KRESSER INSTITUTE
FOR FUNCTIONAL AND EVOLUTIONARY MEDICINE

ADAPT PTP Q&A with Chris Kresser

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1. I was going through one of the lessons here, and I noticed that in the past, you had mentioned that you had not done [a] subscription service before. But I noticed on your new website that you are having [a] subscription service. I wanted to know what changed your mind about that. (3:16)
2. When we start now the treatments and stuff, and also for regular supplements, sometimes people ask. I know you have on the website a list of supplements. And so do you have any particular websites or [an area on] your website [where] you can direct people for regular supplements, probiotics, or when you start doing treatments, and you have the protocols, where to get the products from? (15:51)
3. So I know with insurance companies, Functional Medicine is not really [something for which] you can bill insurance for stuff. But are there any cases if the patient comes to you already with [small intestinal bacterial overgrowth] (SIBO) or the IBS diagnoses that you can try to use one of those codes when you order the test? (21:36)
4. I read [a post] from Dave Asprey recently, and he was mentioning about kale and how kale is not a superfood. And it's bad for us. And he listed his reasons why, which is the first time I'd heard that. And he also mentioned the same thing about hummus and chickpeas. So I just wanted to get your take on that. (25:22)
5. There's one particular patient I have who is recovering from a surgery postcancer. She decided she doesn't want to have any chemotherapy. And she wants to try and improve her health as best she can. I've pointed her in the direction of Adapt180 [Health™]. [I] wanted to know if there was any sort of way that I could work alongside them to see what's being done and what''s recommended, sort of like a working case study, if you like. (30:38)
6. On the stool testing lessons, you used Doctor's Data and BioHealth 401. Are you currently using them? How do they compare to GI Effects by Genova? (34:08)
7. On the SIBO protocol, do you recommend Terraflora? Are you still recommending we use that one or Seed? (36:42)
8. What's your opinion of the COVID[-19] vaccine? Are you going to recommend it for your patients? Do you plan on taking it yourself? Do you have any contraindications for taking it? (37:38)
9. You gave us Paleo diet recommendations for athletes. Will you provide recommendations for non-athletes? (45:24)
10. [What are the] best ways to stimulate the parasympathetic nervous system? Do you recommend acupuncture, massage, deep breathing, etc., for people stuck in fight-or-flight? (45:41)

11. Have you noticed whether [emotional freedom technique] (EFT) tapping and biofeedback are effective for addressing stress and pain? (51:23)

Chris Kresser: Hey, everybody. Welcome to the Q&A. I know a lot of people are understandably distracted by the recent sociopolitical events. And, of course, we have Inauguration Day in the [United States]. Not everyone in the program is in the [United States]. But, of course, I'm sure pretty much anyone anywhere in the world is aware of what's going on. So we had no questions that were sent in ahead of time and attendance today on the live session, that's actually about what it has normally been. But I don't have any questions to answer that were sent in. So I'm going to leave it to all of you on the live call to put your questions in the Q&A box. And also, if you want to raise your hand and come on the live call and say hello, and ask your question that way, that would be welcome. Introduce yourself so you all can get to know each other, and I can get to know you a little bit.

Let's see here. I'm just going to look through some of the questions, Tracey, in the nutrition stuff. I think it's just that the course is so awesome, [and] we're doing such a good job teaching, you don't have any questions. But seriously, go ahead and put questions in the Q&A box. If you don't have any questions, we don't have to spend this time together. That's fine, too. I'm sure some of you will be happy to have the time back. And it is a little bit of a nerve-wracking day for those of us in the [United States]. And I suspect that's part of what's going on here.

So let's see, we [have] Dana, and oh, there we go. Awesome. And Rick, Rick's already on.

Rick: Good morning, Chris.

Chris Kresser: Morning. Welcome. Where are you calling from, Rick, and tell us a little bit about yourself?

Rick: I'm in Orange, California, Chris. I'm in my 27th year of practice here in Orange. Pretty much regular chiropractic. I had some events in my life during this past decade that have led me to this point where I want to transition my practice and work more with Functional Medicine.

Chris Kresser: Great.

Rick: I'm very excited about the coursework. And, of course, I'm also excited about the business side of things, because it's all new. And using a lot of the methods that you use is a lot of great high-tech stuff.

The question I had is, "I was going through one of the lessons here, and I noticed that in the past, you had mentioned that you had not done [a] subscription service before. But I noticed on your new website that you are having [a] subscription service. I wanted to know what changed your mind about that."

Chris Kresser: Great question. And I'm sure one that a lot of people are interested in. I think what changed my mind is realizing that a fee-for-service model wasn't the most effective way to support most patients. Patients who are—my typical patient population is people with [a] fairly complex chronic illness that do tend to need a fair amount of support in between appointments. So just seeing a Functional Medicine provider, even once every three months for an hour, is certainly better than that standard 10- to 12-minute appointment with a primary care doctor a couple [of] times a year, but it's often not enough.

