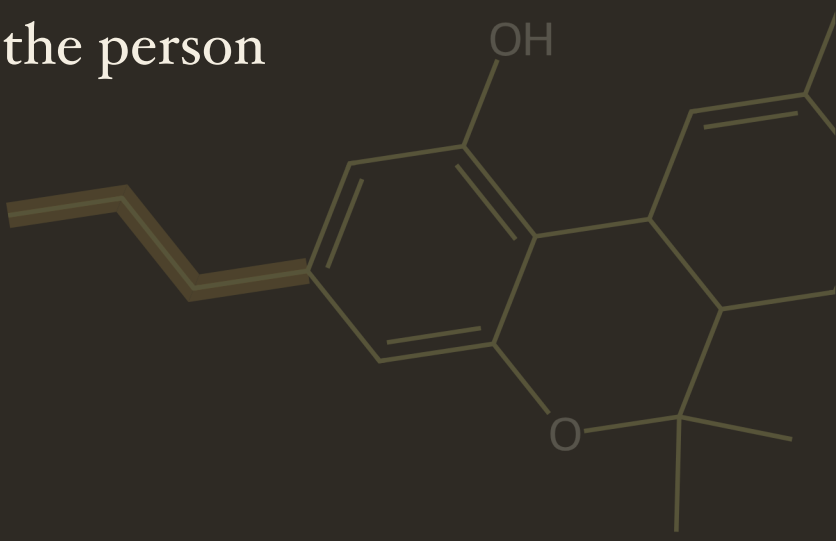
*Nature gives us options. Science helps us choose wisely.*

# THCV

WHAT IT IS, WHAT IT DOES,
AND WHAT NOBODY KNOWS YET

## A short, honest guide to a minor cannabinoid, written for the person holding the bottle.

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# Read This First

Most cannabinoid guides are written to sell you something. This one is written to stop you wasting money and to keep you out of trouble. It is short on purpose.

THE FOUR THINGS WORTH KNOWING BEFORE ANYTHING ELSE

1. **The evidence is thin, and the largest piece of it is negative.** A trial of 207 people found nothing at any dose. That is not a reason to avoid THCV, but it is a reason to distrust anyone who promises you a result.
2. **It will probably show on a drug test.** Not "might". If a positive screen would cost you a job, a licence or a custody arrangement, do not use any cannabinoid product, including this one.
3. **The law changes on 12 November 2026** in the United States, and nobody yet knows exactly where THCV lands.
4. **Nobody knows the right amount.** No effective dose has been established for any use. This guide tells you what is in the bottle. It does not tell you how much to take.

If you only read that box, you have the important part. The rest explains why each line is true.

This guide is educational. It is not medical advice, and nothing in it is intended to diagnose, treat, cure or prevent any disease. It is not legal advice: the legal chapter is a snapshot with a date on it, and law of this kind changes on a legislative calendar rather than an annual one. Cannabinoids interact with medications; if you take anything prescribed, ask a clinician before adding this or any other cannabinoid. Every figure here traces to a named trial or a named regulation, and where the evidence does not exist the guide says so instead of filling the gap. A longer edition with the full trial detail, the fifty-state table and the source list is published at swissvitalisusa.com.

## Contents

# I THCV What THCV Is

**AT A GLANCE**

- A naturally occurring cannabinoid, found in small amounts in some cannabis and hemp plants.
- Chemically almost identical to THC, with one difference that changes everything: a shorter side chain.
- At low amounts it *blocks* the receptor THC switches on. At higher amounts that reverses.
- It does not come from THC, and no conversion into THC has been demonstrated in humans.

THCV is tetrahydrocannabivarin. It sits in the same family as THC and CBD and is usually present in tiny quantities, which is why products concentrate it.

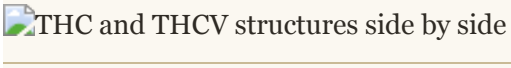



**Figure 1.1** The same core structure. Only the chain on the aromatic ring differs: five carbons in THC, three in THCV. That one difference is why the two behave differently at the receptor.

