Introduction and Guest Background

Hey everybody, Dr. Rob Silverman here, Proven Health Alternatives. I've got Dr Eric here from Fullscript, I'm excited. He's got some knowledge bombs he's gonna drop.

So let me give you a little bit about Dr Erick. he is a licensed naturopathic doctor in Ontario, Canada. He's currently a medical product manager and medical advisor at FullScript. I use FullScript.he focuses mainly on the whole person care, supplement quality and practitioner education.

Dr, Eric, thanks for taking time, I'm happy you're here. Thanks for having me, Dr. Rob. Well, let's dig in. Supplements. I think it's $71 billion industry in the world wide today.

Why would somebody want to take a supplement? Oh, I mean, for the simple reason that maybe they're not getting everything from their diet. And we have a saying at Fullscript that diet first, supplements are there to supplement the diet, there could be lifestyle factors, genetic factors environmental factors that would then influence someone to need to take a supplement or maybe there on a medication and that medication results in depletions of certain nutrients and they need take those nutrients to feel better.

So we as practitioners, myself included and many people that have been on the podcast and people we know, we recommend supplements. As I indicated earlier, supplements are a fastly growing product line in many different venues.

How do people avoid using a low quality, high risk supplement? Great question. So first, I'd say let's set the standard as you'd expect a high quality supplement to be safe and effective.

I think there's an aspect of safety with supplementation from a clinician standpoint. You want to able to prescribe a supplement safely, and that means being aware of contraindications, interactions, depletions.

But in reality, if it's a quality product, it should be effective, What's on the label is in the bottle. Low quality supplements, on other hand, pose several risks, the first being inconsistent potency.

The active ingredient may not be present in a stated amount, which can lead to a lack of efficacy or even a toxicity due to contaminants, due counterfeiting, or due adulterants.

Why Supplements Matter

There are a variety of different contaminates that can show up in dietary supplements, some of which include heavy metals, so mercury, lead, chromium, arsenic, cadmium.

The list goes on and on. Pesticides, mold, and unfortunately, even undisclosed pharmaceuticals have been found in low-quality products. An example here is actually NSAIDs.

So like diclofenac actually showing up in joint support supplements. Another, you know, big risk with low quality supplements is poor absorption. So inferior formulations often use less bioavailable forms of nutrients, leading to poor clinical efficacy.

You know you look at the label, it looks great in terms of dosage, especially for elemental content for things like minerals. But since bioavailability is poor, patients won't benefit.

A good example here could be something like an oxide or carbonate form of a mineral like calcium or magnesium, where forms like citrate or bisglycinate are more easily absorbed.

I think also low quality supplements give patients a false sense of security. So patients believe they're getting the right support, but their symptoms persist due to those poor quality products.

I would say as a clinical tip here to a lot of the practitioners listening, I think really at a basic level, you want to verify brand credibility for that specific manufacturer.

And you can do that through things like making sure that they have third-party testing requirements, looking at things, like third party certifications.

And even keeping up to date on industry published quality reports because there are a lot of great organizations out there like now foods that's always publishing reports in the industry and even some of the major journals out.

There you'll find them releasing studies on potency testing of supplements and contaminant testing. Of supplements as well. Great. I love the concept of checking what's on the label is in the bottle.

And so there's a lot of what we call third-party certifications. But before we get into that, how does Fullscript, first of all, How many different products do you guys carry?

Oh, thousands. and hundreds of different brands. but I think kind of where you're going with this is like, you know, what are FullScript's quality assurance standards?

Is that kind where are you going? People could ask that question. Yeah, so I think one of the major things is that all of brands available on Fullscript, all the supplements, are required to have third-party CGMP certification.

Our quality assurance team works directly with manufacturers and brands.

Supplement Quality and Safety Risks

They also request a lot of different documentation. And looking at very basic things like making sure that they have recall procedures in place just in case a recall needs to happen.

Making sure that they're keeping records and documentation of everything because that's really important when, you know, the FDA comes knocking. And also looking at things like professional grade brands, right?

