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OPEN SOURCE NUTRITION PROJECT
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THE SUPPLEMENT INSPECTION MANUAL

Chapter II

IGNORE HEALTH CLAIMS

A health claim is an advertisement.

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IGNORE HEALTH CLAIMS

Published by the Open Source Nutrition Project, the supplement brand of Magic Beans d.o.o.

Every health claim quoted in this chapter is quoted verbatim from the EU Register of nutrition and health claims, and every refusal is cited to the regulation or opinion that made it law. Where this manual states a judgement rather than a fact it says so in its own voice, and you are invited to check it against the sources printed on each figure.

The products, labels and bottles drawn in the figures are invented for this manual. None of them depicts a real product, and no real brand is described anywhere in this chapter.

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CHAPTER II · RULE #2

IGNORE HEALTH CLAIMS

A health claim is an advertisement.

THE HEALTH CLAIM CONUNDRUM

You've probably heard that "Approved" stamps are what you should look for. It is common belief that if the product carries a claim authorized by the European Food Safety Authority (EFSA), this means the product works.

IT DOESN'T.

What the EFSA-assessed, EU-authorised claims are doing - and fairly well, to give credit where credit is due - is preventing companies from blatantly scamming you and making the most outrageous claims.

However, the claims system can't prevent selling useless products, and even less so tell you which products you should buy.

CLAIM IS NOT A PROMISE OF A RESULT.

A great majority of the approved claims are based on **PHYSIOLOGICAL ROLE**, not **SUPPLEMENTAL BENEFIT**.

Let's take, for example, this claim:

> *"Vitamin C contributes to the normal function of the immune system."*

There's a big discrepancy between the perception and the reality of that claim's meaning:

- **WHAT PEOPLE THINK IT MEANS:** ***"Taking a Vitamin C pill will make my immune system function better."***
- **WHAT IT ACTUALLY MEANS:** ***"Vitamin C has an established role in immune function, and being deficient in it will worsen your immunity."***

Those are not the same. If difference was a distance, they'd be constellations apart.

The key lesson here is, that claims associated with essential nutrients are claims of their essentiality, NOT claims of an effect. They **don't tell you what will happen if you supplement with that nutrient**.

A claim **tells you what won't happen with sufficient intake of that nutrient, through diet or supplementation**. And it tells you nothing about what an extra dose does will do for someone already getting enough through basic diet.

Vitamin C is probably the textbook example of how irrelevant such claims are in real-world scenarios. For starters, because the requirement in humans are generally very low, measured in tens of milligrams. Secondly, most plant matter is rich in vitamin C. And lastly, many staple foods are regularly enriched in essential nutrients, with vitamin C being the most common. That's why today it has become practically impossible to get deficient in vitamin C. If you're livig anywhere without major-scale long-lasting food shortages, you'd have to actually challenge yourself to achieve it, and even then you'd probably fail because you'd eaten enough vitamin C by mistake.

You could say that the problem with those kinds of claims, for the likes of vitamins and minerals, is that the standards are **"TOO EASY"**.

Claim of a benefit gets approved simply because the human body needs those nutrients to not break apart and waste away. But for every other technically non-essential dietary compound, the problem is exactly the opposite.

EFSA EVALUATES CLAIMS USING A RIGID, PHARMACEUTICAL-STYLE FRAMEWORK.

What the framework demands is an established **CAUSE-AND-EFFECT RELATIONSHIP** between the compound and the benefit, resting on generally accepted scientific evidence, with human intervention trials as the decisive proof.

It's easy to prove something "works" when people start turning to compost if you deprive them of it. Like in the case of Vitamin C from the example above.

But it's incredibly hard to get EFSA on board with a claim that something "works" when it makes you "simply" perform or feel better. In practice the compound is treated as guilty until proven innocent. EFSA's interpretation of "proven" is famously pigheaded. What we have here is basically the opposite of what most of us would consider reasonable.

To be fair, it's not all black and white. Obviously there are many benefits to EFSA being the *helicopter-parent of EU food supply*. However, rigid frameworks that work wonderfully when applied to food safety as it relates to public health and in general population, fail in the most absurd way when applied to supplement efficacy for an individual and their specific goals. And so we're trapped with a regulatory framework in which most obvious facts of life are destined to be trapped in semantic purgatory. Forever maybe.

Case in point: the curious incident of the EU refusing to authorise the claim that drinking water reduces the risk of dehydration.