## The part worth understanding

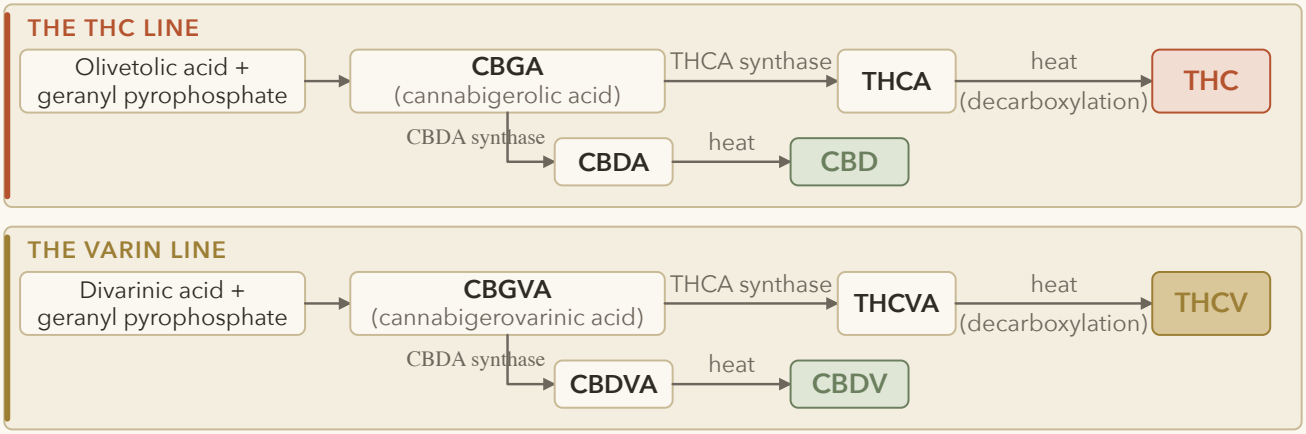
THC switches on a receptor called CB1, which is where the appetite increase and the intoxication come from. At low amounts THCV occupies that same receptor *without* switching it on, which is roughly the opposite behaviour.

**MORE IS NOT A STRONGER VERSION OF THE SAME THING**

THCV is **biphasic**: past a certain amount, preclinical work shows its behaviour at the receptor shifting toward partial activation, and the experience changes rather than intensifying. Where that point sits **has not been established in humans**. This is the single most useful piece of pharmacology for anyone deciding anything about quantity, and it is the reason doubling up is not a strategy.

## Where it comes from

THCV and THC are made by two parallel routes in the plant, not one route that branches late. That is why a plant can be high in one and low in the other.




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

# What the Evidence Actually Shows

This is the chapter most guides skip, because it is the one that does not sell anything.

> THE WHOLE HUMAN EVIDENCE, IN ONE PARAGRAPH
>
> Six controlled experiments, reported across seven papers and records. Four of them tested purified delta-9-THCV, the kind in consumer products. The largest was never published in a journal, and it found nothing. No trial has run longer than thirteen weeks, and no trial has tested isolated delta-9-THCV in healthy adults for focus or energy at the amounts people buy.

## The big one, and it was negative

GW Pharmaceuticals ran a trial of purified delta-9-THCV in adults with type 2 diabetes. **207 people were randomised: 159 received THCV and 48 received placebo**, at 4, 10 or 30 mg a day for twelve weeks.

The result it was built to measure, blood-sugar control, **did not move at any dose**. Against placebo the differences were −0.01, 0.00 and −0.06 percentage points. The placebo group itself improved slightly, 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.

> WHY YOU HAVE PROBABLY NEVER HEARD OF IT
>
> It was never published in a journal. Its results sit in one place, a European clinical trials register, posted in 2018 and untouched since. That is why a trial larger than every other THCV study combined is missing from the articles, the marketing and, until recently, from this guide.

Two things follow, and they point in opposite directions.

- **The metabolic story is weaker than it looks.** When THCV was tested properly for a metabolic outcome, it failed on that outcome.
- **The safety picture got better.** 159 people took it daily for twelve weeks under strict blinding, 52 of them at 30 mg a day, with serious side effects rare and no more common than on placebo. There were no deaths. That is a stronger safety record than existed for THCV anywhere else, and it comes from the same trial that removes the efficacy claim.

## The one everybody quotes

A 2016 pilot in 62 people, of whom roughly a dozen took THCV alone, is the study behind most of what you read online. It **missed the thing it was built to measure**, which was cholesterol. Among its secondary measurements, fasting blood glucose in the THCV group fell from about 7.4 to 6.7 mmol/L. It listed appetite among its secondary and tertiary endpoints without establishing a benefit, and it did not test focus or energy.

