/MS 344/1998, whose adendo extends control only to 'sais, éteres, ésteres e isômeros'; Cannabis sativa L. is in Lista E. THCV is a propyl homologue, not an isomer, of delta-9-THC, so the F2 entry does not literally reach it (inference from the adendo wording, which the 2026 list updates RDC 1.011/2026 and RDC 1.023/2026 left unchanged — no homologue or analogue language was added). Immaterial in practice: any product containing Cannabis-plant derivatives is a Cannabis product and needs either ANVISA sanitary authorisation or an ANVISA import authorisation.	Two separate regimes, and a THCV-dominant product may fit neither cleanly. Domestic route: RDC 1.015/2026 (in force 4 May 2026, replacing RDC 327/2019) governs 'produtos de Cannabis' with ANVISA sanitary authorisation, prescription and pharmacy dispensing. Its scope is products containing CBD or Cannabis sativa L. extracts; a THCV-dominant isolate formulation does not obtain that route automatically and would have to be assessed on its composition (inference — no ANVISA decision on a THCV-dominant product was found). Personal import route: a separate regime under ANVISA RDC nº 660, de 30 de março de 2022 (DOU 31 Mar 2022; in force 2 May 2022; art. 21 revoked RDC 335/2020 and RDC 570/2021), still fully in force in August 2026 and unaffected by the 2026 package. RDC 660 covers 'produto derivado de Cannabis' generically — an industrialised product for medicinal purposes containing derivatives of the Cannabis plant (art. 2, V) — so a plant-derived THCV oil is within its scope; a fully synthetic isolate arguably is not a plant derivative. RDC 660 sets no THC ceiling. No food or supplement route exists under either regime. *Coming: ANVISA has opened a separate regulatory process to revise RDC 660/2022 and, in the vote approving the 2026 package, signalled restricting exceptional personal import to cases where no equivalent Brazilian-authorised product exists, with a 12-month transition; not tabled as of August 2026. STF Tema 1.466 (general repercussion recognised 20 Jun 2026) will decide public and judicial supply of Cannabis products. The STJ's IAC 16 cultivation mandate is closed: the Primeira Seção declared the regulatory obligations fulfilled in April 2026.*	high
Canada	LICENSED MARKET ONLY	THCV = phytocannabinoid = 'cannabis' under Cannabis Act Schedule 1 regardless of source; not separately scheduled.	Ingestible extract = cannabis extract (licensed producer, authorised retail); not permitted in NHPs, foods or supplements.	high

Country	Status	The molecule	The format, and what is moving	Conf.
Chile	MEDICAL ONLY	THCV not named; cannabis and THC controlled under Ley 20.000 and its reglamentos (DS 404/405 as amended by Decreto 84/2015).	Medicines only (ISP registration, retained prescription); no food/supplement route. *Coming: Adult-use regulation bill (June 2025) pending.*	medium
China	PROHIBITED / CONTROLLED	THCV not named; cannabis and THC controlled; all cannabis-derived ingredients banned in cosmetics.	No lawful consumer format for cannabinoid tinctures.	low
Colombia	AVAILABLE	THCV not named. THC control limit applies to THC incl. isomers, salts, acid forms; THCV plausibly outside (inference).	Foods, beverages, supplements, cosmetics with non-psychoactive derivatives allowed with INVIMA registration; novel ingredients need INVIMA review.	medium
Costa Rica	AVAILABLE	THCV not named; hemp/cannabis split keyed to THC content.	Hemp food/industrial products permitted with Ministry of Health registration; medicinal products prescription/pharmacy channel. *Coming: Traceability system due by Feb 2027 (pending).*	low
Czech Republic	FORMAT BLOCKED	THCV is not individually named. The conditional exclusion for cannabis at or below 1% THC does not place cannabis extracts or tinctures on the psychomodulatory-substances list.	The psychomodulatory regime, which the 2025 edition of this guide read as a route for hemp tinctures, covers only kratom and kratom extract today. The food and supplement format remains blocked by EU Novel Food, so there is no ordinary consumer route for a THCV tincture. *Coming: Possible additions to the psychomodulatory list after two-year reviews (e.g., HHC) - pending*	low
Denmark	FORMAT BLOCKED	Not listed in the euphoriant substances order per sources opened (inference).	Oral cannabinoid products: medicines-law classification risk plus EU Novel Food; no authorisation. *Coming: Possible listing of THCA as euphoriant substance (recommendation May 2025, pending)*	low
Egypt	PROHIBITED / CONTROLLED	Cannabis and derivatives prohibited; statute text not read; THCV not named.	No lawful consumer format.	low
Finland	FORMAT BLOCKED	Not named in decrees per sources opened (inference).	Oral cannabinoid products treated as medicines by Fimea; consumer sale not permitted (background position). *Coming: Further decree updates expected (several per year)*	low

Country	Status	The molecule	The format, and what is moving	Conf.
France	PROHIBITED / CONTROLLED	Narcotic (liste des stupéfiants) when THCV content exceeds 0.3%; exempt only at <=0.3% as a trace constituent of industrial hemp (ANSM 2024).	Ingestible cannabinoid products (oils, capsules, gummies, teas) without Novel Food authorisation are being removed from the market under the DGAL plan from 15 May 2026. *Coming: Industry appeals (UPCBD, SPC) reported before the Conseil d'Etat against the DGAL plan (secondary source, unverified); Novel Food authorisation route remains theoretically open*	high
Germany	FORMAT BLOCKED	Not named in BtMG Anlagen or KCanG; possible capture by NpSG cannabimimetic group after the 2 Dec 2025 rewrite is disputed and unverified.	Ingestible cannabinoid extracts are unauthorised novel foods (Regulation (EU) 2015/2283); no THCV or CBD food authorisation exists. *Coming: Watch for official BfArM/BMG guidance on whether the Dec 2025 NpSG group definitions capture natural THCV; EU Novel Food decisions on CBD dossiers*	medium
Greece	FORMAT BLOCKED	Not named in sources opened; 2025 analogue decision scope unverified.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference). *Coming: Finalisation of 2026 hemp/CBD framework (pending)*	low
Hong Kong	PROHIBITED / CONTROLLED	THCV captured as a 3-alkyl homologue of THC under the DDO; CBD also a dangerous drug.	No lawful consumer format; import of any product containing CBD/THC-class cannabinoids prohibited.	high
Hungary	UNCLEAR	Unverified; possible capture by NPS group wording claimed by a vendor only.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference).	low
India	MEDICAL ONLY	THCV not named; NDPS 'cannabis' = charas, ganja, mixtures (no THC % test); THC listed as psychotropic (not re-verified).	Hemp-seed foods only under FSSAI; other cannabinoid products only as AYUSH-licensed medicines on prescription.	low
Indonesia	PROHIBITED / CONTROLLED	Cannabis and derivatives Class 1 narcotics; THCV not named.	No lawful format.	low
Ireland	PROHIBITED / CONTROLLED	Captured by generic 'derivatives of 3-alkyl homologues of cannabinol' wording (Schedule 1, 2025 order); not named.	Controlled-drug preparation; additionally cannabinoid ingestibles are unauthorised novel foods. *Coming: Calls for tighter rules on HHC-like products (Apr 2026); no THCV-specific item*	medium

Country	Status	The molecule	The format, and what is moving	Conf.
Israel	MEDICAL ONLY	THCV not named; THC a dangerous drug (Dangerous Drugs Ordinance 5733-1973); CBD <=0.3% THC partly delisted 2022 (implementation disputed).	Cannabinoid foods/supplements not cleared; THC-class tinctures only as IMCA medical cannabis products. *Coming: Government examination of removing CBD and other non-psychoactive cannabinoids from the controlled framework, slow (secondary). Pending.*	low
Italy	PROHIBITED / CONTROLLED	Not named in the narcotics tables (unverified); the product is caught as an inflorescence-derived oil under Law 242/2016 art. 1 c. 3-bis.	Oils/extracts from inflorescences banned since April 2025; oral CBD narcotics decrees suspended; EU Novel Food also applies. *Coming: CJEU preliminary ruling on compatibility of the inflorescence ban with EU law (referral Nov 2025); complaints to the Commission by trade groups and regions*	low
Jamaica	LICENSED MARKET ONLY	THCV not named; ganja/hemp controlled under Dangerous Drugs Act as amended 2015; hemp defined by THC threshold (sources conflict: <1% or <0.3%).	Only CLA-licensed products via licensed retail; import controlled.	low
Japan	PROHIBITED / CONTROLLED	THCV expressly a designated substance (指定薬物) since 2023; delta-9-THC a narcotic under NPSCL.	No lawful consumer route; only a narrow MHLW confirmation for epilepsy patients' CBD products with trace THCV.	high
Kenya	PROHIBITED / CONTROLLED	Cannabis and 'cannabis oil' (any THC) controlled under Cap. 245; THCV not named.	No lawful consumer format.	low
Luxembourg	FORMAT BLOCKED	Not named (inference); generic listing targets synthetic agonists.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference).	low
Malaysia	PROHIBITED / CONTROLLED	Cannabis and THC controlled under Dangerous Drugs Act 1952 (text not re-read); THCV not named.	Only DCA-registered medicines; no consumer format.	low
Malta	FORMAT BLOCKED	Not addressed in sources opened.	CBD-type supplements subject to EU Novel Food; no authorisation. *Coming: Amendments pending (vendor source)*	low
Mexico	MEDICAL ONLY	THCV not named; cannabis and THC controlled under Ley General de Salud (Arts. 234-248). <=1% THC derivatives = hemp derivatives (Art. 245 V) but still COFEPRIS-controlled.	Ingestible cannabinoid products require COFEPRIS sanitary registration and prescription; CBD/hemp foods and supplements generally refused. *Coming: Federal cannabis law still stalled in Congress; none found for hemp consumer products.*	medium

