



Dr. Jill Carnahan, MD - 00:00

Hey everybody. Welcome to Resiliency Radio, your go to podcast for the most cutting edge insights integrative and functional medicine. I'm your host, Dr. Jill and with each episode we dive into the heart of healing and personal transformation. Join me as I interview medical experts, renowned thought leaders and innovators of all types, helping you and bringing you information to achieve optimal performance and longevity. Now you know if you've been here for a while that we really rely on you as the listener, the subscriber and the podcast. Enjoy. Say love that word. Will you please stop by, leave a review or just hit subscribe. If you're on YouTube, that really helps us to reach more people. Now if you haven't yet been to Dr. Jill health.com you can find all of my favorite products and services to help you live your best life there.



Dr. Jill Carnahan, MD - 00:52

We have a beauty line, Dr. Jill Beauty, filled with very clean anti aging products, ones that I use myself. Some of my favorites are in a package called Dr. Dill Favorites, including the Biopeptide Beauty Cream, the HA Collagen Booster and the Vita CE Serum. But there's loads of other stuff. There's a neck cream, there's a body retinol cream, there is a microderm abrasion mask and so many more. I know that many of you have been really enjoying the results. So check it out. Dr. Jill health.com and if you haven't yet got a copy of my book Unexpected, you can find that on my website jillcarnian.com or you can get a signed copy at Dr. Jill health.com personally from me. Okay guys, let's go to our guest today. You're going to love this episode with Dr. Danielle Chile.



Dr. Jill Carnahan, MD - 01:40

He's a distinguished healthcare professional specializing integrative and functional medicine with a mission to reverse chronic disease and optimize human health through a root cause approach. He's the founder of TBD Fitness Holistic Wellness Clinic based in Elk Grove Village, Illinois, serving patients locally and across the country. You're going to hear about how he began his career as an athlete, earned his degree while playing NCAA Division 1 Soc. After college he pursued a professional soccer career in Europe and experienced that deeply influenced his holistic philosophy on performance, longevity and wellness. And we both you're going to hear us talk about exercise and the gut and peptides and all the cool things that have to do with wellness and recovery. So let's jump right into this episode and welcome Daniel. Hey Daniel, it's so good to see you again.



Dr. Jill Carnahan, MD - 02:28

We were actually just at a conference at the same conference in Las Vegas. So it was fun to see each other there and feel all the energy of all that's happening in our world of functional integrative medicine. There is so much happening. And I don't know about you, but one of the things that I was most excited about was hearing and seeing the newcomers, the people who maybe are traditionally trained and they're kind of like wide eyed and like, oh, what's this new world, right? It's super exciting. Today though, I want to start with your story as a former athlete and how that shaped. I'd love to just hear like, how did you get into doing what you're doing now? And tell us the backstory.



Dr. Daniel Chille - 03:06

Pain drives purpose. So I don't know where to start, but certainly starting from birth, I was a C section baby. My mom tells me my health was generally pretty good. However, fast forward to my early teens. I had impacted wisdom teeth, or so I was sold on, had surgery to remove the wisdom teeth. And then ever since then, things slowly kind of went downhill. One is wisdom teeth. Now we see kind of within not only the oral microbiome, but the impact with teeth in certain meridians is correlated with a small intestine and heart. And what happened was this was medical malpractice at the time. The the surgeon left a piece of tooth inside my wisdom teeth. Well, fast forward first week, second week, third week. My pain was only growing over time. Each time it went back weekly.



Dr. Daniel Chille - 03:55

He said, no, it's just an infection. Infection, infection. Three rounds of antibiotics, three heavy doses of painkillers later, I was no better. Went to see my dentist, took some imaging, a piece of tooth was just left in there. He put some gauze, it was immediately dissolved. Pain gone instantaneously. So I saw very quickly, not all physicians are equal, certainly surgeons included. But after that I kind of saw things kind of digestion related were adversely impact. Now fast forward. I went to go play soccer in Europe. This is now in my later teens. And I came back home very sick. I had constant bouts of diarrhea, frequent loose bowels, six to 12 times a day. I went to Mayo Clinic and they diagnosed me with lymphocytic colitis. Well, they put me on Imodium about three times a day for 12 weeks.



