

Jonathan: Jonathan Hunsaker here, founder of Organixx, and this is our third episode of our Organixx podcast, joined by Organixx CEO, TeriAnn Trevenen.

TeriAnn: Hey, everyone.

Jonathan: And Dr. Daniel Nuzum, the legendary Dr. Daniel Nuzum. We're creating this podcast to really educate you on health, how to get healthier, how to live a healthier lifestyle. We're also talking, Daniel's—Doc, I should say, I never call him Daniel, Doc is a master formulator. So, we talk a lot about supplements as well, so you understand the supplement industry, you even understand the pharmaceutical industry to a certain extent, which we're going to talk about today.

So, let's get right to it. Today, we're going to talk about pharmaceutical versus nutraceutical. We didn't get to it in our last episode, so we're going to start off with that. We're going to talk about organic versus nonorganic, why does that matter, both in supplements and just in life in general, the difference between having organic and nonorganic. And then we're going to talk about how to know what supplements you should take when you're nutrient deficient and all of that. So, let's see where the conversation takes us. Hopefully, we get to all of these subjects.

TeriAnn: And we're going to talk about can you overdose on supplements, which is a huge topic as well. It will be fascinating.

Jonathan: Perfect. Let's start off, so it doesn't get lost again, pharmaceutical versus nutraceutical. What's the big difference between the two?

Dr. Nuzum: What's your big difference? Okay, now let's take a step back and look at—let's talk about pharmaceuticals real quick. Pharmaceuticals, in order to become a pharmaceutical, it has to be a chemical that can be patented. It's a patented drug. That's what a pharmaceutical is. It's a patent drug. Now patent drugs, it can't grow in your backyard. You can't do that. What grows in your backyard can't be a patent drug, and what a patent drug is can't be growing in your backyard.

Jonathan: Meaning you can't patent nature.

Dr. Nuzum: Correct.

Jonathan: Right? I can't patent dandelions because they occur just in nature.

Dr. Nuzum: It's a naturally-occurring substance.

Jonathan: Perfect.

Dr. Nuzum: So, that being said, what's interesting is even today, about 80 percent of the 1,500 drugs we have in the US pharmacopeia actually are synthesized chemicals that are—were originally synthesized patterned after chemicals they extracted from plants.

Jonathan: Well, that's the only way to patent it, right? You've got to synthesize it so that you can call it a patent, make a chemical, and say "This is our thing," that does the exact same thing as a thing in nature does, right?

Dr. Nuzum: Exactly, exactly, exactly. Which is interesting, because the other—your other 20 percent are all basically mineral salt-based compounds. So, they're inorganic compounds that you take these minerals and put them together, you create this drug. In the rest of pharmacy, you have all these compounds that have been synthesized, they're synthetic chemicals that are copies of something that naturally occurred in nature, which is cool. It's cool, from one standpoint, that they actually are copying nature. That's kind of nice, you know? The problem is, this is one of the issues in pharmacy, when you make a synthesized compound, it never comes out 100 percent identical.

Jonathan: It can't.

Dr. Nuzum: It can't. It cannot—you can't copy God's work. It's the truth. So, when you create this chemical, see, in chemistry, we have the—there's two types of chemicals in organic chemistry. You have chemicals with a right genetic spin, so their genetics spin to the right. Then you have ones that spin to the left. Your right spin is called a d-then whatever the compound is, so it's a dextro is what that stands for. Then you have a levo, which stands for left.

Typically, in nature, you're going to find almost everything is a levo spin, a left spin to it. What happens when they synthesize an organic chemical, they'll get most of that left spin, but at some point within the compound, will have a right spin to it, then it will spin back again. And that little quirk is where about 90 percent of all the side effects come from.

Jonathan: Interesting.

TeriAnn: That's fascinating.

Jonathan: Very interesting.

Dr. Nuzum: Okay? That's a little-known, hardly ever published fact in pharmacy. So, when you take and consume the natural substance that they were synthesizing, the natural substance hardly has any side effects.

Jonathan: Unless you're naturally allergic to something like that, like that's not a general side effect for the public.

