Nutridyne and Practitioner-Grade Supplements

As a practitioner, I only use products I believe in, and Nutridyne is at the top of that list. What I love about Nutridyne, is their unwavering commitment to quality, transparency, insights.

Their products are practitioner exclusive, which means they're built specifically for clinical use. That matters when you're trying to get real results.

From foundational support, to condition specific protocols. I've seen firsthand the difference Neutrodyne makes in my patient's health and in practice.

Hey everybody, Dr. Rob Silverman here, Proven Health Alternatives. I've got an expert in many different things, specializing in functional medicine and fish oils.

Why Omega-3s Matter for Every Patient

Okay, I mean, every patient deserves a fish oil, etc. But why did you pick fish oils as a topic? I really believe, you mentioned every patients needs a Fish oil.

I actually check fatty acid status on every single new patient that walks in my practice. Before they get into hormone therapy, before they got into leaky gut repair, or before the get in to neurodegeneration prevention, what's your fatty acids status?

So I've really seen miracles in practice with fatty acid treatments. So today's topic with a great preview by Dr. Charles A healthy balance of essential fatty acids is critical for optimum health and wellness.

In today's podcast, he and I are gonna discuss the role of omega-3 fatty-acids in key areas of your health, discuss what to look for in fish oil, how to test your omega 3 fatty acid levels, and what you need for a good oil change.

A car needs an oil-change, we need an-oil change, And I've got some factoids to really start. The average consumption of EPA DHA per day is 150 milligrams of both EPA DHA.

When we compare and contrast that with Greenland Eskimos, they eat six to seven grams daily. So take that baton and tell me what you think about that.

Well, let's start with essential fatty acids, right? The very main essential, fatty assets. We have two, two camps. You have your Omega sixes and your omega threes, and they're called essential because you cannot manufacture them.

you have to get them in your diet. Omega 3 rich foods, fish, or whether you're taking a supplement, you have to take them externally to make able to be used.

And I think they should be called essential because they're essential for everything that the body needs. They really make up the cell membrane. I mean, Bruce Lipton that said membrane should we spell M-E-M-B-R-A-I-N, the brain.

Everything happens in that cell membrane. The magic is happening there. And so one of the most important things that these omega-3s do is that they just maintain membrane fluidity.

As we understand, if you're going to have a receptor bind to a cell, it's all about can that sell undergo conformational change or can the receptor…

I use the analogy, the illustration of a fishing bobber.

Omega-3s, Cell Membranes, and Inflammation

Can that bobber go above the water to where the hormone that's circulating through, bind to that receptor? Or is that Bobber stuck in underneath the Water?

Is it stuck on a frozen lake in North Dakota in the middle of January? You know, so if it's not able to have the fluidity to move around, then you're not going to the receptor activation.

So there's a lot of things that play into that. And so this is life-critical processes we're talking about. Without question. I concur with you. Every patient that comes in here, I make a recommendation for omega-3 fatty acids.

The body has a receptor site for a few things, one of which is a receptive site on every cell for Omega- 3 fatty acid. To piggyback on your idea of essential, They're essential, like you said, because the body can only synthesize them.

It can't synthesized them, it has to take them in from diet. They are great energy storage, they're great for cell structures. There are various other functions, one of which is hormone function.

So all that being said what do you think is the most important function of omega-3 fatty acids? Far and above, it would be membrane fluidity. It would that maintenance of the healthy fat in a membrane.

Let's put it this way. If my cell membrane is rigid, then the machinery, the magic that happens, and that membrane is not going to work because the rigidity of that memory.

So fluidity is that concept that if something is put into the system, this system can respond. I can move. Simple analogy, if I took a pear and I dropped it into some fish oil, I would see the ripple effect.

If I take a hair and drop it in the Crisco, it's going just sit there and it'll be very hardened. Maybe it's a poor illustration, but I think we get the concept of what fluidity is.

But when you look at fish oil, there's actually, this is Dr. Alex Vazquez, who shared it does four things. Fish oil can decrease inflammation. We understand that inflammation is the root cause of every chronic disease and we look at all the things that we can do to remove inflammation from the body.

Fatty acids are critical for that, fissural in particular. Secondly, it can be used in neurochemical neurotransmitter and hormone receptor activation.

So there again, if someone comes in with anxiety, depression, insomnia, any neurobehavioral disorder, consider the integrity of their fatty acid status.

I always tell patients, your behavior is dependent upon how well your brain works. Dr. Mark Hyman taught us all the concept of a broken brain. We don't have pain receptors in our brain, so if the brain is broken, What's the person to do?

They're going to manifest some neurobehavioral. They are going have anxiety, they're gonna have depression. And so we'll see these individuals, had a young kid come in with Tourette's and Omega-3 fatty acid stats, which we will talk more about testing later, but was just very, very low.

So you have the inflammation, you had the neurotransmitter hormones, it manages the cell membrane dynamics, we've talked about already, and it alters gene expression.