Country	Status	The molecule	The format, and what is moving	Conf.
Morocco	LICENSED MARKET ONLY	THCV not named; cannabis regulated as a whole under Law 13-21 with THC ceiling for industrial varieties (1%).	Only ANRAC-authorised products; imported finished cannabinoid products need ANRAC + MoH approval.	low
Netherlands	FORMAT BLOCKED	Not named in Opiumwet lists per sources opened (inference); HHC/HHCP/THCP List I since 28 Jan 2026.	Novel Food: no authorisation for cannabinoid ingestibles; vendor market for <0.2% THC edibles exists but is not a legal authorisation.	low
New Zealand	MEDICAL ONLY	THCV not named; tetrahydrocannabinols controlled under Misuse of Drugs Act 1975; non-CBD-product cannabinoid preparations are controlled drugs.	Prescription only; medicinal cannabis products cannot be foods; personal import of CBD products prohibited.	medium
Nigeria	PROHIBITED / CONTROLLED	Cannabis (Indian hemp) prohibited; THCV not named.	No lawful consumer format; NAFDAC registration theoretically required for CBD products.	low
Norway	PROHIBITED / CONTROLLED	Not named; captured because any cannabis-plant extract is a narcotic.	Prohibited as a cannabis extract; novel-food route only for synthetic CBD, not approved.	low
Peru	UNCLEAR	THCV not named; regime keyed to THC (psychoactive cannabis = THC >=1%).	Medicinal derivatives prescription-only via licensed pharmacies; hemp-derivative consumer category not verified.	low
Philippines	PROHIBITED / CONTROLLED	Cannabis and derivatives dangerous drugs under RA 9165; THCV not named.	No lawful consumer format; FDA CSP imports only. *Coming: Medical cannabis and hemp bills pending.*	medium
Poland	FORMAT BLOCKED	Not listed per vendor sources; not verified against the statute annexes.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference).	low
Portugal	FORMAT BLOCKED	Not named in DL 15/93 tables in sources opened (inference); HHC added May 2026.	Foods/supplements with cannabinoids require EU Novel Food authorisation; none exists (ASAE position via secondary source).	low
Romania	FORMAT BLOCKED	Not named (inference); HHC scheduled Mar 2025.	Cannabinoid ingestibles unauthorised under EU Novel Food; enforcement strict.	low
Russia	PROHIBITED / CONTROLLED	Cannabis, resin and THC Schedule I; cannabis-derived cannabinoids controlled by source; THCV not named.	No lawful consumer format.	low
Saudi Arabia	PROHIBITED / CONTROLLED	Cannabis and derivatives prohibited; THCV not named.	No lawful consumer format.	low

Country	Status	The molecule	The format, and what is moving	Conf.
Singapore	PROHIBITED / CONTROLLED	Cannabis, cannabis resin and cannabinol derivatives controlled under the Misuse of Drugs Act (statute text not re-read); CBD treated as prohibited.	No lawful format.	low
South Africa	MEDICAL ONLY	THCV not named; THC is Schedule 7 under the Medicines and Related Substances Act with narrow hemp exemptions; CBD Schedule 4 except low-dose unscheduled products.	Ingestible cannabinoid tincture = medicine (SAHPRA) unless within unscheduled CBD thresholds; cannabis/hemp foods banned March 2025. *Coming: Commercialisation Policy and Overarching Cannabis Bill (target Parliament mid-2027). Pending.*	low
South Korea	PROHIBITED / CONTROLLED	THCV not named; hemp-derived cannabinoids = cannabis under the Narcotics Control Act (Supreme Court, June 2025).	No consumer route; prescription medicines via KODC only.	low
Spain	FORMAT BLOCKED	Not named in SND/380/2025 (as read); not an isomer of THC; treated here as unscheduled (inference, vendor claim to the contrary unverified).	Ingestible cannabinoid products lack Novel Food authorisation; no Spanish food-agency source opened this session.	low
Sweden	FORMAT BLOCKED	Not named in classifications found; vendor sources call it permitted. Unverified against primary lists.	Cannabinoid ingestibles unauthorised under EU Novel Food (inference). *Coming: Government decision on the May 2026 proposal (pending)*	low
Switzerland	FORMAT BLOCKED	Not named in BetmVV-EDI (inference); cannabis products <1% total THC are outside narcotics law.	Novel food: BLV authorisation required for cannabinoid foods/supplements; none issued for THCV/CBD.	medium
Thailand	MEDICAL ONLY	THC-based threshold (0.2% in extracts) under narcotics law; THCV not named.	Medical-only channel; consumer import of hemp/cannabis ingestibles prohibited. *Coming: Draft Cannabis Act stalled; push to relist cannabis as Category 5 narcotic; no measure to reopen consumer sales. Pending.*	low
Turkey	MEDICAL ONLY	Cannabis controlled under Law 2313; no CBD-specific legislation (Gün + Partners, 2024); THCV not named.	Pharmacy/prescription only; no consumer tincture category. *Coming: Implementation of the 2025 pharmacy-sales amendment (pending/unverified).*	low
United Arab Emirates	PROHIBITED / CONTROLLED	Cannabis and derivatives prohibited under Decree-Law 30/2021; THCV not named.	No lawful consumer format.	low

Country	Status	The molecule	The format, and what is moving	Conf.
United Kingdom	PROHIBITED / CONTROLLED	Controlled as a 'cannabinol derivative' under the generic definition in the Misuse of Drugs Act 1971 (Sch. 2 Pt. 4), Class B, Schedule 1 of the MDR 2001. Not named individually — this is a reading of the generic wording, which reaches tetrahydro derivatives of cannabinol and their 3-alkyl homologues.	No ordinary unlicensed consumer or over-the-counter route; licensed controlled-drug and medicinal routes are separate and are not addressed here. The exempt-product definition (MDR 2001 reg. 2(1), given effect by reg. 4(5)) requires three conditions to hold together: the product is not designed to administer the controlled drug; the drug cannot be recovered by readily applicable means; and no component part holds more than 1 mg. An ingestible tincture fails (a) on sight, because delivering the cannabinoid is the product's purpose, and fails (c) at any meaningful strength — a 1,000 mg bottle is three orders of magnitude past 1 mg per component part. Whether it also fails (b) is a question of fact about recoverability, and does not need answering: failing any one condition is enough. The 1 mg figure is not a micro-dosing allowance. Separately, cannabinoid ingestibles are novel foods and THCV has no authorisation. *Coming: HHC/semi-synthetic cannabinoid scheduling order awaited (ACMD recommendation accepted Aug 2025, per cannabisregulations.ai); no THCV-specific change found*	high
United States	STATE-BY-STATE	Not scheduled; hemp-derived cannabinoids meeting the federal hemp definition are lawful today. Whether THCV falls in the THC class after 12 Nov 2026 depends on FDA lists that do not yet exist.	FDA has not authorised cannabinoids in food or dietary supplements; the consumer market operates under state law. See the state map (Figure 9.5). *Coming: 12 November 2026 effective date (11 December 2026 for most provisions if the continuing resolution becomes law); FDA cannabinoid lists overdue.*	high
Uruguay	MEDICAL ONLY	THCV not named; regime distinguishes psychoactive cannabis (IRCCA) from non-psychoactive/hemp (MGAP) by THC.	Tinctures only as MSP-registered medicinal specialties; adult-use channel dispenses flower only.	low
Vietnam	PROHIBITED / CONTROLLED	Cannabis controlled; THCV not named; no hemp carve-out.	No lawful format.	low

If you travel with it

Do not. Carrying a cannabinoid product across a border puts you under the law of the destination, the law of any country you transit, and the discretion of the officer in front of you, none of which are governed by the COA in your bag. Buy at the destination where it is lawful to do so, or go without for the trip.

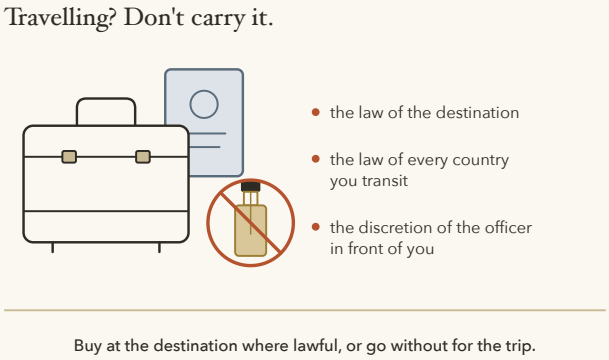


Figure 10.2 The shortest section in the book.

Reading a COA in the Total-THC Era

The way you were taught to read a certificate of analysis in 2023 is now incomplete. Checking that delta-9 THC is under 0.3 percent was the right check under the old federal definition. Under the new one there are two additional numbers that matter more.

The three numbers that now matter

1. **Total THC, not delta-9 alone.** Total THC equals delta-9 THC plus 0.877 times THCA. A report that shows only delta-9 is not answering the current question. Good labs print the formula on the report.
2. **Milligrams per unit, not just percentage.** The 0.4 mg ceiling is a per-container figure. A percentage tells you nothing about a container until you multiply it by the unit mass. Insist on a COA that reports mg per unit and states the unit mass it used.

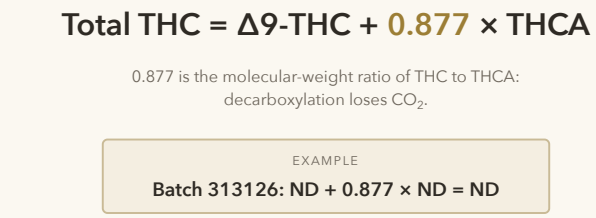


Figure 11.1 The formula that replaces the old delta-9 check. The 0.877 factor is the molecular-weight ratio of THC to THCA.

3. **The full cannabinoid panel, including what was not detected.** A panel showing ND across fifteen compounds is more informative than a panel showing three results. It tells you what the lab looked for and did not find.

A worked example

The following is the actual Swiss Vitalis THCV tincture report, batch 313126, issued 18 May 2026 by SC Labs, an ISO/IEC 17025:2017 accredited laboratory. Reading a real report beats reading a description of one.