Dr. Nuzum: Exactly, the public. And typically, side effects, especially with natural things, are dose-related. You take—you can get too much of a good thing.

Jonathan: Absolutely.

Dr. Nuzum: You can drink too much coffee, you can get too much water. There is such thing as hyperhydrosis, and you can end up in the hospital with kidney failure. And what that is, is you took in too much water.

TeriAnn: Yeah, there's a balance to all things. For sure.

Dr. Nuzum: Anything can have a side effect if you take enough of it. Very few things in the natural kingdom are toxic in and of themselves in reasonable doses. There are some toxic things. I'm not saying there's no toxic. There are toxic plants, there are toxic animals, there's things called cobras.

Jonathan: And there's things that are toxic to us that aren't toxic to something else.

Dr. Nuzum: To something else, right.

Jonathan: And all of that. There's definitely that balance there. Let me ask, when they make the synthetic version, is it generally more potent than what you find in nature? Are you finding that it's, if you were to try to take "an equal dose," is it a lot more potent on the synthetic side?

Dr. Nuzum: Yes, usually, usually. Because drugs are meant to either create a chemical reaction in the body or stop a chemical reaction in the body. That's what drugs are designed to do. And so, your pharmaceuticals are either creating—causing the body to produce a certain chemical or stopping the body from producing a certain chemical. That's what they're designed to do. So, they have to be very targeted and very specific. And in order to do that, they have to be very potent. You can't have a half drug, it has to be all or nothing.

Jonathan: Enough to make a difference.

Dr. Nuzum: Right, exactly, exactly. So, that's pharmaceuticals. Then we come over to nutraceuticals. Nutraceuticals, you have different grades of what would be a nutraceutical. In some people's mind, they—just an herbal extract is a nutraceutical. I still look at an herbal extract as food, personally. That's my—how I would—where I would put that.

Jonathan: Because it's not concentrated in any way, correct?

Dr. Nuzum: Correct.

Jonathan: It hasn't been, yeah, refined at all.

Dr. Nuzum: Right. When we take—okay, we take curcumin from turmeric and we make an extract, where 95 percent of the compound that you have is curcumin, we've created a nutraceutical. That's in my opinion. That would be a nutraceutical. A nutraceutical is something that is highly-concentrated, it's a certain organic compound from a plant that's in a high concentration, and it has a very specific action on the body. You take the other chemicals in the naturally-occurring compounds, and I say chemicals because they technically, they're chemicals, but I want to make sure that when I'm talking about chemicals in turmeric, I'm not talking about like—

Jonathan: Synthetic.

Dr. Nuzum: Synthesized.

Jonathan: Got it.

Dr. Nuzum: Yeah, it's not that kind of thing. I'm talking about the naturally-occurring compounds. That's what, when I'm talking about chemicals in a plant, that's the naturally-occurring compounds in that plant are—there's 300-some other compounds in turmeric root that have medicinal properties that are different from curcumin. Typically, there's 23 to, depending on the plant, you could have up to 30 different curcumins in turmeric.

So, it's not just one compound, there's a whole group of compounds there. And what's interesting about turmeric is turmeric is in the ginger family. It's first cousin to ginger root, actually. So, they actually, the compound that turmeric has, the group of compounds that turmeric has that ginger doesn't is the curcumin compounds. Pretty much everything else is the same.

Jonathan: And I would imagine ginger has some that obviously turmeric doesn't.

Dr. Nuzum: Correct.

Jonathan: And that's why you want both.

Dr. Nuzum: Why you want both, exactly.

Jonathan: But they complement each other in a lot of ways, right?

Dr. Nuzum: Right, right. They're first cousins and they're like a wrestling tag team. You know what I mean? And they work together. But in—a nutraceutical would be a—when they concentrate one particular, or a couple particular compounds out of an herb and make a—it's a nutrient, because it is a

nutrient, these would be those phytochemicals that I keep talking about. So, you concentrate the phytochemical into where the—what you're consuming is primarily almost a pure phytochemical extract.

Now in the industry, we have set norms. You can't typically—they don't allow you to make a 100 percent curcuminoid. When you take a curcumin extract, you won't find a 100 percent curcumin extract anywhere because that's too close to a pharmaceutical. So, my thing is—

Jonathan: So, say that again. I want to understand that more.