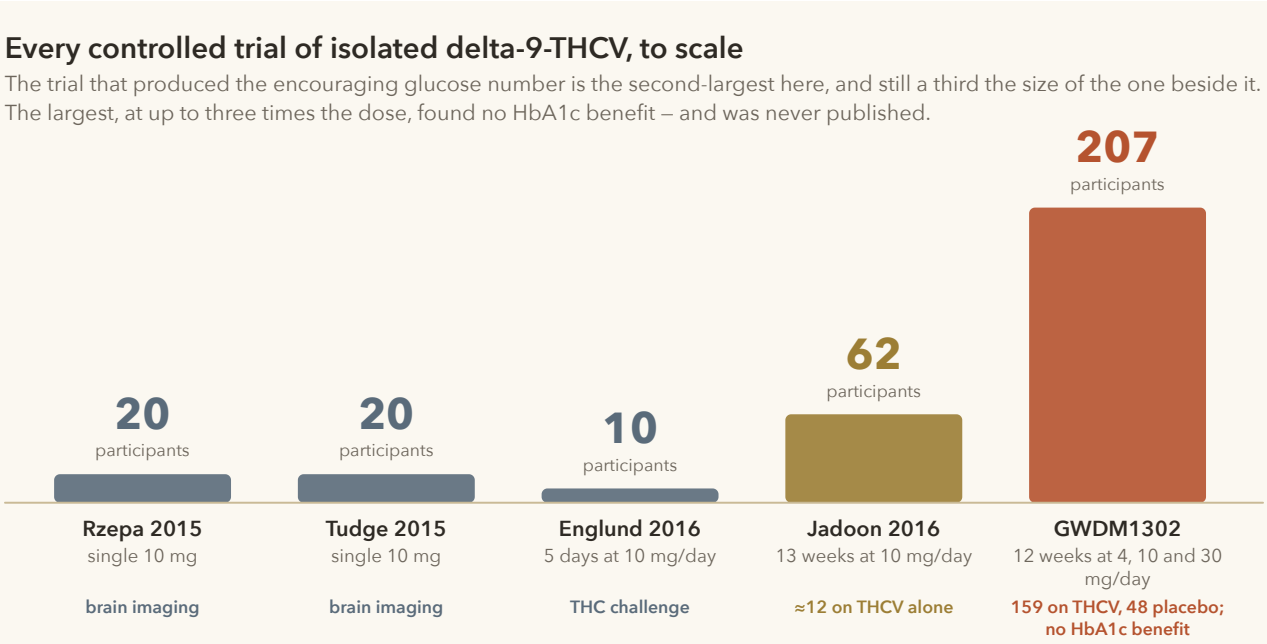



**Figure 2.1** Every controlled trial of isolated delta-9-THCV, to scale. The trial that produced the encouraging glucose number is the second-largest here, and still a third the size of the one beside it. The largest found no benefit on the endpoint it was built to measure.

## What has never been measured

- **How a tincture behaves under the tongue.** No human pharmacokinetic study of sublingual THCV exists, of either isomer. Every onset-and-peak figure you have seen for a tincture is borrowed from other compounds.
- **Whether focus and energy survive a blinded trial** at the amounts people buy. One blinded trial tested attention, and it used the *delta-8* isomer at 12.5 to 200 mg in single doses: the attention signal did not scale with dose and "energetic" did not reach significance.
- **Long-term safety** beyond about three months.
- **Weight-loss effect from THCV alone**, separated from other cannabinoids and from the behaviour change that comes with being in a study.

# 3 THCV
# It Is Not a Weight-Loss Drug

The nickname is a good headline and a bad description, and because it travels faster than any correction, it is worth answering directly.

| | GLP-1 medications | THCV |
|---|---|---|
| **What it is** | Prescription medication | Non-prescription wellness ingredient |
| **Evidence base** | Multiple large trials, thousands of participants, years of follow-up | One 12-week trial in 207 people that found no benefit and was never published, plus three smaller studies |
| **Typical reported weight change** | Roughly 15 per cent of body weight for semaglutide; up to about 21 per cent for tirzepatide | About 4 kg over 90 days in one small study that combined THCV with CBD |
| **Supervision** | Required | Not a treatment and not supervised; tell your clinician anyway |

The gap is not a matter of degree. It is a different category of thing, and the comparison got harder for THCV in 2026, not easier: the one properly powered metabolic trial found no benefit at any dose.