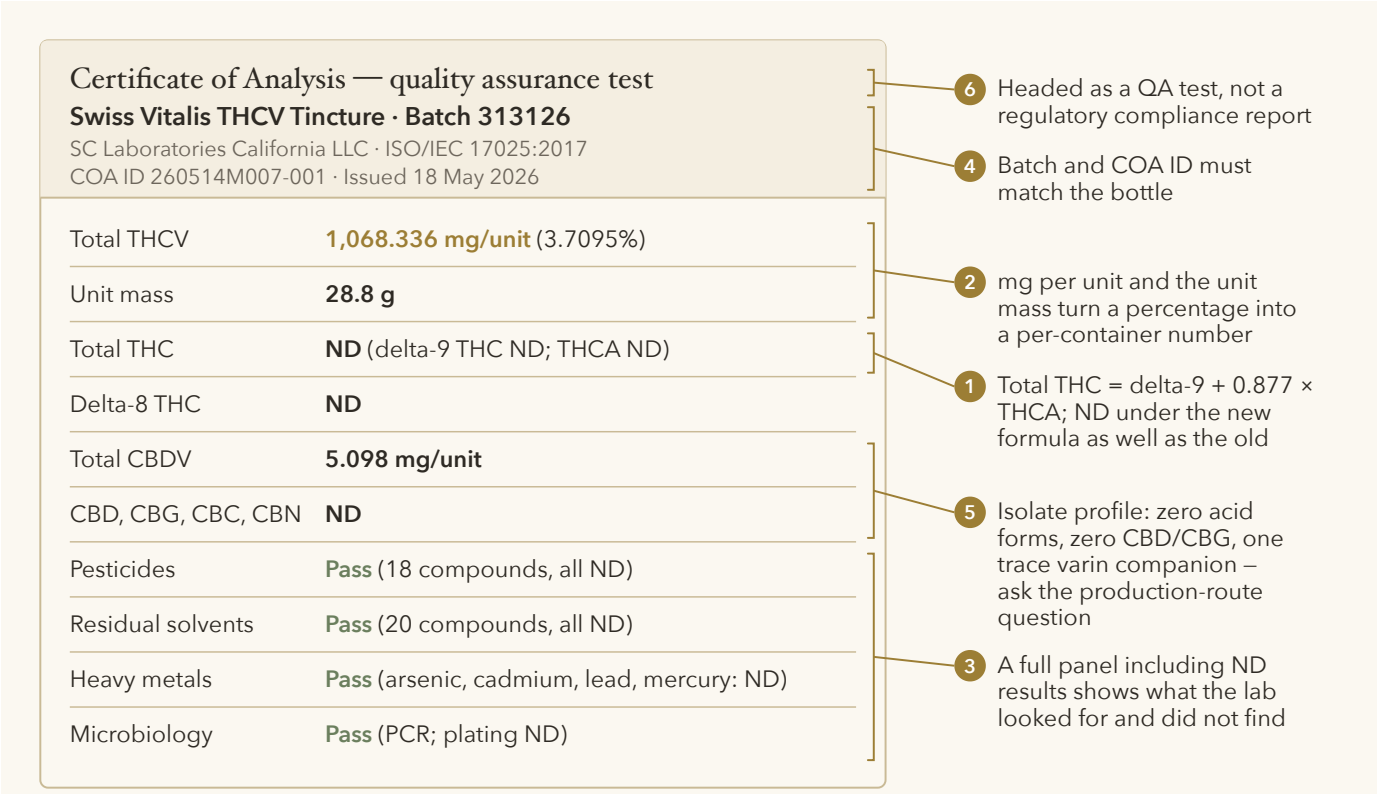


Figure 11.2 The real batch 313126 report, redrawn and annotated. The six callouts are the six things a careful reader checks, in the order they should check them.

Line on the report	What it said	How to read it
Total THCV	1,068.336 mg per unit (3.7095 percent)	Slightly above the 1,000 mg label figure, which is 6.8 per cent above the 1,000 mg label claim; whether that sits inside the manufacturer's release specification is not established here
Unit mass	28.8 grams	This is what turns a percentage into a per-container number. Without it, the mg figures cannot be verified
Total THC	Not detected	Both delta-9 THC and THCA came back ND, so total THC is ND under the new formula as well as the old one
Delta-8 THC	Not detected	Relevant because delta-8 counts toward total THC under the new standard
Total CBDV	5.098 mg per unit	A trace varin-line companion cannabinoid, chemically coherent with THCV
CBD, CBG, CBC, CBN	Not detected	This is the profile of a purified isolate rather than a broad plant extract
Pesticides	Pass, 18 compounds all ND	Check the panel size, not just the word Pass
Residual solvents	Pass, 20 compounds all ND	The single most important panel for any isolate or distillate

Heavy metals	Pass; arsenic, cadmium, lead, mercury all ND	Four metals is the standard minimum panel
Microbiology	Pass by PCR; plating ND	Two methods is better than one
Batch and sample ID	Batch 313126, COA ID 260514M007-001	This must match the batch printed on your bottle. If it does not, the report is not for your product

What this example also shows you about honesty

Two observations a careful reader should make about that report, which are printed here rather than hidden.

- **The cannabinoid profile is that of an isolate.** Zero acid forms, zero CBD, zero CBG, one trace companion. A direct extraction from varin-rich plant material would normally carry a broader fingerprint. This is relevant to the production-route question raised in Chapters 2 and 9, and it is a question every buyer should put to every brand.
- **The report is headed as a quality assurance test, not a regulatory compliance report.** That distinction is printed on the document itself. A QA report tells you what is in the bottle. It does not certify compliance with any particular jurisdiction's rules.

12 How to Choose a Quality Product

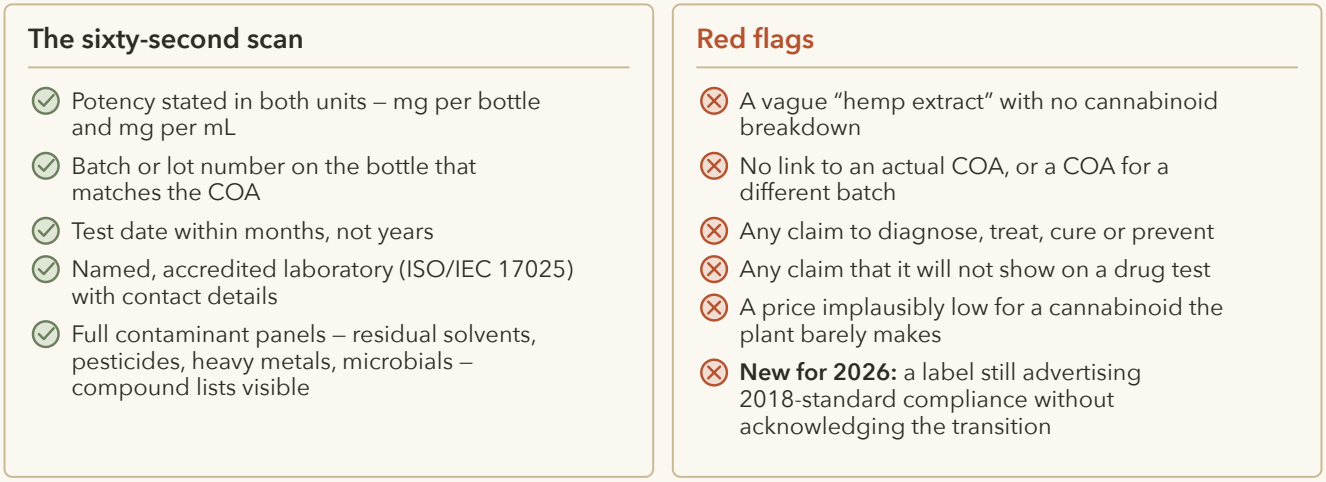


Figure 12.1 Five things to look for, six things to walk away from, and the one question almost nobody asks.

The sixty-second scan

- **Potency stated in both units.** Milligrams in the bottle and milligrams per millilitre. If a label gives you only the first, you cannot dose it.
- **Batch traceability.** A batch or lot number on the bottle that matches the COA. A QR code that resolves to a generic page rather than to your specific lot is a marketing asset, not a quality one.
- **Test date within a reasonable window.** Months, not years. Ask what the brand's retest interval is.
- **Named, accredited laboratory.** With contact details. ISO/IEC 17025 accreditation is the standard to look for.
- **Full contaminant panels.** Residual solvents, pesticides, heavy metals, microbials, all passing, with the compound lists visible.

Red flags

- A vague "hemp extract" with no cannabinoid breakdown.
- No link to an actual COA, or a COA for a different batch.
- Any claim to diagnose, treat, cure or prevent a disease.
- Any claim that a product will not show up on a drug test. See Chapter 21.
- A price that is implausibly low for a cannabinoid the plant barely makes.

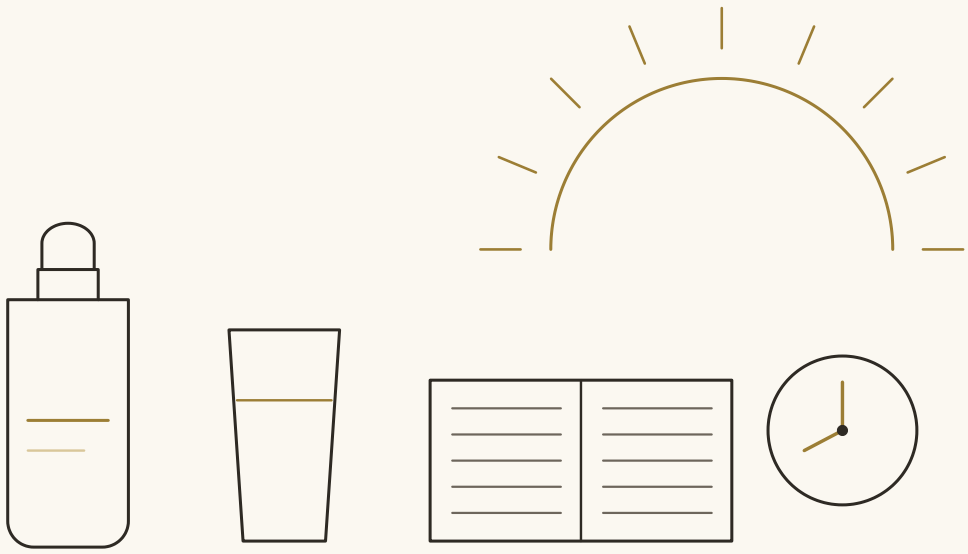
- **New for 2026:** a label that still advertises compliance with the 2018 standard without acknowledging the transition. That claim has a known expiry date.

> THE QUESTION ALMOST NOBODY ASKS
>
> Ask the brand, in writing, whether the cannabinoid was extracted from plant material or produced by chemical conversion, and from what starting compound. Keep the answer. Under the framework in Chapter 9 that single fact may matter more than anything printed on the label.

PART III

Using It Well

What is actually in the bottle, what the trials administered, and the honest answers to the questions people actually ask: sleep, driving, drug tests, interactions, and what to do when it does not seem to work. No regimen, because none has been established.



13 Content by Volume

THIS CHAPTER IS ARITHMETIC, NOT DOSING GUIDANCE

This guide does not tell you how much THCV to take, when to take it, or how to build up. It cannot, and neither can anyone else honestly: **no effective dose of THCV has been established** for focus, appetite, energy or any metabolic outcome, no titration schedule has been validated, and **no safe upper limit exists** in humans.

What this chapter does is answer a narrower question: *how much is in the bottle, and how much is in what you just poured?* That is a fact about the product, and you are entitled to it. What you do with the number is between you and a clinician.