Dr. Nuzum: Yes.

Jonathan: Because if a pharmaceutical pulls out curcumin, it's not patentable still, right?

Dr. Nuzum: Correct.

TeriAnn: They have to change it.

Jonathan: They have—they have to synthesize it.

TeriAnn: Yep.

Jonathan: But if you do, on the nutraceutical, if you get 100 percent, that makes it too close to the synthesized curcumin?

Dr. Nuzum: Correct, correct.

Jonathan: Wow, okay.

Dr. Nuzum: And so, there's rules and regulations on that. So, what you'll find is typically, you won't find anything more than a 98 percent standardized extract. That's typically—

TeriAnn: For a nutraceutical?

Dr. Nuzum: For a nutraceutical. Because then it's—

Jonathan: Legally?

Dr. Nuzum: Legally, right.

Jonathan: You could.

Dr. Nuzum: You could. Oh, heck yeah.

Jonathan: But it's all legal.

Dr. Nuzum: We do all the time in the lab.

Jonathan: Right.

Dr. Nuzum: Because when you're doing research, you need the pure chemical to do it. But that's not something you take to the market. It's not—that's not permissible. So, you take—you could do a 98 percent curcumin, for example, but it still has to have 2 percent of the rest of the turmeric root.

TeriAnn: And that's what makes up the nutraceutical, in that specific example.

Dr. Nuzum: In that specific example. So, it's still the organic compound. It hasn't been synthesized, it's just been extracted and they've—in order to do that, if we had—we could make a turmeric tea out of a turmeric root. We could even grind that up and make some powder to put on our—spice to put on our food, right? But to make a—about one percent of what's in the turmeric root is curcumin. So, you'd need 95 turmeric roots to make a turmeric—a curcumin, a 95 percent curcumin extract.

Jonathan: Wow.

Dr. Nuzum: And we're just—we're only talking—that probably wouldn't even fill one capsule. So, the amount of turmeric that it takes, you're talking truckloads of turmeric root—

TeriAnn: Large amounts.

Dr. Nuzum: —to make these 95 percent turmeric extracts, if that makes—does that make sense?

Jonathan: Makes tons of sense. Quick tangent. Are they extracting other things from turmeric more than just the curcumin? Or is the rest of that wasted now?

Dr. Nuzum: Most of it's wasted.

Jonathan: It is?

Dr. Nuzum: Yeah, most of it's wasted. There are some companies that are taking a lot of that and using it for compost. There are some companies that do that. And that's kind of a cool side industry. Because there is, there's a lot of this stuff ends up as waste that you can actually reuse if you use it as compost.

Jonathan: You should put it back in the soil, right?

Dr. Nuzum: Totally.

Jonathan: To help put the nutrients back in there. We're just pulling out one chemical from it, one flavonoid.

Dr. Nuzum: Right.

Jonathan: To be more specific. So, great. Sorry for the tangent.

Dr. Nuzum: No, but does that make sense?

TeriAnn: For sure.

Dr. Nuzum: Does that kind of explain the difference?

TeriAnn: No, it makes perfect sense. So, that brings up an even bigger question then, when we're talking about—let's go to nutraceutical versus just a food-based product. Can you really drive home the difference between nutraceutical versus food-based? And then when should people be taking these? And obviously, everyone's different. We've talked about that earlier on, that everyone has a unique body that needs different things. But are food-based products things that they can take on a continual basis versus a nutraceutical. So, let's touch on those two things.

Dr. Nuzum: That's a really good question, because you take—again, we keep using curcumin because it's common. Everyone knows about curcumin right now. It's big in the market. So, you take a 95 percent curcumin extract all the time, and is it safe to do that? Well, it's not a toxic compound.

So, again, it goes back to dose. If you're taking a high dose, you don't want to stay on a high dose for a long period of time. But that goes for water, goes for anything. Anything, especially if it's concentrated. So, that's a concentrate.