You know brands that prioritize clinical needs. brands that have medical advisors who are clinicians on their science and advisory boards that help with formulating products.

That, I think, really sets the sort of table stakes around quality as a baseline standard. Now, this is an online store, if you will, so people can go online.

People don't realize how beneficial that is because, for instance, as Obviously, I do in-state and I add a state work. Some people can't make the two-hour drive to me, but they want to get their supplements.

I'm able to give them a prescription, they're able go online, and they are able procure their supplement easily. In these supplements, these products are of real high quality.

So that's really exciting. But the question is from practitioner to practitioner. What kind of stuff or what lab testing would you recommend that the practitioners ask for to ensure that there's no pesticides, emulsifiers, mold, microtoxins, all these buzzwords?

Yeah, great question. I think it's important to verify with manufacturers and brands that they're conducting third party testing with independent ISO certified labs.

So ISO is a certification that's very important for dietary supplements, because basically it ensures that the lab conducting the testing has met stringent criteria for accuracy, reliability, and validity of test results.

Labs actually have to undergo regular audits, participate in proficiency testing, and continuously actually improve their processes to maintain certification.

So this helps to reduce the likelihood of errors, mislabeling, or even fraudulent test results, which is unfortunately something that still goes on in the industry.

Ideally, brands are testing every batch, so they're ensuring consistency between each lot. Unfortunately, again, some brands and manufacturers might actually skip certain lots in testing.

So make sure you're aware of what testing requirements are behind the brand when it comes to potency and purity. So let's talk about supplements itself or the ingredients.

Let's do this as a rapid fire. So I do rapid-fire because I'm from New York, everybody. We give you 30 seconds or less to answer a particular question.

Number one supplement being sold or purchased today. Oh, wow. I would think of the staples here, so magnesium, omega-3s, vitamin C, Vitamin D. Probiotics are really high up there.

There's NAC, which we know is a great antioxidant. Good for detox support, good for immune support. Good, for glutathione production, because it's sort of a precursor there.

There are a lot. I think it would depend on the specific case that's in front of you in your clinic. But I would say more of those kind of like staples, you'll see a little more sales volume.

I love creatine. I take creatinine every day in my water in the morning. Great evidence there for resistance training, some emerging evidence for cognitive and neurological support, especially for athletes that have had concussions and brain injuries.

Generally great as well for energy production, because it's that, you know, helping with ATP production in your muscles. So a great thing to take, if you want to preserve your lean muscle mass, something to think about too, If you're like an older individual, You're dealing with, sarcopenia, losing lean muscles mass creatine might be a good option.

Of course, chat through that with your doctor, but it could be a good option to add to your supplement stack to prevent that muscle wasting. Where are you on probiotics and biodiversity and changing them up every two to four months?

Oh, good question. I think it would depend on the reason for why you're taking the probiotic, because as we know, certain strains are heavily studied for specific indications.

So there are strains out there that help with cardiometabolic support, so maybe those are the strains that people want to take. Though if it's, you know, I think kind of where you're going is this is sort of more a general wellness, maintenance support.

Yeah, for sure. I would recommend, changing it up every now and then, looking for different sources of probiotics, whether that's human source, animal source spore-based probiotic.

There's different benefits depending on the source as well as the research out there. And something I always go on about with probioticism You know, it's important to have strain specific studies to back up the use of a product.

But what's even more important than that, I think, is to Have studies on that finished product that you're pulling off the shelf or recommending to a patient because I see this a lot.

You'll find a probiotic and it has so many different strains and The manufacturer might say, you know, because this strain has this study and that strain, has, that study, therefore the finished product should be good to support all of

that.

I'm more in favor of seeing, okay, was that finished project involved in a clinical trial, a randomized control trial? And what were the results? I think that's a little bit more informative and helpful for both practitioners and patients.

I think that's fabulous. I agree, I'm going to piggyback on what you said. We want to look on the studies mice or mice and humans, let's say. Is the ingredient been studied, but has the ingredients been study in the formula?

That's a real big takeaway. There's those moments in a podcast.