The arithmetic for a 1,000 mg / 30 mL bottle

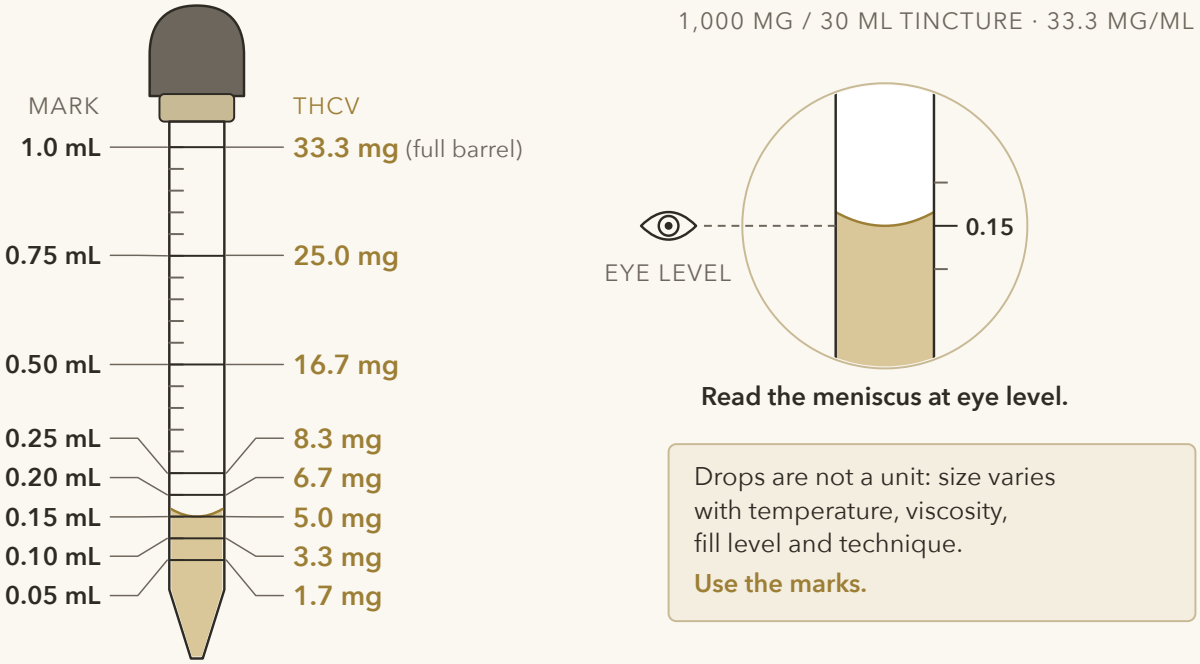


Figure 13.1 Each graduation on a 1 mL dropper, translated into milligrams of THCV for the 1,000 mg / 30 mL bottle. Arithmetic only – the marks are not recommendations.

Measure	Value	How it is derived
Label strength	1,000 mg per 30 mL bottle	Printed on the bottle
Per millilitre	33.3 mg/mL	1,000 divided by 30
Drops per millilitre	40	Measured on the supplied glass dropper with MCT carrier, twenty drops at a time

Per drop	approximately 0.83 mg	33.3 divided by 40
Full dropper	approximately 33 mg	The full barrel is 1 mL

THE NUMBER WORTH HOLDING ON TO

A full dropper of this bottle is **about 33 mg**. Two repeated-dose trials of isolated delta-9-THCV give that number a scale. The smaller one, the Jadoon pilot, gave **10 mg per day** to roughly a dozen people over thirteen weeks. The larger one, in 207 people over twelve weeks, ran three arms at **4, 10 and 30 mg per day**, and 30 mg a day is the largest repeated daily regimen of delta-9-THCV any controlled trial has used. So a full dropper is a little above the largest repeated daily regimen of delta-9-THCV anyone has studied, and more than three times the quantity in the trial that is usually quoted.

That comparison is not a recommendation to take one third of a dropper, or any other fraction. It is the piece of scale the arithmetic supports: **a dropper is not a serving**. Two further facts belong with it. The 30 mg arm was *tolerated*, with serious adverse events no more frequent than on placebo, so the concern about a full dropper is not that the amount is unheard of. And that same arm produced *no benefit* on the endpoint it was built to measure, so the instinct to fill the dropper is not supported by evidence of more effect either.

What the trial doses do and do not tell you

The 10 mg per day figure gets quoted constantly, so it is worth stating exactly what it carries — including that it was delivered by a different route than this product uses. It comes from a five-arm pilot in 62 people, roughly a dozen of whom took THCV alone. The study **missed its primary endpoint**, which was HDL cholesterol. The 30 mg figure carries something different and, for a reader deciding what to do, more important: it is the dose at which a 207-person trial tested HbA1c and **found no benefit** (Chapter 5). It measured glucose and lipids, not focus, energy or appetite. It dosed purified THCV *orally*, not sublingually, and it studied people with type 2 diabetes, not healthy consumers. Nothing establishes that a given volume held under the tongue delivers what that oral arm delivered.

So the trial does not establish that 10 mg per day works for anything a consumer would buy this for; it does not establish bioequivalence between what it dosed and what is in this bottle; and it does not establish a safe range above or below itself. It establishes one narrow thing: that quantity, in that population, by that route, for thirteen weeks, did not produce a tolerability problem the investigators reported.

WHAT THESE CONVENTIONS ARE

The amounts, the timings, the sublingual hold, the hot-drink rule and the pairings described in this guide have **not been compared in a human THCV trial**. No human sublingual pharmacokinetic study of THCV exists at all. They are anecdotal or editorial conventions, and reading them as demonstrated effects is the commonest way to over-read this book.

Reading your own dropper

Drop size varies with temperature, viscosity, how full the bottle is and how you hold it, which is why the millilitre markings are the only reliable measure on the instrument. To check yours: dispense twenty drops into a 1 mL oral syringe, read the volume, and divide twenty by that volume. The figure used throughout this guide, forty drops per millilitre, was measured on the Swiss Vitalis glass dropper with MCT carrier.

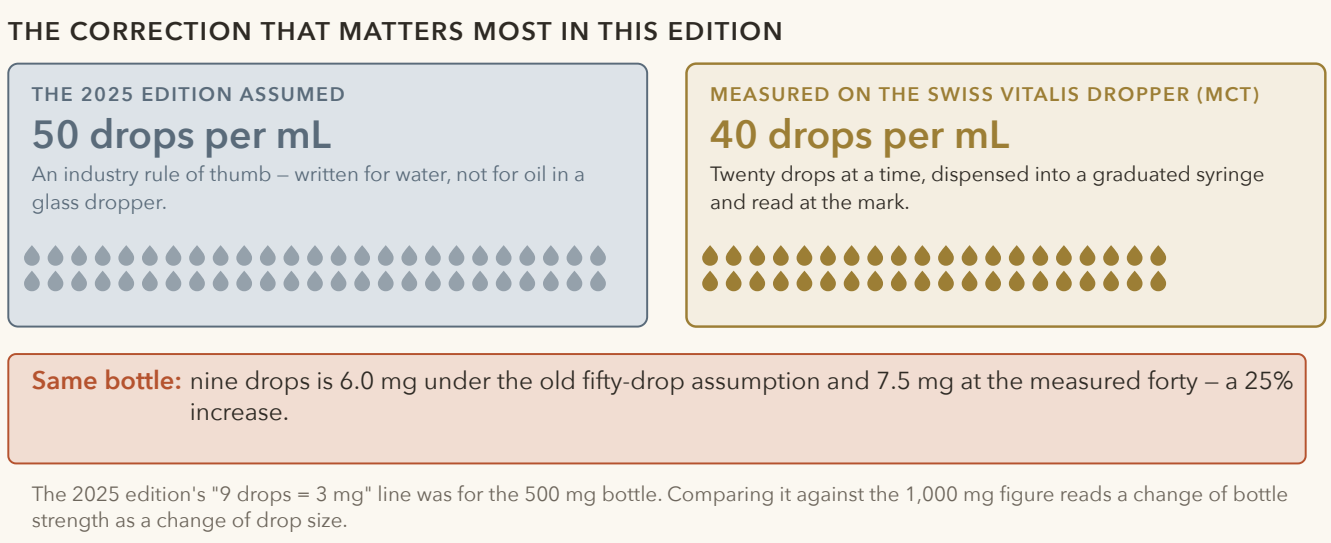


Figure 13.2 A correction carried from the 2025 edition, which used an industry rule of thumb of fifty drops per millilitre – a figure written for water. Measured on an actual dropper with oil, it is forty. At a given concentration that raises what a drop delivers by 25 per cent: nine drops of the 1,000 mg / 30 mL bottle is 6.0 mg under the old assumption and 7.5 mg at the measured figure. (The 2025 edition's "9 drops = 3 mg" line was for the 500 mg bottle, not this one.)

Practical handling

Two facts about the product, neither of which is advice about quantity. Shake before use if the label directs it. An oil tincture may be a true solution or a suspension depending on how it was formulated; the carrier oil alone does not establish that it will settle. And read the meniscus at eye level rather than counting drops in mid-air, because that is the difference between measuring and estimating.

> IF YOU WANT A REGIMEN
>
> Ask a clinician, and bring this chapter plus Chapter 5 and Chapter 15 with you. A prescriber who can see what the evidence actually consists of — one small pilot with a missed primary endpoint, one large negative trial that was never published, one mechanism study whose direction is the opposite of the popular summary, and one exploratory combination study — is in a position to weigh it against everything else they know about you. A table in a book is not.

PART III · USING IT WELL

14 Pharmacokinetics and Bioavailability

WHAT THESE CONVENTIONS ARE

The amounts, the timings, the sublingual hold, the hot-drink rule and the pairings described in this guide have **not been compared in a human THCV trial**. No human sublingual pharmacokinetic study of THCV exists at all. They are anecdotal or editorial conventions, and reading them as demonstrated effects is the commonest way to over-read this book.

Formal human pharmacokinetic data for THCV are thin but no longer absent. One dose-ranging study in healthy adults reported a median time to peak plasma concentration of **3.8 to 5.0 hours** after an oral dose, which is later than most users assume and later than the onset figures that circulate for tinctures. Read that number with its caveat: the study dosed **delta-8-THCV** in MCT oil (12.5 to 200 mg, twenty-one enrolled with plasma analysed in fifteen, sampling stopped at eight hours), not the delta-9-THCV in this guide's product, and it dosed it swallowed rather than sublingually. Isomers do not have to share a pharmacokinetic profile. What the study establishes is that oral varin cannabinoids peak later than most users assume; it does not establish a curve for a sublingual delta-9-THCV tincture, and no study does. Then the harder point: **nobody has measured THCV blood levels after a sublingual dose, of either isomer.** For *highly purified* oral THCV the published plasma concentration-time data amount to one study, and it stopped sampling at eight hours, so even the duration is unmeasured. Separate whole-blood and oral-fluid data for delta-9-THCV do exist, measured after standardised cannabis was smoked, vaporised or eaten (Newmeyer 2016). Those are mixed-cannabis studies: they do not establish the pharmacokinetics of an isolated THCV tincture, and none of them is sublingual. Every onset-and-peak figure you have seen for a THCV tincture, including the one this guide printed in 2025, is borrowed from how other compounds behave under the tongue. The figure below prints none of that borrowing: it draws the one curve that was measured and leaves the other two routes flat, because there is nothing to draw.