Nutraceuticals, in my—this is in my—the way I categorize things, there's whole food supplements, which are food concentrates, then you have just above that, you have herbal extracts, where it's—you can have different ranges. Once something gets past a 20:1 extract, and I'll explain that in just a minute, that's where my cutoff is for me.

Once it's at 20:1 extract, now it's becoming a nutraceutical, in my opinion. So, 20:1 extract, that means a 1:1 herbal extract is—would be like a tea. That's 1:1, you have 1 part of your herb is—and you have a one-part extract. So, it's one part. Now a 20:1 is where they took 20—it would be like 20 tea bags all concentrated into one teabag. So, you've done some shrinking and some concentrating there. That's where your potency just went up 20 times.

So, when you have—in my opinion, once we get past a 20:1 extract in the herbal extracting kingdom, that's where it starts to become a nutraceutical. So, it's more phytochemicals than nutrients at that point. So, your medicinal substances went way up and your—the amount of nutrients, vitamins and minerals type nutrients, have dropped. So, you have x amount of space, it's just more phytochemical, less nutrients.

TeriAnn: Yeah, and we talked about that in an earlier episode, where we talked about the phytochemicals being the healer of the body, to be able to take that food and you pull out the most important ingredient for how it heals—could heal your body.

Dr. Nuzum: Right.

TeriAnn: Impact it can have on your body. And so, nutraceuticals are really taking all of that one component out of something and delivering it into your body.

Dr. Nuzum: Correct, yes.

TeriAnn: So, let's shift to just talking about nutraceutical versus food products. When should people be taking these? And should they be taking the food-based products all the time or not? Let's talk about that for a minute.

Dr. Nuzum: Here's—okay, here's—your food concentrates make the best nutritional supplements because you're getting concentrated food. So, back to we've used beets, we've used carrots, we can use broccoli, cauliflower, kale, we can use spinach. If you can—let's say we were to juice organic salads, you have a salad of all these organic fruits and vegetables.

If we were to juice that and put that into a capsule, that's what a whole food supplement would be. Now those are things that you could—you'd be hard set to ever take too much of that. You'd be hard set. I mean it'd be like eating too much salad. It's feasible, it is a possibility, but that's really—you'd be hard set to ever hurt yourself eating too much salad or taking too much of a whole food supplement.

When you come over to the nutraceutical world, now most anything that's going to be allowable on the market has either no or very, very little toxicity to it. So, green tea extract, or green coffee bean extract, or curcumin from turmeric, those are all—those are concentrated nutraceuticals. So, they're highly concentrated, certain compounds from those particular plants.

And they could take them every day until the cows come home. But if you're taking really high doses, you're going to need to fluctuate. Maybe high doses for a couple weeks, and then take it down for a couple weeks, then go back. So, you're not taking real high doses all the time. Because real high doses of

anything concentrated, including water, you take too much water for too long, it'll throw your electrolytes off, it could give you a heart attack. That's potentially dangerous, right?

But taking a high amount of any one or two or multiple nutraceuticals, not that you'd ever need to go off of it completely, you just need to fluctuate your dose, so you don't stay on a real high dose for a long period of time. They're not toxic, but they may overstimulate your system, or over—just because you're taking so much of it, eventually, that could become an irritant if you don't give it a break. But that just goes back to—

TeriAnn: So, could you say that if someone's taking a nutraceutical and they shift to taking a food-based product that has more of that ingredient in it, would that be a healthy way to fluctuate?

Dr. Nuzum: You could fluctuate like that, yeah, because you're—the concentration is what I'm talking about. So, if you're getting—if you're taking 10 curcumin pills a day to offset some inflammatory process that's going on in your body, that's great. That's way better than 10 ibuprofens. Your chances of having any problem with that are almost none.

But eventually, it's not—your body will get used to that and its efficacy is going to go, is going to go away to an extent. So, taking a little break from it and then coming back to it will keep it—it will stay effective in your system. If you get—it's kind of like—a good way to—a good analogy for this would be like if you went to the gym and just did one exercise, all you ever did is—

TeriAnn: One exercise.

Dr. Nuzum: Eventually, going to the gym and doing that one exercise could be counterproductive for you even. Your body just gets used to it. It's not going to do anything beneficial for you anymore. Does that make sense?