Fullscript Standards and Lab Testing

where this big bell goes off and that was it. Everybody, you know, that they are influenced by influencers, if I could say that. But the real question is what does the data, what is the reel data?

What does quality data reveal? for the supplement, not if you took a good Dale Carnegie, but what did the data reveal? That said, do you like formulas or do like individuals?

So you mentioned vitamin D, I know you meant D3, and of course you're going to take that with K1 and K2. But formulas where you see a litany, five or six things together, or you prefer it singularly?

Oh, good question. I think it would depend on the nutrient. So for example, like I'm a fan of B complex vitamins, bigger fan have methylated B-complex vitamins because we know they're more bioavailable and they are helpful for people that have methylation issues.

But for other nutrients, let's say you're taking a multivitamin, I live up in Canada so we don't get that much sunlight. Also a darker skinned individual, so I definitely need to take vitamin D in addition to kind of my multivitamin.

So it certainly depends on like the dosage you're aiming for and the outcomes you are aiming. What about peptides? Do you guys carry them? What's your feel on that from a corporate perspective?

And I'll even ask you from personal perspective. Good question. So peptides, I don't think, are available in Canada. As far as I know, injectable peptide are still considered banned substances by a lot of anti-doping agencies.

But there are oral peptids available, like BPC157. There are brands out there that do manufacture an oral-based supplement and I believe more recently there was a larger clinical trial with humans.

Finally, I'm blanking on the specific brand name and the product name, but I could give that to you maybe after the podcast. Because for a long time, I think peptides were being pushed, probably still are being push a lot on social media.

And there certainly could perhaps be benefits for certain people taking peptide. But as you said, the data, you know, haven't really seen a lots of published human trials and we're starting to see that now.

So I'll probably hold my judgment on peptidies for now, but I'm sure there are practitioners that maybe are seeing benefits out there with their patients before, you know, that human data is available.

Yeah, I'll agree with you on the point of the BPC157 being the peptide of conversation. Peptides are short-chain amino acids. About 60 amino acid make a protein, 15 make peptides.

Bpc156 has been called the Swiss army knife of peptids. because of its versatility and its potency. It actually comes from Gastic Juice. I think they found it in 1993. That said, you kind of mentioned the word social media and here we are on a podcast.

Oh my goodness. But there's a lot of influencers and there are doctors. A list like Dr. Mark Hyman does a great job.

He's the medical doctor and their supplements.

There's others who remain nameless, who are not doctors, some aren't even graduates of any kind of health institution, yet they talk a lot about supplements.

Where are people supposed to go? How are they supposed discerning between a full script, a Mark Hyman, Rob Silverman or Dr. Eric and Bozo the Clown? I said it.

Bozu the clown, that's a throwback. Yeah, why would they? You didn't rage away with that. You know, what's problematic is there's not only an overwhelming amount of information on social media, but there is also an over whelming amount misinformation when it comes to supplements.

Actually, just last week there was a news report about deepfakes on TikTok. of influencers actually pushing dangerous products to the general public and just series of videos covering whole lines with not even a real person pitching these products.

I would say, you know, as a clinician you're probably going to get patients coming into the clinic asking about a lot of these products they see on social media, I would say, you know, be gentle with them, validate their interest because patients trust social medias, so definitely acknowledge their curiosity, but I think use this as a teaching moment rather than dismissing their inquisition outright.

educate them on quality, you know, show them how to check for third-party testing. Talk about, if they're bringing in a specific ingredient, talk to them about different ingredient forms and the quality associated with them.

And then once you kind of give them more of that information, it shouldn't be too difficult to then provide better alternatives. So you can suggest more research back backed high quality supplements instead of more like trendy, potentially low quality brands that are being pushed through social media.

Top Supplements and Ingredient Trends

And I think really as, you know, basic table stakes, get them to look for CGMP third party certification because there's a lot that goes into a CG MP third third-party certification.

Do you mind if I just kind of go through that really quick? I mean, is it on the label? Is it in the back of the So it should be on the label usually it's like near the back near that the supplements fax panel there'll be an actual logo for an organization like for example NSF for the National Sanitation Foundation and it'll say CGMP certified.