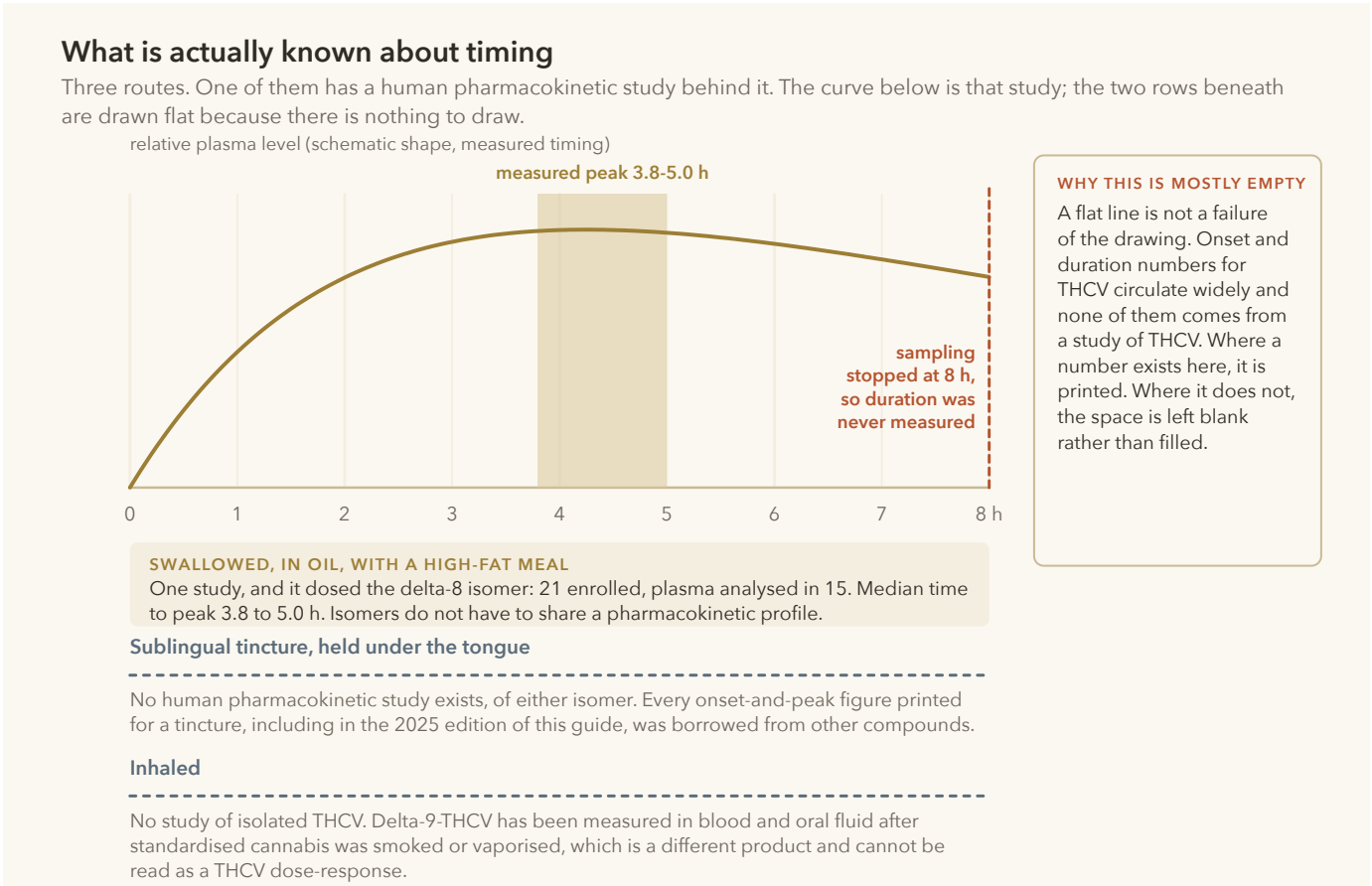


Figure 14.1 What is known about timing, and what is not. One measured curve, two flat lines: the sublingual curve is the one a tincture user cares about, and it is the one nobody has measured.

Route	What is known in humans
Sublingual tincture	**Nothing.** No human pharmacokinetic study of sublingual or oromucosal THCV exists, of either isomer, purified or otherwise. Any onset-and-peak figure you have seen for a tincture is borrowed from other compounds.
Swallowed	One study, delta-8-THCV in MCT oil taken with a high-fat meal: twenty-one enrolled, plasma analysed in fifteen, median time to peak 3.8 to 5.0 hours, sampling stopped at eight hours — so the duration is unmeasured too.
Inhaled	**Nothing for isolated THCV.** Delta-9-THCV has been measured in blood and oral fluid after standardised cannabis was smoked or vaporised (Newmeyer 2016); that is a different product and cannot be read as a dose-response for a THCV tincture.

Food effect. Dietary fat increases absorption of swallowed cannabinoids generally. Whether it does so for a THCV tincture, and by how much, has not been measured.

Metabolism. Hepatic metabolism to a carboxy metabolite (11-nor-9-carboxy-THCV) is documented in humans, again for the delta-8 isomer; faecal and urinary excretion is expected based on cannabinoid class behaviour. That metabolite is also the reason for the drug-test finding in Chapter 21. Genetics, diet, gut and concurrent medication all shift the picture.

15 Safety, Side Effects and Contraindications

Tolerability is generally favourable across the trial record, and the best safety evidence comes from the trial that failed on efficacy: 159 adults took isolated delta-9-THCV for twelve weeks against 48 on placebo, 52 of them at 30 mg a day, with serious adverse events rare and balanced against placebo and no deaths. Thirteen weeks at 10 mg a day in a second trial was also well tolerated. Both dosed orally in split doses, not sublingually in one, and both studied people with type 2 diabetes. No study has published adverse-event rates for THCV in the population that buys it, so the words below are orderings of what users describe, not frequencies. Described most often: reduced appetite, dry mouth and light alertness. Described less often: gastrointestinal upset, restlessness, usually from a higher dose or a stimulant stack, and sleep disruption if taken late.

The one published human study of daily THCV strips also recorded one mild ALT elevation in each active arm and one mild AST elevation in the lower-dose arm over ninety days, against one mild ALT elevation on placebo. The paper does not say whether the lower-dose ALT and AST elevations occurred in the same person. The elevations were small and the study did not track alcohol or other medication, so causation is unproven — but if you use THCV daily for months, ask your clinician whether a liver panel is worth adding to routine bloodwork.

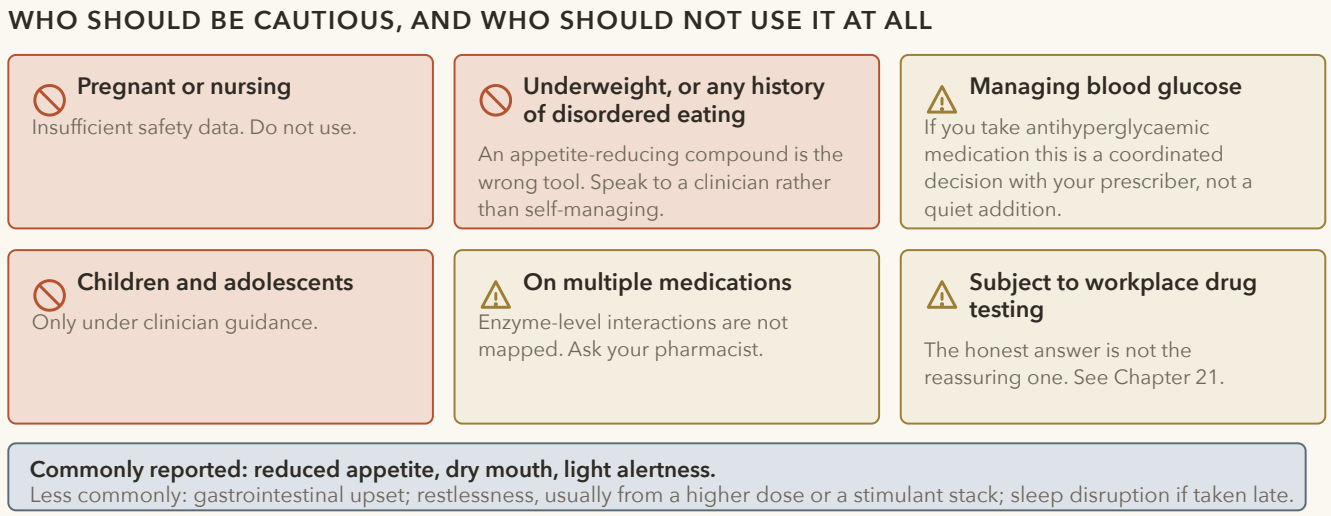


Figure 15.1 Six groups for whom the answer is "not without a clinician" or simply "no".

Who should be cautious or avoid it

- **Pregnant or nursing.** Insufficient safety data. Do not use.
- **Anyone underweight, or with any history of disordered eating.** An appetite-reducing compound is the wrong tool. Speak to a clinician rather than self-managing.
- **Anyone managing blood glucose.** THCV appears to influence metabolic pathways. If you take antihyperglycaemic medication, this needs to be a coordinated decision with your prescriber, not a supplement you add quietly.

- **Children and adolescents.** Only under clinician guidance.
- **Anyone on multiple medications.** Enzyme-level interactions are not mapped. Ask your pharmacist.
- **Anyone subject to workplace drug testing.** See Chapter 21. The honest answer is not the reassuring one.

Timing and sleep

The most consistent report in the user literature is that late use disturbs sleep. That is a safety observation rather than a schedule, and it is the reason this guide treats timing as a question for Chapter 15 rather than a line in a dosing table. What follows from it is a matter for you and a clinician.

> NOT A TREATMENT
>
> THCV is a wellness adjunct. It is not intended to diagnose, treat, cure or prevent any disease, and it is not a substitute for medication, medical advice, or the behaviours that actually drive metabolic health. If you are using it in place of something a doctor prescribed, stop and talk to that doctor.