TeriAnn: Yeah, absolutely makes perfect sense.

Dr. Nuzum: And so, same thing with the nutraceuticals. They're perfectly safe. You can take even large doses of them. But you just don't want to be on large doses for a long period of time because your body gets used to it and it won't be as effective. So, going on it and off of it and kind of fluctuating your dose is the way to go with nutraceuticals.

With the whole food supplements, that's a whole other deal. Whole food supplements are—they aren't a high concentration of any one thing, it's just a real broad nutrient-base. And so, you could take something like that all the time, and it never get “old” for your system, or your system never get used to it, if that makes sense.

Jonathan: So, let me ask you, Doc, specifically about the Organixx supplements. So, how would you categorize them?

Dr. Nuzum: Now here's something, when I took these formulas, some of these formulas are some of my old clinic formulas that I've been using. And what we did is we kind of tweaked them a little bit to make them so that it's something everybody and their brother could take. You know what I mean? It's not too potent to take it out of the general public's—or just Johnny Q. Public's capacity to take these things.

So, they're not—I say, they're not too hard-hitting, per se, as figuratively speaking. But they're also targeted. So, they're whole food supplements, again, with that real broad nutrient base, but what we did is with the ingredients, we targeted them, so they work towards specific tissues of the body, or specific areas of the body.

I use Detoxx as my—as the best way to show you this. So, Detoxx 1 is a whole food supplement. I mean it's whole food supplement. It is very broad nutrient-based supplement, but it's targeted to support lymphatic drainage and colon health. It works on everything. It's feeding the body in general, but it has specific affinity to the colon and the drainage of the lymphatic system.

When we do Detoxx 2, Detoxx 2, it's not designed to flush the kidneys and liver out. It's not that kind of supplement. It's designed to feed the liver and kidneys, so they function better. So, it's targeted nutrition. So, we took this real broad base of nutrients and we're targeting specific areas of the body.

Jonathan: Yeah, I think that's important to understand that it's still a whole food, because I know that you've given people protocols before when it comes to the Detoxx, and you say, “Take double or triple the dose that's on the bottle.” And there's not much risk there, right?

Dr. Nuzum: Right.

Jonathan: Because it's just more nutrients that's targeted to that one area.

Dr. Nuzum: Correct.

Jonathan: Now I can't say that you should go beyond the dose that's on the bottle, but you as a doctor have said to people, “Hey, double up, or triple up, or quadruple up.” And essentially, you're saying “Hey, you're not eating too much salad.” You know what I mean? Just have three salads instead of two salads, or something along those lines.

Dr. Nuzum: Sure. Exactly.

Jonathan: So, Organixx is whole food, and I keep looking back because I know that they're behind here on a nice little display. But I like that they're targeted. It's like the Turmeric 3D is targeted around healthy inflammation response, or 7M around the immune system and anti-aging, and I could go down the list.

Dr. Nuzum: Right.

TeriAnn: Well, and it brings up another question for me, too. We talk about can people overdose on supplements, which you answered no. But is it possible, going back to an earlier conversation about soil and not having enough nutrients in the soil, and on average, people are just getting 17 out of the 90 things, or whatever the number is that they need in their body, is there a possibility that someone has sufficient amounts of a certain nutrient that they wouldn't need to supplement in a certain area? Do we ever see that?

Dr. Nuzum: Yeah, sometimes. Sometimes, people will have, let's say selenium, they have plenty of selenium, but they're low in all these other nutrients, or they're high in these other nutrients and low in selenium. The more allopathic or Western medical way to approach that would be "Okay, if you're high in selenium, don't take any selenium, but you're low on these over here, let's give you a bunch of these."

And so, you take those supplements for a while and it brings these up, this comes back down, but then, these are high, and you've got to bring this one back up, and you get into this teeter-totter cycle is what happens. I've seen this for years and years and years, I've seen that happen. What I've found that works the best is give the body a little bit of everything, it chooses what it wants, it keeps what it wants, and gets rid of what it doesn't want.

Jonathan: Why starve it of something? Just because it's high in it, and it's not going to hurt you, why starve your body of it? Because you don't ever know exactly when it needs a little bit extra.