And that's important for a few different reasons so. It really means that the manufacturer meets FDA mandated quality standards, but they've kind of gone above and beyond self-regulation because unlike prescription drugs, dietary supplements are not pre-approved by the FDA before we're sale, But manufacturers are supposed to comply with the FDACGMP regulation, which is 21 CFR part 111. The tricky thing here is that manufacturers can say they're compliant, but really set their own standards and not be transparent about it at all.

So having that third party that comes in, audits them, holds them accountable to CGMP regulations, helps to reduce the risk of bias, contamination, adulteration or mislabeling of supplements.

And it really helps confirm that the facilities follows these regulations consistently. And I think a few key aspects of CGMP certification that maybe many people listening aren't aware of is that, you know, CGNP actually requires raw material testing.

So, manufacturers are required to ensure that their raw materials have the correct identity, purity, potency and freedom from those contaminants like heavy metals, microbes and pesticides.

They need to have process controls in place, so that helps to prevent cross-contamination and ensures batch-to-batch consistency of each product. Additionally, they have to be doing finished product testing, confirming that the

product actually meets label claims for potency and purity.

Another thing that maybe doesn't sound as interesting but is still just very much important is documented traceability and record keeping. It ensures that if a recall needs to happen, they're ready for it.

A lot of these CGMP certification programs also require manufacturers to do mock recalls frequently, at least annually, and really it's just general accountability.

I would be skeptical if you see on a supplement label CGMP compliant without third party verification because that really could mean anything. And again, that third-party CGM certification provides that objective external validation, which in my opinion is a reason to have increased confidence in the brand.

That's fabulous. I have a buddy of mine who watches my podcast every week, because we do one a week. And he's always looking for some pearl. Because at a certain point, we say similar things.

Take vitamin D, take omega-3 fatty acids, eat whole foods, exercise, get good sleep. But what you gave him was the ability when he goes into a pharmacy or wants to do business with a supplement company in Geneva, he now has a pearl, So I think that that was an extremely salient point.

That said, number one question I get, hey, Dr. Rob, what do I need to take supplements for? Can I do it just with food? Now, mind you, this is the 50-year-old unhealthy person who's 40 pounds overweight asking the question.

Send this to the table for you Dr Eric. Yeah. I mean, it's a good question. Are they really getting everything they can in terms of nutrition from their diet?

What are they consuming? Is it ultra-processed foods, highly processed foods that are devoid of nutrients? How are their digestive processes? Are someone dealing with small intestinal bacterial overgrowth or irritable bowel syndrome where they're not really many, many different reasons.

I talked about vitamin D earlier. We get vitamin B from the sun. And in the winter, people don't really get as much sun exposure. So probably a good idea to supplement with vitamin d there.

It potentially is possible for someone to get all their nutrition from their diet. But I unfortunately just haven't seen it. Some people do need to be taking a supplement, again, to Great point, absolutely.

Hence the word supplement, supplemental to diet, lifestyle, etc. Vitamin D is a great option. Pre and probiotics, I mean, If you have a slightly busy schedule, it's really hard to get fermented foods.

I mean, for me, It's no problem because I love those half sour pickles from New York, kimchi, my wife's South East Asian. Love kimchi. But I really, how many times has someone at lunch said, hey, do you want a piece of my lunch?

Do you some kimchi? It just not happening. So how would you assess patient's supplemental need? Yeah, another great question. Certainly through a full review of systems, looking at their medical history, and looking their diet, conducting lab testing is a great way as well.

For vitamin D, you can look at vitamin C serum levels, B12 levels. You can run a GI map to see their microbial diversity. So there's a lot of different ways to do so.

But I would say you need to look at the whole person and not just kind of focus in on one area. And that's where a thorough medical history is really important.

Here's one for you. People say, hey, you know what, doc? I've taken your suggestion. I'm carrying the supplements. They go to full script. We know that there's good quality supplements there, but the patient's not getting better.

Their numbers aren't changing.

