## Michael Roesslein:

We are going to talk today about CellCore Biosciences, and Dr. Jay Davidson is the founder of CellCore. I have known about your products and your company for quite a long time. When we have asked our community which brands and products do they have the most trust in, or would they like us to add to our shop and have us start working with and make available all through our site, yours always come up. I've personally been taking a few of them myself for two years now, maybe longer. The TUDCA product actually, I'm pretty convinced is responsible for pretty much eliminating my non-alcoholic fatty liver disease.

So, for those who don't know Dr. Jay, they mention you by name quite a bit, so I think a lot of our audience is familiar with you or watched your summits. I'm going to just do a little intro bio. I'm your host, Michael. Everybody here probably knows me, but I will introduce Dr. Jay, and then we'll get started. We'll talk a little about CellCore, and we're going to go over some specifics about a few products that we added to the shop in our new website launched this week.

So, you may know Dr. Jay Davidson as the Lyme guy, as one of the docs behind CellCore Biosciences and Microbe Formulas, or as an expert speaker, an international bestselling author on foundational medicine and overcoming chronic illness. After nearly losing his wife, Heather, who's also a doctor, to Lyme disease twice, through trial and error, Dr. Jay Davidson finally learned what was needed to save her life. Once she recovered, he took everything he learned and turned it into a five-step protocol, using the exact tools and solutions that gave Dr. Heather Davidson her health and life back.

One, I'm really sorry that you guys went through that. A lot of the work I've done has been driven by my wife's multiple autoimmune conditions and the struggles and the challenges that we've been through with that. So I can relate to the frantic mix of caretaker, husband, problem solver, trying to fix everything while freaked out yourself. So kudos to both of you for making it through there.

This is when Dr. Jay realized that they had identified a major gap in the Lyme and chronic illness community. It became his mission to help these people regain their health, and this led him to co-found CellCore and Microbe Formulas, health companies who create solutions and supplements for gut health, immunity, and chronic illness. He completed his undergrad studies at the University of Wisconsin–La Crosse. I'm originally from Chicago, so not that far.

Dr. Jay Davidson: Yeah. [inaudible 00:02:50].

Michael Roesslein:

And majored in biology... Yeah. Majored in biology with a biomedical concentration and chemistry minor, and received his doctorate of chiropractic at the Northwestern College of Chiropractic in Minnesota. So you are in a much warmer place now-

Dr. Jay Davidson:

Yes.

Michael Roesslein:

... than Wisconsin and Minnesota. I am too. There is winter here, but it's not... I kind of scoff when I hear the word winter now, if somebody's never been through a northern Midwest winter, there are levels to that game. It's not bad. It doesn't drop below about 30 Fahrenheit here, so that's tolerable.

He's also an author of two bestselling books, How To Fix Lyme Disease, Three Secrets to Improve Any Lyme Disease Treatment, and Five Steps to Restoring Health Protocol, helping those who haven't been helped with Lyme disease, thyroid problems, adrenal fatigue, heavy metal toxicity, digestive issues, and more.

So you've been a busy man. You guys have really unique formulas, really unique delivery systems. So I will get out of the way here and ask you about CellCore. We just learned about the founding. It was out of your own experience of necessity. If there's anything you'd like to add to that to introduce the company, that's great. Then I also want to introduce the concept of your carbon technology, your fulvic and humic acids, polysaccharides. I find that's very unique to your formulas. So maybe introducing that concept first, and then we can go into a few specific products, if that's okay with you.

Dr. Jay Davidson:

Yeah. Yeah, I actually put together a bunch of slides, if you want me to share them.

Michael Roesslein:

Sure, sure. You're a cohost now, so it should work.

Dr. Jay Davidson: Okay. Let me just jump over. See if you... You see the slide?

Michael Roesslein: I do. I am making sure that... Okay, great.

Dr. Jay Davidson: Everybody else see it?

Michael Roesslein: Yep.

Dr. Jay Davidson: Okay.

Michael Roesslein: Yes.

Dr. Jay Davidson: Yeah, so-

Michael Roesslein:

[inaudible 00:04:49] drop in the chat. Hold on one second. Just let us know in the chat real quick, if you can see. Yep. All right, you're good. Thank you. Go ahead.

Dr. Jay Davidson:

Sweet. So, yeah, CellCore we started in 2017, Dr. Todd and myself, healthcare practitioner brand, really the only company with the carbon technology and big focus parasites, cleansing, detoxification, drainage, mitochondrial support. We're on a mission to change health. Obviously my wife has... Yeah, Michael was just going through, had her own health pretty intense journey, which led us down this path. But just looking at people that have been able to change and transform their health, just makes my day. This is obviously a pre-post of somebody with some pretty rough psoriasis. These are actually some worms people got out of their noses, the one on the left and the one in the middle. The stuff on the right is out of somebody's stool. So, kind of looks like bean soup, but it's definitely some pretty crazy stuff. And that, even the little video there of what came out of somebody's nose, so.

But just being able to see, as you mentioned, the autoimmune, even with your wife, just people struggling. The classic butterfly rash. Autoimmune and just the big changes, but our focus is really about detoxification. It is about removing the chemicals that are built up in the body. The focus in the last couple years has been about a virus. I think we really need to shift that focus to chemicals.

I just went on this today to look at the most updated numbers and they published from February, this is the EPA, there's over 86,000 chemicals that are registered to the EPA in the United States. Over 42,000 of them are active, meaning they're currently being manufactured.

So these are chemicals that are basically manmade. They're registered at the EPA. This doesn't include everything on the globe. And just because it's not active, doesn't mean that the chemical does not persist in the environment still.

So really, we live on one planet, one atmosphere. We share chemicals all over the place. This is really a big focus of ours, detoxing, which I know you want to get into BioToxin Binder, which we put together some slides for that too. But a big thing to emphasize, just the idea that toxicity creates deficiency. So there's a big focus of taking lots of vitamins, but if you look at the bottom chart there, where you see A turns into B with a little bit of magnesium. B turns into C for example, with a little bit of vitamin B6, for instance, as a co-factor. C turns into D with some zinc. But as soon as you throw a toxin in there, all of a sudden now you need so much more zinc in order for that reaction to happen. So this is just an example to give you the idea that toxicity can create deficiency. So you can take tons of vitamins, but if we don't get to underlying toxicity, then when can we ever really stop the megadosing or when can we ever really decrease it.

So at CellCore we focus with carbon technology, which are basically extracts of fulvic and humic acid, polyelectrolytes, polysaccharides. And fulvic acid is different than folate or folic acid, which is vitamin B9. So fulvic is a carbon molecule and so it's just us that basically has this proprietary process of extractions for the fulvics and humics. Then we add in polyelectrolytes and polysaccharides as well, too, and the reason why is it's really the backbone to the body.