> *Users consistently describe being able to choose not to eat, rather than being unable to eat. That is a real report. It is not a pharmaceutical outcome.*

# 4 THCV 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 guide prints no amounts and no times of day.

Three descriptions recur, and they are worth separating from what has been demonstrated:

- **Alertness without the peak and crash** that people associate with caffeine.
- **Appetite becoming easier to ignore** rather than absent.
- **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. The 2015 imaging study points in a direction that complicates the appetite story rather than confirming it: it found brain responses to food images *increased*, not blunted.

## The one report consistent enough to act on

It is a caution rather than a benefit: **late use disturbs sleep.** That is the most consistent report in the whole body of user experience, and it is the reason this guide treats timing as a safety question rather than a preference.

## What people combine it with

Four pairings come up repeatedly: THCV with CBD, with CBG, with L-theanine and with rhodiola. Except for a fixed THCV-plus-CBD product examined in one exploratory ninety-day study, **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.

One combination is worth naming as a caution rather than an option. With **caffeine or nicotine**, the combined effect is reported as stronger than either alone. No adjustment has been studied, so treat it as an unknown rather than a known quantity.

5

THCV

# Safety, and Who Should Not Use It

ASK A CLINICIAN FIRST IF ANY OF THESE APPLY

- You are pregnant or breastfeeding.
- You take psychiatric medication.
- You are being treated for diabetes. THCV is not a substitute for established treatment, and your prescriber needs to know you are taking it.
- You have liver disease, or you are on a medication that is hard on the liver.
- You have surgery scheduled.
- You are under 18.

## What has actually been observed

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 under the tongue, 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 and restlessness.

## Liver enzymes

The one published human study of daily THCV strips 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. If you use THCV daily for months, ask your clinician whether a liver panel is worth doing.

NOT A TREATMENT

THCV is a wellness ingredient. It is not intended to diagnose, treat, cure or prevent any disease, and it is not a substitute for medication or for medical care.

# 6 THCV Drug Tests

This is the chapter with the most practical consequence in the whole guide, and the one the 2025 edition was too soft about.

A POSITIVE SCREEN IS LIKELY, NOT MERELY POSSIBLE

In the one published study that tested urine, **seven of nine participants** taking 16 mg of THCV daily for ninety days screened positive for THC on a standard workplace immunoassay. Every one of them reported never using THC. No baseline urine test was run, so that is self-report rather than a measured negative.

**If a positive test would cost you your job, your licence or a custody arrangement, do not use any cannabinoid product, including this one.** No certificate of analysis and no brand can guarantee the outcome of a test administered by someone else under rules you do not control.

## Why it happens

Workplace panels start with a screen that looks for a shape, not for an exact molecule. THCV is close enough in shape to trip it.

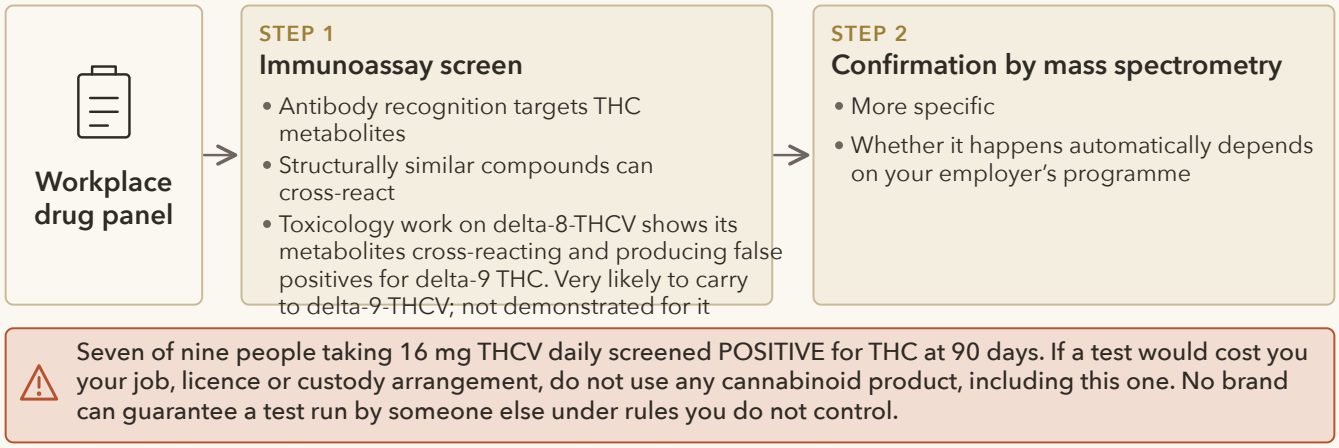



**Figure 6.1** Two steps, and the problem is in the first one. Whether the more specific confirmation step happens automatically depends on your employer's programme, not on you.