Probiotics, Formulas, and Peptides

What's the problem? So I typically say, one, they have a digestion problem. And a lot of times to speak to your idea of testing and not guessing to reveal a blind spot, I am big on testing for the gut because the macro and micronutrients are absorbed through the god.

If the God is leaky, have a problem. So the synergy between lab testing, supplements, and diet is real evident when we have this discussion. That said, patients often don't even know why they take certain supplements.

Haven't they come in and reached out to you and say, yeah, I'm taking that because it looked good. Where at source can people go, the layperson, to really learn about the quality of supplements and what supplements they should be taking?

Oh, great question. I mean, ideally to their doctor or their healthcare provider who's going to, you know, be well versed in supplements and talk them through everything they're taking and why they should be or shouldn't be taking it.

But I would say, fullscript.com has a lot of great information and resources for both health care providers and patients. A lot of great information in terms of ingredient reviews, a lot great webinars.

There's also a ton of different blogs. You can just search for the specific ingredient or condition you're curious about and you'll find a lots of information on there.

We hear these terms when it comes to supplements, bioavailability, absorption, Some people are confused. They think they're the same. Clearly, both of us know they are not.

Could you give a brief definition of the difference between bioavailability and absorbability of supplements? Yeah, sure. So bio availability would be how much is there that can actually be absorbed or absorbed.

And absorption would be how much is actually absorbed. So you'll see, for example, breakdowns in different ingredient forms when it comes to the elemental amounts and then the absorption amounts.

And those might be quite different. I would say it's not only important to be aware of the element amounts of minerals you're looking at, it is also important know that ingredient form.

And I think I might have touched on this earlier, but a good example here is carbonate and oxide forms versus more bioavailable forms like citrate or bisglycinate forms.

The lower quality forms can actually bump up the elemental amounts on the supplement fax panel, and they're cheaper. So it actually looks like a really good deal.

But then people don't factor in, they have poor bio availability, which will limit the amount that your patients can absorb before they actually encounter GI issues.

So with lower quality forms, unfortunately, like oxides and carbonates, you'll start to see that. Again, even though it looks really good on the label, patients will try to get to an ideal dose and then have GI issues.

So for things like minerals, I definitely prefer chelated forms. Something like a magnesium bisglycinate over a Magnesium oxide for better absorption.

For something like curcumin, actually you had asked me earlier, like top selling ingredients. Curcumen is definitely up there. I would say to take a lot of the guesswork out of it because there are so many different forms of curcumin on the market, look for trademarked forms like Meriva, Long Vita, Theracurmin.

Those generally have really good bioavailability studies as well as clinical evidence in the form of randomized controlled trials. So you can find a great information on Merivah, long Vida, and Thercuramin.

For Omega-3s, another big category, I would say look at the sources of fish because larger fish tend to bioaccumulate. A lot of contaminants versus smaller fish don't as much, but of course you want to be looking for that testing, making sure that Manufacturers are testing for things like heavy metals and PCBs and things that end up in our oceans.

Look at the ratios of EPA to DHA because that'll be different depending on what you're trying to target. Um, look for triglyceride versus monoglycerides forms.

Since they tend to be a bit better than ethyl ester forms of omega-3s for absorption, And I think we covered this one earlier for probiotics. Look for strain-specific studies.

And the strains will be that code that's after the name of the organism. So make sure that the code lines up with the indication and the clinical evidence.

Even better, ask for finished product studies, because that will really be very valuable for you and your practice. Outstanding takeaways. Let me put you on a spot a little bit.

Another rapid fire, you're doing so well with it. You've adapted to my style. I love it! Let's talk about ingredients for inflammation. Give me your three top ingredients.

Oh, wow. Specific Pro-Resolving Mediators. So like SPMs from fish oil, Omega-3s, curcumin. Vitamin C is a decent one. There's a lot. I think there are a there a of anti-inflammatories out there.

Boswellia. The list can go on and on. I love talking about specialized pro-resolving mediators, pro resolving mediator is because they are a lipid class switch.