So the body is primarily made out of 96% carbon, hydrogen, oxygen, and a little bit of nitrogen. So carbon, hydrogen, oxygen, just those three, make up 93% of the body. And when you look at the backbone of fulvic and humic acids, they're primarily made out of carbon, hydrogen, and oxygen. So, we're basically giving the body the backbone of what it's made out of. Minerals, as you see, isn't on that list. So minerals would encompass less than 4% of the body. And fulvic acid is really best known as the ultimate adaptogen. So rhodiola, ashwagandha, these different adaptogenic herbs that people talk about, really, fulvic acid is kind of in its own category.

Dr. Mir talks about the different ways that it can interact. And you can see that ginormous number, one with 26 zeros. That's basically the different possibilities of how it can interact and then also helps to direct metabolites. So it's really the ultimate adaptogen.

As I think about supplements, like, "What makes supplements effective?" It's the fact of being able to get a supplement through the stomach acid, because stomach acid will break apart a lot of the herbs. It's also, "Does the product itself have energy?" And then, "Is it small enough where it can go systemic or go throughout the body?" Those are kind of the three big things that I look at or really consider on the supplementation side and what we focus on with CellCore.

But the carbon technology, which are, again, the extracts of fulvic and humic acid, polysaccharides, polyelectrolytes, they primarily do three main things. They bind, so they bind onto toxins or more of a technical name is toxicant, is another name that gets thrown out there, but I'll just use toxin as a general basis.

The carbon technology also helps to protect and deliver. So if it's mixed with herbs, it'll actually help to buffer that through the stomach acid so the stomach acid doesn't tear it apart. Then helps to deliver it to where it's going to go because of the size of the molecule and it's ability to carry. The other thing too, is when you go into detox and pull something out, like what the BioToxin Binder does, you're going to have tissue that's abnormal after that's pulled off. So you want to basically heal the inflammation. You want to heal the abnormal tissue. That's what the carbon technology also helps to do is restore and support that tissue.

Then just from a quick science standpoint, there're different bonds that happen from a chemistry standpoint. There's covalent and there's ionic. So when we're talking about bonds, it's basically, let's say you have some glyphosate in the body and we want to bind onto it. If I'm going to bind onto it, there're different types of bonds. Like in covalent, which you see on the bottom left-hand corner, where they're holding basically elbows like when somebody's walking down the aisle at a wedding, right? That's a strong bond. That's actually where they share electrons. Or you can just hold hands, which is basically you're transferring electrons, ionic. The takeaway here is covalent is the strongest bond. In a chemistry standpoint that's actually what chelation is, is a covalent bond. Ionic is a weaker bond.

So, if I bind onto a chemical ionically, it's likely that it might release halfway out the body. Whereas covalent, it's going to be locked on. And from a detox standpoint DMSA, DMPS, EDTAs, which I've all used in the past too. Those are all ionic bonding, which is, again, more of that hand-holding versus the interlocking.

Then if anybody's used activated charcoal, which I've, again, used over the years just being in this health realm. The big difference is activated charcoal is a spent carbon.

So, if I can give an example. If we have a fireplace or a campfire, for instance, we throw a log on there and the log burns, and now you have the ash. So the energy's already been spent by the wood creating the fire with the heat given off, and then you're left with the ash and you put that in the capsule. That's essentially activated charcoal.

So what that means is the energy's already spent. On carbon technology, the energy's unspent. So it means that there's higher energy potential for it to create reactions or for it to move throughout the body. The other big difference, I mean, there's multiple, as you can see on there, but activated charcoal too is primarily just large chain carbons. So they just stay in the gut. Where the carbon technology is large, there's even medium with the polysaccharides, but the large and small chains. The small chains are the fulvic portion, which will go systemic throughout the body which will cross the blood brain barrier.

So, versus activated charcoal kind of sitting in the gut, energy spent, it's also not selective. The carbon technology isn't selective and it can actually be taken with food. So if you're taking BioToxin Binder, you can take that with or without food. You can actually make an argument that it might actually be more important depending on where you're eating to actually take it with a meal, because if you're eating out

and there might be pesticides in the food itself, maybe it's not as clean. You're eating out at a restaurant that you're unsure, the pesticides in the food will get bound by the BioToxin Binder if you're taking it with food.

But obviously there's also times where you want to take it on empty stomach too, depending on your preference. But, I know, people ask me a lot of times about shilajit, lignite, humic, fulvic. Shilajit, lignite, just I would consider it a little bit dirtier. Fulvic, humic, is obviously where we get our stuff that we extract and that's where it makes the CellCore carbon technology in its own category.

You might be asking, "Where does fulvic come from?" It's natural. So, soil based microbes breaking down old plant matter for thousands and thousands and thousands of years, essentially able to recycle in the plant matter and it makes all this stuff bioavailable for us. So, everything is sourced for us out of the USA. As far as safety, this is just some research from 2020. So just a couple years ago, they did a 60-day study on humic and fulvic acid using rats for 90 days. And they were giving them 2,000 milligrams per kilogram of body weight per day. So essentially what that equals, if I'm 165 pound individual or 75 kilograms, it'd be 150 gram dose per day. And they basically saw no organ toxicity, no adverse events, which is NOEAL, N-O-E-A-L. There was actually another study done. Oh, go ahead.

## Michael Roesslein:

For those not really... People don't have a mental picture with that amount of grams or milligrams or whatever. That's a lot.

## Dr. Jay Davidson:

Oh yeah, yeah. I've got that on the-

#### Michael Roesslein:

They gave them a lot. That's a [inaudible 00:14:54].

#### Dr. Jay Davidson:

Yeah. So this is a massive amount here. This is actually a 60-day study on fulvic and they actually, instead of 2,000, they did 5,000 milligrams per kilogram. So if I was 165 pound individual, that's 375 grams, which usually supplements are dosed in milligrams. So that would be 375,000 milligrams per day of fulvic acid and they found no adverse effects, no toxicity effects, nothing.

So, if we're to equate that volume, as Michael was saying with BioToxin Binder, if you're equating the volume reference, just to have an idea, that's basically consuming five bottles of BioToxin Binder per day for 60 days. So obviously that's five bottles, times 60 days, which is a ton of... I don't know why somebody would want to consume that much, but there's basically no toxic effects from it. So it's a very safe product is the purpose of me showing that with fulvic and humic acid.

As you look at BioToxin Binder, this is one of our flagship binders, BioToxin Blinder. And you look at the label, and that's why I wanted to show some slides ahead of this, because when you look at the label, you're like, "What makes this unique?" Right? Humic acid, fulvic acid. I see some molybdenum, 20 micrograms of broccoli sprout, yucca root, citric acid. I see other ingredients, polysaccharides, HPMC, which is just the capsule, basically a veggie capsule. What makes that unique? Well, based on the labeling laws, the humic and fulvic acid that we use in our proprietary process, all that goes on the label is just the common names, which is humic and fulvic acid. So, the label doesn't really explain, hopefully what you saw previously there. But our focus is really about high energy products and about systemic binding. So, the broccoli sprout is phenomenal. The yucca helps to bind ammonia. If anybody has

ammonia buildup from pathogens within the body. Then the citric acid actually helps to power the carbon technology as well, too. So there's some pretty awesome research on that.