Yes, you've read it right. Claim of water reducing the risk of dehydration is considered illegal in the EU.

THE CURIOUS INCIDENT OF WATER AT THE EU AUTHORISATION TIME

If you were ever in doubt about the claim approval machinery being completely untethered from reality, you probably aren't familiar with its conclusion regarding water. That translucent liquid which you must drink to lower your risk of dehydration. Or so you thought. Because EFSA wholeheartedly disagrees. By their "legal logic" water in fact doesn't reduce the risk of dehydration. And no water bottle should ever be allowed to claim that it does any such thing.

According to EU regulations, preventing dehydration is not something the water does for you.

Water only has those two **APPROVED HEALTH CLAIMS**:

> *"Water contributes to the maintenance of normal physical and cognitive functions."*
>
> *"Water contributes to the maintenance of normal thermoregulation."*

Meaning that any bottle of water is legally allowed to print these robotic sentences on its label. And even those two only conditionally: if the label also informs you that at least **2 LITRES OF WATER A DAY, FROM ALL SOURCES**, is needed for the claimed effect. The claim that water "works" ships with a legally mandated dosage of water, which at best seems dubious if not completely arbitrary, given that required water intake in individuals varies greatly and is influenced by a number of factors.

But here comes the real punchline. In 2011, a group of scientists applied for a different claim:

> *"The regular consumption of significant amounts of water can reduce the risk of development of dehydration and of concomitant decrease of performance."*

EFSA's panel said no and Commission Regulation 1170/2011 turned the refusal into law. The newspapers reported it the only way it could be reported: **"EU RULES THAT WATER DOES NOT PREVENT DEHYDRATION."**

The official reasoning is probably even stranger that you thought it'd be:

This is a **RISK-REDUCTION** claim, and such claims legally require a defined **RISK FACTOR** and evidence that the evaluated compound faithfully reduces that risk factor. The applicants offered "water loss in tissues" and evidence that drinking water increases the amount of water in tissues.

However, technically speaking, water loss in tissues isn't a risk factor for dehydration. Instead it counts as a measure of **DEHYDRATION ITSELF**. EFSA ruled that you can't claim the water reduces the risk of dehydration if in fact it reduces the dehydration itself.

THE VERDICT: No risk factor reduction, no risk-reduction claim.

Read that again. "Water reduces the risk of dehydration" died on the definition of the word risk. Not on any doubt about what water does. A category definition beat the most obvious fact of life on the planet.

Reasoning like that may be legally immaculate.
Practical it is not.

FIGURE 01 WATER VS DEHYDRATION AT THE SOURCE



According to EFSA, water does not qualify for the claim that it reduces the risk of dehydration. Because it doesn't lower the risk of dehydration, it lowers the degree of dehydration.

THE BOTTLE: No such label exists and neither line on it could lawfully be printed: it is what the refusal reads like taken literally. **WHAT WAS ACTUALLY DECIDED:** EFSA never assessed whether water "works". The application failed on the definition of a risk factor, not on evidence. **SOURCES:** in the figure notes at the back of the chapter.

THE LESSON: YOU PROBABLY SHOULDN'T TRUST A REGULATORY BODY TO BE YOUR HEALTH GUIDE.

The claims refusals often turn on **SEMANTICS**, not **SCIENCE**. That's fine for setting a hard limit, and it certainly is relatively effective at preventing the most shameless attempts of deception.

We're all very grateful for the job EFSA is doing in that department. The EU's claims regime is probably the strictest on this planet, and it keeps a lot of grifting off the EU shelves.

However, the claims regulations are set in such a pedantic manner that the whole "approved claim" system is rendered useless for deciding what to buy.

A HEALTH CLAIM CAN'T TELL YOU WHAT TO BUY

Our position, and make no mistake that it really is only what we think is true, so don't take it as fact yet: as a buying guide, the current approved-claims system for supplements is a complete and utter farce.

Four arguments support that position.

PROBLEM #1: THE "ESSENTIALITY" BIAS

For a non-essential compound, getting a claim approved is rare, brutally expensive, and the approvals land wherever the funding and the trials happened to be.

Because **EFSA views essential nutrients through the lens of deficiency** the debate is not about the strength of the **EVIDENCE** but the **CATEGORY** in which a compound belongs.