So Omega-3s, Tumeric, Boswellia, they kind of shut the lights off in a room in the house. Pro resolving mediator's a master switch for inflammation.

Social Media Misinformation and CGMP

And that's why you put it first. That was a great takeaway. It allows for the resolution of inflammation and the homostasis between the initiation and a resolution, which is great because here in America or in North America, everybody's pre-inflamed.

Absolutely. So, if I have one thing to do, I would recommend to all practitioners or all patients, seek out a doctor who wants to manage and modulate your inflammation.

That's why when you said provisional mediators, as I did the Bronx cheer, jumped up in the air. I love it. How about gut ingredients? Give me your top three gut ingredients.

Oh, gosh. Gut ingredients? Well, probiotics would be up there for sure. Let me interject. Is it pro? Or is it just probably should say or is that free?

Well, yeah, that's a good question. I mean, depending on the overgrowth of organisms, prebiotics might be helpful for some people. They might detrimental for others.

There's certainly sort of like a lag time when it comes to pre biotics. You know, people will notice more gas, more bloating when they start it. In some cases, that's a good sign, and they'll slowly start to adapt to it.

In other cases if they have small intestinal bacterial overgrowth, maybe not a great idea to give them probiotics with prebiotics. Maybe they're just looking at probiotic alone.

Probiotic, prebiotics like you mentioned. I'm a fan of L-glutamine. There's N-acetylglucosamine out there. I mean, curcumin is also potentially a good one as well for the gut.

A lot of other anti-inflammatories. NAC, if you're thinking of like biofilms, good biofilm disruptors out there. I mean, there are also other formulas if you're thinking of like motility support, so like your ginger.

You know, if your thinking more acid reflux, you know there could be DGL, D-limonene. There's a lot of good options out there. I would say, for gut stuff, it's always important for patients to be aware of what foods they react to.

Because I think maybe people don't realize what food they're reacting to because those reactions can pop up in different ways and they might not necessarily be digestive reactions.

People could have things like pain, joint pain from certain foods. So I would say going back to your point about lab testing, Looking at food sensitivities is a good first step as well, so that people know which foods to cut out and then you can see how they adapt to that.

Of course, it's a tough one too because you don't want to limit someone too much. You do also want provide them with resources of like, here's some great recipes that will avoid your food sensitivity so it can make that adoption a little bit easier.

I had some great points in there. I agree with you on the food sensitivities. There's a 72-hour lag from the time you ingest the foods that you're sensitive to, to inflammation or symptomology comes out.

Um, I love the fact that we're talking about glutamine. And I think that glutamate has been lost. Yes, it's the most abundant amino acid in the body. It's great for muscle building, but it really does help with mucosal lining buildup.

My mistake. you know, doing Al Pacino dance and sent up a woman around it. I appreciate that. Except you had your eyes open. Thanks. Since we talked about inflammation, we talk about gut, I'd be amiss about not asking you.

Brain, cognitively, what do you recommend for that? Because people are taking notes now. Yeah. I mean, there's a lot out there. Certainly DHA, that neurological support component of fish oil would be a good one to support anyone at any age with, honestly.

Creatine, I personally am a fan of creatine for that. I've noticed a boost in my cognition with creatinine. There are a few others I'm blanking on them right now.

Oh, of course, long Vita, because we just covered long vita, a good one to consider there as well. You were saying magnesium, definitely magnesium L3 and eight, right, which we know crosses that blood brain barrier, Which can be very helpful for cognition and neurological support.

Yeah, those I think would be my top ones. I don't know if you have any help you out here. Oh, yes. Yeah. takes an M1 microglial to an m2. So essentially the cleanup in the central nervous system goes from pro-inflammatory to anti-flammatory.

FYI, everybody, eggs are a superfood. The cholesterol in an egg is diverse in that it's LDL, it is HDL. And cholesterol is a whole other discussion. It's not going to damage you.

You can have a yolk, you can two yolks. Maybe you don't want to have 10 yolks because of the caloric content, but that's fine. And you did mention curcumin, curicumin mixed with omega-3 fatty acids.