I'm not going to spend a ton of time going through the research on that because I know there's a lot of things that I want to cover, but the purpose of BioToxin Binder is to bind onto chemicals. To help assist the body in detoxification of industrial and environmental chemicals and toxins, which don't seem to get enough attention. It also helps to bind onto, and this is what most people know it for is mycotoxins or what the mold produces. It's a toxin called mycotoxins. I mean, it's living in mold or eating mold or eating mycotoxins in the food supply. It also helps to bind on the toxins that parasites and Lyme disease produce. Like I mentioned, ammonia, which has a pretty distinct smell. When it's real high in people, I mean, you can smell it like coming out of people's pores. If somebody's struggling with yeast or fungus, this is a great formula. Helps with the sulfur metabolism as well too. That's molybdenum in there, helps with that. It also helps to upregulate oxygen, feed the microbiome, the good bacteria.

And like I mentioned, it's got the different sized carbons, so it's not just going to stay in the gut, but it's also going to go systemic throughout the body. And also help to heal and repair. So, as far as, I don't think I put this in the slideshow, but we measure things based on electrical connectivity, dissolved oxygen, pH, and just making sure the product has lots of energy. That way it's got enough energy not only to get into where it needs to go, but also once it binds onto the chemical, it's got enough energy to get back out of the body. And that's always a big piece in getting well.

As far as dosing, BioToxin Binder, the standard dosing you can see on the left is two capsules, twice daily. That can be, like I said, with or without food. If you're eating at home, I'd recommend BioToxin Binder usually without food, but if you're eating out, oftentimes taking some BioToxin Binder, or even just a cap, if you're not sure about the food, taking it with the food can help a lot of unwanted side effects from potential chemicals that might be in that food.

You can see the aggressive dosing, which definitely you never start there. But that's if somebody wants to push it further along. If you're in that sensitive category, you can see it's just one capsule, twice a day. Or if really sensitive, you can always open the capsule up, put the powder in a little bit of water, basically shake it around and just drink it. There's virtually no flavor when it's mixed with water. Open the capsule up so you can do very, very small doses and slowly work up. Again, this is a journey. This isn't, "Oh, I'm going to detox this weekend and be done." No, the chemicals have built up for 20, 30, 40, 50, 60 years of your lifetime. It's going to take a process to really unload them from the body. So that's the Biotoxin Binder.

This is really a big staple, I know Dr. Todd Watts early on with our company, CellCore, had a child in second grade that basically had to drop out of school because of his health. Started on BioToxin Binder and was basically a normal kid again and went back to school. Then early on we actually ran out of this product. We had a production delay. I think maybe a month or two, and so ran out and he started backtracking and we were lucky enough to find a bottle from somebody else that still had one left, send it to him, and his kid was back at school. It's just those type of instances and testimonials where you realize, "Wow, how impactful this has been." The parent had tried different binders and things.

So if you've never tried BioToxin Binder, I'd highly recommend, at least give it a shot. It's very well tolerated for kids, adults, even in the sensitive category. But again, just start slow and low. There's no reason to push and there's about 120 caps in there. So if you take two caps twice a day, that'd be like a month's supply in one bottle.

Michael Roesslein:

Perfect. Thanks for the breakdown. I had questions and you answered all of them in your product presentation. So, I don't really have any specific to this product, but we did include this in my wife's protocol for both of her severe autoimmune flares we traced back to a mold exposure. It was different mycotoxins each time, depending on how accurate you believe the urine excretion tests are of mycotoxins. But we loaded up on this for the last protocol recovery from her mold exposure. It's definitely my favorite binder.

I had to have it explained to me because I was educated on the, "You can't take binders with food or you'll get none of the nutrition from the food," line of thinking, which I think is still probably true with some of them. Like I wouldn't want to take handfuls of charcoal and other kinds of binders with food, but it took a very patient rep of yours quite a bit of time explaining to me and convincing me that it was safe to take with food. So then we did, anytime that we ate out, or food that might give her an issue or food that might have something in it, we took it with the food and then away from the food without. So thanks for the breakdown.

## Dr. Jay Davidson:

Yeah, absolutely. It makes protocol or just your daily dosing so much easier when you don't have to worry about the food or not, or two hours away. So yeah, it's a big game changer. Just easier compliance, which has been very impactful for a lot of people.

This is a chart, just an outline of the liver, which is essentially the detox lifeline in the body a lot of people talk about. Obviously, there's many organs that involve detoxification, the kidneys, and the bowels of excretion, people can say the skin and things, but the liver really seems like it's the big thing with phase 1 and phase 2 detox. So, phase 1 is essentially the preparation phase with the cytochrome P450 enzymes and oxidation, and then takes it to phase 2 where it conjugates and this is where a lot of the fancy words that people probably heard before, glucuronidation, like the whole glutathione and methylation and acetylation and sulfation and things happen.

But the point of why I want to bring this up, right. So it's taking a fat-soluble toxin and making it watersoluble, is generally from a clinical standpoint the weak link in somebody's health is not necessarily phase 1 or phase 2, it's what's called phase 3. Phase 3 is the elimination, which primarily 80% of it is preferred to go down the bile. So the bile is made by the liver. It's also made in the bile ducts and then toxins are processed through phase 1, phase 2 and the liver, as you see, but then it's got to go somewhere. If it can't go anywhere, that's usually the weak link in somebody's health journey, is things aren't flowing. They're not draining. So it's not necessarily detox is the problem, but it's actually the drainage that can often be the problem that can then back up.

So if phase 2's got nowhere to go to dump it into the bile, then it gets backed up. If phase 2 gets backed up, guess what? Phase 1 gets backed up. If phase 1 and 2 are backed up, then you're not detoxifying. It's not necessarily because there's a problem always with phase 1 and phase 2, oftentimes it's actually the bile excretion in the phase 3 of the liver is usually the weak point.

So, as you look at the bile, it basically is almost like branches of a tree. Really small and then they just get into bigger trunks before it basically just combines with the pancreatic duct. Then that dumps into the small intestine and then that's where those toxins get in the bowels. And then hopefully you poop them out.

But with this, it's the movement. The movement is key. So as I look at what are key takeaways with the liver and with the bile movement is bile is released to assist in digestion of fats and neutralize acidity. So if you have a lack of stomach acid, meaning I'm not producing enough, oftentimes it's actually because of a lack of bile.

So if there's not enough stomach acid, it's typically because there's not actually enough bile movement coming in to neutralize the acidity, so the body naturally puts less stomach acid. So instead of trying to increase stomach acid, always with digestion the functional medicine approach is really going to the next stage of getting the bile flowing and moving will actually help the stomach acid. And when you have low amounts of stomach acid, that's poor digestion. And it's also a gateway just for microorganisms too, where if you can't break that down.