Dr. Daniel Chille - 04:42

I had to abstain from four from severe abdominal cramping. And for the next 10 years that was kind of my normal state. I didn't know any better. The Mayo at the time being kind of the zenith of our modern medical Culture. And so until I went down the path myself. Right. I realized there certainly is a better way, and I don't want to undermine conventional allopathic care, but certainly it let me down early on, and that was kind of my trajectory. But in terms of my health in general, it's like I was always the sickest, healthiest person in the room. My nutrition was always dialed in. My sleep was prioritized. I mean, I thought I was doing everything correctly. Additionally, as growing up, the sweetest thing in my pantry from my parents was oatmeal. Right.



Dr. Daniel Chille - 05:29

So they had this kind of safeguarding and understanding nutrition. But similarly, for breakfast, every morning was bowls and bowls of cereal with milk. Right. 2% milk cereal that was like cherries, Cheerios, Wheaties, Rice Krispies. Healthy kind of mucil. Healthy material. But we realize now later on that, well, perhaps not so healthy after all. So even when we do, and we're kind of myopic intention, we don't always get it right. But that's kind of, I guess, a brief synopsis of my history.



Dr. Jill Carnahan, MD - 06:02

Wow. Well, and I definitely want to dive into gut. That's one of our topics today. And I think it's so relevant. You and I both have very personal experiences that have shaded and driven our desire to bring gut health. And it's such foundation, even with your wisdom teeth and the antibiotics. And probably that started a cascade of gut

symptoms and things. And one little side note, so interesting, back in the 80s and 90s and all these serials, I mean, a lot of pro athletes were featured on the covers of these, you know, on the boxes, which is hilarious because how sad that our advertising really abuses those role models in our environment. Like you know, you're playing soccer in Europe, and. And so you would think, oh, Wheaties are the best health food for an athlete. And it's so wrong for children.



Dr. Jill Carnahan, MD - 06:45

Like, it's just. That's just should be criminal, right?



Dr. Daniel Chille - 06:51

Yeah, that's the reality. But we. We follow that, right? We adhere to social norms, and that's the propaganda that we're constantly fed. Pun intended. And so the difficulty becomes is where do we find. Where do we not only find the right source of news, but also things that are not perhaps blinding us. Right. And sometimes it's the things that we digest, or maybe not digest, that we're not being exposed to that often enough will provide the healing that we need. And so I always say this with our patients in order to heal. Number one, you speed at the heel of your nervous system. But number two, it's the environment. And certainly the internal is what's driving the external. So people raise their hand when they're in physical pain. Right. For myself, it was six to 12 bowel movements a day of constantly bloating, diarrhea.



Dr. Daniel Chille - 07:37

And then I realized, obviously I went the functional approach. And obviously with my own medical training, it was parasite, it was dysbiosis, it was huge intestinal permeability, or what we colloquially now know as leaky gut that was setting the stage for these symptoms. And then with pain, people raise their hand when pain. But pain manifests as a representation of the internal. So you're absolutely right.



Dr. Jill Carnahan, MD - 08:03

Wow. And how did you end up obviously conventional, and you were just told ibs, which is the classical. And for those of you listening, if you've heard me, you've probably heard this. But just in case, IBS is this generic term that categorizes, you know, frequent stools, uncomfortable bloating, pain for more than six months. It's a very generic kind of label that we give our patients. But Dan and I know underneath that there often lies a parasitic infection, a small intestinal bacterial overgrowth, a fungal overgrowth, or any number of things that are very treatable from a functional perspective. Dan, for you, where was hot or how did you find someone to actually help you navigate a more functional approach with your gut?



Dr. Daniel Chille - 08:40

Oh, that is a good question I have to recall. But I know for me is because I was considering at the time, well, eventually I figured there has to be a better way, and I have two options. I need to resolve this myself. Medicine has. Was always a passion, but soccer was my one truth. So fitness training, just living a very holistic, healthy lifestyle, which was ingrained in my parents. I was a product of my environment. So fortunately, you know, I grew up in an environment that was more conducive to making better decisions. So natural medicine, natural healing always spoke to me. And when I kind of spoke to my MD counterparts, I learned early on that this was more treating symptoms in the pharmaceutical approach rather than something that's treating kind of root cause medicine or underlying drivers. Right.