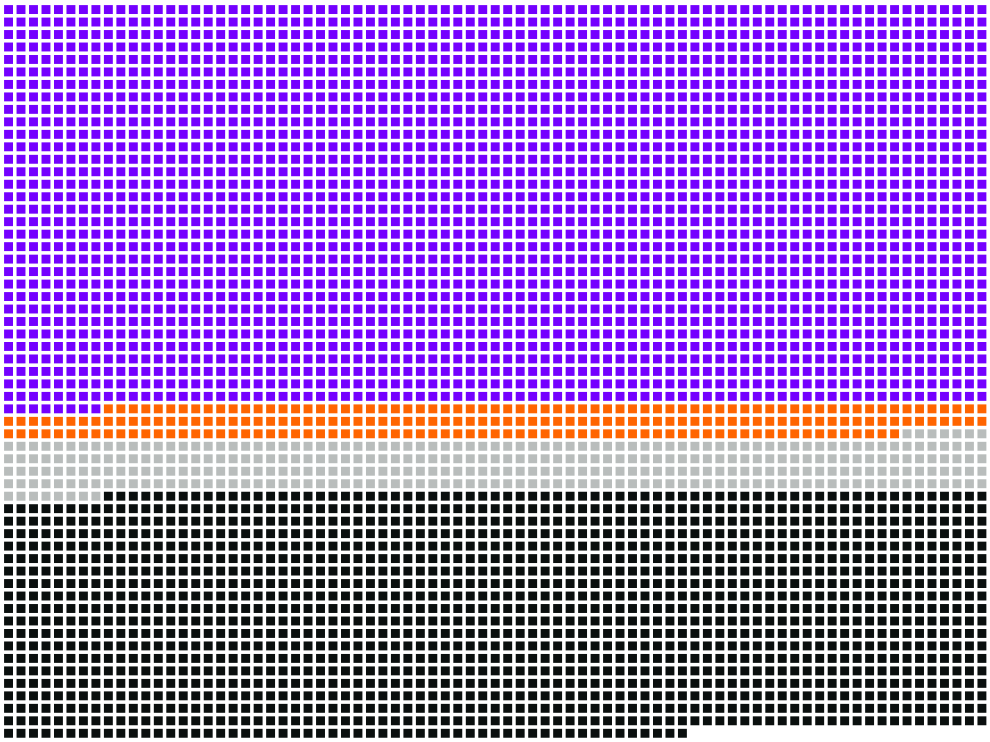
> **Essential = Approved**
>
> VERSUS
>
> **Non-Essential = Prove it like a drug**

FIGURE 02 THE LIST OF CLAIM APPLICATIONS HANDED TO EFSA

44,000 SUBMITTED → 4,637 AFTER DUPLICATES MERGED

4,637 CLAIMS HANDED TO EFSA

ONE MARK = ONE CLAIM



2,536
Assessed. Refused.

222
Assessed. Authorised.

331
Withdrawn before assessment.

1,548
Never assessed. "On hold".

A missing claim is not a verdict. More than half of this field was refused. Most of the rest was never looked at.

THE LIST: Every count on this page is EFSA's own figure for the Article 13.1 "general function" process, and they sum to 4,637. **SOURCES:** in the figure notes at the back of the chapter.

Based simply on a compound preventing deficiency it gets approved broad, generic claims in the domains where symptoms of deficiency would show up.

For example, because Vitamin C deficiency impairs immune function, that vitamin gets a “supports immunity” stamp.

Standards are very different for non-essential compounds (like Creatine, Polyphenols, or Flavonoids), which EFSA views through the lens of Pharmacology.

Non-essential compounds are those you don’t actually need to not die soon. You’re using those to improve your health beyond the baseline. Seemingly this is not EFSA’s cup of tea.

EFSA is all about you not dying from deficiency. It just doesn’t care much about you trying to improve upon your survival.

To get a claim, it must be proven, with pharmaceutical-grade trials, that this specific compound improves health in already healthy people. Food can rarely clear a bar built for medicine. Because food is not medicine. And anyone who’s telling you otherwise is obviously clueless about the facts of nutrition and human physiology.

The handful of non-essential compounds that ever cleared it have done so at enormous cost, and walked away with claims cut to the exact scope of the trials that were paid for.

What we're dealing here with is basically like trying to prove that Porsche should get an approved claim of "superior method of transportation". But the regulatory body won't grant it because the standard prescribed is aerospace-grade trials. There's literally ZERO chance the prescribed trials in this analogy could ever provide evidence for Porsche superior transportation capabilities. Because the test here is carrying astronauts into space. And Porsche is just as bad a manned spacecraft as any other car. Even the simple Yugo. Meanwhile walking with bare feet would probably have their transportation claim approved by default, years ago.