And we would try to encourage people to schedule more regularly, and we try to provide as much support in between appointments as we could, but certainly, from a business perspective, there's a limit to what you can do in between appointments if you're not charging for those services, and you're not being compensated. You can end up providing a lot of services that are not being paid for. And, of course, you could choose to factor that into the cost of your appointments, understanding that you're sort of baking in some support in between appointments with the appointment charge. But then I think the cost of the appointments can become onerous and start to exclude too many people, which, arguably, Functional Medicine does already as a fee-for-service offering.

So getting people to commit to a subscription has both, I think, a psychological effect and a business and revenue effect. The psychological effect is they're committing to a program. It's not just having a single appointment with a practitioner. They're actually psychologically committing to a program that they're going to be participating in on a daily, weekly, [or] monthly basis. And I think that's huge and makes a big difference, even the finances aside. And then the second reason was more of a business decision where we did a lot of internal research and looked at the service we were providing patients in between appointments, and realized that there was a lot of service happening that we weren't getting compensated for, and we just didn't feel like that was sustainable financially.

Now, do I think everyone needs to do a subscription? No. I think it depends on your patient population, [and] it depends on how you structure your fees. There are lots of different ways to do subscriptions. For example, I know some people, including my former co-director, at [the

California Center for Functional Medicine], they're offering different tiers [of] subscription. Some people just do a pretty low-cost monthly kind of practice fee, like somewhere maybe between $25 and $40 a month, [which] doesn't really include services per se, not a certain number of appointments or anything like that, but just guarantees that the practice will be able to provide the level of service that the patient expects and that the practice wants to be able to provide.

So I do think, if you look, even in primary care, there's a movement toward this with the direct primary care (DPC) providers, [and] there's a growing number of them. There have been studies done that both patients and doctors and other practitioners tend to be happier with the DPC subscription-based model. It tends to produce better outcomes, less stress for the clinician because they have a background, a foundation of revenue and income that they can depend on. They don't have to see as big of a panel of patients; they don't have that constant stress. So I think there's a lot to be said for it. But I've also always been a believer that there's a lot of paths to the top of the mountain. And we shouldn't feel constrained to follow one or the other. It just depends on who we are and who we're working with.

Rick: Well, it's always been my experience that patients have a better outcome, they realize a better outcome with a very clear treatment plan. And the way that you have it structured, where you're telling them exactly what they're getting month to month and during the course of the year, I think that's great. So I plan on eventually being able to incorporate something like that. We currently do; we find that prepaid patients, when they pay for their service ahead of time, tend to have better outcomes because they just show up and follow through.

Chris Kresser: Yeah, it really, I think one way to look at money is just as a measure of commitment. And there [are] all kinds of problems with seeing it that way that we won't go into, but the fact is that is the effect that it has for certain people. And I learned this a long time ago when I was in a previous career, actually. Before I pursued Functional Medicine, I was doing counseling work and teaching nonviolent communication, and the ethic in that community was to offer services basically on a donation basis. And I often found in that situation that when people didn't pay for the work, they didn't invest as much of their own energy into it and didn't get out as much as if they would have, even if they paid a relatively small amount. So it was an interesting lesson for me to witness that.

Rick: I found that when you devalue your services, patients don't take it as seriously.

Chris Kresser: That's also true. So somewhere, we have to find this, everything we're talking about is true. And then on the other side of the coin, there are those patients who simply can't

afford to pay, and how do we address that? That's been one of my big ongoing questions in terms of Functional Medicine, given that it's not part of the insurance system at this point. And I don't have an easy answer. That's an ongoing exploration that we're all going to have to work together to figure out.

Rick: Well, thank you, Chris.

Chris Kresser: Well, thanks for your question, Rick. Nice to meet you. All right. So we have Dana, who I believe just joined the course. So we're excited to welcome you on, Dana. All right, you're on mute, Dana. So it's right there at the bottom.

Dana: Okay, got it. Hi, Chris.

Chris Kresser: Perfect. Hi. Where are you Zooming in from, and tell us a little bit about your background?

Dana: I'm Zooming in from Scottsdale, Arizona, and we're having an unusually cold day here today. It's going to only be about 70.

Chris Kresser: That's funny.

Dana: Yeah.

Chris Kresser: There's snow on the ground outside my window.

Dana: I can see, yeah, in your (inaudible 10:36) here. I'm a Functional Integrative dietitian, and I've been trained by Kathie Swift, and [I'm] just absolutely thrilled to be part of this course. I've been watching it since it started and finally had the opportunity to jump in. And I'm just one of those people that can't stop learning. I wanted to thank you so much for the way you present the information. It's so manageable, it's easy to digest and absorb, [and] it makes sense. I use it; everything you've taught me so far, I've already used with all [of] my patients. And one of them referred to you yesterday. He said, "Do you know Dr. Kresser?" And I said, "Well, not directly. But yes, I'm very familiar." I've read all your eBooks, and [I'm] just a huge fan.