16 Interactions and Stacks

PART III · USING IT WELL

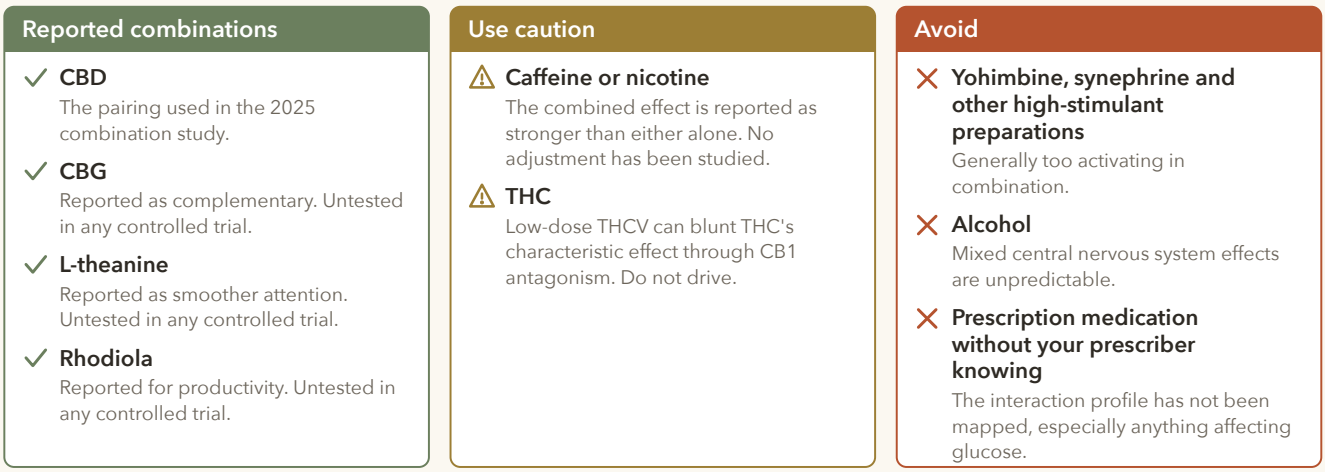


Figure 16.1 Green, gold, clay. Reported pairings, pairings that need a lighter hand, and pairings to avoid.

Combinations people report using

REPORTED PAIRINGS, NOT RECOMMENDATIONS

Four combinations come up repeatedly in what users describe: THCV with CBD, with CBG, with L-theanine and with rhodiola. Except for the fixed THCV-plus-CBD product examined in one exploratory ninety-day trial, **no controlled human trial has established the benefit or the safety of any of them.** They are listed here because you will meet them, not because this guide suggests trying one. There is no evidence base from which to say which pairing suits whom, in what amount, or in what order.

Use caution with

- **Caffeine or nicotine.** The combined effect is reported as stronger than either alone. This edition prints no adjustment, because none has been studied; treat the combination as an unknown rather than a known quantity.
- **High-stimulant preparations** such as yohimbine or synephrine. Generally too activating in combination. Avoid.
- **THC.** Blunting is expected at low THCV doses. Do not drive.
- **Alcohol.** Best avoided. Mixed central nervous system effects are unpredictable and there is no reason to find out on a Friday.

17 Keeping a Record

PART III · USING IT WELL

This edition does not print a titration schedule. A titration schedule is a claim that a particular sequence of amounts, over a particular number of weeks, produces a particular result — and no study has established that for THCV. What the 2025 edition offered as a four-week protocol was inference dressed as method.

What survives that deletion is the part that was never a claim: **if you use this, write it down.** Not because a journal makes the compound work, but because without one you have no way to tell a real effect from a good week, and no way to give a clinician anything better than an impression.

Five lines a day

- What you took, by volume, and at what time.
- Context: fasted or fed, hours of sleep, caffeine before and after.
- What you were trying to do that day, and a rating out of ten for focus, appetite and energy.
- Timeline: when you noticed anything, when it seemed strongest, when it faded.
- Notes: mood, gut, sleep that night, how you felt the next morning.

Two things make a record worth keeping. Keep the conditions steady while you are observing — comparing a fed morning against a fasted one, with different sleep behind each, tells you nothing. And record the days you skip, because those are the only comparison you have.

> WHAT A RECORD IS FOR
>
> It is evidence for a conversation, not a substitute for one. If you take this to a prescriber, the useful thing is not your average score; it is the pattern — whether anything changed at all, whether it changed on the days you took it, and whether the effect you are attributing to the product survives a week of decent sleep.

18 Why This Guide Prints No Routines

PART III · USING IT WELL

Earlier editions carried a page of routines by use case: the knowledge worker, the intermittent faster, the student, the athlete, the shift worker. It was the most-read page in the book, and it is gone.

The reason is narrow and worth stating plainly. A routine addressed to a group is a claim about that group — that people doing this kind of work, or this kind of training, benefit from this compound on this schedule. **No trial has tested THCV in any occupational or lifestyle group.** Not students, not athletes, not shift workers, not people fasting. The routines were assembled from what customers reported doing, and reporting that people do something is not the same as suggesting they should.

There is a second reason, and it is not scientific. Guidance about when and how much to take, distributed alongside a product, is how a wellness ingredient starts to look like an unapproved drug to a regulator — regardless of the disclaimers attached to it. A guide that wants to be useful for a long time has an interest in not writing its own evidence of intended use.

What replaces it

Three things this guide is willing to say, none of which is a schedule.

- **Users consistently report that late use disturbs sleep.** That is the observation behind calling THCV a daytime compound, and it is a caution rather than a timing instruction — Chapter 15 covers it.
- **The compound is biphasic.** Chapter 4 explains why more is not a stronger version of the same thing, which is the single most useful piece of pharmacology for anyone deciding anything about quantity.
- **The arithmetic is in Chapter 13.** How much is in the bottle, how much is in a dropper, and how that compares with the quantities controlled trials have administered: 4, 10 and 30 mg a day.

If you want those three facts turned into a regimen, that is a clinician's job, and Chapter 15 lists the circumstances in which it is not merely advisable to ask one but necessary.

19 When It Does Not Behave

PART III · USING IT WELL

WHAT THIS CHAPTER NO LONGER DOES

Earlier editions answered each complaint with an adjustment: add this much, halve that, move the timing. Those were inferences, not findings, and an adjustment table is a dosing schedule in another format. What follows is the likely explanation only. What to do about it is a decision for you and, where the row says so, a clinician.

What people report	The most likely explanation
"I do not feel anything"	The sublingual hold was short, the amount was low for that person, or there is nothing to feel — no blinded trial has tested focus or energy for this isomer at these amounts, so absence of effect is a possible true result rather than a problem to solve. Verifying potency against the batch COA rules out the one explanation that is the product's fault.
"Too wired"	Usually a stimulant stack rather than the cannabinoid alone. Chapter 16 covers the interaction; audit what else was consumed, including after dosing.
"Appetite suppression is too strong"	The effect people buy it for, arriving harder than wanted. Chapter 15 explains why this is a reason to stop rather than to adjust if you are underweight or have any history of disordered eating.
"It is affecting my sleep"	Late use. This is the most consistent report in the whole literature of user experience and the reason Chapter 15 treats timing as a safety question rather than a preference.
"Stomach upset"	Fasted use or the MCT carrier, which some people do not tolerate. If it persists, it is a conversation with a clinician, not a formulation to work around.
"I do not like the taste"	The carrier and terpene profile. A room-temperature drink afterwards is a preference, not a protocol.

One pattern is worth naming because it is the most common source of a false conclusion: people compare a fed morning after six hours of sleep against a fasted one after eight, and attribute the difference to the compound. Chapter 17 explains what a usable record looks like.

20 Myths and Misconceptions

MYTH
"THCV is legal everywhere"

FACT
No. Rules vary by country, by state and sometimes by city, and in 2026 they change on a scale of months.

MYTH
"It burns fat directly"

FACT
The evidence does not support that. Behavioural support that makes an eating pattern easier to hold.

MYTH
"It is nature's Ozempic"

FACT
No. The gap to a prescription GLP-1 agonist is orders of magnitude of evidence.

MYTH
"More is better"

FACT
Biphasic: higher doses can give a different effect, not more of the same.

MYTH
"It is just THC lite"

FACT
Mechanistically distinct: at guide doses it blocks CB1 rather than activating it.

MYTH
"0.0% THC means it cannot affect a drug test"

FACT
Corrected from the 2025 edition: risk is lower than THC but not zero (immunoassay cross-reactivity).

Figure 20.1 Six things people say about THCV and the short version of why each is wrong.

"THCV is legal everywhere"

No. Rules vary by country, by state and sometimes by city, and in 2026 they are changing on a scale of months. See Chapters 9 and 10 and the two maps.

"It burns fat directly"

The evidence does not support that framing. Treat it as a behavioural support tool that makes an eating pattern easier to hold, not as a metabolic intervention that works while you ignore everything else.

"It is nature's Ozempic"

It is not. Chapter 6 lays out the comparison in detail. The gap between a prescription GLP-1 agonist and a wellness cannabinoid is measured in orders of magnitude of evidence, not in marketing adjectives.

"More is better"

Biphasic behaviour means higher amounts do not simply give you more of the same effect. They can give you a different one. Chapter 4 explains the mechanism; this edition prints no amounts to compare.

"It is just THC lite"

"A 0.0 percent THC result means it cannot affect a drug test"

Wrong, and the 2025 edition was too soft about it. In the one published study that tested urine, seven of nine people taking 16 mg of THCV a day screened positive for THC at ninety days, all of whom reported never using THC (self-report; no baseline urine test was run). See Chapter 21.

Will THCV show up on a drug test?

The careful answer is that a positive screen is **likely**, not merely possible. In the 2025 oral-strip study, seven of nine participants taking 16 mg of THCV daily for ninety days screened positive for THC on a standard 50 ng/mL urine immunoassay, and every one of them reported never using THC. No baseline urine test was run, so the denial is self-report, not a measured negative. A 2026 forensic toxicology study reached the same conclusion from the laboratory side: THCV metabolites cross-react with the immunoassays used in routine cannabinoid testing and produce false positives for delta-9 THC. The laboratory detail is worth having, because it shows where the failure happens: in that dataset seventy of eighty urine samples tripped a THC immunoassay while mass spectrometry on the very same samples found no THC metabolite at all. The screen is the problem, not the confirmation. Two qualifiers, because this guide has been strict about isomers elsewhere: **that laboratory work used delta-8-THCV**, and the strip study did not publish which isomer its product contained. The cross-reactivity mechanism is a property of the varin scaffold rather than of one isomer, so it is very likely to carry to delta-9 — "very likely to carry" being the honest strength, not "demonstrated". Plan on the assumption that a THCV product will fail a workplace screen, and note that a confirmatory mass-spectrometry step, where your employer runs one, is the thing most likely to clear you.