So we understand that it is going to speak to our genes a message of life so that our jeans are manifesting and expressing the phenotype, the code that we want them to read.

I don't want the Parkinson's SNPs I may or may not have to ever be expressed. I don t want to cognitive impairment SNPS I might or might not be have expressed, part of that gene expression to be healthy is gonna come from Fish oil, omega-3 fatty acids.

Outstanding. Well, you talked about omega 6s. You talked omega 3s My man's having coffee. We're having a little coffee break together. I love it. Organic, of course, right?

Let him know organic. Oh yeah, organic for sure. So omega-6 is linoleic acid. People should think about it, essentially, for the most part, it's pro-inflammatory.

There are some instances it is not, but let's think of it as pro inflammatory. Yes, yes. Omega-3 alpha-lipoic acids breaks down to EPA and DHA.

EPA vs DHA and Flaxseed Limitations

And they have vastly different properties, EPA and DHA, and that's what we call our omega-3 fatty acids, or our fish oils, if you will. And that what you're predominantly speaking about right now.

Correct. Let's go back to that. So, alkaline acid, when you look at that, people say, why can't I just take flaxseed oil? Why would I use that? That's an omega 3. Well, as you and I know, less than 2% to 5% of the alkalinic acid in faxy oil makes it through the enzyme conversions down to actually getting EPA and DHA.

So, am I opposed to flaxseed oil? No, you know, use some for some constipation, and use faxy ground for fiber, but don't use that to try to boost up your low omega-3s because you're just never going to get there to the degree that you need.

It's interesting, they did a study. They wanted to look at Dha in particular. We talk about EPA We know that DHA is the predominant fatty acid in the brain, the retina, these parts of the nervous system.

And so they did this study. I don't know how much they spent to do this, but they wanted to find out what's the best way to improve or increase Dha in your body.

The summary was quite simple. is to take DHA, you know? And so we have this deficiency. So don't try to go upstream, especially when you can have EPA and DHE delivered directly to you.

We understand that's where all of the chemical processes occurring is with those downstream. Yeah. It's funny you mentioned flaxseed because I had Udo Erasmus on.

Okay, yeah. And he's definitely a luminary, if you will. Yeah, great guy. He's all about flex seed oil because he was the first one to theoretically convert fax seeds to fux seed.

So, I mean, he is big about essential fatty acids and everything of that nature, but he does not like fish oil. And I felt that was a real big chink in his armor.

How do you deal with someone who doesn't understand the idea that there's multiple enzymatic conversions and nutrient enzymes needed to convert flaxseed to EPA DHA?

Well, I think the proof's in the pudding, and I'll mention this later, or we can even hit it now. I test, don't guess. When you can do a test and you check some Omega-3 level, and I say, hey, you want to go, do your flaxseed oil, And you have an Omega 3 level of 3.15%.

It should be 10% or higher. You can your Flax Seed Oil for three months. Let's recheck it. Take it to the bank. It's not going to 10%. So the proof in the pudding.

Now I'll say, Hey, now let's go ahead and put you on, uh, you know, two to four grams of EPA DHA a day. Let's

recheck that omega quant in, 90 days or 120 days.

And we're going see that level start to rise. So I think the fruits and the putting. Obviously, clinicians are a little bit easier because you can just take them to a physiology textbook and say, well, here's the biochemistry pathway.

This is what it's doing. But to patient that you don't want to get lost in the weeds of biochemical pathways, the patient, most doctors dont want get loss in bio chemical pathways.

So I think the proof's in a pudding. Do the test. Don't guess. And then implement your therapeutic trial of care. Then how's a patient respond? That's just the only point that I use.

I use the omega-quantum also. You're at 10%. They recommend about 8%. That's a percentage of omega 3s in your red blood cells. We will come back to that.

Let's give them a little bit more background. So we have EPA and DHA. For me, I always tell everybody EPA is the anti-inflammatory portion of the fish oil.

Testing Omega-3 Status in Practice

DHEA is a cognitive one. EPA mediates cellular inflammation. It inhibits an enzyme so we don't produce this thing that I know we're going to talk about called arachidonic acid.

Do you watch Indiana Jones? I don t. One of my favorite characters. Indiana jones hates a few things. He hates snakes, he hates Nazis, and he hate poison.

They use the aracidomic acid in that bottle that he so very much. DHA is interesting in that it takes up more space in a membrane. And as you said before, so articulately, it makes the membrane more fluid.

So take EPA, DHE, put them together, and give me some of the health promoting properties. Great point you bring up there. EPA and Dhe, while we use them, together there are some opportunities for us to look at maybe trying to highlight or increase maybe just DHA.

For example cognitive impairment, retinal issues, those kind of things. But I think your categories are just perfect. The EPA with the anti-inflammatory component, the DHEA with a cognitive component.

What really the magic happens and I always tend to be using EPA and DHH together. And when we do that, if I'll talk about study here later on which about the testing.

that you can increase your EPA, increase you DHAs, we'd use them together in higher doses and we can actually stimulate muscle protein synthesis which is going to decrease the loss of muscle in the aging population which we know the number one predictor of longevity is the amount of lean muscle a person has.