Then there's some pretty cool research on what's part of slowing bile flow down. So, the technical term for slow bile flow is cholestasis. So when you see estrogen induced cholestasis, basically what that means is that high amounts of estrogen, being estrogen dominant, actually has been shown to slow bile movement down. Now what's interesting with this is your preferred method of actually excreting estrogen is through the bile, but if you have too much, it can actually clog up the bile. So keeping the bile moving can be very beneficial with helping with hormones. So anybody that's struggling with hormone imbalances and estrogen dominance is a pretty common and major thing that's going on right now.

I mentioned glyphosate earlier, too. Glyphosate is sprayed all over the place. It's in rainwater, it's in newborn babies. They're finding it pretty much everywhere. CDC actually, I should have put this in there, CDC, I think it was about three weeks ago, did a study and they just released that. They looked at almost 3,000 individuals and there was a third of them, or a quarter of them, where I think were like kid ages too. And 80% of the people that they survey, and they try to pick a wide geographic area to cover what would be the mass population percent, so it wasn't just a select area. But 80% of them had glyphosate in their urine and that was just within the last few weeks.

But this paper came out in 2013, and just showing that glyphosate impairs bile acid synthesis and secretion, basically shutting down phase 1. So, when you're exposed to glyphosate, we obviously want to detox and detox it through the liver and process it out, but glyphosate actually slows that whole process down and actually impairs the bile movement. So it not only slows phase 1 down, but it also slows the excretion down too.

And you know gallbladders, which the surgical name for removal of a gallbladder is cholecystectomy. That's what you see toward the bottom of the last bullet point. But on an average, there's about threequarters of a million individuals per year getting a gallbladder out, but here's what I thought was interesting with this research. They said up to 15% of the population of the United States has asymptomatic gallstones, meaning you have no symptoms. You have no idea that there's gallstones in the bile. Gallstones in the bile happen when there's a lack of flow, a lack of movement.

So motion is life. Movement in that bile is really important and they said 20 to 25 million Americans have gallstones and three-quarters of a million undergo a gallbladder removal. I can tell you that Advanced TUDCA, taking TUDCA. And TUDCA is an acronym, so T-U-D-C-A. Everybody pretty much says TUDCA because the long name, which is tauroursodeoxycholic acid is just a mouthful to say, right? Tauroursodeoxycholic acid. So we always just say, "TUDCA." But it's basically helping to open up the liver and bile ducts.

I put a picture here of the drainage funnel. The thing to understand is there's a difference between drainage and detoxification. Detox is, "I'm going to grab on to chemicals and pull them out of the body." Drainage are the normal pathways that just need to flow and move.

The base of that funnel you see at the bottom there, is the colon. That means if you're not pooping, if you're trying to detox at the cellular level or the mitochondrial level, or try to flush your lymph or flush your liver. If the colon's not moving, it's backing everything up. It's basically clogging up that sink and that's when reactions happen. That's where herxing and having symptoms really will occur.

So one of the most common places that I see clinically to actually be clogged up in this funnel is the liver and bile duct system. When that's clogged up and/or the colon and it backs everything else up, basically from a literature standpoint, there's this thing called the blood-bile barrier where instead of the toxin byproducts dumping into the bile and going into the small intestine, large intestine, and pooping them out, essentially it gets sent into the blood circulation. When it gets sent in the blood circulation that's when people develop rashes and itchiness in the skin. That's when kidney problems occur, lungs. In the literature they call it endothelial damage of the kidneys and the lungs. It's basically just because the drainage pathways are clogged.

So, if your goal in listening today is like, "Oh, I want to really move my lymphatic system." The key thing to understand is that the liver and bile ducts have to be moving, and the colon has to be moving, in order for the lymphatic system to drain and move. We just need to understand that there's multiple pieces with the body. Advanced TUDCA is one of the strongest things, really, to open up the bile flow.

I pulled some research and there's definitely, I mean, just we actually have to update our document. We have a 26-page PDF document and there's like 194 references. We actually have to add to it. But I just cherry picked some because obviously, 194 different citations is a little overwhelming. But when you're looking at TUDCA, it actually helped you to excrete bile.

So bile will oftentimes get recycled because it's expensive energy-wise for the body to make. So when you take TUDCA, it actually helps you to excrete more to get rid of those toxins, to flush them out.

The second one there. TUDCA stimulates bile flow, increases by 250%. Again, motion is life. You want to keep movement there.

TUDCA also helps to improve actually the quality of it. So it's not just making more bile, it's actually making better quality and improving the flow of it.

Then the bottom one there just talks about restoring protein folding, cell apoptosis, which is quite big, especially in the cancer world.

Looking at the brain category. This is really cool research from 2020. TUDCA shows a similar effect to intermittent fasting in terms of improving cognitive function. So if you intermittent fast because you want to biohack and turn the brain on, you can actually take TUDCA and it'll show a similar effect of intermittent fasting as far as cognitive function, even if you do eat.

If you have a stroke, well, this is more likely to actually protect it, but if you have one, it's going to reduce the damage by 50%. That's the second one there.

And then MS, amazing. In that category, same thing with Parkinson's. So it's obviously very, very awesome. And our body naturally makes TUDCA. It's a secondary bile acid, but it's made by the microbiome in the gut. And most people from a health perspective, the gut is very not well and there's not good bacteria. When you're not well, you don't make TUDCA. TUDCA is an anti-inflammatory. It actually protects a smooth endoplasmic reticulum, which is why you see research all over the place here from cardiovascular and the cancer world to liver. I'll show you diabetes in a second. It's just really beneficial, but most times when you're not well, you're actually not making this. This is why it's such a helpful thing as a supplement to get it into your body.

TUDCA sharply reduces the number of cells that die during a heart attack. So if you're taking that and unfortunately have a heart attack, it'll prevent damage from that.

The last one there, TUDCA when given after heart attack has been shown to shut down enzymes that cause improper protein folding, minimize scaring, and helped to ease less myocardial dysfunction. So heart dysfunction is what that's showing.

And then just some more research on diabetes. Reports improving hyperglycemia, which is basically high blood sugar associated with type 1 and type 2 diabetes.

TUDCA, the second one there, TUDCA improved diabetes induced severe albuminuria and podocyte injury in the kidneys. So it's very helpful in the kidneys with high blood sugar. TUDCA also has been found, the last one, to help regulate fatty acid breakdown and help regulate insulin resistance.

So, it's pretty amazing when you take some time if you go on PubMed or just do some deep diving in TUDCA, which is, you can see on the screen there, tauroursodeoxycholic acid, in the parentheses. It's pretty amazing, the research that's out there. It's one of my favorites, used it for years. I pretty much brought it to the functional medicine world probably seven years ago. It's a water-soluble bile acid and it really helps to move phase 3 liver. So I am putting it in here with the liver because that's its primary mode, but it does so many other things.

Now, when you're looking at the ingredients a couple things that we mixed in here, N-acetyl cysteine, melatonin, fulvic acid. So, the fulvic acid is the carbon technology along with when you're looking at the other ingredients, it says polysaccharides. That's part of the carbon technology.