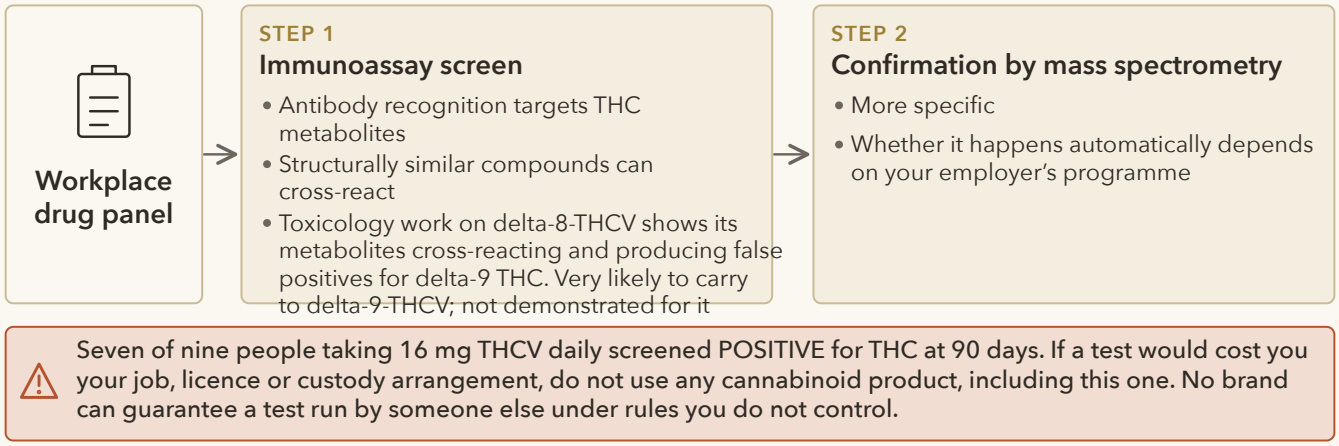


Figure 21.1 Screen, then confirm. The screen is where cross-reactivity lives; whether the confirmation happens is your employer's decision, not yours.

Standard workplace panels begin with an immunoassay screen that targets THC metabolites. Immunoassays work by antibody recognition, which means structurally similar compounds can produce a signal. That is called cross-reactivity, and it is a documented general limitation of these screens. For THCV it is no longer a theoretical concern: metabolites of THCV cross-react with the immunoassays used in routine cannabinoid testing and produce false positives for delta-9 THC. Confirmatory testing by mass spectrometry is more specific, but whether confirmation happens automatically depends entirely on your employer's testing programme, and a confirmed negative does not undo a reported positive screen.

> If a drug test would cost you your job, your licence or your custody arrangement, do not use any cannabinoid product, including this one. No COA and no brand can give you a guarantee about a test administered by someone else under rules you do not control.

Can I drive after taking it?

Not until you know your own response and timing, and not on your first several sessions. Establish your response at home.

Can I drink alcohol with it?

Best avoided. Combined central nervous system effects are unpredictable.

How should I store it?

Cool, dark, upright, sealed, and recap promptly. Heat, light and air are what degrade cannabinoids. A cupboard beats a windowsill.

What is the shelf life?

Typically twelve to twenty-four months when properly stored. Potency and flavour degrade past that. Check the COA date and replace expired product rather than pushing the dose to compensate.

Can I take it every day?

Two controlled trials dosed daily for twelve and thirteen weeks, the larger one in 207 people at up to 30 mg a day, both with good tolerability. Beyond about three months there is no human data either way, which is the honest answer to a question about habit. Note that the larger trial also found no benefit on its endpoint, so daily use being tolerable is not the same as daily use doing something.

Will it work if I have used cannabis regularly?

Regular CB1 agonist exposure changes receptor dynamics, so the subjective response may differ. There is no human data on this specific question.

Is THCV legal where I live?

Check the maps in Chapters 9 and 10 for the verified snapshot, then the tracker published at swissvitalisusa.com for anything that has moved since. In 2026 a static answer would mislead you.

Terpenes and Formulation Science

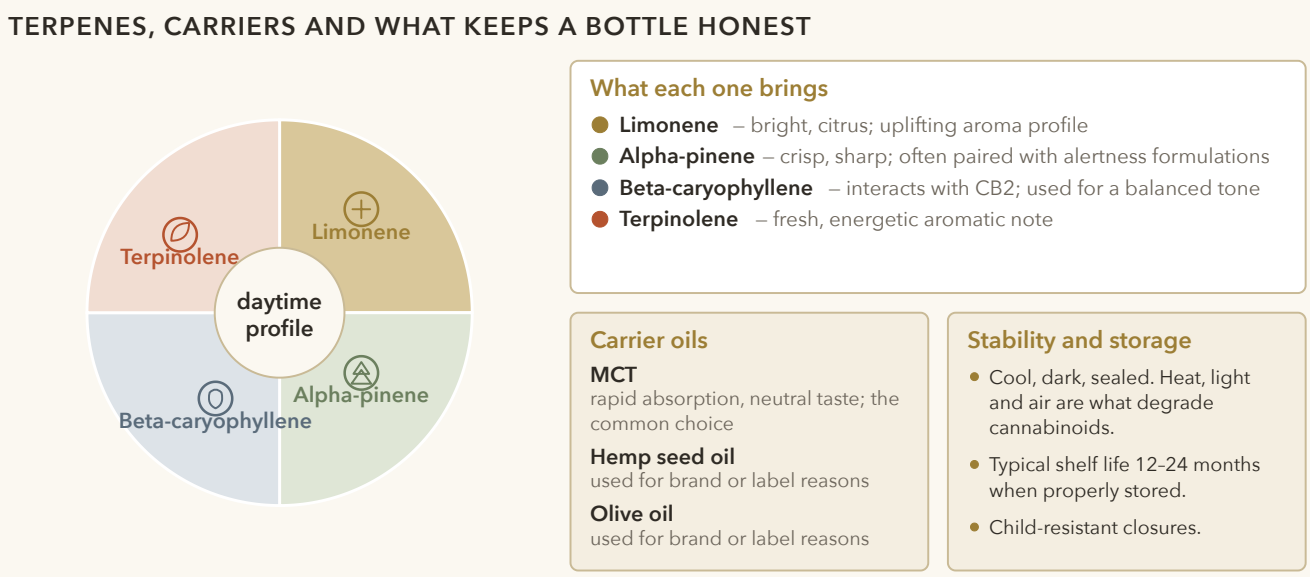


Figure 22.1 The four terpenes that suit a daytime profile, the three carriers, and the storage rules that keep a bottle honest for a year or two.

Carrier oils

MCT is the common choice for rapid absorption and a neutral taste. Hemp seed and olive oil are used for brand or label reasons. The carrier matters for how the product feels in the mouth, how it absorbs, and whether it agrees with your gut.

Terpenes that pair with a daytime profile

- **Limonene.** Bright, citrus, associated with an uplifting aroma profile.
- **Alpha-pinene.** Crisp and sharp, often paired with alertness formulations.
- **Beta-caryophyllene.** The one terpene shown to bind and activate CB2 directly, though at doses far above the amounts used for aroma in a tincture. Used here for a balanced tone, not as an active.
- **Terpinolene.** Fresh and energetic as an aromatic note.

Labelling and compliance in formulation

- Prefer natural flavours. Avoid loading a tincture with sugar alcohols.
- Declare allergens.
- No medical claims anywhere: not on the label, not on the product page, not in an advertisement, not in an email subject line.

- Print the batch number where a customer can find it without a magnifying glass, and make the QR resolve to that batch.

Stability and storage

- Cool, dark, sealed. Avoid heat, light and air.
- Twelve to twenty-four months typical shelf life when properly stored. Verify with stability testing rather than assuming.
- Child-resistant closures.

A

APPENDIX

Glossary

Term	Definition
Biphasic	Producing different, sometimes opposite, effects at different doses.
CB1 / CB2	The two primary cannabinoid receptors. CB1 is concentrated in the central nervous system, CB2 in immune and peripheral tissue.
CBGVA	Cannabigerovarinic acid. The precursor at the head of the varin line, from which THCVA and then THCV are formed.
COA	Certificate of Analysis. A third-party laboratory report on a specific batch.
Decarboxylation	The heat-driven conversion of an acidic cannabinoid, such as THCVA, into its neutral form, THCV.
ECS	Endocannabinoid system. The signalling network that helps regulate mood, appetite, pain, immunity, metabolism, sleep and cognition.
First-pass metabolism	Liver processing that reduces how much of a swallowed compound reaches circulation.
Isolate	A purified single cannabinoid, as opposed to a broad or full-spectrum extract.
LOD / LOQ	Limit of detection and limit of quantitation. The thresholds below which a laboratory cannot detect, or cannot reliably measure, a compound.
ND	Not detected. The compound was tested for and not found above the limit of detection.
Novel Food	In the European Union, a food or ingredient without a significant history of consumption before 1997 that needs authorisation before sale. Ingestible cannabinoids fall under it.
Total THC	Under Section 781, the total tetrahydrocannabinols concentration, expressly including THCA. The statute sets no formula; laboratories apply the USDA plant-testing convention, delta-9 THC plus 0.877 times THCA, and the Congressional Research Service reads the statutory total as also covering other tetrahydrocannabinols such as delta-8 and delta-10.
RDC 660/2022	The ANVISA resolution governing exceptional personal import of Cannabis-derived products into Brazil by an individual, on prescription, for their own treatment. Still in force in August 2026. See Chapter 10.
Varin line	The family of cannabinoids with a three-carbon propyl side chain, including THCV, CBDV and CBGV.

APPENDIX B

Bottle Strength Conversions

All figures assume a 30 mL bottle and 40 drops per millilitre, as measured on the Swiss Vitalis glass dropper with MCT carrier. Verify against your own dropper: dispense twenty drops into a measuring syringe and read the volume.

BOTTLE STRENGTH CONVERSIONS – 30 ML BOTTLES, 40 DROPS PER ML

Bottle strength	mg / mL	mg / drop	in 0.25 mL	in 0.50 mL
500 mg / 30 mL	16.7	0.42	4.2	8.3
1,000 mg / 30 mL	**33.3**	**0.83**	**8.3**	**16.7**
1,500 mg / 30 mL	50.0	1.25	12.5	25.0
3,000 mg / 30 mL	100.0	2.50	25.0	50.0
6,000 mg / 30 mL	200.0	5.00	50.0	100.0

A conversion from a target dose to a volume has been removed from this edition: no target dose has been established for any use of THCV. The table above runs the other way, from what you poured to what it contains.

Verify your own dropper in two minutes

1. Dispense twenty drops into a 1 mL oral syringe.
2. Read the volume at the mark.
3. Divide twenty by that volume: that is your true drops per mL.

If yours reads thirty, each drop holds a third more than the table shows, which puts the table 25 per cent below the true amount per drop.

Millilitres are unaffected. Trust that column.

Figure B.1 The conversions, and the two-minute method for checking whether your dropper matches the one these tables were measured on.

Bottle strength conversions

Bottle strength	mg per mL	mg per drop	mg in 0.25 mL	mg in 0.50 mL
500 mg / 30 mL	16.7	0.42	4.2	8.3
1,000 mg / 30 mL	33.3	0.83	8.3	16.7
1,500 mg / 30 mL	50.0	1.25	12.5	25.0
3,000 mg / 30 mL	100.0	2.50	25.0	50.0
6,000 mg / 30 mL	200.0	5.00	50.0	100.0

WHAT IS NOT IN THIS APPENDIX

Earlier editions carried a second table converting a target dose into a volume. It has been removed. A lookup from "the amount I want" to "the amount to pour" is a dosing instruction, and no target dose has been established for any use of THCV. The conversions above run the other way — from what you poured to what it contains — which is a fact about the product rather than a recommendation about you.