And so now we have fish oils introduced into this environment of maintaining healthy muscle mass, reducing risk of osteopenia, or reducing the risk sarcopenia.

These kind of things. And so I think using them in concert together is critical. So again though, if somebody comes in and they're like, hey, I've got retinal issues, cognitive issues.

I'm going to put them on EPA for sure, because there's going be inflammation, glial priming. There's gonna be something going on there. And then I'll boost up DHA.

What's nice is we use some tools. I can give an EPA Dha and a DHa. Yeah, I agree with you wholeheartedly. The standard ratio I think in a good quality fish oil would be 3 to 2 EPA to DHA, higher if you're worried about brain.

You mentioned the word longevity without question, the incisive conversation of now, in the last two years, and

maybe the next decade. Who really knows?

There's a study that said if take 2 grams of EPA-DHA You extend your life five years and that's five is a healthy life. I'm 59. Give it to me, you know, right?

Yeah, put it in my veins. Here's another one for you. Four point seven years of Alzheimer's free life if you take those two grams of omega three fish oils.

Well, and as you said, delayed onset muscle soreness, muscle growth, Muscle Protein Synthesis, hand grip strength. I think we're making a compelling argument for everybody to take fish oils.

Yeah. Well, let's make a few more. So we know that fish oil could actually reduce neurodegeneration risk. We know it can reduce neural inflammation.

Longevity, Brain Health, and Muscle Support

I don't remember, when you went to school, the glial cells of the brain, we were kind of taught, oh, it's just scaffolding, you know, there's a structure, and now we can know these are the immune cells with the and glial priming can get turned on and it leads to these terrible conditions, ALS and Parkinson's and Alzheimer's.

And I think people are really wanting to, A, they wanna live longer, but I wanna remember my longer life. When you look at fish oil, it's gonna impact both of those.

It's going to actually reduce my neuroinflammation, reduce risk of cognitive impairment, and its gonna help me to live long. That's really what I'm after.

We know you are the gut brain super highway expert. And we look at the impact of omega threes on leaky gut. I tell patients all the time, you need four things to heal your leeky gut, vitamin D, glutamine, zinc, carnosine, and fish oil.

You can not have a healthy gut without fish. So you've got to have that healthy got repair. We look at hormones already. I mentioned when a woman comes into me and we do a lot of hormone testing.

We'll do the Dutch test. but I'm not jumping into that until I see what their fatty acids are because hormones are not going to work without the cell membrane dynamics being in play.

And so let's check that first. Let's normalize that. I'll tell you, it's amazing to me the number of women that come to see me and they're like, I need this, this and this.

Now save them 600 to a thousand dollars of testing just by simply doing an inexpensive fish oil test. Seeing that they are low, put them on fatty acids, and 90 to 120 days later, they're like, I'm feeling better.

I agree with you wholeheartedly on that as well. So I love the microglial, so for everybody listening, there's a thing in a body called macrophages. They're kind of like your Pac-Man.

The eat up cellular debris. they do a good job when they are in what we call an M2, not trying to get geeky, Dr. Charles knows what I am saying, an m2 fashion.

If they in an n1 fashion, the overeat, and they are pro-inflammatory. Microglial are macrophages of the central nervous system. The data is robust that these microglials are now attacking the brain and therefore leading to a lot of neurodegenerative disease.

As a matter of fact, we all know that Alzheimer's is an immune dysfunction of Now, you mentioned the gut-to-brain axis. Omega-3s are great for increasing the biodiversity of the cut and that improved diversity increases the number of species of healthy bacteria in the got which leads overall quelling of inflammation in body.

And I'll hit you with one more. Omega-3 fatty acids stimulate vagus nerve tone. Yes. That's huge. And I mean, we could have a whole seminar on vaguus, nerve, tone, but before we go down that rabbit hole, this is not something that we discussed before, But I know you're ready for it.

Omega 3 fatty acid in theory are supposed to convert to something called resolvents. Yes. Just like flax seeds to flex seed oil. Very low conversion. So what do I do?

And wait a minute. What are these, if you will, pro-resolving mediators, Dr. Charles? Well, I tell you, what a great point you bring up, because this is so exciting.

I mean, who's really published a lot on this, but I remember even going back to my old guidance textbook of physiology and him write about resolvents and then seeing the impact of these pro resolving mediator, s I describe like this to patients.

When you have that, you mentioned the macrophages, those Pac-Men that come in, if I have damage to tissue or if i have a pathogen, a chronic infection, that's going to lead to neutrophil infiltration.

That white blood cell that comes in and it converts to these macrophyces that try to eat up the debris. Well, what happens, and this is simplistic, but what happened is when it gets into the tissue, a little stopwatch is started.

And it's gonna, in the next 10 to 12 hours, that debris field better be pristine. Because if it is, great. Inflammation has resolved. Point A, point B, points Z, all the way to the Z point, now I'm done, it resolved, everything goes back to being healthy and happy.