I don't have any questions right now. I'm working on a complex patient case right now with methane-dominant SIBO, and I've read your *Unconventional Medicine* book, actually audiobooked it, and digested it in a day and a half.

Chris Kresser: Oh, great.

Dana: It was so good, I couldn't stop listening. And so I've been looking at the bonus chapter you presented online and using those case studies to help guide me [with] crafting personalized programs.

Chris Kresser: Great. Well, thank you for the kind words, and [it's a] pleasure to meet you. Check out the podcast I just released with Dr. Pimentel, who you may know of as probably the foremost expert in SIBO in the world. And I've interviewed him, I think this is [the] third or fourth time. [The podcasts are] all definitely worth reviewing if you're interested in SIBO. And we did talk about some kind of updates on the methane front.

Unfortunately, [there's] not much to offer you there. In terms of new treatments, there was one treatment that we were excited about, but it failed phase two of the [U.S. Food and Drug Administration] (FDA) trial, unfortunately. There was no meaningful difference between the treatment and the placebo arm, but there's still a lot that we teach in this course that will be really helpful. And the tenacity is a good quality to master when you're treating methane-predominant SIBO. Let's just put it that way.

Dana: Yeah, he went through another provider who treated him with rifaximin and neomycin but didn't really follow up on pretty much anything else, [which is] kind of typical. Just throw some antibiotics and drugs at you, and good luck.

Chris Kresser: Yeah, that's a problem for sure.

Dana: So we're working on it now with a multi-tiered approach and [will] see what we can do.

Chris Kresser: Great. All right. Well, we're here when you have questions. Nice to meet you.

Dana: Thank you. You, too.

Chris Kresser: Okay.

Dana: Thank you so much.

Chris Kresser: All right. So, next is, I may not pronounce this correctly, is (Imenna? 13:30) or (Jemena? 13:31) or (Hemena? 13:33). Please correct me because I would love to pronounce it correctly. If it's a Spanish language name, it would be Jemena, I think.

Jemena: Yes, it's Jemena; you are correct.

Chris Kresser: Okay. Welcome.

Jemena: All right.

Chris Kresser: Bienvenidos. Where are you calling from?

Jemena: I am in Dallas, Texas, actually in (audio cuts out 13:58) Texas. I am a PA, and I am currently working in internal medicine. I am looking forward to transitioning to a different type of patient care. I've been little by little getting familiar with Functional Medicine and all my (audio cuts out 14:24), I was able to find you and start the program, and I'm very excited. It's kind of changing my thoughts, my way to analyze things from conventional to Functional Medicine. But I think it's great, and I can see helping people more because sometimes, with traditional medicine, there is a point that you're like, okay, there is nothing else that I can do.

Chris Kresser: Right, right.

Jemena: This is really blowing my mind, and yeah, very, very excited about this program.

Chris Kresser: Awesome. We're really excited to have you. Do you have any ideas of (crosstalk 15:12)?

Jemena: I have a quick [question].

Chris Kresser: Go ahead, please go ahead.

Jemena: No, I was just going to ask you for, "**When we start now the treatments and stuff, and also for regular supplements, sometimes people ask. I know you have on the website a list of supplements. And so do you have any particular websites or [an area on] your website, [where] you can direct people for regular supplements, probiotics, or when you start doing treatments, and you have the protocols, where to get the products from?"**

Chris Kresser: Yeah, we do cover that in the course. There are lots of different options, as you can imagine. Wellevate and Fullscript are probably the two most popular options right now for practitioners. They're distributors, and they carry, unfortunately, Wellevate has some brands, [and] Fullscript has other brands. There's not one distributor that has all of the brands that we use, which would be really nice. But I would say between Wellevate and Fullscript, they carry about 90 percent of the brands and products that I tend to prescribe and that we talk about in the course. And then there's another 10 percent of the holdout companies who have

neither partnered with Fullscript nor partnered with Wellevate, and you still have to send patients to their website directly or some other online distributor to get those products.

But between Wellevate and Fullscript, they cover a lot of it. And those are the most convenient options for most practitioners unless you want to get into stocking and warehousing your own products, which most people don't want to deal with. Wellevate and Fullscript have great apps, so it makes it really easy for patients to reorder. You can set up recurring orders. They can set up an auto-ship, so they continue to get the product. They have features for practitioners where you can set certain products to be limited to prescription.