Why? Because for the general population, bare feet are ultimately what's essential for moving from point A to point B. You don't have to prove anything; because without feet, you can't transport.

However for **Porsche** the claim gets rejected. Because cars aren't essential for travel. Since they are "optional" (non-essential), the regulator demands "proof" that is impossible to deliver. Until then it remains official that:

> **"There is no evidence that a Porsche has any additional transportation benefits compared to bare feet."**

So, a regulator would ship a hefty fine to any Porsche salesman that dared to claim their vehicle offers a superior transportation experience compared to using bare feet. On the other hand a more ambitious Yugo salesman may offer their car as a superior transportation experience, based on the fact that owning a Yugo by definition means you'll be using your bare feet more often than people use them on average because the vehicle breaks down relatively often.

And that is why Creatine, the Porsche of supplements, holds exactly two narrow claims, while bare Vitamin C has plenty.

PROBLEM #2: THE INDUSTRY DADDY IMPERATIVE

For non-essential compounds, the claims that do exist landed mostly where a food industry could fund the science and gain something from it. Olive oil and cocoa being the good examples.

While EFSA doesn't trust the "compounds", the system has a soft spot for evidence built around "traditional" foods and European culinary history. This is especially true when the trials behind the evidence were paid for by someone or something with deep pockets.

Getting a claim approved costs millions. Because human intervention trials are the decisive currency of a claims dossier.

And where a well-studied non-essential compound holds a claim at all, the claim is cut exactly to the scope that somebody's trials covered.

CREATINE MONOHYDRATE holds two. One about "short-term, high-intensity exercise" at 3 g a day. And since 2017 a second one, that daily creatine can enhance the effect of resistance training on muscle strength, but only for adults over 55, and only if they actually train, at least three times a week. Wording so dry it reads like a tax form. The latter isn't even true: weight of the evidence is conclusive that creatine enhances the effects of resistance training for basically everyone. Why the claim needs an "over 55" qualifier is not something any reasonable person could argue for while keeping a straight face.

Or **CAFFEINE**, the cleanest case in the whole story. In 2011, EFSA reviewed the massive evidence and gave **positive opinions** for claims on alertness and endurance performance. The European Commission drafted the authorisation. And then, on 7 July 2016, the **European Parliament vetoed it.** The explanation provided is, to put it mildly, ridiculous. The stated grounds being adolescents and energy drinks: cans carrying 27 grams of sugar and 80 milligrams of caffeine, potentially marketing themselves as good for endurance to kids. Call it consumer protection or call it politics overriding the science, either way, caffeine's evidence won the scientific review and lost the vote. A compound with a mountain of favourable evidence carries zero claims, for reasons that have nothing to do with the evidence.

However, the turn of events can look very different when a wealthy backer is ready to foot the multi-million-euro bill for the specific science EFSA demands.

Two backers famously did foot that bill, and both cases teach the same lesson.

1. **OLIVE OIL POLYPHENOLS** hold an approved claim for protecting blood lipids from oxidative stress. But the claim's conditions of use are legally keyed to **OLIVE OIL**. Why? Because the evidence came from **EUROLIVE**, a publicly funded EU research project that used olive oil as the delivery method for the polyphenols. The trial was done in olive oil, so the claim lives in olive oil.

   - 5 mg of Hydroxytyrosol and its derivatives technically have the claim approved. But it can't just be the 5 mg. To be in line with regulations, it must come in **20 G OF OLIVE OIL**.

   - You have to attach **~180 EXTRA CALORIES OF FAT** to legally claim the health benefit. Meanwhile no claim is authorised for a calorie-free capsule with the exact same 5 mg of polyphenols. A supplement borrowing the olive-oil claim sits, at best, in a legal grey zone that enforcement authorities read as non-compliant. Because the "science" was done with olive oil.

   - In this particular case one could easily defend an argument that the regulation isn't really there to protect your arteries, but rather the bottom line of olive oil producers or the economy of EU countries with higher dependence on olive oil export.

2. **COCOA FLAVANOLS** are the other exception, and the purest specimen of how this game is played. **Barry Callebaut**, the world's largest industrial chocolate manufacturer, paid for the science and took the proprietary-data route. The reward for fronting the research money: the claim that ***"cocoa flavanols help maintain the elasticity of blood vessels, which contributes to normal blood flow"***, which came with **five years of exclusive rights to use it.** And when the conditions of use were later extended to high-flavanol cocoa **EXTRACT** in capsules and tablets, the extension carried **its own five years of exclusivity.** Twice over, for five years each, a public health claim was one company's private marketing asset.