Melatonin, when you hear about melatonin, you think, "Oh, this for before bed. It's to fall asleep." No, melatonin here is actually used as a driver. So it won't make anybody fall asleep. The way that we have it connected to this TUDCA molecule is that it's basically used as a driver. Melatonin is essentially one of the strongest antioxidants out there. That's why it's so beneficial to have awesome sleep because it's when your body heals and restores and all that.

But when you're taking Advanced TUDCA with the melatonin, it's not going to make you tired. It's used as a driver. And melatonin can actually get down into the mitochondrial level. So that's really the reason that we're using that and then N-acetyl cysteine is just a really good combination with the TUDCA to really help that liver side and support.

#### Michael Roesslein:

Yeah, thank you. I would love to see that PDF. So I'll hit up your... I got somebody on your side, I'm going to find that because I'd love to read more about TUDCA. But I recently wrote a pretty detailed article on TUDCA and I thought I was going to be focused primarily on bile, the liver, detoxification and you'd posted a few links there for brain health and cardiovascular. It's no joke. This whole presentation could have been on research around TUDCA and different body systems and different benefits and different things that I couldn't even honestly figure out the mechanisms on how some of them are related, but it is a powerful systemic addition to anybody's protocol.

It's something I've been taking consistently for about five years probably. I switched to yours a couple years ago and we used it also in my wife's protocol because rice, she's reactive to, and every other product had rice in it. The TUDCA product that we had found before, and so I was also skeptical of the melatonin because I thought it would make me sleepy and it definitely does not.

My non-alcoholic fatty liver was diagnosed by ultrasound. So this was not going by ALT and AST numbers. It was about 18 months from someone telling me, "You have mild to moderate fatty liver," to, "Your liver looks awesome." I did a couple other things, but this was twice a day part of my own regimen through that time. I have also noticed the cognitive brain clarity type... I don't want to call it symptoms, effects, positive effects from it as well. So yeah, it's really pretty incredible stuff.

# Dr. Jay Davidson:

Yeah. It's really an amazing formula. What I believe really why we get such a huge systemic positive response is the smooth endoplasmic reticulum that's inside the cell protecting that. Because that's in

many, many cells within the body. So I think that's the primary mechanism of why it's so beneficial throughout the body.

It is a strong product, meaning it's going to open up the bile. When I say strong, most people with chronic illness, the bile is not flowing. The analogy that I love to give is, if you have a fire hydrant and you have a hose hooked up to it and the hose has been sitting out in a hot place, let's say where I'm at, Puerto Rico, and it's been outside for a few years. Well, that hose is going to not be the most flexible. It's probably going to shrink a little bit. If I just crank the fire hydrant on, that hose is probably not going to handle it. That's the analogy of many people that are struggling with health issues have poor bile duct system, which is essentially kind of the hose that's been sitting out in the sunshine.

So, a little bit goes a long ways. I always recommend to actually take this with food, especially when you start off. The standard dose, and you can see, is one capsule twice a day. I don't recommend to open the capsule up. Nothing is harmful about it if it's just mixed in water, but TUDCA is the most bitter substance you will probably ever taste, which is why it's so beneficial for the liver. It's almost unpalatable. The one thing that I have seen parents do is they'll slice strawberries and then sprinkle it on and that's for kids, that'll help cut some of that bitterness and make it palatable-

Michael Roesslein:

It's no joke. I've tried it.

## Dr. Jay Davidson:

Yeah. Yeah. I recommend leave it in the capsule. So, one cap twice a day there and if you're sensitive, just once with a meal, once a day. As far as side effects, potentially just too effective right away. So, meaning that it's kind of opening that fire hydrant up. So again, a little bit goes a long ways.

But it is, I mean, when you look at literature, I just did a deep dive. Even on all the ingredients with pregnancy, which is obviously a very cautious time. All the ingredients are safe, even for pregnancy.

It's just the fact that opening the bile up when somebody's never maybe had it moving great and they're pregnant. It's like, well, and I would always err on the side of being cautious. All the literature says it's fine and whatnot. Same thing with the BioToxin Binder. It'd be fine. But I always recommend being a lot more conservative in the pregnancy side of things. Less is more, especially in that case.

It opens pathways up really well. So I think that's really the only side effects. I mean, it is very protective, very safe, but it's just an effective product.

So, moving into the last portion here on the third product. So we had BioToxin Binder, had Advanced TUDCA, and then LymphActiv. This is really focusing on the lymphatic system.

Now, when you look at the drainage funnel, you'll see that's kind of sticking in the middle there. So, if I was to give a little better example on the drainage funnel, let's say that you are having headaches, you're having brain fog. You just can't think well. It's hard to focus. People talk to you and you're kind of, "What? Can you say that again?" You know it's just not sharp and you want to be understanding what's going on.

Well that's draining at the cellular level inside the brain, which is really an organ. Draining the glial cells essentially, which usually happens while you're sleeping. If the brain is supposed to drain in order for the cells of the brain, so the cells and the organs and tissues on the top part of that funnel. In order for that to drain, the lymphatic system has to be draining. In order for the lymph to be draining, the liver and bile ducts have to be draining. And then in order for all of it to be draining, you just got to make sure you're pooping. I mean, somebody that's constipated and they're not pooping every day, minimum. I mean,

that's an area you got to make sure you get the bowels moving. And Advanced TUDCA can actually help mobilize the bowels as well too.

But looking at lymph, it means clear water, and it's a major circulatory system. The blood and cardiovascular system gets most of the attention as far as circulatory, but the lymphatic is also a circulatory system too. It's arguably the most neglected bodily system. And this came from, and you can see that journal reference, this is 2020. So less than, or just over two years ago, March of 2020, out of the journal called Wounds. They thought that the lymphatic system is arguably the most neglected system.

So, as we are looking at the lymph, most people really believe that it's a passive system and that the only way that the lymphatic fluids move throughout the body is actually when you have physical contraction. So when I actually move my body, this is where jumping on the trampoline has been such a big recommendation over the years.

However, you can see in that last bullet point, the question is, "Well, if people are paralyzed, how come they don't have massive lymphedema and swelling?" It's because, yes, some physical movement can help with lymphatics, but that's not the primary method of actually moving lymph and I'm going to help show why.

So when we're looking at the lymphatic system, there's actually three distinct parts. Most people just think of the soft tissue lymphatic system, which is really about 20%. And that's the, "Oh, I'm going to go get a lymph massage. I'm going to jump on a trampoline." But most of the lymph is actually intestinal lymphatic system and the liver lymphatic system. So we're just touching on the liver, but understand that all of them communicate and when you're looking at, "Well, what's the most important?" I mean, hands down, the liver and intestinal lymphatic produce close to 80% of the lymph within the body. This is why your gut and your liver are so impactful with the whole parts of the body. And as far as which one makes the most, the liver. The liver's actually the largest lymph producer in the body.

