

LEGION®

THE ONLY SUPPLEMENTS YOU NEED TO GET THE BODY YOU WANT.

BEWARE THE "FAKE SCIENCE" OF THE SUPPLEMENT INDUSTRY



"Scientifically proven!"

"Backed by science!"

"Studies show that...!"

We see stuff like this all the time when shopping for dietary supplements.

Every label, banner, and advertisement discusses the scientific merit of their products.

While there are a handful of companies that do truly want to be science-backed, there are significantly more companies who just want to appear science-backed. Treating science as if it were just a damn word to increase sales is like saying that your steak is gluten-free.

The worst part, however, is that while sometimes errors are chalked up to simple mistakes, there are also times where science is intentionally misused and product pages are made intentionally misleading because the producers know the science is not on their side.

SCIENCE IN ADVERTISING

Got some eye pain? I've had that before from staring at a computer screen for what seemed like forever. Man, if there was only something I could take for the eye pain.

Thankfully, I have a few options. There's some bilberry here (Bilberry? That's a weird name for a berry) and some lutein/zeaxanthin over here; I heard they were good for the eyes. Huh, some weird things in the eye health section as well; I thought ginkgo biloba was a brain booster and even cinnamon? Ginkgo is the cheapest one so I guess I'll get that...

Wait, hold your horses; SCIENCE IS HERE!

Bilberry has been tested at 480mg a day in literally this exact scenario, eye fatigue from staring at screens for too long; supplementation did help compared to placebo.

Lutein and Zeaxanthin? They're also good for the eyes but their specialty is in helping mitigate Age-Related Macular Degeneration, maybe useful for grandma but not something I'd want personally.

Even ginkgo has some evidence but it's for improving blood flow to the eyes in cases of glaucoma, and maybe only glaucoma as it doesn't seem to work in otherwise healthy subjects. Sweet, that's new to me but not what I'm looking for.

No clue why cinnamon is there though, no studies on it and the eyes. I guess somebody noticed cinnamon's benefits on blood glucose and extrapolated too much?

Whatever, bilberry is right up my alley here. Case solved!

This, dear readers, is what science in advertising should be. Different supplements have different niches and we should use the available science to narrow down which ones benefit which people.

WHAT SCIENCE IN ADVERTISING IS SUPPOSED TO DO

At its core, science is proof. I say creatine makes you jump higher, you say prove it, I do.

In the past decade, consumers have demanded that their products are backed by science.

For quite some time consumers took advertisers at face value and, yeah, that didn't end too well for the consumer. It turns out that just because supplements can be seen as weak drugs doesn't mean the industry has the same morals as medical doctors.

When a company provides science-based products, the consumer benefits greatly. You're not chomping down on things that don't work, you're actively bettering your own life. And if you're actively bettering your own life with science-based products, consumer faith in the producers grows. If you love our products you're going to want to buy our products.

And while some products, like Phoenix, are products you only take when needed, others like our Whey+ and Genesis are things you take daily. Repeat sales baby, the benefit of consumer faith.

It's a nice symbiotic relationship; we make great products and you give us money. Win-win. If you see yourself as a cash cow then call me Hindu.

SO, WHY DON'T MORE COMPANIES MAKE GREAT PRODUCTS?

A sizeable amount do these days, thankfully, but with great science comes great responsibility. There are definitely restrictions in place and costs can get in the way of things.

The cheaper something is, the more money a company can make off of it. People are just as willing to spend \$45 on a supplement that cost \$30 to produce as they are spending that same amount of money on something worth a dollar to make.

It's because of this that some companies still aim for the cheapest stuff they can put into a supplement and then use marketing as a way to force sales.

If you can dupe a few million people then that's a lot of profit. Return customers don't matter as much when your initial sales are so high, just get a new thing to talk about next January when the new year's resolutioners come back looking for the next magic bullet.

Ultimately, all I can do as a formulator here at Legion is make our babies as good as possible. I'd suggest you take them but that's too self-serving (as well as obvious on my end) so instead I'll discuss how some companies use marketing to try and cover up for products that are not science-based.

THE RED FLAGS OF SCIENCE ADVERTISING

While you won't (or at least, hopefully) won't see things as drastic as gaslighting there are numerous tricks you may encounter that, either intentionally or not, play you into buying products without evidence.

Excessive Usage of Scientific Claims

You know, y'all don't need to talk about science all the time. Creatine increases strength, oh, shocker, such an amazing revelation. *Hey why didn't you cite something right there?*

I'm not trying to sell you creatine right now nor is that a recent discovery that few know about. I'm not going to cite a scientific study showing that water is wet, but a study that shows gargling water actually helps prevent sickness? That's novel enough a citation is warranted.

Keeping up with this theme, citations are indeed like water; necessary in some amount but too much just drowns things out. Citations should be relevant and put in so whenever you use a citation you can expect people to go 'oh wow, that's interesting' and click it.

Overuse of citations, though? You're no longer trying to talk with consumers or readers on a topic, you're just preaching to them. Whether intentional or not this desensitizes people to the science.

To be fair, this isn't always malicious. Some people take pride in writing blog articles where every citation is relevant and actionable whereas other websites act like databases of information (shout out to Examine!).

For some blogs and databases, the more citations the better as long as they remain accurate and relevant.

For an advertisement however? It's possible that it's an attempt to disillusion you and avoid checking the sources while giving the illusion that the product is very well researched. I mean, there's 40+ of them, it has to be legit right?

Difficult to Follow Citations

When you make it easy to follow your citations you increase the chance that people will actually read them and, when this happens, it's harder to hide inaccuracies and misinterpretations.