There is no application fee in this system; what the money buys is the trials and, through data protection, a temporary monopoly on the claim itself.

An "approved health claim" marks the spot where scientific evidence and financial horsepower were made to meet, because someone or something found enough motivation to make it happen.

FIGURE 03 THE SAME FIVE MILLIGRAMS



OLIVE OIL

20 G, OR ~ 1.5 TABLESPOON

NUTRITION INFORMATION

PER 20 G

Energy	740 kJ / 177 kcal
Fat	20 g
Hydroxytyrosol and derivatives	5 mg

MAY PRINT THE CLAIM



CAPSULE

ONE CAPSULE

NUTRITION INFORMATION

PER CAPSULE

Energy	0 kJ / 0 kcal
Fat	0 g
Hydroxytyrosol and derivatives	5 mg

MAY PRINT NOTHING

> *Olive oil polyphenols contribute to the protection of blood lipids from oxidative stress.*

The claim may be used only for olive oil which contains at least 5 mg of hydroxytyrosol and its derivatives per 20 g of olive oil, and the label must tell the consumer that the beneficial effect is obtained with a daily intake of 20 g of olive oil.

Olive oil earned the claim because the trials submitted in the application used olive oil as the vehicle for the molecule.

THE OBJECTS: Both are drawn for this figure and neither depicts a real product.
SOURCES: in the figure notes at the back of the chapter.

PROBLEM #3: THE ON HOLD MESS

The regulations are **“TOO EASY”** for essential nutrients. For non-essential compounds they are **“TOO HARD”**. But for the third category, the botanicals or “herbs”, the regulations are simply a mess.

Around 2010, the European Commission realized it had a massive problem. More than a thousand claim applications were sent in for the likes of **ASHWAGANDHA**, **GINSENG**, **TRIBULUS**, **RHODIOLA** and dozens of other more or less exotic herbs.

Under the rigid “drug standard” of pharmaceutical-grade human trials, almost every single herb fails. Expectedly.

Most herbs are supported by hardly anything more than fairly esoteric narratives of “traditional medicines” and “ancient wisdoms”. If the strict rules had been applied to the botanicals’ mumbo-jumbo, Brussels would have had to strike down every single herbal health claim in Europe. All of them, without exception. Which is what should have happened.

But here’s the kicker: what happened instead is what anyone with a pinch of common sense deemed unthinkable.

In 2010 the assessment of botanical claims was paused. By 2012, when the approved-claims list became law, 1548 botanical claims were formally parked onto an **“ON HOLD” LIST**. By doing that the EU has legally awarded them with the status of **“NOT REJECTED”**. The pause button was pressed by the **European Commission**, and it has stayed pressed ever since. Whether it was because of laziness disguised as pragmatism or bureaucratic cowardice, it doesn’t really matter which, because the fact of the matter is that the queue hasn’t moved in over a decade.

Technically EFSA has not verified these herbs work, but also has not said they don’t work. Instead they seem perfectly content with leaving the mess on the plate and trying to convince everyone that the meal they served back when even Instagram hasn’t existed yet, can still serve as a perfectly delicious user experience. Well, it doesn’t, because it was already served rotten and after sixteen years of neglect it hasn’t gotten better.

Legal loopholes are the kind of stuff that age the worst. What we have is very unlike fancy aged cheeses or fine wine. It stinks bad and only the grifters learned to enjoy it while the rest of us keep suffering.

Manufacturers of supplements with “on hold” claims are legally allowed to print these claims on their packaging. Although under their own responsibility, pending a final decision that has been delayed for sixteen years.

In 2025 the EU Court of Justice ruled that the botanical claims outside the so-called “transitional” regime are prohibited until evaluated, but nothing really changed for the claims on the 2012 list which are still allowed a free-pass.

Meanwhile, no claim is authorised for an isolated olive-polyphenol capsule, because the trials were “done in olive oil”. Creatine’s claims came out of full review cut down to narrow, conditional wording which doesn’t even hold out against what is now basically the consensus in nutrition science.

But a shamanic miracle-worker is legally allowed to print vague health claims on their ancient medicinal herbs just because they are “on hold”. They can also sell you **TRIBULUS TERRESTRIS** carrying a “provisionally legal” claim along the lines of supporting sexual desire, while the tribulus has repeatedly failed in human trials to raise testosterone, and its libido record is a mixed bag of modest effects, some from industry-linked studies, occurring without any demonstrated testosterone increase.