Looking at some research, they've actually found that the lymphatic fluid can move the wrong direction when there is pathology in the liver. So that basically means that when there's disease in the liver, they found that what's called retrograde, that the lymph is actually moving the wrong direction. So again, movement is life. But obviously movement in the right direction and typically the only reason you're going to ever have it move in the wrong direction is because it's clogged. It's a, if the door is shut there's nowhere to go, and so opening that up.

Then the other big thing to look at with lymph is the more fluid you have, the worse off you are. So with lymph fluid, we want a lot less fluid. So there's a ratio when we're looking at cardiovascular to lymphatic fluid and it's usually about a two to one ratio. So, two parts lymph fluid to one part cardiovascular fluid. If that ratio gets out of sync where it's three to one, or four to one, and you have so much more lymph fluid, that is disease conditions. Problems all over the place.

So this research showed that basically when somebody had cirrhotic liver, basically problems in the liver, that they produced 30 times more lymph, but the lymph quality was also worse. So, when there's disease, your body has more lymph. We want less lymph. We want less fluid. We don't want it to be stagnant and hang around. We want to clear that out.

Then some more recent literature they found in 2012, there's a system called the glymphatic system, which is basically in the brain. They also, three years later, found meningeal lymphatics where they thought the brain didn't have any lymph for so many years. Well, now they actually found two different lymphatic systems or two different lymphatics in the brain, the meningeal lymphatics and the glymphatics. Most of it drains, like I mentioned, when you sleep at night. This is why it's so important to get great quality sleep.

So there's two different types of phases of sleep that are really important. Deep, that's when your body and muscles, physical body, regenerates and then there's REM or R-E-M. REM sleep is basically when the brain hard drive defrags. When it kind of fixes all the brain stuff. So if you have a lot of confusion and you can't think straight, most likely you didn't get great REM sleep the night before. REM sleep is when the glial cells drain.

So when we're awake, we have cells in our brain that basically accumulate fluid. Then when we sleep and go into REM, R-E-M, then those cells shrink and drain and that's when we have great focus and can think and process. So having drainage within the brain lymphs is really important. But again, in order for the brain to be drained, the lymphatic system has to be draining. In order for the lymph to be drained, the liver has to be draining. And the liver is usually that weak link. This is why it's so important. This is why Advanced TUDCA is such a great tool to go along with the LymphActiv.

When you're looking at ingredients with LymphActiv, there's a bunch of different herbs in there. So you can see the sheep sorrel, the slippery elm bark, burdock, astragalus, soursop leaf, cleavers, Chinese rhubarb, chuchuhuasi bark. Then you can see the humic, fulvic, and citric acid, so all three of those are actually the carbon technology. That's just how we have to label that. And there's 60 caps in there.

So, just looking at some literature and feel free to, if Michael posts this as a replay or whatever, you can screenshot or screenshot now, if you want to just deep dive into any of these articles and I had all the links on all the slides as we're going here.

But the sheep sorrel is a great anti-inflammatory, antioxidant, antibacterial, antiviral, antifungal.

The burdock is really known to help detoxify the blood and help promote great blood circulation. Also, you can see on the second bullet point, awesome literature, as far as gut issues and colitis as well too.

Another ingredient is the slippery elm bark, which is really great with liver cancer. Hepatic cancer is a fancy word for saying liver cancer basically. It helps to protect the cells and help to reverse or inhibit mutations within that.

Astragalus roots, another ingredient in the LymphActiv that's been shown very... It's used heavily in the Lyme world, but it's got great protection of different organs. You can see brain, heart, intestine, kidneys, liver, lungs, and it is also anti-inflammatory and really good with the liver as well too.

So there's a lot of overlap with the LymphActiv that it has not only helping the lymphatic system, but it's very helpful in the liver system as well too, because they're very dependent on each other.

Cleavers there. You can see anti-cancer benefits. Stimulates immunocompetent blood cells. So basically helps the immune system and the scavenging of free radicals and being an antioxidant.

Graviola. Lots of different conditions that that's been shown to help literature-wise. But it's really the unique combination of these and the ratios of when we put these together in our lab and clinically speaking, that help to get the lymph results.

You can see SARS-CoV is also actually helpful with the turkey rhubarb that's in here. So if anybody's worried about what's been going on the last couple of years, there's a helpful ingredient in that.

We've got the fun one to say, chuchuahasi bark. That one has some anti-tumor and anti-inflammatory, also antibacterial, antiviral, antiparasitic.

So, lots of research on these ingredients and just the different things. But it's not, again, we're not just isolating one ingredient. It's the combination and how they work together. Along with the carbon technology that helps to protect these herbs to help deliver and get them to where they need to be. So that's really the combination of the LymphActiv and the dosing, one capsule, twice a day. That's the standard dosing.

If you're more in that sensitive category, one capsule just once a day. Then you can see if you want to push it, be a little bit more aggressive. I don't recommend to start there. I mean, a little bit goes a long ways, is one capsule, twice a day.

I think the big thing to just think about is the stagnation of the lymph. The buildup of the fluid, which is really what lymphedema is, results in chronic inflammation. That's such a big thing of what we're targeting from a health standpoint, is decreasing the chronic inflammatory state within the body so that the body can really shift and move more into a healing place.

#### Michael Roesslein:

Beautiful. Incredible presentation, thank you so much for taking the time to put that together. I learned some pronunciations I've struggled with while reading your labels, especially that last one in the LymphActiv. That was the first time I've seen that. I had to do a double take and look that one up a little bit.

Yeah, I think the lymphatic system often gets overlooked and ignored a lot of times, even within functional medicine circles. It's always the liver. It's always the gut. It's always the microbiome. It's always these things and you don't see a lot of focus on the lymphatic system, unless you, like you mentioned, somebody says, "Go bounce on a trampoline."

Dr. Jay Davidson:

Yeah.

Michael Roesslein:

Then there's a lot more to it than that. I love tying everything together here as well on how these work together. So I really appreciate that. I know your entire product line is really designed to influence each other and work together and flow together and we'd love to add more of them going forward.

So everybody's saying, "Great presentation." We have a few questions, if you don't mind?

Dr. Jay Davidson:

Yeah.

Michael Roesslein: Do you got time for-

Dr. Jay Davidson: Yeah.

Michael Roesslein:

... a handful of questions?

Dr. Jay Davidson: Yeah, fire away.

Michael Roesslein:

Okay, cool. Are new CellCore products safe for those with celiac gene or disease because they contain rice and wheatgrass, and my doctor says both are a "No." Are there any plans for alternatives that don't include these two ingredients? I already used all the microbe products that are free of these ingredients?

## Dr. Jay Davidson:

I haven't seen any side effects or any reason for any of the products to stay away from if you have celiac disease or celiac gene. I mean, anytime a gene pops up the question is, is that expression active? That's really the big question. It's not your genes, it's what's being expressed. We know that our environment and what we do in lifestyle is going to affect that, the expression.

So, I haven't seen any side effects or any negative reason, or any reasons, to stay away from any CellCore products with celiacs at all. But obviously, I don't want to ever trump what your individual doctor is saying. I mean, really utilize them as they know your individual case.