Dr. Daniel Chille - 09:29

Which was where exactly the Mayo Clinic fit. Now, the Mayo Clinic has certainly come a long way since then adopting their own functional medicine department. But years back, I mean, there. That was. There was no alternative. It was kind of pursuing alternative care, which to me is synonymous with restorative care. Right. I think people often confuse alternative care as something less evidence based, but in fact, this is how we help our patients heal every single day. So I just kind of saw early on that there were two kind of approaches and I decided to go the natural approach.



Dr. Jill Carnahan, MD - 10:01

Yeah, amazing. And obviously then you started seeing symptom relief over time. And then that obviously, I'm assuming, led to some of where you're at now with your. How did you take your own personal story and then develop a philosophy and develop a fitness model?



Dr. Daniel Chille - 10:20


Well, interestingly, my story is almost identical with my patient population. I mean, when I first started about a decade ago, 50% of individuals came with sleep issues. In the other 50 with gut issues. And often they're equal. Right. So it's often both. Right. One goes hand in hand, leaky gut, leaky brain. Obviously, if there's any sort of vagal nerve dysfunction, you're stuck in this dysautonomic sympathetic driven state. You cannot heal. Right. The, the nighttime is when the body really prioritize detoxification. Obviously we're doing all the time, but this is when we repair, when our hormones replete. And so I understood that I need to find a rubric in order to optimize my patients. And what I started. I was fortunate to have some very imprinting mentors early on, and one being Dr. Rakowski. We did him on a podcast.




Dr. Daniel Chille - 11:16

He treats everybody, but notably works with Olympic level athletes. So it always starts kind of at the high top with me. And same thing. We have worked with Olympic level athletes, professional athletes, collegiate level athletes, and obviously those kind of solutions often trickle down in the fitness side in terms of general population. But he taught me early on is the stress sleep reset therapeutic dosing of melatonin L Theanine to shift someone into that


parasympathetic state, rebalance the nervous system, allow for the environment to start healing. So that was one component working on that sleep.

 Dr. Jill Carnahan, MD - 11:51


Yeah.

 Dr. Daniel Chille - 11:52


When you intersect that with the sleep gut access. Now we recognize if you're balancing hrv, because the vagus nerve innervates every step of the digestive process, you can now restore the assembly line balance right from mouth to out to anus. So working on both those in tandem were critical to not only help my healing curve, but 100% of my patients. And what I saw early on is that actually we can make a shift in our patient population very quickly. And so my mantra now is how we can help our patients heal faster and safer. Because too often, and I don't want to undermine functional medicine practitioners, but my assistant as an example, so she came to me and she was sold on a package that said, we need you for Two years, We'll get you better in two years.

 Dr. Daniel Chille - 12:41

And I told her verbatim, I said, well give me two months and in two weeks you already feel better.

 Dr. Jill Carnahan, MD - 12:47

Yeah.

 Dr. Daniel Chille - 12:48

Why? Medicine is very personalized. How we practice precision based medicine is we'll look at advanced blood chemistry, we'll look at the stool, we'll couple that often with food, which is often overlooked, and then a nutrigenomic test to see, okay, where there are holes in someone's biology, plug those holes to mitigate any sort of predisposition and risk factors. So mine as an example, very high cardiovascular risk. So very quick anecdote. Great grandfather died in his sleep at 104 in Sicily, toiling in the land. Great grandparents moved to urban Rome, worked in the industry. Both passed from a cardiovascular incidence at 84 and 86 respectively. I have those same genes, same genetic lineage. So I know kind of what afflicts me. My goal now is same thing with my patient population.

Dr. Daniel Chille - 13:37



Here's the now genomic intervention so we can practice precision based medicine rather than, you know, symptom based care. So when you asked about fitness, we typically will have someone come in, we'll do a very comprehensive structural balance assessment to see whether mobility restrictions their strength imbalances, their weaknesses, cardiovascular risk factors. And then from there we create a personalized approach. But what's often missing is the internal chemistry in order to optimize the external. People are very into obviously muscle medicine now, strength training, VO2 max, you know, these markers of longevity. But what they're missing is you have to optimize the internal biochemistry in order to optimize the external. Case in point, I had a young athlete that came to me the other day and I just asked him a very quick question. How did you find me? Like how did you end up here?