An on-hold claim on an herbal supplement wasn’t even verified, let alone approved by a relevant authority. It’s there solely because the evaluation was parked and has stayed parked. Why? We at least can’t find a single proper reason for that. It’s anybody’s guess at this point.

FIGURE 04 EVIDENCE-BASED VERSUS EFSA-ALLOWED

The letter grade is this manual's own assessment of the published trials, not a regulator's. Criteria and sources are printed below.

GRADE	WHAT THE TRIALS FOUND	CLAIMS YOU MAY PRINT
A	**CAFFEINE** 1,881 trials Twenty-one meta-analyses agree it works: endurance, strength, power, speed. Consistent, and graded moderate quality by the reviewers themselves.	0 BLOCKED IN PARLIAMENT
A	**CREATINE** 698 trials Decades of trials, one direction. The position stand calls it the most effective supplement available for high-intensity work and lean mass.	2 AUTHORISED CLAIMS
C	**VITAMIN C** 1,727 trials A large, clean evidence base showing a small effect. In 10,708 people it prevented no colds at all; it shortened them by about 8%.	15 AUTHORISED CLAIMS
NEVER ASSESSED · ON HOLD SINCE 2010 · NOT LISTED IN THE EU REGISTER AT ALL		
E	**GINKGO** 300 trials Enough trials to answer the question, and the answer was no: no effect on preventing the cognitive decline it is sold to prevent.	USABLE AT OWN RISK
E	**ECHINACEA** 62 trials Twenty-four double-blind trials, eight of them at high risk of bias, too heterogeneous to pool. No benefit shown for treating a cold.	USABLE AT OWN RISK
F	**TRIBULUS** 24 trials A handful of small trials, and on the thing it is actually sold for, testosterone, they agree: no effect. Marketing claims unsubstantiated.	USABLE AT OWN RISK

The A grade may print nothing at all, or a couple of irrelevant claims at best. The C grade gets 15 fairly impressive-sounding claims. And the F grade may print a claim nobody will ever check.

GRADES: A to F, assessed by this manual, for how strongly the published human trials support the effect the product is actually sold for. A: many trials, one direction, pooled and consistent. C: a good evidence base showing a small or partial effect. E: enough evidence to answer the question and the answer is no, or too few and too weak trials to support the marketed effect. F: the trials that exist point against the effect the product is sold for. The grade is our reading of the sources below and you are invited to check it against them. **SOURCES:** in the figure notes at the back of the chapter.

PROBLEM #4: THE TROJAN HORSE DECEPTION

Now here comes the final insult, and maybe the most egregious of them all: **THE LOOPHOLE** which makes it obvious that this whole "claims conundrum" is not considered a problem for "the supplements industry". Quite the opposite actually, as most of the players in this field have been enjoying it and benefited from it tremendously.

The industry found a way to adapt to the claims system, and not merely endure it but even benefit from it. It learned to use the same system everyone thinks is protecting them from the scam, to launder the scam.

EFSA's rigidity has become water to the supplement industry mill. The ones getting hurt are the consumers; anyone buying supplements for longevity, health, or performance-related goals.

Surely you've noticed the likes of **"SUPPORTS BRAIN PERFORMANCE"** screaming at you right there from the front of the "nootropic" bottle. But how? When you can't get similar health claims approved even for the star ingredients like creatine or caffeine?

Because what we have here is a sort of a "legal hack" situation going on. And a fairly simple one at that.

You don't need a PhD in grifting to figure out that the door to customer exploitation is wide open. And the health claims system is playing the doorman.

Grifter brands will sell you a “longevity” or “brain” supplement full of trendy, exotic ingredients. They know which ingredients are currently the “sexiest”. They’re also aware those ingredients are claimless. They are also mostly unproven, whatever the marketing story says. But luckily for them, there’s the EU’s register of authorised claims, maintained by the European Commission themselves.

The claims registry is a one-stop shop where everyone and their mother can find a perfect “trojan horse” ingredient for their specific grift.