But if I get stuck and the timer goes off, and mom comes and inspects the room and your room's not clean, you're not going out tonight, your grounded.

And so that's what happens and the whole process starts all over again and we never get from point A to point B.

Gut Health, Hormones, and Pro-Resolving Mediators

We have people that are living, if I use the alphabet as an analogy, that is stuck at letter M or letter N all their life because they're so chronically inflamed so much immune debris that they're never getting the resolution of inflammation where the PRMs are fantastic.

Pro-resolving meat eaters, they are not really anti-inflammatory. We need some inflammation to drive proper immune function, as you wrote about in the immune review.

But you have to be able to resolve the inflammation appropriately to have it get to a place. Now, the amnesia is going to say, I don't have be on hyperolder any longer and I can be healthy.

The next question always is, do I take fish oil or PRM? Yes. I like to use both. And so I will frequently almost I cannot think of a patient right now that is not on EPA DHA and that will also be recommended PRN.

Now, the nice thing about PRMs, they don't have to be very high dosing. To have a really beneficial effect so you can add in a couple capsules to your supplement stack and not be a not Be a big burden for somebody but profound results because you've mentioned it already Just like flax oil as they get down to EPA DHA.

It's a very small percent I believe it's less than 12 to 15 percent of the EPA. Dha converts to the resolvents. Great discussion on pro-resolving mediators.

You know, you and I both lecture nationally and internationally, and it's still a little, no pun intended, a sticking point for a lot of doctors not really getting around what you just discussed.

I try and let them know that inherently in the word resolution resolve, it allows for the resolution of inflammation.

Nothing does that as effectively, not turmeric, not omega-3s on their own.

So the example I use is, think of a six-room house. You have turmeric. It shuts off the inflammation in one room, ginger one- room. Because pro-resolving mediators are a lipid class switch, it's the master switch for inflammation.

But like you said, you set something that was very in that it allows for the initiation of resolution. It doesn't let it go too high, but it doesn t allow chronic inflammation to run.

And that's the problem in America. Everybody's inflamed, our patients are pre-inflamed. I think COVID really showed that because I that s what led us to this idea of a cytokine storm.

Pro Resolving Mediators with Fish Oils because the fish oils have something called a Marison, again not trying to get too geeky, that work for inflammation in the muscle and the Pro-Resolvent Mediaters don't necessarily do that.

They do an overall inflammation switch and they do overall nerve switch. Everybody PRM is probably solving mediators with omega three fatty acids. So I hear the question.

They're going to say, is all fish oil the same then? Can I go to Costco? Don't worry about for the company guys, Gary. Give me Costco. It's eight dollars.

Boy, that's a big, hard. No, don't go anywhere like that. That's my that my soapbox issue that that makes my the hair in the back of my neck stand up.

My blood pressure rise a little bit when someone says, hey, I went to GNC. I want to target a Wal-Mart. or a big box store and I bought fish oil because it's cheaper.

Let's just talk about quality off the table for a second. Look at the dosing on the label. So I had a guy come in years and years ago and I was doing a talk here at the clinic.

And I mentioned that the high quality pharmaceutical grade fish oil supplement that I carry and prescribe to patients is superior to what you can get.

He kind of blurts out, liar. So, I kind to stop and just kind talk to him a little bit. I went to Sam's Club and he named the bottle size and the price he paid.

So I want you to do this. I wants you go home and I went to look at the dosing of the capsule that you're taking from Sam's club versus the dose, you know, the bipolar that I'm giving you.

And he would have had to take like 25 or 30 capsule a day at this time to meet two capsules of what I was prescribing. So it actually became cost prohibitive for him to the junk product.

But now let's really take rice off the table because the most expensive treatment is the one that doesn't work. Yes. Quality is huge. And so we understand that fish, our fish industry is being altered by just toxins in the environment.

You do not want a fish oil that's going to increase your risk of mercury, lead, PCBs, dioxins and these things. So you want to use fish oils that have been obviously clean, but also third party certified to be pure any contaminants.

We like to eat and supplement with the smash fish. smash is an acronym, sardines, mackerel, anchovies, salmon, herring. These are gonna be lower on the feeding scale, lower levels of heavy metals to begin with, but then they're also gonna to be processed in a way that's not going to allow the accumulation of these toxins.

There's a study I present, when I lecture to doctors, I do a 48 hours program as you do, And when I lecture to them, there's a slide that shows that people who use fish oil that is contaminated, it will alter their lipid.

So, hey, I've got triglycerides of 170. I have heard that fish can lower trigliserides, and it does. If I take this

contaminated fish, my triglicerides go down.

It must be doing good, right, Doc? not so fast because they show that the oxidative stress increased, increasing cancer risk because of the chemicals that were in the fish oil.

So buyer beware, you want a very, very clean fish soil.

Fish Oil Quality, Purity, and Transparency

And so that's a big issue for me. Quality is paramount when you come into fish, especially when we'll talk about more in dosing, but when your doing higher doses for short periods of time, I don't wanna bioaccumulate toxins.