So I think those are all really good choices. I'm going give you a break. Going to get off all the supplements and tax your brain and talk about practitioner only supplement companies versus consumer brands.

How do you differentiate that? How does a consumer now? I would say for one, definitely check out the

manufacturer website. If they're a practitioner brand, they'll be very vocal about it in their marketing information as well as their information about the brand.

Practitioner brands are often formulated based on clinical research and they undergo rigorous third-party testing. So look for that as they should have a link to the science behind their supplements, why they were formulated in such a way.

They'll call out third party testing. Mass market brands actually might prioritize price over potency, which can lead to weaker formulations. Thinking back to our example of oxide and carbonate forms, They're cheaper forms.

They bump up that elemental count, so it looks like a good deal.

Assessing Need and Bioavailability

But there are some direct-to-consumer brands out there that do meet high standards. So I would say, again, learn as much as you can about the brand. Scrutinize any quality control information that they provide.

Speak to their QA team. speak to the medical representatives and get the full story. I think it's a great idea to stick with those clinician-backed brands with published research and transparent testing data.

Those will all help in terms of your patient getting better. Good quality research, preferably on humans. A friend of mine just asked me the other day, he said, I hear you have Dr.

Eric, ask him this question, natural supplements versus pharmaceutical grade supplements. What's the difference? Yeah, I've heard that term thrown around a lot, pharmaceutical grade.

I think it calls back to the United States Pharmacopeia or USP because typically they set specifications and testing standards around different ingredients.

But really, if you're looking for something that's quote unquote, pharmaceutical grade, look for that CGMP certification because you know that they're being held accountable.

They're following all those regulations and what's on the label is in the bottle. Well, there's regulatory gaps. What to watch and look. I wrote this down.

Now, I'm American. If the US has less stringent regulations in other countries like Canada or even parts of Europe, What red flags should practitioners watch for when choosing US-based brands versus some of the international ones?

Great question. So as I mentioned, I'm in Canada. Canada and the EU actually require pre-market approval of supplements before they're sold to the general public, while the US relies more on post- market enforcement.

Unfortunately, in the US, low-quality and dangerous products aren't typically caught in market until consumers report their adverse events to the FDA.

For red flags, look for brands that don't disclose ingredient sources, that lack CGMP certification, or lack third-party testing. Unfortunately, and I'm going to call them out here, hopefully no one gets in trouble, but Amazon and third party sellers are actually notorious for counterfeit and poor quality supplements.

And in fact, just last week, the FDA sent a warning letter to Amazon after finding out that someone was actually selling pharmaceuticals and marketing them as supplements on the platform.

So, you know, again, if recommending US brands, stick to those companies with that third party cert. Wow. I'm a little disappointed that we're not as stringent in the US.

Um, I do admit sometimes I think you guys in Canada are a bit too stringient. A great example of being stringing in Europe and that's necessarily string in America is melatonin.

and you can't get melatonin without a prescription in Europe. That said, actionable takeaways. If you're a functional medicine practitioner who wants to improve and assess the supplement quality, what are three steps that they can do to ensure that quality improvement?

Sure. So I would say, and I've said this, I probably repeated myself too much here, but check for third party testing. Check for 3rd party CGMP certification.

Prioritize those organizations that have a good standing in the industry like NSF, like Underwriters Labs, Like the United States Pharmacopeia. There are tons of different organizations.

informed choice, informed sport for people that are looking for supplements that have been tested for banned substances or illegal substances. There's Friend of the Sea in terms of sustainability when it comes to fish oils.

there's USDA Organic, there there are a lot of different certifications out there. get familiarized with them. You can probably find one that aligns with your ethics with, your practice needs as well and review the brand.

So look again for heavy metal testing, general contaminant testing potency testing and choose bioavailable forms. Again opt for chelated minerals, methylated B vitamins and clinically tested ingredients and products.

I think like The biggest takeaway would probably be make quality part of patient education. Teach them how to choose safe and effective supplements because they'll get better when they're on a high quality product.