#### Michael Roesslein:

Thank you. Why would TUDCA potentially make someone feel dizzy? Is that possible? Also, what do you recommend for detoxing ochratoxin A. So I guess those are two questions.

The BioToxin Binder is my go-to for mycotoxins. That's why we included it, because it's a very robust, wide-ranging binder. But have you heard of maybe just going too fast with the TUDCA?

#### Dr. Jay Davidson:

Potentially, yeah. As far as the ochratoxin A. Right, it's a type of mycotoxin. So we've shown all mycotoxins decreasing with BioToxin Binder. So it will go after the whole gamut of all the different mycotoxins that are on the Great Plains Labs and the RealTime and Vibrant America labs that are looking at the mycotoxins that you mentioned.

As far as dizziness, I would imagine it's probably just too fast and just kind of that garden hose analogy that just slow and low. And if you're like, "Well, I don't want to take a full capsule." You can literally buy blank capsules and put a quarter of a TUDCA in one and re-shut it so you're not tasting it because it is bitter. But I do know some people on here are like, "I want to try it if you say it's really... Is it really that bad?" Yeah, it is, but totally try it because-

#### Michael Roesslein:

It really is that bad. I bought a loose TUDCA once, like a powdered TUDCA, to save money. It was a really bad decision. I was like, "I'll buy the raw ingredients. I'll make the capsules. I'll do the whatever." Not only is it like... and it gets on things and it's everywhere and it's like a powder that sticks to things. It is, I don't even know if bad tasting is the right word to use, it's something that shouldn't go in your mouth.

#### Dr. Jay Davidson:

Yeah. It's just strong. It's strong. Yeah, and if you capsulate yourself, you get all the powder all over the outside of the capsule. If you take ours, right, open it up and kind of tap on it. I recommend the double O capsules, just because they're bigger. It's easier to dump a little bit in. If you don't have swallowing issues, that's an easy one to do.

But we've seen, one of my first testimonials, first people I put on TUDCA. This is probably, oh, 2014, 2015, 2014, I think, when I figured the TUDCA thing out. He had heart palpitations and he thought it was

his heart. He was a realtor, a social drinker. He drank a lot. So I was like, "You have liver issues. Let's try TUDCA." And heart palpitations disappeared.

So, you see a lot just with when you go after the liver, it affects so much else within the body. And as far as dizziness, it's probably just moving things real fast. That's why BioToxin Binder is a great combination with the TUDCA. So you get the flow moving. Just I would dose less. Add some BioToxin Binder in on that so you're binding more of the chemicals and clearing that out of the body.

#### Michael Roesslein:

Great. Trying to combine a few TUDCA questions in one. I have NAFLD, non-alcoholic fatty liver disease, would like to know if TUDCA needs to be a daily regimen, or is it a one time treatment? No supplement is a one time. Like, "Take this one pill," and boom, everything changes. But the study that I saw regarding non-alcoholic fatty liver disease, I think, was over three months or six months, but I don't know, do you?

## Dr. Jay Davidson:

It would be a regular thing. If you have non-alcoholic fatty liver disease, that means that there's been issues within the liver for many years and when they say non-alcoholic, it's because you're not drinking. Alcohol didn't destroy your liver. It's just the fact that all the environmental toxins that we're around and a lot of it is drinking water and whatnot and you're still-

## Michael Roesslein:

[inaudible 00:56:16] depend a lot on diet and lifestyle factors too. This wouldn't affect the same person. If somebody's eating a bunch of candy and processed foods and all of that, and taking TUDCA with nonalcoholic fatty liver disease. Or if somebody switches their diet to be whole foods and organic and cleaner and stay away from those things, there's definitely... The supplements are supplemental. I try to stress that every single time we talk about supplements. That's why they're called that.

# Dr. Jay Davidson:

Yep, got to still have the lifestyle changes. And like you said, it depends on somebody's environmental exposure. If they're exposed to way more chemicals than another person, they're going to need more support. Somebody that has less, then you're getting your body into a healthy state so it can sustain itself, itself. So it doesn't need to be a daily thing forever. That's really the goal. You shouldn't have to take a supplement for the rest of your life. If we get to the core issues, then we really start peeling the layers back of the onion and really start expressing massive health, which is the goal.

# Michael Roesslein:

For sure. Two that are very similar. A safe dose for TUDCA if one has a bad gallbladder, sludge, and potential stones? Is it true that TUDCA dissolves and helps pass gallstones if present? Also thinking about possible sluggish gallbladder and the role of TUDCA supplementation. People who suspect sluggish gallbladder, potential stones. You used that example of the clogged hose earlier. Those people would probably be in the one cap a day at the beginning-

# Dr. Jay Davidson:

Yep. With a meal. With a meal.

Michael Roesslein:

... range. They would go with the sensitive, with the meal.

Dr. Jay Davidson:

Yep.

Michael Roesslein:

Because it's stronger without the meal. It's a higher impact, so.

Dr. Jay Davidson: Yeah. So, your bile releases when you eat.

Michael Roesslein:

Yeah.

#### Dr. Jay Davidson:

If you're that person that's like, "Well, I just want to feel if it does anything." Then take it on an empty stomach. Because you'll feel, after you take it, you'll feel probably a little, like gurgle, 10 or 15 minutes later because your gallbladder or your bile just released. But somebody that they want as less symptoms as possible, especially just starting off, take it when you eat. Because that's when the bile and the gallbladder are normally supposed to squeeze, so that's the lesser impact.

Michael Roesslein:

Perfect.

Dr. Jay Davidson:

But yeah, absolutely. Somebody has liver bile duct issues in the body, TUDCA. TUDCA, TUDCA, TUDCA. And again, the research on it is, it's almost ridiculous. It's almost like it's too good to be true.

#### Michael Roesslein:

It's unbelievable. I mean, I don't remember how many pages you said your PDF is on TUDCA research, but it's absolutely believable. Because when I went down that rabbit hole, I spent a whole day reading journal... Like it was this one, led to this one, led to this one, led to this one, and I was like, "Why are not more people talking about this?" There's only a few TUDCA products made by professional grade supplement producers. There's only a handful, not even. It's not anything that's on most people's radar.

I was introduced to it by Michael McEvoy, who's a clinical practitioner who is always a few years ahead of a lot of things when I used to study under him. He put this in front of me about five years ago and I was like, "What is this?" I tried to read it. You do really well with the pronunciation. I was like, "What is this stuff?" He goes, "Don't worry. Just try it. It does this, this, this, this. You've had liver issues. You've got this, you've got this." I'm grateful.

I was so happy to see it in your product catalog and to see it getting... It is, the research is just absolutely unbelievable. So yes, sluggish gallbladder. Yes, just start low. Go with the food as he said would be the best play there.