I, I dont want that parking in the parkings places of my cell membrane because the fats I ingest are gonna go and they're gonna park themselves in my parking spaces of myself membrane.

It's gonna be either nice cars that I want to have there or it's going to be junkie jalopies that don''t start and I can't move out there and then they just sit there forever and the wheels fall off and it sitting on cinder blocks.

And so that's gona cause alterations and so quality is paramount. I agree wholeheartedly on that. Again, you've got me a bunch of times. I'm sweating, I am getting so excited.

To get the hair up in the back of your very calm head, this is at the top of the mind of consciousness. This could be our capstone moment together, without question.

Fish oil quality, purity and potency, like you said, no mercury, Freshness, totox, that's the oxidative thing. So if you ever looked at the scale, you want it less than 26, so you don't want too much oxidation.

You can open it up and smell it. If it smells like fish, it is not a dish. Get rid of it! So good, yes. Bioavailability. And I think we should talk a little bit about third party certifications.

There's some quality third-party certification, and you want transparency. You want the transparency about the sourcing, the processing, how they get the method.

Ask them, where do you catch the fish and where's your factory? So if you're catching fish in Norway, and you come from Norway and go to New York, Westchester County, that may be a little bit of time.

And people say, well, I don't know what you mean by that. I said, do you ever see the movie The Perfect Storm? They had a long way to go, to save the fish, and they needed some ice.

That's net-caught fish. You want to use the line- caught fish so everybody's in the net. If I am not a fisherman, then I'd rather watch grass grow. Apologize to everybody.

Here's the nets, you're grabbing a whole bunch of fish and you've got all these fish to deal with as opposed to a line court catching the fish and taking out the essence, the guts of it and attending to it right there.

How far line versus net caught, how far is the factory and all of these other things. And that's one of the reasons why they need to come to you because I don't think they're going to get that delineation that they needed in Costco, vitamin, CVS or whatnot.

Or even from a lot of other docs, because that took time, because I know that I did the same arduous search. Well, and that's the point. You're in it for a whole different reason than the big box store.

Your in healthcare as a provider and you did all the due diligence for the background search to find the companies that you feel are valid that meet the criteria to help your patients.

Because really, by extension, I can only be as effective as the tools that I use. So it would be foolish for me to say, hey, yeah, go buy this junk product.

And when it doesn't work, it's going to make me look bad. I want to be effective, as a clinician, if I could be. And so what you've spent time saying, hey, you know what, I've vetted this.

I have looked at this, so I understand all of your advanced degrees in nutritional training that you went because your focus is on the health of the patient, not trying to make a quick buck and then here and gone, at a big box store.

And that's where I think going to a reputable clinician that has veted. of people in the functional medicine realm or in nutritional realm that say, oh, just go to your health food store where the guy behind the counter didn't graduate biology.

He's going to tell you, hey, take this because I just read it in Breeders Digest or something. I'm opposed to that. doing and use the same things that I would give to my wife who I love and my three kids who i love.

If it's not good enough for them why in the world I give it to patients who um I care about. And my goal again this is this we're not in a sick care model we are operating in health care models.

Just be very frank The health, the sick care industry makes money on fat, sick, nearly dead people. Right. If that's where I make my money, I want to keep them on that sick nearly-dead.

Now, full transparency. I made money healthy, well, optimal individuals. And so I wanted to get them to that level. And to get them to that level, I have to use healthy, optimal, good tools to do that.

And then they don't need as much assistance. They can become educated on this. As they start to turn their brains on, because they're using good product, they can do the research now and say, oh, this is why I'm doing this, so.

I thought you explicated those points really well. I just want to add a couple of things to pull them in from right field. Disc injuries, we're both chiropractors, that's our origin.

So the intervertebral disc, two to four grams of omega-3 fatty acids, real, really popular. It's that time that I like to do, it's called rapid fire.

Dosing, Food Sources, and Athletic Use

And I know you're from North Dakota, so strap in, let's see where you can go and what you You know what? I don't want to take those fish oils. Can I get enough from food alone?

Possibly, possibly. But here's the situation. Ask people how many like sardines. Most aren't eating sartines, I love sarnines and avocado. I loved them.

You don't want to eat swordfish. One serving of sword fish is going to exceed your lifetime exposure to mercury. You Don't wanna go that route. So people are just not going have the dietary expansion they need to get it from diet alone.

I've not seen people be very optimal with diet along. I do believe that supplements are going be a very very necessary for that. One to three grams for general maintenance.

I like three to five grams a day of EPA and DHA for cardiovascular disease prevention. If I wanna lower homocysteine, if I want to reduce the stickiness of my blood, I'm gonna go on that range.

So that's kind of the dose that I'll use for that. And I think you can't get that and diet alone in my opinion. Omega-3 fatty acids, good or bad for triglyceride levels?