Take for example the “SUPPORTS BRAIN FUNCTION”. The recipe on how to make and market a completely useless supplement and sell it for a fortune, goes as follows:

1. Open the register and pick a micronutrient with a cognitive claim, then pick from a lineup of candidates like **Zinc**, **Iron**, or **Vitamin B12**.
2. Add just enough of it for the product to legally count as a ***"source of"*** that nutrient, which is often at least 15% of the reference daily intake per daily dose. A cheap pinch.
3. Print the specific authorised claim, for example ***"zinc contributes to normal cognitive function"***, next to the big front-of-pack shout. Because the naked general slogan is only lawful when the specific claim accompanies it.

And there we go, a perfectly legal Trojan Horse product.

"NEURO-MASTER 5000" with "SUPPORTS MENTAL PERFORMANCE" printed across the front: made from exotic herbs that drive the sales, and a cheap pinch of zinc that makes the shouting legal.

While the claim is legally linked only to the minuscule amounts of vitamins and minerals inside, the expensive, exotic, but completely useless, "botanicals" are what sell it for a hefty price.

And as long as the register works this way, that door stays open.

FIGURE 05 ANATOMY OF A TROJAN HORSE LABEL



NUTRITION INFORMATION

PER DAILY PORTION (1 SCOOP, 10 G)

INGREDIENT	AMOUNT	NRV	
Vitamin B6 (pyridoxine hydrochloride)	10 mg	714%	4
Lion's mane (Hericium erinaceus, fruiting body extract)	500 mg	*	
L-tyrosine	500 mg	*	5
Phosphatidylserine (from sunflower lecithin)	100 mg	*	
Bacopa monnieri (leaf extract, 50% bacosides)	100 mg	*	

NRV = nutrient reference value. * NRV not established. 6

1 THE PITCH — A.K.A. THE SCAM

'Memory & Focus' is a general, non-specific health claim: suspicious at best, unlawful in most cases. Everything on the front wears a mask insinuating "cognition" so that nobody has to say it out loud. Scam has to be implicit to survive in legal territory.

2 THE EMPTY CLAIM — MEANS NOTHING

A claim to potency that never says what the maximum relates to, or who decided it. It works until you stop and ask what the hell that even means.

3 THE ASTERISK — TESTED, NOT PROVEN

"Clinically studied" is a badge on the front. The fine print under it admits the studies were on single ingredients, never on this powder, and never says what they found.

4 THE TROJAN HORSE — VITAMIN B6

Vitamin B6 is the cheapest thing in the tub and the only ingredient with an authorised claim. Much less would have qualified it, but it looks more impressive when it's forty-seven times that. Besides, it's dirt cheap.

5 THE CARGO — TRENDY STUFF

1,200 mg of mushroom, botanical and amino acid: everything you are paying for, and not one useful ingredient among them.

Phosphatidylserine went to EFSA and came back with no cause and effect established; bacopa never got that far and sits "on hold" to this day.

6 THE TABLE — THE ONLY HONEST PART

Everything above is decoration. The table is the only part of the pack that has to tell the truth, because EU law forces every quantity onto the label. Read the table and disregard everything else.

A pinch of vitamin B6 bought the right to shout about memory, and sell you something that does absolutely nothing for you. Ignore the front of the pack entirely, including the approved claim: it is advertising with a licence. Only part worth reading is the table.

THE LABEL: "Limitless Powder" is invented and no such product exists; the ingredient line-up, the doses and the label format follow what is actually sold in the EU nootropic aisle. **SOURCES:** in the figure notes at the back of the chapter.

A HEALTH CLAIM IS AN ADVERTISEMENT, AND OFTEN A COVER FOR A JUNK PRODUCT

A claim, remember, is optional. What a brand does with that option is informative.

A premium bottle of mineral water doesn't need to proudly claim that drinking it *"contributes to normal thermoregulation"*. Even though it legally could, with a two-litre disclaimer and all. Premium mineral water has no need for a silly stamp to prove water "works". You know why you're drinking water. And the one buying the one in a premium bottle has reasons for it that have nothing to do with what EFSA believes a bottle of water can or cannot claim.

Pretty much the same goes for caffeine, creatine or any other supplement for that matter. The manufacturer of good quality creatine knows what they're selling is the **GOAT** of performance supplements. A bureaucratic phrase about *"short-term, high-intensity exercise"*, or something else about the people *"over 55"*, will add absolutely nothing to convince the customer creatine is what they need.

A brand confident in its formulation can afford to leave the front of the pack quiet rather than insult your intelligence like that.

The fair player lets the product speak for itself.

The brands that lean hardest on the claims, are often the ones whose formulation has nothing else to say. A massive front-of-pack health claim is, practically by rule, a smokescreen for a junk formula; a tried and tested method of separating the customer from their hard-earned money.