So let's say you're prescribing an antimicrobial protocol for SIBO, which has some herbs that shouldn't really be taken long-term; you can set a limit on refills for that particular product just like you would do with a medication. So those are the platforms that I really recommend. In terms of supplements for ongoing maintenance, like vitamin D and probiotics and stuff, I have some in my store at ChrisKresser.com. But, frankly, [I] don't put a ton of energy and time into that. We just provided [them] there for convenience. And I've written lots of articles and talked about various supplements that I think could be helpful, just on a day-to-day basis.

Generally, as I'm sure you may be aware, I'm a much bigger fan of getting nutrients from food. There are some exceptions that are difficult for most people to get enough from food. Vitamin D would be a major one, especially now during the pandemic. Magnesium is another that it's difficult to get enough of from food because of soil depletion and other factors. So I think a lot of people do pretty well [with] taking magnesium. Essential fatty acids like omega threes, that will depend on seafood intake. If people aren't eating seafood, then I would typically recommend taking fish oil, as well. And then, probiotic[s], we're going to talk all about in the course. So does that answer your question? I'm not sure whether you're asking more about how.

Jemena: That's how I was thinking, yes.

Chris Kresser: Great. Okay. Yeah, and we do have a module in the course talking about supplements and different options for whether you want to warehouse them yourself. There are actually, and I don't mean going and buying a warehouse. There are actually services like Shipwire and others where you are essentially fractionally renting a portion of their warehouse. And then you can order supplements in bulk from the manufacturers, [which] have been stored in that warehouse, and then Shipwire or a company like that handles all of the fulfillment,

returns, everything like that. That's what we're doing with the ChrisKresser.com store, for example. And the upside of that is your margin is better.

So you can, for every supplement that is sold, you would make more money on that, presumably, because you're not paying a middleman like with Fullscript and Wellevate. They're the middleman; they're essentially doing that distribution and warehousing and stuff. And then you, as the practitioner, get some percentage that's leftover after they've taken their cut. So it just depends whether you're trying to maximize for convenience and functionality, which most practitioners are. But if you're trying to maximize your profitability, then those other options are better. They just require a lot more work and also risk. Because if you buy a bunch of supplements, for example, and your patients don't order them, then they expire in the warehouse, then you eat that cost. So there's always a trade-off there.

Jemena: Find a balance. Okay. (crosstalk 21:01) No, go ahead.

Chris Kresser: I was just going to say we have a whole module where we talk about the ins and outs of that and the pros and cons. It'll be a little bit later in the course, I think.

Jemena: Okay, and just a last question, maybe we will cover that later. "**So I know with insurance companies, Functional Medicine is not really [something for which] you can bill insurance for stuff. But [are] there any cases if the patient comes to you already with SIBO or the IBS diagnoses that you can try to use one of those codes when you order the test?"** or (inaudible 21:38).

Chris Kresser: You can definitely use a code; you can use all those codes and you can get coverage for rifaximin, for example, if a patient has IBS. And rifaximin is FDA approved for IBS-D that has failed other treatments. So if you can document that they've failed like Imodium, and other standard treatments for diarrhea, then you can often get them coverage for the rifaximin (if they have insurance, of course, and the type of insurance that will cover that; not all do). But we do that all the time. We are often working with [a] patient's insurance. Likewise, for blood work, if a patient has insurance and we order blood work through LabCorp or Quest, it's virtually always covered to the extent that their insurance would cover that blood work from any provider. So that's good news. With all of the other tests, like the stool testing [and] breath testing, it's less common to get coverage for insurance. And that's not necessarily an issue with Functional Medicine, per se; it's an issue with those tests. If a conventional provider ordered those tests, they may not get coverage either. It's just because those tests have not been approved by insurance yet. So that depends on the test.

Genova, as a lab, tends to be better than most of the other functional labs in getting, they have some relationships with some insurance companies, which they document on their website, or you can call somebody there and talk to them. So, if you're favoring trying to get as much insurance coverage as you can, then working with Genova, using Genova for a lot of the tests, the stool, saliva, and other functional tests, probably makes sense to do.

Jemena: Okay, great. Thank you so much.

Chris Kresser: Good luck.

Jemena: Thanks.

Chris Kresser: You're welcome. All right. So Rich has a question, I see. You've got your hand up, Rich, so why don't you just come on and ask your question that way. And then, I'll get some of the questions that are in the Q&A box. Hey, Rich, welcome. Where are you calling in from, and tell us a little bit about your background?

Rich: I'm calling in from London, UK. I'm an osteopath over here and a sports rehabilitation specialist. I guess osteopathy is different [in] the United States, as I suppose many people would know.

Chris Kresser: Right.

Rich: We're not medical doctors. We do musculoskeletal hands-on treatment. (Crosstalk 24:32)

Chris Kresser: Sorry, I just want, we met. I just, we have different people on different Q&As. So I just wanted to make sure they get to know you a little bit, as well.