Quite frequently you find companies and advertisers sticking to MLA or APA formatting, putting little numbers beside their claims which you then have to scroll down on the page (losing your place) to then cut and paste a citation into google hoping that you get the study they were talking about.

And that's being generous, sometimes they don't even have in-line citations but rather just dump a bunch of references at the bottom, and you have no idea how they fit in with their claims.

And sometimes they try to hide the citations on other pages, making you play hide and seek with the sources.

If you have a truly science based supplement then you can find the science, and if you want people to care about the science, then give it to them. When companies try hide their sources, that should be a major red flag.

Unverifiable Information

Sometimes people miss a citation here and there. It happens to the best of us. However, when your main claim cannot be verified then it can be a huge red flag and there is no bigger frustration than the phrase "In-House Testing."

The reason researchers online use Pubmed or other scientific databases like ScienceDirect, is because there are rules in place for those websites that are monitored by academic institutions; if something erroneous happens the paper gets retracted (it looks like this).

If you're looking for a supplement to buy and the only 'proof' they give you is unverifiable information coming from the people selling the supplement, rather than

linking to independent third parties who don't have a stake in the profits, then keep on looking.

Misdirection

Misdirection is when you have a question and it doesn't seem to be getting answered at all because, if they were to answer your question directly, it would not be in their benefit. Dancing around a topic does nothing but misdirect the reader into assuming (falsely) that if it is studied for so many related things that it must work for the topic at hand.

I also don't want to come across saying that proxy measurements are useless or you need multiple human studies to simply include something in your supplement. There is a degree of finesse and creativity when it comes to making custom blends that sometimes isn't satisfied with double blinds on the supplements by themselves.

And that's fine, if you want to include a supplement or put a combination in that is based on what you think is solid theory then you can do so; however, if you include it based on solid theory just say it was included based on solid theory. Turning your theories into 'facts' or claims without evidence helps nobody.

WHY COMPANIES MISLEAD CONSUMERS

Is it because supplement companies are headed by evil Mr. Monopoly types who only care about the bottom line or could there be more human reasons? I doubt we can discuss all possible reasons but, three of them spring to mind more than others.

Competition

Creatine is pretty awesome, eh? Cheap, safe, and it just bloody works. It would be perfect for me to sell to my customers since I get a nice profit off of it and my customers also get a proven strength and muscle boosting supplement.

Oh darn, seems like I was late to the party. Everybody is selling creatine these days. I'll never stand out at this rate. I need an angle, a niche, something new and exciting that draws customers to me rather than all these plebes selling this 'monohydrate' form.

I know, I'll sell creatine nitrate. People like nitrates, makes them think of nitric oxide, the marketing team is going to love this 2-in-1 punch!

"Hey Bob, get this; creatine nitrate! I think it'll sell really well, get me the science stat!" ... "Ok...did we study it yet?" ... "Somebody probably did somewhere, get me

those tasty citations.” ... “There’s literally a single poster presentation showing that it is more water soluble, that’s it.” ... “Hmmm, I can make this work.”

Such a situation arises quite frequently when it comes to competition between supplement companies, with everybody trying to get a proportionately bigger piece of the pie at the end of the day. New forms, new combinations, and even new genres of supplements are all fair game.

However, if you wait for data to be published then you run the risk of somebody else becoming the first person to market your idea. In this situation, it is seen as prudent to jump the gun and try to string together seemingly irrelevant bits of information like a detective in front of his bulletin board of pictures and thumbtacks.

Let that sink in, in order to stay ahead of the curve some companies opt to sell stuff that hasn’t even been tested for safety.

Ultimately, many companies choose to use scientific misdirection because they want to find a new niche or angle or a product, but honest-to-goodness innovations in supplementation that actually have scientific backing are pretty rare and the industry pretty fierce.

Accidental Lack of Efficacy

Jumping the gun doesn’t always refer to selling something before any science is conducted. Sometimes companies do wait for a study or two to be conducted before they start selling a supplement. However, science doesn’t like stopping at a few studies. They keep on hammering it out and sometimes things that looked like they worked are then found out to be no better than placebo.

But what if you’re already selling it and it makes up 50% of your total profit? Whelp, that sucks. Quick, put some spin on the data so it looks like it actually does work and people who speak against us are mere contrarians. We can’t revoke this product without losing a large chunk of our money.

This is partially why Legion focuses on supplements with numerous components. Even if something in Pulse ended up being shown to be less interesting or potent than it was initially we can just remove it, maybe replace it with something else, and it’s still Pulse.

Unethical Intent

The former two sections, competition and lack of efficacy, were worded somewhat sympathetically so you could understand how manufacturers think about these things.

Sometimes companies cannot do what they want due to practical reasons (oh Berberine, why do you taste so horrible, you would have been amazing for Atlas). Of course, sometimes they just straight up don't give a shit about you.

Basically, when things are as unregulated as supplements are, people just swoop in to make a quick buck and then run away with their profits when they're called out. They don't give a damn about consumers, they give a bad name to the industry, and they are why we can't have nice things.

WHAT THIS ULTIMATELY MEANS FOR YOU

At the end of the day, we all just want our supplements to work and get our money's worth out of them. Science is the best tool we have to determine what works and what doesn't but, when shopping for new supplements, it is used so haphazardly it seems like just a buzzword at times.

Try your best to not fall for misleading marketing tactics, call for science when things aren't clear, and vote with your wallet on how you want companies to act.

Real science. Real supplements. Real results.
Get the results you want when you shop our line of bodybuilding,
pre-workout and weight loss stacks and supplements.

[Shop Supplements Here](#)

YOU SHOULD BE GETTING MORE FOR YOUR SUPPLEMENT MONEY.