Very good. Omega-3 fatty acids and healthy body composition, yay or nay? Definitely, definitely. omega- 3 fatty acid for recovery from muscle injury, like a pain-free and result because the reason I asked you that there was a study that showed that just two grams, the amount that you recommended, reduces joint pain and the need for non-steroid anti-inflammatories in 60% of the patients with neck and lower back pain.

So instead of aspirin, nonsteraid, antiinflammatories, Aleve, ibuprofen, you can take two-grams of fish oil. They are more effective. Which those NSAIDs and aspirine ibiprofib you mentioned create leaky gut.

Fischl heals leky gut, lekey gut you need three things to turn on autoimmune disease, genetics, environmental exposure and leakey gut so now you're creating the environment where now, you can turn in chronic disease and autoimmunity, don't do that.

Avoid the NSAID when you have something so safe and natural, two grams of EP and DHA, that's super simple, I can get that in two capsules. Two capsule that we talk about daily, really interesting, we talked about the gut I mean NSAIDS damage the blood brain barrier, They do decrease pain, they impair healing.

The nutraceuticals, the fish oils, you're talking about decreased pain and promote healing, which do you want, Mr. And Mrs. Patient? It's just a real simple conversation.

Yes. Yeah. So you alluded to a test, OmegaQuant, we both use it in our office, and Omegaquant tests for several different things. Let's start with testing for just Omega-3s.

Okay, so very simple. This test will look at omega-3s. You do a finger poke, you send it to the lab in South Dakota. They're gonna tell you, where are you at with the spectrum?

They are gonna say greater than 8%. I like to see it 10% or higher for the omega 3s? Most people are at 4%. Or less, yeah. Yeah, it measures the amount of EPA, DHA in your blood, specifically the red blood cell membrane.

Omega-6 to omega three ratio. I'll give you one. anywhere from 15 to 25 to 1 is the average American. So why don't you share the optimum and just tell them how to get there.

It's a ratio. When you increase your omega-3s and you decrease the intake of omega 6s, think about processed seed oils, fast foods, processed foods. Hold on, I'm interrupting you because I got this guy on.

I apologize for interjecting. There's this Instagram Influencer, Lane Norton, smart guy. And he says, there's nothing wrong. There's no data that says that if you take processed seed oils, they're detrimental to one's overall health.

Well, I disagree with that. I think there was plenty of research that is contrary to that statement. Here's the situation again. Look at the omega quant, which looks at 6 to 3 ratio.

it looks at your arachidonic acid and it looked at you're trans fat. And I'll just take them being in clinical practice for 20 years. The patients that are consuming the most processed seed oils have the worst omega quants and so they don't get healthy.

I can't change the parameters if I kept them on all the processed seat oils. So and here's the situation, I'm not a researcher, i'm a clinician. so to me the end of one matters.

So you could come up and say, well, this research shows this, and this. I'm going to say hey, listen here. Miss Johnson couldn't walk a block without severe pain.

And she was forgetting her kids' names. As she came in with omega-3 levels in the can, her 6 to 3 was elevated. Her arachidonic gas was off the chart.

So I took her off her seed oils and put her on healthy fats, gave her oil change, increased omega 3s, decreased omega 6s. Decreased trans fats. she can walk two miles and she could pick her grandkids up.

That's really what I'm interested in. I am at a loss for words because that was wonderful. It's beautiful. I feel the same way. No processed seed oils and I've limited a lot of grains.

You know, I heard someone just talk about gluten and everybody knows Iam anti-gluten and i know you are also. So we don't have to, you know hunt that buffalo if you will.

However, somebody just said to me, when you really think about it, gluten comes with grains, so it's inflammatory and spikes your insulin reaction as well.

So if you guys want to decrease your omega-6s and have a possibility of getting a good ratio, you should decrease grains. There was a book out, it was no grain, no pain, talking about the joint.

It's hard to get your Omega-3s up, hence the fish oils. Right. So an interesting concern is those omega-6s, what do they turn into? Is that the poison that we talked about before, arachidonic acid?

Well, yes, they can be, and they'll have that downstream effect of that poison. And again, just so we're not throwing the baby out the bath water, there are some good, healthy omega-6s, borage oil and eating primrose oil, those are maybe helpful for skin and for some hormonal imbalances.

But this is where, again I test don't guess because I'm gonna get the omega 3s up and then we might add, we were talking like, 250 milligrams or 500 milligrams of an EPO or something like that.

You don't need to go very aggressive with it. But I tell patients this, your omega 6 to 3 ratio should be 4 to 1 or less. I've been taught that when it is greater than 15 to one, it's not if you're going to get an autoimmune disease, is when.

And if your at 20 to 101 or higher, if have an Autoimmune Disease, which one do you have? And that's how impactful these omega-3s are on the overall health.

But arachidonic acid, you can measure that on omega quant, is that pro-inflammatory. We need some aracidic acid. Healthy immune, some oxidative stress.

When aricidomic acid gets out of hand, it actually alters the brain function. So it increases the glutamate excitotoxic system in the brains. Glutamates are kind of the accelerator of brain.

dampens or inhibits GABA. GAB is our anti-anxiety neurotransmitter. It's the calming one that we think about. And it actually changes how the brain releases the cortical releasing factor to create stress.