Rich: Okay. Great. Yeah, so my question, but (inaudible 24:53) really have any specific question[s], but there are a couple of things I wanted to ask. **The first one was, " I read [a post] from Dave Asprey recently, and he was mentioning about kale and how kale is not a superfood. And it's bad for us. And he listed his reasons why, which is the first time I'd heard that. And he also mentioned the same thing about hummus and chickpeas. So I just wanted to get your take on that."**

Chris Kresser: Yeah, sure. There's a lot of this kind of thing out there. Steven Gundry, if you've heard of his work or read his book, *The Plant Paradox*, is really largely about this topic.

His belief is that lectins in foods that we commonly eat are in tons of fruits and vegetables, and grains, and legumes, and lots and lots of other foods. His basic [theory is] they cause leaky gut and then leaky gut, as I'm sure everyone has heard by now, then provokes an autoimmune type of response that can cause inflammation and oxidative stress and all these problems.

I think the research on that is really poor. I actually followed a lot of the references in Gundry's book, and most of them didn't say what he said they said in the text, and/or it was really misrepresenting the study and leaving out key details. I think it's plausible that a diet with a lot of lectins might be problematic for a subset of people, let's say, people with severe autoimmune disease or who already have significant leaky gut. And that could be one of the reasons why, for example, a grain-free, legume-free diet tends to work well for people with pretty significant [gastrointestinal] issues or autoimmune issues. But then to extend that to mean that nobody should consume any lectins in their diet or should minimize that to the extreme is a leap that is not supported by the scientific evidence.

It's kind of like saying, "Hey, this person has a strawberry allergy. Therefore, everybody should not eat strawberries." Or "This person has celiac disease; therefore, everybody is going to have a severe reaction to eating gluten." Which I don't think is true, either. I think gluten intolerance exists on a spectrum where you have some people with celiac [disease] who could even almost have a life-threatening reaction to eating a significant amount of gluten. And then, contrary to what some people believe, yes, there are plenty of people in the world who can eat gluten and not have an immunological reaction. Do I recommend that they eat tons of gluten-containing foods? No. Not because of the gluten but because a lot of the foods that gluten comes in are not very good for us anyway, right? Bread and crackers and cookies and muffins.

But that doesn't mean that gluten is harmful [to] them particularly. It just means that those gluten-containing foods aren't great. And then you have everything in between where you have someone with non-celiac gluten sensitivity who has a mild reaction, [and] is probably closer to this end of the spectrum. Someone with non-celiac gluten sensitivity that has almost as bad of a reaction to someone with celiac [disease] or maybe even worse. So then there's a concern about thallium and some heavy metals in kale and other brassicas, which do tend to bioaccumulate certain toxins in the environment. But I think it's a huge stretch and actually a distortion of the evidence to suggest that we shouldn't need any kale and that nobody should eat chickpeas or legumes. It's really, as I've argued from day one, pretty much there's no one-size-fits-all approach, and you really have to consider all of the different variables.

Rich: Yeah, that's good. It's good to hear. Thank you. (Crosstalk 29:13)

Chris Kresser: We have much bigger fish to fry. Like how about let's focus on getting people off industrial seed oil, sugar, and flour and not worry as much about kale and chickpeas?

Rich: Yes, yeah. Absolutely.

Chris Kresser: Yeah. All right. Thanks. Good to see you. Yeah. Anything else? Any other questions?

Rich: Oh, yeah. Just quickly, first of all, thank you for the course. I'm really enjoying it. It's all very new to me. But it's very manageable, the way it's delivered. And I'm starting to try and incorporate it with some of my patients. And a couple of them I'd like to work with but also don't really want to use them as guinea pig[s] too much in certain aspects. **"There's one particular patient I have, who is recovering from a surgery post-cancer. And she decided she doesn't want to have any chemotherapy. She wants to try and improve her health as best she can."**

Chris Kresser: Yep.

Rich: "I've pointed her in the direction of Adapt180 [Health™]. [I] wanted to know if there was any sort of way that I could work alongside them to see what's being done and what's recommended, sort of like a working case study, if you like."

Chris Kresser: Yeah. Well, they're actually working on some mentorship, kind of internship residency options, but they're not ready yet. So, the answer right now, unfortunately, is no, but there may be soon. One thing that we have, definitely, it's a goal of ours, for sure. In terms of working with people, when you're just learning, there [are] two ways of answering that.

First is, one of my mentors said, there's a reason we call our work a practice. When you say I have an osteopathy practice, or I have an acupuncture practice, or a medical practice, I don't know who originally came up with that nomenclature, but I take it to heart. I really try to remember that what I'm doing is practicing, and for whatever reason, people are willing to pay us to practice. So that's a good thing. And hopefully, our practice is helpful in most cases, but I think if you're just, when you're transparent and real with patients, that goes a long way. And, of course, we want to maintain our credibility and authority, and that's important, too. But just being willing to admit when I don't know something, and if this is true for you, which is for me to say, "You know what? I'm not sure what the answer to that question is, but I'm going to try to find out." And I'm going to go and do some research or talk to my mentor, or, I'm in this

program where I'm learning, and I'm going to ask the faculty members there, and I'll get back to you at our next appointment.