## You're welcome, Andy.

Two more and then we're done. Fulvic, humic acid, gradually detox excess zinc from the body. I don't know if-

## Dr. Jay Davidson:

Oh, will it. So yes, it will. So this is a complex question, but basically when you're looking at a mineral such as zinc. All minerals are metals. All metals are minerals. Some are heavier, that's where heavy metals come in. Not all heavy metals are actually toxic, but some heavy metals are toxic. So, blanket statements are very challenging in the mineral category.

Your question though about zinc. It depends on the form. So there's zinc that is toxic to the body and there's zinc that is not toxic to the body. What the fulvic, humic acid will do, it can do a few different things, is first of all it can actually change the oxidative state of an element. So, as you look at zinc, it could be a two plus or some other number, right? Basically amount, the valence or the electrons on the shell. This is chemistry.

The fulvic, humic can actually change that. So it can change an unusable, not great for the body form, into a usable form. So it can actually, what's called change the oxidation state or the valence. It can actually transmutate elements too. That gets a little crazier where it actually changes elements.

And then the other thing it can do is if it is a non-beneficial form of the mineral, it can just bind and remove it. This is what makes it selective, is it's looking at the form of the elements which it comes in contact with.

This is why having a higher amount, and it almost sounds like a sci-fi film, I think as I'm explaining this. Because I'm thinking about what I'm verbalizing, so I totally get this, but this is, again, the research with fulvic and humic acid. Dive into it. The TUDCA is, I think, is 26 pages, 194 references. I think the humic, fulvic research we have, I think it's maybe around 53 pages right now of all that it's shown in the literature as well too.

But essentially it's a selective binder, so it has to have energy though for it to go from cell, to cell, to cell. Because certain cells might have excess zinc and then certain cells might have a deficiency so it binds onto the zinc. And the one cell brings it to the next cell dumps it off. So it's helping to modulate at the cellular level, along with the fact that if there's a toxic metal or something that can bind onto that or transform it or what they call in the literature, transmutate.

So basically the big takeaway, if you take BioToxin Binder, it's not going to deplete you of any minerals. So somebody that says, "Well, I am copper toxic," right? "I have too much copper." Oftentimes they're actually deficient of copper in the right form, but they're toxic of copper in the wrong form. It's a complex topic, but just know the humic, fulvic make it safe and easy. That you're just going to go cell to cell and fix it, basically.

# Michael Roesslein:

Perfect. Last, would TUDCA potentially help with chronic by now, effects of a stroke? Extra sensitive to itching and pain areas on the skin, sores in the mouth, frozen shoulder due to pain, scar tissue and the shoulder muscle weakness, et cetera. I think that question probably arose from a couple of the slides that were in there about heart attacks and the neurological things. We can't obviously make guarantees and promises and give specific medical things. Seven months is... Does it say seven months, or did I just make that up in my head? I think that was in the comment. I think she wrote it in the chat. Yeah, seven months, stroke.

Dr. Jay Davidson: Yeah. This is just a-

Michael Roesslein: I don't know if it's possible to answer anything.

Dr. Jay Davidson:

Well, it's this slide, right? So, what I would recommend is just go to these articles. Screenshot this. Go to these journal articles and read when they talk about post-heart attack or post-... Or was it, it was this... Sorry, it was this one. Post-stroke, right here, right?

Michael Roesslein:

Mm-hmm.

Dr. Jay Davidson:

Go and see what the literature is on those. I mean, I don't think it's going to be harmful by any means, which is why we have these as products. Now, everybody's thing is individual. Like you're saying, Michael. It's also the longer it's been, a lot of times the harder it is to reverse things too. So the sooner you get to things, obviously, the better off most people are.

Michael Roesslein:

Right. Thank you. [inaudible 01:04:53] I just sent her. [inaudible 01:04:54] I took the screenshot for you off his slide and just sent it to you. So, I think we're good. Which, you mentioned psoriasis, somebody's asking again. At what point you mentioned psoriasis, I think it was during the LymphActiv part, but-

Dr. Jay Davidson:

Yeah, well we-

Michael Roesslein:

... did you mention psoriasis?

Dr. Jay Davidson:

I had just the pre-post of the psoriasis lady with some pretty bad on her skin [inaudible 01:05:16].

Michael Roesslein:

Oh, at the beginning. Yeah, yeah, yeah.

Dr. Jay Davidson:

Yep. From detoxing and breaking garbage down in her body. So, there might have been... [inaudible 01:05:24].

Michael Roesslein:

Psoriasis is like a big picture thing though. It's like anything that's aiding in detoxification reduction and toxins, ability of the body to clear toxins is going to link back to skin issues including psoriasis, including acne, including rash, like all of that, so.

## Dr. Jay Davidson:

Yep. Yeah, and especially like blood purification, which LymphActiv, that was a mention of one of the ingredients, burdock root, with part of its benefits, so.

#### Michael Roesslein:

The last thing is, could TUDCA potentially help, and have you guys worked with anybody with Gilbert's syndrome and elevated bilirubin?

## Dr. Jay Davidson:

Yeah. Elevated bilirubin, for sure. Right, because you're basically normalizing an organ. Gilbert's syndrome, I haven't heard of. Is that just a fancy name for the elevated bilirubin?

## Michael Roesslein:

I'm looking it up right now. You can answer, I'll get it. A common harmless liver condition... Well, according to Google. A common harmless liver condition in which the liver doesn't properly process bilirubin. Bilirubin is produced by the breakdown. Gilbert's syndrome is an inherited genetic condition. Symptoms, jaundice.

Dr. Jay Davidson:

Yeah. So symptoms jaundice. Absolutely, TUDCA all the way.

Michael Roesslein: Yeah.

Dr. Jay Davidson: All day long. Yep.

Michael Roesslein:

Yeah. Yeah.

Dr. Jay Davidson:

And just make sure anytime you're detoxifying, you're adding something new to your regimen, or you're progressing in your health. Make sure you have adequate input of clean, pure water. So hydrate that body.

Michael Roesslein:

People often go right to the complex and ignore the foundations and, "How much water are you drinking?" "Well, I drink diet soda." So yes, the water.

Then I love how you mentioned phase 3, too. We just put together a pretty detailed post on the detox physiology. We included phase 3 as well, elimination, sweat, stool elimination, and all of that. Because if

you're conjugating all these toxins and you're putting them all in one place, and then they're going into your intestine and then they're sitting there. You mentioned these things are recycled and they do get reabsorbed. So the TUDCA is the best mover of anything that I've seen.

Again, the presentation was excellent, far exceeded my expectations. I really appreciate the time you obviously took to put that together. I'd love to connect more and maybe do another webinar. I love some of the topics you rifted on there and appreciate the time. We're grateful to be partnered with CellCore and I look forward to more in the future.

Everybody's in the chat. Lots of thank yous and enjoyment. So thank you, Dr. Jay, it was great. I've watched you on things. We've never actually communicated, like met each other and done something together before. But it was great to meet you and to learn from you and I really appreciate the time. Enjoy the sunshine and the beaches.

Dr. Jay Davidson:

You're welcome. Everybody have a great rest of your day.