So high arachidonic acid makes you more stressed. Well, stress, toxins, malnutrition, that's what's killing us. And so we have to get that arachidonic acid down.

Yeah. Neurotoxic effects of aracidomic acids, to add to what you said, they create free radicals. They can amplify the effects obviously causes overall brain inflammation, cell death.

Now, interesting, you talked about glutamate. Glutamates, as you said, creates excital toxicity. It opens up what we call this synaptic cleft and causes calcium to go from outside the cell to inside the cells where calcium now can plaque.

By the same token, conversely, it allows potassium to go from inside the cell, which is a great source of energy for axons. It goes outside the cells, and it damages the axon.

Now, one of the things that you may want to take with omega-3 is if you're concerned about neurotoxicity, maybe taurine is an amino acid, just to bring that in.

from left field. One other thing I wanted to add, a lot of people ask me, does omega-3s work synergistically with

anything else? Obviously, we've added pro-resolving mediators.

Good data on it adding a positive effect with probiotics because it creates a stickiness to the epithelial cell on the gut. Got any other factoids or gems you want to share?

Well, let's throw in that. I love the NMDA receptor, and I loved that calcium influx picture that you just painted for us. And taurine is a great thing for stabilizing the neuronal membrane.

Inflammation, Ratios, and Clinical Takeaways

Also magnesium, because magnesium is the cap of the MDA receptors. Stress depletes magnesium. If arachidonic acid is high, I'm stressed. Stress depletes magnesium.

So now I've got a fatty acid imbalance. My brain is shrinking in size. I got unstable neurons. NNBA receptors with calcium blowing in there causing catastrophic neuron degeneration.

Let's throw some fatty acids into it. Let's throw some taurine and some magnesium to that picture and get that brain to calm down. So begs the question, really, what is the choice test or would you consider the omega 6 to 3 ratio a choice tests to determine someone's inflammation?

I would do the omega quant, because that way I'm getting the Omega 3, I get the 6 to 3 and the arachidonic acid. Then I am getting a really clear picture.

How inflamed is this person really? I know you've heard this, but this is for the listeners. I was told not to take fish oils because it's a blood thinner.

So, I'm going to get some work done on my gums. They said not take it. Be careful if you bump yourself. You may bleed inside, etc., etc. Would you like the podium on that one right now?

Well, you know, and I don't have the citations in front of me, but you can look at the literature. There is Fish oil decreases platelet stickiness. Okay.

So there's a difference between blood thinning and platelets stickness. That's an important point. And there is research that shows better clinical outcomes on people who are on omega-3 fatty acids before and after surgery.

Again, I wish I had the citation ahead in front of me, but you can find it on PubMed. and there is no risk. I'm trying to remember, I think Dr. William Sears wrote a book called The Omega-3 Effect and that highlights some of the challenges that have been really the concerns pushed away.

You're not going to cause excessive bleeding on one to two grams of fish oil. That's just not gonna increase bleeding of any warrant to be concerned with dental procedures and surgical procedures or thinning the blood too much.

So it really begs the question. I think you've convinced everybody they need to supplement with omega-3s. They need Getting back to the idea of rapid-fire, give me your five favorite omega-3 foods.

Okay, it's the smash fish for sure. It's sardines which I love, but sartines, mackerel, anchovies, salmon, herring. That's my five-favorite omega 3 rich foods we can throw in there.

I'm from North Dakota. My father-in-law has cattle and it is grass-fed grass finished beef in North Dakota with a great omega three content. that's an option there and eggs can be a When you say eggs, you mean the yolk with the egg.

The yolk was the. Yes, You've got to have the whole egg and it should come from chickens that do chicken things. They eat chicken, things they eat, the bugs they.

Eat that they're roaming around like know where your eggs are coming from. You can take an egg from the grocery store and an. Egg from The farmer that you purchased it from is doing organically and you can tell a difference the moment you try to crack the Egg.

And then once you crack, look at the yoke color. Like, it's a big difference. Yeah, nice bright orange, going to be nutrient rich, kind of weak yellow, like the seventh time you go to the bathroom in a day, just not going do it.

No dosages. Let's talk about dosage is for the regular person. So again, we'll do this rapid fire adult male adult female. maintenance one or two grams per day of EPA DHA.

Now, interesting. I agree with you. Two grams a day is what I usually do. If you haven't taken any omega-3s before and you put them on the first time, there's some data that says you may want to go up to four grams to build the cell membrane up.

You see you're not. Now, here's the other question about that. What about 12 to 18-year-olds? We'll call them, obviously, teenagers. Yeah. So, again, the dose is going to vary.

I depended so much on that fatty acid test, but I like the idea of one to two general maintenance or two to four for general Athletes that are in contact sports that have a potential of head injury, we may want to keep them on a four to six gram maintenance dose because we know that within six hours of a head entry, you're going to get leaky gut, and you have inflammation so that you can have that stuff on board.