I've done that. I still do that today because I see a lot of patients with some pretty far out-there cases and presentations and diseases that are in the index of some medical textbook that I've never heard of. And so, if somebody asked me a question about something like that, [I'd] tell them, I don't know; I'll learn as much as I can about it. So I think that's one way to answer and I think that's a good approach, in general.

On the other hand, when you're dealing with something like cancer, preventing cancer recurrence, I think, in that situation, I personally would probably want to at least have support, which is exactly what you're asking for and working alongside someone who's more experienced, rather than taking that on myself, just because of how high the stakes are in that case.

Rich: Yeah.

Chris Kresser: Yeah, we're happy to provide as much of that support as we can. I'm not sure if that will be sufficient for you to feel like you have what you need.

Rich: Yes. Well, I think with her, I'll refer her on to Adapt180 [Health™], but I definitely have more patients now. It's good to know that I can get some help alongside practicing and learning. So yeah, thank you.

Chris Kresser: Yeah, all right. Great. Good to see you again. Take care, Rich.

Rich: Thanks a lot. Thank you.

Chris Kresser: All right. We've got some questions. **Adrian. "On the stool testing lessons, you used Doctor's Data and BioHealth 401. Are you currently using them? How do they compare to GI Effects by Genova?"**

No, BioHealth closed as a lab. Doctor's Data is still a great lab; we still use that test. Actually, it's a new test. There's so much, I think we talked about this in the last Q&A. There's so much change that happens with medicine lab testing, which is good because the change is usually [an] improvement. So we are actively right now working on updated stool testing curricula. And because there were some big changes on that front.

Genova came out with a completely new test using a new evidence-based methodology for DNA [polymerase chain reaction] analysis that's really the gold standard. It's the same kind of metagenomic approach that companies like Longevity use. So we're really excited about that test. And we're using it and compiling case studies. The Doctor's Data GI360 is a really good test, as well. We've used that in some case studies. We had been using the Diagnostic Solutions GI-MAP. So we have lots of case studies there. So we're going to be, when there are those kinds of changes, I don't rush to get the new content out because [we've] got to kick the tires. We've done a lot of split samples and validation stuff with each of these tests to make sure that they're reliable. And we've finally finished all of that legwork and research, and now we're putting that together into curricula that we will release to you.

And the good news about this course is you have access to all updates that I make, even after you graduate from the course. So I expect to have the new stool testing content out while you're still in the course. But for any, let's say in two years, I update it again, you'll still have access to it. As long as the course is still going and the internet's still running and all that stuff, you'll still have access to the updates. So that's really great. People who were in the first cohort back in 2016 are getting all of the updates that I've been doing over that period of time.

So stay tuned there. Carla, this is a related question, actually. Carla says, "On the SIBO protocol, do you recommend Terraflora? Are you still recommending we use that one or Seed?"

We recommend Seed now. Terraflora, I like it, [but] I don't like it as much as the original Prescript Assist. So I don't know if you all followed what happened there; there was a big legal thing. It's not worth going into, but Prescript Assist no longer was available as a formula after that happened. And then, the same company released Terraflora, which is slightly different. And around that time, Seed became available, too. And I think it's a phenomenal product, [with] lots of good solid research behind it, [a] phenomenal scientific team, and it's really effective in clinical practice. So that's what we typically recommend now.

Adrian asked, "What's your opinion of the COVID]-19] vaccine? Are you going to recommend it for your patients? Do you plan on taking it yourself? Do you have any contraindications for taking it?"

Those are big questions. And, as you can imagine, [it] is a very polarized area. And it's difficult to even find balanced information and reporting on it. I've done quite a lot of research on it, as you would imagine, and we're trying to figure out the best way of sharing that. But I'll tell you

the short version of my take on it so far. I think that as a starting place, it's really important to recognize that there is a risk in getting COVID[-19]. I think that's not a newsflash for anybody. And there's both an acute risk, having a severe acute infection, and, of course, that risk can go all the way up to death. And then there's a long-term chronic risk. And that's long COVID. And unfortunately, that is a very, very common occurrence. I just shared in an email recently, and I think on social media, the largest study that had been done on long COVID, and [a] shockingly high percentage, I think it's over 75 percent of patients in this study had at least one and often more than one long-term symptom that still persisted even after the virus had been cleared.