Dr. Nuzum: Right.

Jonathan: And if it's there, then it can use it.

TeriAnn: Well, and I think that's an important question to answer for people, because I think that's a common question that people have. "Can I take too much of it?" And we're talking food-based supplement here, and I think that was a really important thing to outline there, nutraceutical versus food-based, because people can take as much as they want when it comes to food-based. And to Jon's point, maybe you're high in that, but you never know when your body's going to need that, so why not just take those nutrients that your body needs?

Dr. Nuzum: You may have only been high in that particular nutrient during the week that they took that particular analysis, test.

Jonathan: Right.

Dr. Nuzum: The next week, it maybe has dropped. And it could have.

Jonathan: And our diets change. Unless you're eating the same thing every single morning, afternoon, evening, doing the same exercise, breathing the same air, I mean it's constantly changing. There's constant—

Dr. Nuzum: And if you were to do that, eat the same thing day in, day out, every—same breakfast seven days a week, every month, every year, same lunch, same dinner, eventually, you're going to create a food allergy. Your body's going to get irritated by that breakfast, that lunch and dinner, regardless of how healthy it is.

Jonathan: So, let me ask you this. That's an interesting question. If I'm taking a whole food-based supplement and I'm taking, let's say I'm doubling the dose for a long period of time, can I develop an allergy to that?

Dr. Nuzum: Here's what's interesting. When you take—because we have such a broad base, it's—it would be hard to do that. It would be hard to become allergic to something like this because we don't have high doses of any one particular thing. There's small doses of a lot of things, which end up as the sum quality of all of those things versus high doses of any one particular thing. Again, too much of any one thing will eventually, even if it's good for you, it eventually will start irritating your system. You have to take a break from it. Then you can come back to it. But you'll have to take a break from it at some point.

Jonathan: So, you talk about cycling nutraceuticals, because that is a high dose, and I know—I'm just—I don't want to be beating this into the ground, but I just want to be really, really clear for those listening. Even on a whole food supplement, should you cycle at all? Should you go for three months and take a week off? Should there be cycling?

Dr. Nuzum: Yes. I have my patients do that. We do—typically, what I'll have people do, using these—this line of supplements, what I typically have people do is I'll have them do a protocol for 90 days. Then they do the Detoxx program for a month. Then they go back to that protocol. And back and forth, kind of alternating like that. That month off, they take that month off, they clean themselves up, they go back on the protocol, and the protocol works. They feel so much better than they were the previous 90 days on the second time around.

Jonathan: Is that that same balance that you're talking about in the cell that's in the petri dish in the lab. 45 percent cleaning, I don't know if that was episode 1 or 2, but 45 percent is cleaning, and the other 55 percent is feeding with nutrients. And so, consider, it doesn't need to be exactly that perfectly, because

your body's naturally detoxing anyway when you're naturally feeding, but doing that three months on, one month off just helps everything.

Dr. Nuzum: Right, right.

Jonathan: I love that.

Dr. Nuzum: And we go back to, again, this—we're not—this Detoxx isn't something where we're stripping the body. So, they're doing 90 days of fortifying their body with whatever protocol I have them on, then they do that 30 days of cleansing their system. But the cleanse is still feeding their system. This isn't—we're not just purging, we're not just stripping things from their body. You know what I'm saying? So, we are replenishing. They're still being fed well, we just changed the diet a little bit.

Jonathan: Great.

TeriAnn: So, let's talk about then, in talking specifically about that, when people should take them, can you get too much, can you get too little, another really important question is, with all of the supplements that are offered out there now that provide these nutrients that we need, how do you know what supplements you should be taking? Obviously, you could take all of them. The bigger question is, and I think this is something that Jon and I can actually weigh in on as well, and we actually talked about this previously, but knowing the quality of your supplement matters a great deal.

Dr. Nuzum: Right, quality is super, super important. One of the things I explain to patients when they come to see me, this is in my initial appointment, I have different processes that I lay out, but one of the things that I discuss is that you have—the outcome of a protocol for one of my patients is based on—and not just my patients, this works for any doctor, there's three factors that weigh in to the outcome of a protocol.