The laboratory work that demonstrated this cross-reactivity used the *delta-8* isomer of THCV. The effect is a property of the varin shape rather than of one isomer, so it is **very likely** to carry to the delta-9 form in consumer products, but that has not been demonstrated for it directly.

A "0.0 PER CENT THC" RESULT DOES NOT PROTECT YOU

It means no THC was detected in the product. It says nothing about what your body produces from THCV, or about what an antibody screen mistakes for THC.

7

THCV

# Is It Legal Where You Are?

THE DATE THAT MATTERS: 12 NOVEMBER 2026

On that date the United States federal definition of hemp changes. Products are measured on **total THC** rather than delta-9 alone, a **0.4 mg per container** ceiling applies, and cannabinoids that the plant cannot naturally produce fall outside the definition. Where THCV lands is **not yet settled**.

The law required the FDA to publish three lists of cannabinoids by 10 February 2026, and those lists decide a great deal. As of 21 August 2026 **none of them had been published**. Until they exist, anyone telling you with certainty where a specific minor cannabinoid lands after the effective date is estimating. That includes this guide.

Falling outside the Controlled Substances Act is also not the same as being authorised for sale. The FDA's published drug-exclusion conclusions address THC and CBD, not automatically every cannabinoid, and the agency has published no THCV-specific conclusion.

HOW HONEST THESE MAPS ARE, STATED PLAINLY

Of the 107 jurisdictions covered, **64 are marked low confidence**: for 34 of them, every source consulted was secondary rather than a statute or an agency page. Those rows may well be right; they are not evidenced. A low-confidence row is a reason to ask a lawyer, not a licence.

TRAVELLING

Do not carry it. You are subject to the law of the destination, the law of every country you transit, and the discretion of the officer in front of you. Buy at the destination where lawful, or go without for the trip.

## The United States, state by state

State law moves faster than federal law and sometimes faster than a printed page. The map below is a snapshot with a date on it; the current version is published at swissvitalisusa.com.