Now granted, this particular study was only with hospitalized patients. But previous research has shown that there's actually no association between the severity of COVID[-19] in the acute phase and whether someone develops long COVID later on, and that young people are actually even more likely to develop long COVID than older people. So if we use that (audio skips 39:33) work to think about risk, you've got short-term risk, then you've got long-term risk with COVID[-19]. And then you have short-term risk and long-term risk with the vaccine. So the short-term side effects, many of them are fairly mild, but injection site pain and headache and things like that. But we've also all seen in the news about some much more severe short-term reactions that people have had to the vaccine, that it required at least short-term hospitalization.

And then there's been some discussion of things like higher incidence of Bell's palsy in people getting the vaccine that even Paul Offit, who's a vaccinologist, and, of course, is the furthest from anti-vax that you could possibly get, has raised questions about and wondering if that's something that deserves further investigation. And then I'm sure many of you saw the news stories of the deaths in [the] elderly after receiving the Pfizer vaccine.

But I think, just starting with that, for example, in a population of very elderly, frail people, there's a certain number of deaths that would be expected to occur in the background no matter what. And the question is, did the number of deaths that occurred after getting this vaccine exceed that background level of deaths that you would expect? And then, of course, another question is, if the vaccine did induce a strong immune response to cause the high fever or something and because of how frail they were and other pre-existing conditions that did actually cause their death, how do you balance that against the almost near certainty that they would have died if they [had gotten] COVID[-19], and that many other people in that age group may actually be protected by the vaccine, and have a better chance of surviving the vaccine than surviving COVID[-19] itself?

So it's a really, really complicated question because we can't even just talk about the vaccine; we have three vaccines that are out there right now. Two mRNA and then the adenovirus AstraZeneca vaccine, the Pfizer, and the Moderna being the mRNA vaccines. Those are new. We don't have a history that we can point to of mRNA vaccines and what happens over a long period of time. Adenovirus vector vaccines are, we have a little bit more familiarity. But if we're evaluating risk with COVID[-19] and the vaccine, and we're seeing short-term and long-term, we know something about [it]. We know a lot about the short-term risk of COVID[-19], [and] we actually even now know more about the longer-term risk, because I think today was actually the first COVID[-19] case one year ago diagnosed in the [United States]. So we've got a year under our belt. With the vaccines, we know a fair amount about the short-term risk because those have been studied fairly well. Now quite a number of people have been vaccinated. But we really don't know much about long-term risks because they just simply haven't been around for that long. They really only started in December, and here we are in January. So there's this important variable in (mask or risk? 43:12) evaluation that we don't really understand at this point.

Now, having said all of that, I think that for the majority of people, the risk of both the short-term and the long-term risk of getting COVID[-19] almost certainly outweighs both the short- and the long-term risk of getting the vaccine. I can't be sure about the long-term part of that, of course, because, as I just said, we don't have those data. But that would be my guess, based on everything that I have seen so far. And there are some subgroups for whom that might not be true, particularly people that have had adverse vaccine reactions in the past. But often, the subgroups that might be expected to react more poorly, or have a higher risk of an adverse reaction to the vaccine, are also in the group of people that would be expected to have a more severe either acute and/or chronic COVID[-19] response. So for that particular population, I think the decision about whether to get vaccinated or not is much more difficult than [for] someone who is, let's say, 35 [years old], and healthy, [with] no history of adverse vaccine reactions. And no pre-existing conditions or anything that would predispose them to a severe COVID[-19] infection. I think for that person, the decision is a lot easier and more clear. So hopefully, that was helpful. It's as much as I can do on the spot here. And hopefully, we continue to collect more helpful data from the ongoing trials and the much greater number of people that are getting vaccinated now.

Okay, so Dave, or excuse me, Dara or Dhara said, "You gave us Paleo diet recommendations for athletes. Will you provide recommendations for non-athletes?"

Oh, those should already be in there. Please reach out to support@kresserinstitute.com, and they can direct you to where to find those.

"[What are] the best ways to stimulate the parasympathetic nervous system? Do you recommend acupuncture, massage, deep breathing, etc., for people stuck in fight-or-flight?"

That's a great question and one that I'm super interested in and have been doing a lot of research and exploration into over the past several years. Because after practicing for a decade and training for longer, I think this is really the elephant in the room in a lot of cases that you're going to see, is just the intense, persistent background level of stress, the sympathetic arousal. And for a lot of people, no matter what we do, it might have some benefit, but it's not going to get them where they want to get to unless that background level of stress is addressed. So I'm really glad you're asking this question.

I think everything that you mentioned is great. I'm definitely a fan of people learning self-care strategies that don't depend on other people. So acupuncture is awesome, [and] so is massage, but there's a limit to how often people can do that. And now, especially during the pandemic, they may be less likely to seek that out. So things like deep breathing, as you mentioned, restorative yoga, tai chi, Qigong, meditation, mindfulness practices—there are a lot of self-massage mats that vibrate and have heat. There are self-massage devices like the Theragun, which are actually quite good and can be really helpful in that regard.