So, whether it's successful or not, there's three basic factors. You have the experience, and education, the understanding of the doctor or the guide, because he's guiding through the protocol. Number two, you have the quality of the remedies. So, if you have good quality remedies, your chances of recovering are way better, regardless—and this is kind of universal.

So, it doesn't matter if we're talking a medical doctor, an alternative medical doctor, a shaman out in the forest, these are the factors. This is what weighs in. The last thing is the patient's capacity to respond to this protocol, which is a whole other thing. So, for—looking as a consumer, looking at supplements, you want to get the highest quality. Your quality is what's super, super important, because the quality of nutrition that you're consuming will determine the quality of nutritional integrity your body has.

So, you don't get nutrients from the air, other than oxygen. You get nutrients from what you're consuming, or you don't. We've covered that in some of the other podcasts. So, looking at quality, what

are we looking for, for quality? Well, organic ingredients. Organic ingredients are going to have far less—because we're talking food here, we're talking food concentrates, so your organic, in order to be an organic food, there are certain things that they can't use on them, certain pesticides, certain herbicides, they can't use on that soil or on those foods.

And so, there's 95 percent less chemicals that can possibly be present in those foods that something that's not organic can have these things in—present. Let me rephrase that. So, a food that's not organic can have 95 percent more pesticides and herbicides and metals and things like that in it, than a food that is organic.

Jonathan: The reason that's so vitally important is we're talking about highly-concentrated ingredients that are coming in here, right? So, if you have something that's been sprayed with pesticides and herbicides, and now you're trying to extract it down by x amount, right?

Dr. Nuzum: Right.

Jonathan: You have that same amount of pesticide and herbicide as you did—it's the same proportion, same ratio as it was when it was in the starting factor. So now, how much of that capsule is just filled with toxin?

Dr. Nuzum: Right.

Jonathan: Because it's not organic. And that, a lot of people I don't think really recognize that. It's interesting. Because obviously, we all feel that you should be eating organic as much as you can. It's even more important when it comes to a supplement, right? I can understand sometimes that an apple's not always available organic, and okay, maybe go wash it and do what you want there. Still can't get the glyphosate out. But still...

TeriAnn: That's a whole different story.

[crosstalk 0:36:35]

TeriAnn: We could go on a whole tangent.

Jonathan: But when it comes to your supplements, in my opinion, it couldn't be more important than to make sure that your ingredient is organic.

TeriAnn: Well, the whole purpose of taking a supplement is to get the nutrients you lack, and it's food-based—

Jonathan: Knock the toxins out.

Dr. Nuzum: Right.

TeriAnn: Then you're putting them back in your body if it's not organic. It doesn't make any sense. It's counterintuitive to what you're actually trying to accomplish. And I think that's something really important for people to understand in manufacturing supplements and going through that process. And putting this together, first, you formulate the product.

And we've talked about it in a previous episode, all the things that you want that go into your formulation that make your supplement bioavailable and be delivered directly into your system, into your body so that it's actually absorbing the supplement. But not only that, talking about those organic ingredients, once you get to the point of manufacturing, you want all of those things to be organic.

And so, there's a lot of supplements that are out there and available in the industry today, but they're not providing organic ingredients, and that's quality right there. You need to know that they're sourcing organic ingredients. In fact, something that's really important for people to understand is that the capsule products cannot be USDA certified organic, so that's something you need to look at when you're looking at capsule products, which we've talked about a lot.

A lot of the food-based products are encapsulated to deliver it into your body. You need to be making sure you're looking at your label and that you're fact-checking with your supplier, your manufacturer, that your ingredients are organic. The reason they can't be USDA certified organic is because 95 percent of a capsule product has to be organic to be USDA certified organic, but the capsules are a high enough percentage that you don't get to that 95 percent. But it's important to know that all the ingredients going into your product are organic, all organic.

Jonathan: For sure. Yeah, and I'm going to talk a little bit more on that. I mean if—in order to have a USDA certified organic logo on your product, what TeriAnn is saying is that the entire product itself has to be more than 95 percent organic.

TeriAnn: Right.