They'll come back. So it not only makes great business sense, but it'll help your patients get My buddy who listens to my podcast every week usually asks for three key takeaways, but I think you've made him crystal clear what he would need to do.

So I'm going to substitute a question for him. Number one, soft gels, tablets, capsules, powder, pros and cons. Yeah, great question. I Think when you're thinking about those different delivery formats, think about stability.

i'm gonna call out one that you actually didn't cover, it's gummies. Okay. People love gummies. The main problem with gummys is that they're water-based.

Inflammation, Gut, and Brain Support

And certainly the technology is getting better over time. But when something is water based, it makes the active ingredient completely unstable. So I am not a fan of gummis, also because they could have all kinds of different dyes and sweeteners and things in them.

But even thinking like, you know, seeing some of these, science-based influencers out there that are pushing creatine gummies, creatinine becomes highly unstable in the presence of water.

So you want to make sure that if you are purchasing a gummy or recommending a gummie, make they have stability testing data, whether that's real-time or expedited, to By the time you get the product, it has what's on the label.

Because in thinking of expiration here, the FDA does require that the products meets 100% of label claim by date of expiry. So it's a potential infringement there with the FTA if these products are not meeting that requirement.

I want to mix my creatine and water. That's OK. That's OK, yeah, because it's in powder form. You're keeping it stored in a dark place at room temperature.

If you mix that in water, it is good to go. In powderform, no concerns. Once it in that water-based gummy form, its

sitting in the distribution center wherever it sitting.

It's being shipped to you maybe on a hot summer day. you might forget to initially go pick up your package, bring it home. So all those factors, light, heat, humidity, will all impact stability, especially in that gummy format.

So for that reason, I'm not a huge fan of gummies. But I know that people, you want to meet people where they're at, and you wanna personalize that treatment plant for them.

Some people can't take capsules or maybe don't wanna take powders. If you are opting for the gummy, again, make sure it's third party tested and make they have that stability data behind it too.

You bring up a really good point. I don' wanna let you go right away because you did a great job. Stay, stay. Aqueous solutions, hot. A lot of people like to mix MCT oil, collagen.

I've had a few people say they dump creatine in their coffee. How do you feel about that? Good question. And I don't know if creatinine coffee has actually been studied and what that does.

It has either. There wasn't a fixed question, it was just, you know, Thought-provoking question, because I put collagen in my coffee. I use MCT powder, full disclosure, Laird.

So I was just curious because people want to know, how can I mix them together? Here's all these bottles. Here are all of these powders. You know I got to take eight bottles, which there's nothing wrong with, by the way, cause I'll show you mine.

And I take 50 pills in the morning. Sorry everybody, I'm going to live to 120 and die of hyperviomanosis. That's my goal. I'm talking to the man upstairs because I am about halfway there right now.

So we'll put that aside. We'll get that as a food for thought for later. How can people get in touch with you and how can get more information about Fullscript?

Another great question. I would say just go to fullscript.com. All the information is there for you. Again, lots of great information for free on ingredients, conditions.

Brand Types, Regulations, and Takeaways

You can speak directly with a customer success representative if you'd like to open an account and get set up on there free of charge and then they'll take you through the platform and how to use it.

But yeah, if you want to reach me, you can definitely shoot me an email. My email is eric.vegas at fullscript.com. Would love to hear from some of your audience about what they thought about this episode, as well as their thoughts around supplement quality, because I love connecting with practitioners about that.

Oh, believe me. They're going to have a conversation with you. I mean, it's getting to lecture nationally, internationally and having these podcasts The one thing before we close is that everybody thinks you're matching apples to apples.

You're not even matching apple to oranges. There's such vastness. It's kind of like grass-fed grass finished meat versus fast food hamburgers. There is truly no comparison.

And they're both labeled the same. Imagine the confusion in that. So this has been great. We've got to do part two. Thanks for answering all my questions.

I appreciate you being on 45 minutes of rapid fire. Thank you so much, Dr. Rob. My pleasure. Hope to see you again. Everybody proven health alternatives.

Dr Rob Silverman, always yours in health.