There are heart rate variability kind[s] of training programs like HeartMath, which can be helpful. Connection with nature is very important for regulating that response, and since outdoors is one of the safest places to be during the pandemic, I think encouraging that as much as possible is a really good idea. Sauna is another one that I would put pretty high on the list that's more expensive. But for people who have the means and resources to get a sauna at home, that's nice. And there are lots of different options like this thing here. This is a single bulb from SaunaSpace that's mounted to a wood panel, which they sell. But if you're handy, you could make one yourself. And then it's attached to a swing arm on my, the same kind of thing you would attach a computer monitor to. It's got a VESA mount on the back of this wood panel. And so sometimes, when I'm working, I'll just turn this on and get a little bit of near-infrared light. It has some of the same benefits [as] sunlight; it's got the heat. And then you can put that thing on a stand, too. I have another stand that I put it on, and I can target different parts of my body. So if funds are limited for patients, you can recommend something

like that, which is much more affordable than getting a whole sauna, and there's still a lot of benefits.

Then there's, of course, a whole other domain, which we haven't talked about yet. If you search for Chris Kresser stress on Google, you'll find some articles where I go into more detail here. Because if we're talking about stress, we also have to talk about how we relate to our lives and how we relate to other people. A classic condition pattern that tends to create a lot of stress in life is not being able to say no, for example. Being the type of person who always says yes, and there's a lot of good reasons behind that usually. That type of person tends to be a helper, like most of us as healthcare practitioners tend to be in that camp, but we will often take on more than we can handle, sacrifice our own well-being and self-care. So that may be beyond your scope of practice or what you want to go into in an appointment with a patient, but health coaching can be phenomenal for that kind of thing—helping people to cultivate resilience and discover their strengths and use those strengths to make positive changes in their lives. This is why I've become such a big advocate of health coaching. So having a health coach either in your practice or that you can refer to can be really helpful.

And then things like cognitive behavioral therapy can be extremely helpful with this kind of thing. Just really learning to change our relationship internally in a way that generates less stress. So I think you have to approach it, I would call all the other things we were talking about, like stress management, where you're taking steps to manage the stress that's there. But I think stress reduction is also an important part of the puzzle; even though it's more difficult often to do, it's equally important. It's sort of like if you use the analogy of a leaky boat, a boat that has holes in it, bailing the water out as stress management, and that's good because it will slow the rate at which the boat is sinking. But obviously, plugging up the holes will be even more important longer-term.

Okay, next question from Adrian. "Have you noticed whether EFT tapping and biofeedback are effective for addressing stress and pain?

I think they are, absolutely. I have some patients who swear by EFT. For whatever reason, it's not something that ever really grabbed me. But this is, again, why it's important to really embrace that no one-size-fits-all approach. Some people will try EFT, and it will just be like a light switched on. It's just really powerful. And what I like about it is that it's very accessible; it's not expensive to learn, you don't have to buy $1,000, $2,000 equipment, and it's always available. People can do it quickly in a car; they can do it even under the desk at a meeting without anybody else seeing [it]. So there [are] lots of good things to say about it.

And then biofeedback, yeah, and neurofeedback. Both have a lot of research behind them and are helpful. I would say, especially for people who are less in touch, at least initially with their own experience, their sensations, their emotions, their thoughts. And that's not to say that neurofeedback and biofeedback can't be helpful for people that are. But sometimes, for example, if somebody is just really overwhelmed, and they don't have a history of doing any kind of somatic practice where they have increased their awareness of what's going on in their body. If in a conversation with them, I'm asking them questions about their physical experience, and they really can't answer them, and they just don't have that literacy, then I will often start them with some kind of practice like biofeedback or neurofeedback. And/or I will tend to recommend meditative practices that have a movement element to them, like tai chi or Qigong or restorative yoga, because for those folks, often they need that physical grounding to quiet their mind enough to even enjoy it and have a pleasurable experience, which I think is important.

So, okay, I see Austin has his hand up. We've got a few minutes. Let's bring him on, and that would be the last question for today. All right, Austin, I can see your square, and I see that you're not muted, but I can't see your video, so I'm not sure if you're hearing me. I can't hear you yet. Technical issues, perhaps. Zoom is generally pretty good, but [it] definitely [has] issues sometimes. Maybe, Katie, we can try taking him off and adding him back again. See if that helps. Otherwise, we can try to do it next time.

Okay, so Austin's saying he's got to change settings. I assume that was skipped for now. Sure, no problem. We've got several more of these. So we'd love to meet you next time if you're able to, Austin. Everybody, thanks for being here, especially on a day like today. Thoughts and prayers for a smooth and peaceful day today, and I will see you and talk to you next month. Take care.