The louder the claim on the front of the packaging, the more sceptical you should be about the product and the harder you should look at what's actually inside.

FIGURE NOTES AND SOURCES

WHAT EACH FIGURE IS BUILT ON, CITED

Figure 01 WATER VS DEHYDRATION AT THE SOURCE

SOURCES: EFSA Panel on Dietetic Products, Nutrition and Allergies, Scientific Opinion on the substantiation of a health claim related to water and reduced risk of development of dehydration, EFSA Journal 2011;9(2):1982, doi 10.2903/j.efsa.2011.1982, Question No EFSA-Q-2008-05014. Refusal enacted by Commission Regulation (EU) No 1170/2011 of 16 November 2011, OJ L 299, 17.11.2011, p. 1. A reduction of disease risk claim is defined in Article 2(2)(6) of Regulation (EC) No 1924/2006.

Figure 02 THE LIST OF CLAIM APPLICATIONS HANDED TO EFSA

SOURCES: The 44,000 national submissions, the consolidated 4,637, the 2,758 claims covered by EFSA's 341 opinions, the 331 withdrawn and the 1,548 botanical claims put on hold by the Commission are all EFSA's own figures for the Article 13.1 "general function" process, and they sum to 4,637. The 222 authorised are the original Annex to Commission Regulation (EU) No 432/2012, amended several times since.

Figure 03 THE SAME FIVE MILLIGRAMS

SOURCES: Claim wording quoted verbatim, and the conditions of use condensed, from the Annex to Commission Regulation (EU) No 432/2012 of 16 May 2012, entry for olive oil polyphenols, EFSA Journal 2011;9(4):2033, claim identifiers 1333, 1638, 1639, 1696 and 2865.

Figure 04 EVIDENCE-BASED VERSUS EFSA-ALLOWED

SOURCES: Caffeine, Grgic et al., Br J Sports Med 2019, doi 10.1136/bjsports-2018-100278. Creatine, Kreider et al., J Int Soc Sports Nutr 2017, PMID 28615996. Vitamin C, Hemilä & Chalker, Cochrane 2013, doi 10.1002/14651858.CD000980.pub4. Ginkgo, Yang et al., Am J Chin Med 2014, doi 10.1142/S0192415X14500335. Echinacea, Karsch-Völk et al., Cochrane 2014, doi 10.1002/14651858.CD000530.pub3. Tribulus, Qureshi et al., J Diet Suppl 2014, doi 10.3109/19390211.2014.887602. Trial counts are PubMed records for each substance as a MeSH term, publication type "Randomized Controlled Trial", humans, retrieved 31 August 2026.

CLAIMS: Counts are entries in the Annex to Commission Regulation (EU) No 432/2012, counted from the original text: vitamin C 15, creatine 1, caffeine 0; creatine's second claim is Commission Implementing Regulation (EU) 2017/672. EFSA gave favourable opinions on five caffeine claims, the European Parliament objected in 2016, and the authorisation was never adopted. The botanical claims are not in the EU register at all; they sit on the Commission's separate 2010 on-hold list of 1,548 claims.

WHAT AN ON-HOLD CLAIM ACTUALLY PERMITS: Article 28(5) of Regulation (EC) No 1924/2006 lets such a claim be used until the final list is adopted, "under the responsibility of food business operators provided that they comply with this Regulation and with existing national provisions applicable to them", subject to safeguard measures under Article 24; it must already be on the list and still may not mislead, and Case C-386/23 Novel Nutriology, ECLI:EU:C:2025:304, confirmed that botanical claims outside this regime stay prohibited.

Figure 05 ANATOMY OF A TROJAN HORSE LABEL

SOURCES: Quantities are declared per daily portion as required by Directive 2002/46/EC; NRV and the 15% “source of” threshold are EU values under Regulation (EU) No 1169/2011 and Regulation (EC) No 1924/2006. The vitamin B6 sentence joins two authorised claims from the EU register, as labels do. Phosphatidylserine: EFSA Panel on Dietetic Products, Nutrition and Allergies, Scientific Opinion on the substantiation of health claims related to phosphatidyl serine (ID 552, 711, 734, 1632, 1927), EFSA Journal 2010;8(10):1749, doi 10.2903/j.efsa.2010.1749. Bacopa monnieri: on the Commission’s 2010 list of botanical claims put on hold, never assessed; see Figure 04.