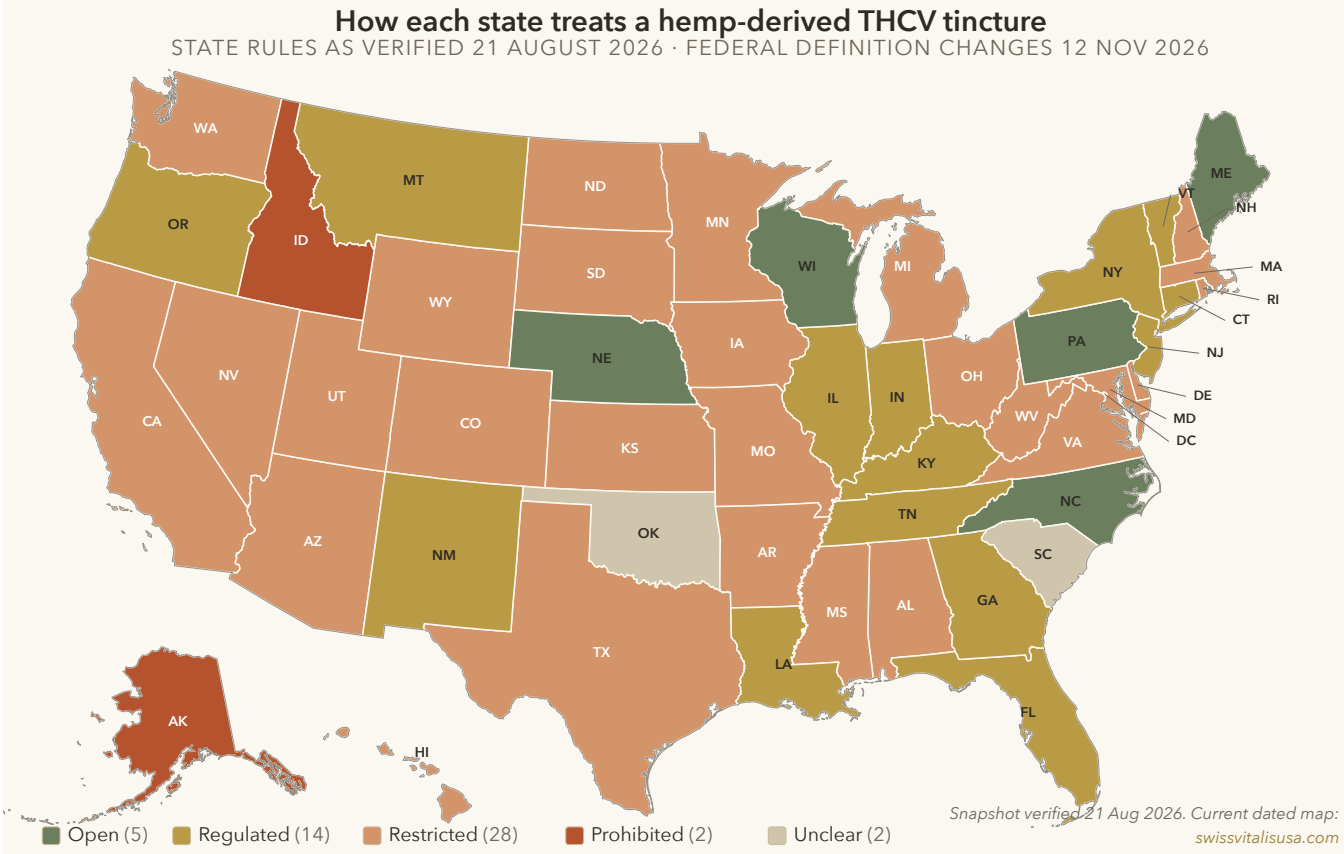



**Figure 9.5** How each state treats a hemp-derived, non-intoxicating THCV tincture, as verified on 21 August 2026. Snapshot only; the current dated map is published at swissvitalisusa.com.

## Outside the United States

Two questions decide the answer: the status of the *molecule*, and the status of the *format*. In much of Europe the format rule is the binding one, and a tincture can be blocked even where the molecule is not named.