Jonathan: Even though 100 percent of our ingredients inside of that capsule are organic, we can't put that logo on there, that certification, because the capsule itself is taken into account of the overall 100 percent. And that capsule may make up 7 or 8 percent, and so, it's impossible to get that certification of 95 percent or greater because of the capsule.

TeriAnn: That's why—right.

Jonathan: But we're working on getting capsules that are certified. We'll see.

TeriAnn: It has to be approved by the powers that be.

Jonathan: Exactly.

TeriAnn: For everyone, yeah.

Jonathan: And so, what you're saying more, that I want to elaborate more on, is when you're looking at your supplement bottle at home, or at the store, look at the ingredients, and does it say organic this, organic that?

TeriAnn: All of the ingredients.

Jonathan: For all of the ingredients. Now, not all of the ingredients are available organic, right? There's just some, and we've worked really hard to get as many possible, obviously. But some just aren't there yet.

TeriAnn: That's an important point, though. Let's stop there for a second because that's important. Even if you can't get it organic, it can still be tested for certain chemicals and pesticides to make sure that the quality—

Jonathan: That farmer may just not have paid.

TeriAnn: The quality and purity, that too. But even if you can't get something, an ingredient organic, what's the quality and the purity? Is it being tested for chemicals and pesticides? Wherever you're getting that ingredient from, are they taking every precaution to make sure that's a healthy, clean ingredient for you to be taking?

Jonathan: Right. So, yeah, I think we're going to wrap this up pretty soon here for today's episode. Again, read the label on something like this. The organic is what really makes a difference.

TeriAnn: Yeah, one more important thing, though, to mention on that, is we've talked about liquid, powder, capsule. You can actually get liquid and powder USDA certified organic, because they don't have to be encapsulated. The capsules do. So, I think that's an important thing to look at. When you're out looking for supplements, looking for what supplements you want to purchase, you should be looking for bioavailability, the delivery system in that product. You should be looking at are the ingredients organic?

And know that some of your products you can get USDA certified organic right now, but capsules, you cannot. So, it's important to look at that label, to fact-check, to look at is your manufacturer testing your product and ingredients to make sure that the chemicals and pesticides, all of those things that come into play, that those factors are low? It's really, really important. It's essential when you're looking at supplements.

Jonathan: Yeah, and it's why we're making this podcast series, and it's not just to talk about supplements, even though our first season, we're talking more about it just so that there's a basic understanding, it's because there's a lot of misinformation out there. And there's a lot of different qualities of supplements that are out there, even whole-food ones that we've talked about.

And as with most things in life, you get what you pay for. So, if there's a bottle of it on the shelf, and I'm not saying this is true 100 percent of the time, but if there's a bottle of it that's \$30, and there's a bottle next to it that's \$50, likely, the \$50 one is a better one. You can't say it all the time. Sometimes, people are price gouging just because they can, and they do on the market.

TeriAnn: That comes back to people's responsibility to know what you're taking.

Jonathan: Agreed.

TeriAnn: Sometimes, people are paying a high price for a product that's actually not doing them any good. So, make sure that if you're paying that high price point, you're willing to pay it, that you're getting something that actually benefits your body, you're not just taking something that goes straight through your system. It doesn't do anything. That's wasted money.

Jonathan: Awesome. Before I wrap this up, anything else, TeriAnn? Or Doc?

TeriAnn: I think we're good today.

Dr. Nuzum: I think we're good.

Jonathan: Awesome. This was a wonderful episode. Thank you everybody for tuning in.

Listen, if you want to learn more about Organixx, please go to Organixx.com. That's O-R-G-A-N-I-X-X.com. We publish tons of articles on there. They're not supplement-related, they're just general health-related. We actually have something that we call INSPIRED, which is—stands for the eight pillars of health, each letter in INSPIRED is for the acronym. Go check it out. Go learn how to be healthier, learn how to live a happier, healthier lifestyle.

And tune in to our next episode, episode 4, where I'll be back here joined with Doc and TeriAnn, and we will go further down the rabbit hole. Thanks for tuning in.

TeriAnn: Thanks, everyone.

Dr. Nuzum: Yes, thank you.