I was just training with Randy Valdry, who's a nurse practitioner from the West Coast, did a master class with Dr. Karazian Institute, and he was showing an Omega challenge where he recommends with mild cognitive impairment or neurobehavioral issues, 10 grams per day for six weeks to see how the patient does.

What? That's wonderful. So you get a lot of wiggle room. As you know, the clinician, it's so hard to just say, here's a blanket statement, Here's the cookbook.

We don't practice cook book medicine or supplements or nutrition. It's precision medicine for the patient. So the real right answer is find the dose that makes you feel the best and brings your numbers into where you want to be.

If you're not getting, or you wanna be at one to two grams, bump it up to four. You're gonna hurt yourself. And if you are feeling great at four, stay there.

root cause resolution will occur by precision medicine. I think that's going to be the quote. You know, you opened up Pandora's box about concussion. Number one athlete who gets concussions is a female soccer player.

Omega-3 fatty acids promote neural cell survival, reduction of cell death, production of oxidative stress, synaptic plasticity, neurotransmission. And here's the takeaway with any of your athletes that have a concussion.

Given fish oils, 75% of the damage abates within the first 30 days. Here's a caveat to that. Take the fish oil before and you will have tremendous declivity in concussions.

That's great. So, I'm going to be courageous. Let's go for it. I know we're going raise the roof on this. How many grams in acute concussion, 200 pound high school male athlete, 18 years old, what are you going to give them coming in?

Let's see who can lose their license first. I would start at 10 grams. That's a big boy. with a concussion and I honestly probably go higher than 10 grams.

Yeah. Where would you start? Yeah, 12 to 18 grams for the first week. I know I'm in a lot of trouble now. Here we go. And it would be a week and then I would have it by week two.

You've got to get it. leaky gut. It's those tight junctions that get compromised in a concussion and they do so

because of the decrease, dramatic decrease in vagus nerve tone immediately.

And that would be a great conversation about zonulin and occluding and LPS. the women a little bit less with the fish oils because they're a bit lighter.

So I'm very much like you, but I look at the body weight as well as the ratio. Can we just talk about this for a second? The obstacle we face with patients, they say, do you take fish oil?

No, I don't take Fish oil because I do feel good when I get gastric upset. And here's what I always want to know. Number one, is it a quality supplement?

If it's poor quality, that's why you're burping it up. But secondly, You have to be able to digest the fat. And if you can't, don't stop taking the thing that's going to help you live longer, get your gut fixed.

You might need a three month, six month gut protocol, but get the gut healthy so you could tolerate the fissure. Now we can stick them in the freezer, they can take it at night, and they could do these things as a band-aid.

But I just want to hit that point because so many people, I don' take fischl, or I tried them and didn't do well with my gut. I burped them up. It's like, let's get your gut healthy.

You should be able to take your Fish Oil at the doses that we're talking about. And I've already had six grams of Fish oil today and I'm feeling great.

I should able digest the fatty acids I am consuming. Clearly, clearly. That is a huge takeaway everybody. If you're burping up your fish oil, it's probably not the fish from a quality company.

you have a digesting problem and address it, please. So we come to that point in the podcast where my buddy, he watches him every week from Geneva. He's my guy.

I'm his protector in life. And he says to me, Rob, with my Oxford degree, give me three things that I can do on Monday to be better. So I am going to tell you what he needs.

he Needs an oil change. What can he do? Number one, increase omega threes. and yes, by that, I mean supplement. Take a good high quality fish oil. Secondly, decrease the processed seed oils.

I'm just telling you, just try it. Do it for 30 days, if it works for you great. If it doesn't, send Dr. Silverman some ugly mail and he can deal with it, but decrease seed oil.

And then again, the clinician and me, The Third Takeaway, test, don't guess. You're using the OmegaQuant, Dr. Silverman, you can help them get that. They can contact you.

It's very available testing that they can have. And it's so easy. The report's easy, Don't shoot in the dark. Know what is what's happening. I'm sure he wrote those all down.

In the last thing I want to ask, A lot of people say, hey, I consume extra virgin olive oil. Is it the same as omega-3 fatty acids? No, it's not. But it is by itself the polyphenol richness of extra-virgin olive is high-quality olive, which we can do a whole other thing on.

I love it. Pro olive but it isn't the Right. It's an Omega 9. We're talking about Omega 3s. This has been extremely illuminating, to say the least. I greatly appreciate it.

Dude, you delivered. The ball went out of the park at 450 feet and it's still going. It hasn't hit the ground yet. I appreciate you. Thanks so much. Well, thank you, Dr.

Subma, and thank for your service to our industry and our field. As a clinician, You have helped me and I want to

thank You and for the opportunity to speak to your audience and what you've done and the books that you have written have been a benefit to me.

So thankyou. And I appreciate all that I learned from you in this composite 53 minutes. It was great. And by the way, you were good at rapid fire. Everybody, Charles Cefcik, Robert Newman, Proven Health Alternatives.