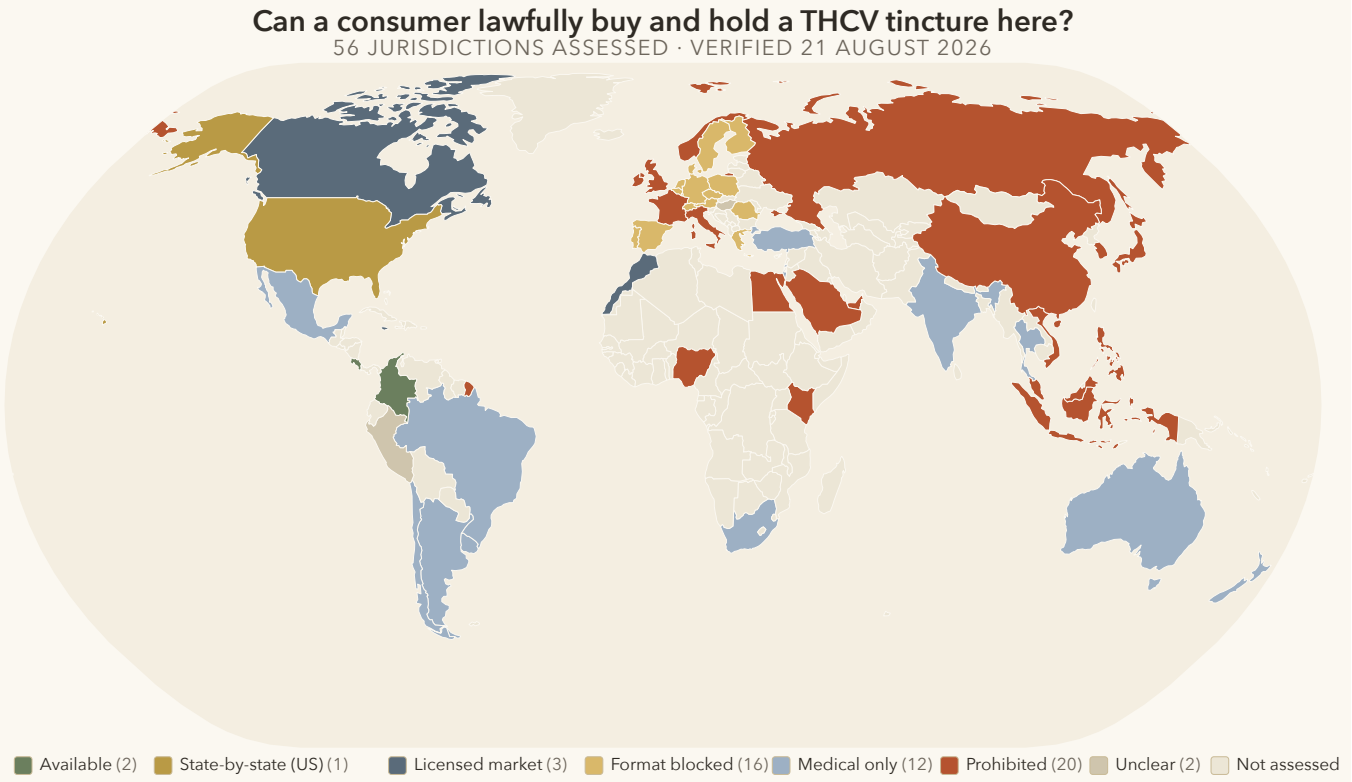



**Figure 10.3** 56 jurisdictions, one question: can a consumer lawfully buy and hold a non-prescription THCV tincture there? Verified 21 August 2026; pale countries were not assessed.

8

THCV

# How to Read a Lab Report

This is the chapter that saves you money. A certificate of analysis is the only thing separating a real product from a story.

## Three numbers, in order

1. **Total THC**, not delta-9 alone. The plant-testing convention is delta-9 plus 0.877 × THCA. Checking delta-9 alone was the right habit in 2023 and is now incomplete.
2. **Milligrams per container**, not just a percentage. The new federal ceiling is a per-container figure, so a percentage on its own cannot be checked against it.
3. **The unit mass the lab used.** Without it, the milligram figures cannot be verified at all.

## What a good certificate has

- The **batch number**, matching the one on your bottle.
- A named, accredited laboratory, with the accreditation stated.
- The panels that came back *not detected*, printed rather than omitted. Pesticides, heavy metals, residual solvents and microbiology.
- A date close to the batch, not to the brand's launch.

WALK AWAY FROM THESE

- A vague "hemp extract" with no cannabinoid breakdown.
- No link to an actual certificate, or a certificate 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.
- A price implausibly low for the milligrams claimed.

# 9 THCV What Is in the Bottle

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, and **no safe upper limit exists** in humans.

What this chapter answers is narrower: *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

| 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 |
| 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 give that number a scale. The smaller one gave 10 mg a day to roughly a dozen people over thirteen weeks. The larger ran 4, 10 and 30 mg a day in 159 people, and 30 mg a day is the largest repeated daily regimen of delta-9-THCV any controlled trial has used.

So a full dropper sits a little above the largest amount anyone has studied. Two facts belong with that: the 30 mg arm was *tolerated*, and it produced *no benefit* on what it was built to measure. **A dropper is not a serving**, and the instinct to fill it is not supported by evidence of more effect either.

## Why millilitres and not drops

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. 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.

IF YOU WANT A REGIMEN

Ask a clinician, and bring this chapter and Chapter 2 with you. A prescriber who can see what the evidence actually consists of is in a position to weigh it against everything else they know about you. A table in a book is not.

# 10 THCV Myths, and Straight Answers

### "It burns fat directly"

The evidence does not support that framing. Treat it as a behavioural support that may make an eating pattern easier to hold, not as a metabolic mechanism you can rely on.

### "It is just THC lite"

Mechanistically distinct. At low amounts it blocks the receptor THC activates rather than switching it on.

### "More is better"

Biphasic: higher amounts can produce a different effect, not more of the same one. Where the turn happens has not been established in humans.

### "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.

### "A 0.0 per cent THC result means it cannot affect a drug test"

Wrong, and this is the myth with the most expensive consequences. See Chapter 6.

## Straight answers

### Will I feel it?

Not the way THC is felt. Users describe clarity rather than intoxication. Some people describe nothing at all, and no trial has tested whether the subjective effects survive blinding at consumer amounts.