How to verify your own dropper in two minutes

Dispense twenty drops into a 1 mL oral syringe. Read the volume. Divide twenty by that volume to get your true drops per millilitre. The figure used here, forty, was measured on the Swiss Vitalis dropper. If yours reads thirty, your drops are a third larger and every drop figure in this appendix contains one third more than the table shows, which puts the table 25 per cent below the true amount per drop. Volumes in millilitres are unaffected, which is why the millilitre column is the one to trust.

APPENDIX C

References and Sources

Full citations for the claims made in Chapter 5 and Chapter 9. For current research, search PubMed for "tetrahydrocannabivarin" and filter by human versus animal studies.

Human clinical

- Jadoon KA, Ratcliffe SH, Barrett DA, et al. Efficacy and safety of cannabidiol and tetrahydrocannabivarin on glycemic and lipid parameters in patients with type 2 diabetes: a randomized, double-blind, placebo-controlled, parallel group pilot study. *Diabetes Care*. 2016;39(10):1777-1786. PMID 27573936.
- GW Research Ltd. A randomised, double-blind, placebo-controlled, parallel-group, dose-ranging study of GWP42004 (delta-9-tetrahydrocannabivarin) as add-on therapy to metformin in subjects with type 2 diabetes (GWDM1302). NCT02053272; EudraCT 2013-001140-61. Results posted to the EU Clinical Trials Register 23 September 2018. **Never published in a peer-reviewed journal.** Primary endpoint HbA1c null at 4, 10 and 30 mg per day (p = 0.96, 0.983, 0.677); n = 207 randomised, 193 completed. Read the posted results at clinicaltrialsregister.eu, trial 2013-001140-61.
- Tudge L, Williams C, Cowen PJ, McCabe C. Neural effects of cannabinoid CB1 neutral antagonist tetrahydrocannabivarin on food reward and aversion in healthy volunteers. *Int J Neuropsychopharmacol*. 2015;18(6):pyu094. PMID 25542687, PMCID PMC4438540. *(The 2026.1 printing cited PMC4772823, which is a different paper by the same group on resting-state connectivity.)*
- Smith GL. Randomised, double-blind, placebo-controlled pilot of a fixed THCV-plus-CBD combination delivered by mucoadhesive oral strip over 90 days. *Cannabis*. 2025;8(1):109-120. ClinicalTrials.gov **NCT05574049**. Fifty-two adults randomised 2:1:1, 44 completed: 24 on 8 mg THCV / 10 mg CBD, 10 on 16 mg THCV / 20 mg CBD, 10 on placebo. Source of the 16 mg figure quoted in this guide, and the study that urine-tested participants (Chapter 21). *Treat as exploratory, not as evidence of efficacy, dose or safety: analysis restricted to completers, significance judged on one-tailed tests at p<.05 with no correction for multiple comparisons, high-dose and placebo arms of ten each, and every active arm combined THCV with CBD in a fixed ratio, so the design cannot show what THCV does alone. Self-funded; the sole author is affiliated to the manufacturer of the tested product.*
- ClinicalTrials.gov identifier NCT06213064. An observational, decentralised study of the effect of specific cannabinoid products on motivation, energy level, focus and appetite. Registered January 2024; record not updated since; status listed as unknown; estimated completion June 2024 passed without results. The active product pairs 10 mg THCV with 5 mg THC.
- Rzepa E, Tudge L, McCabe C. The CB1 neutral antagonist tetrahydrocannabivarin reduces default mode network and increases executive control network resting state functional connectivity in healthy volunteers. *Int J Neuropsychopharmacol*. 2015;19(2):pyv092. PMID 26362774. Twenty healthy volunteers, single 10 mg dose.
- Englund A, Atakan Z, Kralj A, et al. The effect of five day dosing with THCV on THC-induced cognitive, psychological and physiological effects in healthy male human volunteers. *J Psychopharmacol*. 2016;30(2):140-51. PMID 26577065. Ten men, 10 mg/day for five days before an intravenous THC challenge.
- Peters EN, MacNair L, Harrison A, et al. A two-phase, dose-ranging, placebo-controlled study of the safety and preliminary test of acute effects of oral **delta-8**-tetrahydrocannabivarin in healthy participants. *Cannabis Cannabinoid Res*. 2023;8(S1):S71-S82. NCT05210634. Phase 2 was double-blind, randomised, within-participant, n=18, single doses 12.5-200 mg. Funded by Canopy Growth Corporation. Note the isomer.
- Rao Q, Zhang T, Pu QL, et al. Comparative metabolism of THCA and THCV using UHPLC-Q-Exactive Orbitrap-MS. *Xenobiotica*. 2023;53(1):46-59. Human and mouse liver microsomes and mouse hepatocytes; no animals or humans dosed. Reports THC among THCV's metabolites — unreproduced, and see Chapter 2.

- Sempio C, et al. Dose-ranging pharmacokinetics of oral **delta-8**-tetrahydrocannabivarin in healthy adults. *Pharmaceuticals*. 2024;17(12):1603. Twenty-one enrolled, plasma analysed in fifteen; 12.5 to 200 mg; median time to peak plasma concentration 3.8 to 5.0 hours, with sampling stopped at eight hours, so duration was not measured. Note the isomer: this is delta-8-THCV, not the delta-9-THCV in most consumer products, and it was swallowed rather than held sublingually.

Reviews and preclinical

- Mendoza S. The role of tetrahydrocannabivarin (THCV) in metabolic disorders: a promising cannabinoid for diabetes and weight management. *AIMS Neuroscience*. 2025;12(1):32-43. PMC12011981.
- Pertwee RG. The diverse CB1 and CB2 receptor pharmacology of three plant cannabinoids: delta-9-tetrahydrocannabinol, cannabidiol and delta-9-tetrahydrocannabivarin. *Br J Pharmacol*. 2008. PMC2219532.
- Wargent ET, Zaibi MS, Silvestri C, et al. The cannabinoid delta-9-tetrahydrocannabivarin (THCV) ameliorates insulin sensitivity in two mouse models of obesity. *Nutr Diabetes*. 2013.
- Riedel G, Fadda P, McKillop-Smith S, et al. Synthetic and plant-derived cannabinoid receptor antagonists show hypophagic properties in fasted and non-fasted mice. *Br J Pharmacol*. 2009.

Law and regulation

- Public Law 119-37, Division B, Title VII, Section 781, enacted 12 November 2025. Amends the definition of hemp at 7 U.S.C. 16390, effective 365 days after enactment.
- Congressional Research Service. Changes to the Federal Definition of Hemp: Legal Considerations Under the Controlled Substances Act. Legal Sidebar LSB11381.
- Congressional Research Service. Changes to the Statutory Definition of Hemp and Implications for Agricultural Policy. In Focus IF13136.
- Brazil. ANVISA Resolução RDC nº 660, de 30 de março de 2022 (DOU 31 March 2022; in force 2 May 2022; art. 21 revoked RDC 335/2020 and RDC 570/2021). Governs exceptional personal import of Cannabis-derived products by individuals, on prescription, for their own treatment. Neither revoked nor amended by the 2026 package and still fully in force in August 2026.
- Brazil. ANVISA Resolutions RDC 1.011/2026, 1.012/2026, 1.013/2026, 1.014/2026 and 1.015/2026, published February 2026, and RDC 1.023/2026 of 11 May 2026. RDC 1.015/2026 replaced RDC 327/2019 and entered into force 4 May 2026; RDC 1.012–1.014/2026 took effect 4 August 2026.
- State and country legal-status maps (Figures 9.5 and 10.3): 434 citations across 107 jurisdictions, resolving to 412 distinct URLs, opened 21 August 2026. They include legislature and agency pages, CRS products and law-firm trackers, and their quality is uneven: 64 of the 107 rows are marked low confidence. Thirty-four were downgraded in a sweep on 23 August 2026 specifically because every citation on the row is secondary, and a majority of the 64 cite no statute, regulation, gazette or agency page at all. Those rows are marked low confidence for that reason. The full list with URLs is published with the interactive map at swissvitalisusa.com.

Toxicology and testing

- Moeller KE, Kissack JC, Atayee RS, Lee KC. Clinical interpretation of urine drug tests: what clinicians need to know about urine drug screens. *Mayo Clin Proc*. 2017;92(5):774-796. *(General review of immunoassay cross-reactivity; it does not address THCV. The 2026.1 printing cited it for a THCV-specific claim, which it does not support.)*
- Sempio C, et al. Cross-reactivity of tetrahydrocannabivarin metabolites in cannabinoid immunoassays. *Forensic Toxicology*. 2026. Demonstrates false positives for delta-9 THC from THCV metabolites.

- Swiss Vitalis THCV Tincture, batch 313126. SC Laboratories California LLC, COA ID 260514M007-001, issued 18 May 2026. ISO/IEC 17025:2017, PJLA accreditation 87168.

Chemistry

- Molecular structures in Chapters 2, 3 and 8 were drawn from the published connectivity of each compound (Δ9-THC C21H30O2; Δ9-THCV C19H26O2; CBD; CBDV; CBG; CBGA; CBGVA; THCVA) using RDKit, with the alkyl side chain highlighted.

D

APPENDIX

About Swiss Vitalis

Swiss Vitalis USA formulates lab-verified cannabinoid products designed for clarity and daytime function. Every batch is tested by an accredited third-party laboratory and every certificate of analysis is published in full, including the panels that came back not detected.

Where to find current information

Certificates of analysis	swissvitalisusa.com/pages/coa
THCV 1,000 mg tincture, 30 mL	swissvitalisusa.com
Live legal status tracker and interactive maps	swissvitalisusa.com (legal-status tracker, dated and updated as rules change)
Education	swissvitalisusa.com/blogs/news
Support	charlesh@swissvitalisusa.com

What Swiss Vitalis is doing about the transition

- Our COAs already report total THC using the USDA plant-testing convention (delta-9 + 0.877 × THCA) and milligrams per container. Section 781 prescribes no formula, and the Congressional Research Service reads its statutory total as reaching other tetrahydrocannabinols as well, so treat the two-term figure as a laboratory convention rather than as the finished-product standard.
- We are reviewing the U.S. product line against the 0.4 mg per-container ceiling ahead of the effective date and will publish reformulation decisions on the legal-status page.
- We answer the production-route question in writing to anyone who asks it.

"Nature gives us options. Science helps us choose wisely."

Charles Henry Calfat, Founder, Swiss Vitalis USA

Second Edition 2026.2 · Illustrated · Content verified 21 August 2026