### Can I take it every day?

Two controlled trials dosed daily for twelve and thirteen weeks, the larger one in 159 people at up to 30 mg a day, both with good tolerability. Beyond about three months there is no human data either way. Note also that the larger trial found no benefit on its endpoint, so daily use being tolerable is not the same as daily use doing something.

### Will it help me lose weight?

No trial has shown that for THCV alone. One small ninety-day study combining THCV with CBD reported about 4 kg in ten people, which is exploratory, not evidence of efficacy.

### Does it interact with my medication?

The interaction profile has not been mapped the way it has for CBD. That is a reason to ask a clinician, not a reason to assume it is fine.

### How should I store it?

Cool, dark, upright, cap tight. Typical shelf life is 12 to 24 months when properly stored.

### What if it does not seem to work?

The honest answer is that no effective amount has been established, so "not working" cannot be distinguished from "no amount works for this" with the evidence that exists. Before assuming anything, check that the product has a certificate of analysis matching its batch.

CLOSING

# Where the Claims Come From

Short guides earn trust by saying where their numbers come from. These are the studies and rules behind every figure in this one.

## The human trials

- **GWDM1302** (NCT02053272 / EudraCT 2013-001140-61). GW Research Ltd. Randomised, quadruple-blind, placebo-controlled, dose-ranging phase 2 trial of purified delta-9-THCV added to metformin in type 2 diabetes. 207 randomised, 159 on THCV and 48 on placebo, at 4, 10 or 30 mg per day for twelve weeks; 193 completed. Primary endpoint HbA1c null at every dose (p = 0.96, 0.983, 0.677). **Never published in a peer-reviewed journal;** results posted to the EU Clinical Trials Register on 23 September 2018.
- **Jadoon KA, et al.** Efficacy and safety of cannabidiol and tetrahydrocannabivarin on glycemic and lipid parameters in patients with type 2 diabetes. *Diabetes Care*. 2016. Five arms, 62 people, roughly a dozen on THCV alone; missed its primary endpoint (HDL cholesterol). PMID 27573936.
- **Tudge L, et al.** and **Rzepa E, et al.** Two analyses of one single-dose crossover imaging experiment in twenty healthy volunteers (nineteen in the resting-state analysis). Found *increased* brain responses to food-reward and aversive cues. PMC4438540; PMC4772823.
- **Englund A, et al.** Five days of dosing before an intravenous THC challenge in ten men. *J Psychopharmacol*. 2016.
- **Peters EN, et al.** Single acute doses of the *delta-8* isomer, 12.5 to 200 mg, in eighteen healthy adults. Attention signal did not scale with dose; "energetic" did not reach significance. PMID 37721990.
- **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. The source of the 4.1 kg figure, of the liver-enzyme observations and of the urine-screening result. Exploratory, single-author, manufacturer-affiliated. PMC11831893.
- **Sempio C, et al.** Metabolite patterns in human urine after oral administration of highly purified delta-8-THCV. *Forensic Toxicol*. 2026. The laboratory basis for the drug-test chapter, and the reason its finding is stated for delta-8 rather than for THCV generally.

## The law

- **Section 781** of Public Law 119-37, effective 12 November 2026. Total-THC standard, 0.4 mg per-container ceiling, exclusion of cannabinoids not naturally producible by the plant.
- **The three FDA lists** that Section 781 required within ninety days of enactment. Deadline 10 February 2026; none published as of 21 August 2026.
- **Pending bills**, none enacted as of 21 August 2026: H.R. 7024 and S. 3686 (delay), H.R. 7010 (parallel delay), H.R. 6209 (repeal), and H.R. 9830, the Lawful Hemp Protection Act, which would repeal Section 781 and build an FDA-regulated category whose product definition names oral tinctures explicitly.
- **The maps** cover 51 US jurisdictions and 55 countries, verified 21 August 2026. 64 of the 107 rows are marked low confidence; 34 of those because every citation on the row is secondary. The full source list is published with the interactive map at swissvitalisusa.com.

WHAT THIS GUIDE DOES NOT DO

It does not print an amount to take, a schedule, or a combination to try, because none has been established. Where a number appears, it is either a fact about the product, or a quantity a named trial administered. The difference matters, and this guide keeps it visible on purpose.

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

Charles Henry Calfat, Founder, Swiss Vitalis USA

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