Dr. Daniel Chille - 14:26

And he goes, to be honest, you had helped one of my, well, call it a friend who was a former gymnast, very high level gymnast. She came to me because her mom said she saw two orthos. They said that she has to discontinue her career due to dis degeneration. I said, okay, I'll take a look. I looked at the blood chemistry and I said, absolutely not. She's highly inflamed. There's immune dysregulation. That's why she has pain. It's not overuse, it's misuse. And it was the same thing with this young soccer athlete. No different. He was coming to me with burning legs. He went to several PTs, several trainers, no one fixed him in two. In two years. And in two, I fixed his burning legs. Why?



Dr. Daniel Chille - 15:09

I looked at the internal chemistry, recognizing immune dysregulation, heightened degree of inflammation that's at the root of all pain. Fix that. And now we're training at a very high level. He was just, he made freshman team. He's a freshman, just made varsity, got player of the month. He's excelling. And before this, he was sitting on the sideline for a couple of years due to constant chronic pain. And so we see very quickly is once you look at the internal, you couple that with the appropriate strength training regimen, people get better, stronger, faster, very quickly.



Dr. Jill Carnahan, MD - 15:39

Hey guys, as this episode is coming out, it's a new year. And if you have not yet checked out my movie@drpatientmovie.com it is free on YouTube and Tubi with commercials and it's available on Amazon Prime. I would highly recommend you check it out. There's no cost. It's just time and inspiration. And we spent just a lot of time and energy putting together a documentary that is there just to encourage and inspire you wherever you are in life. If you have already watched it, will you please share with someone that you love that might need some inspiration or encouragement in this new year? And let's get back to our show. I love that we're speaking the same language and so relevant because one thing I think that function medicine does not do well is prescription for exercise.



Dr. Jill Carnahan, MD - 16:22

And you're obviously doing the training and assessment your clinic. And I think that is actually a piece that many of my colleagues forget or they're like 150 minutes of aerobic activity a week. What does that really mean? Right? Like we need some more prescriptive. So I get excited talking about coaches and trainers who have that experience. But like you said, every coach and trainer that I've ever worked with, they know, just like you said, if there is a celiac disease undiagnosed or an autoimmunity going on or a gut disturbance, their athlete is going to perform less well because of the inflammation. So it's like we need both of these parts so importantly and neither one without the other is going to work.



Dr. Jill Carnahan, MD - 17:00

Now, we talked about gut and gut, both of our personal stories and obviously a lot of your clients gut is so core for immune system and autoimmunity. But one question I have for you is here I'm in Boulder, Colorado, so we have a lot of professional athletes as well. And because of that, I find if they're training it at a high level Especially more the ironman kind of the extreme athletes. If I'm seeing some gut disturbances, I will actually not treat them if they're in training at that level because I find that it's pretty impossible to heal a severely damaged gut when someone's trained at those like extreme levels. What thoughts on that and where is that line? Because I feel like that sometimes in the extreme training it can actually cause more permeability.



Dr. Jill Carnahan, MD - 17:42

I mean we have the research to show post high exertional high training there is more permeability. And where is that line? Do you train them offseason or you do fix their guts offseason or. You know, again, as someone who's a former athlete, I always like to ask these questions because I haven't figured out a perfect way to fix a leaky gut in the midst of heavy, heavy training.



Dr. Daniel Chille - 18:04

So you're lucky in that regard. And I say that obviously with a grain of salt. Boulder, I think is ranked the most healthiest city in the US Next door, not far, I think is the Olympic Training center in Colorado. Colorado as well. So the lucky part is that when you're training at altitude or kind of this hypoxia induced environment, we don't have that here. How I try to mimic that is with resistance in blood flow, which restricts oxygen to the muscle, builds up lactate, now used as an energy source which we previously thought was a negative byproduct. But it certainly enables a heightened sense of hypertrophy which especially injured population becomes super relevant.



Dr. Daniel Chille - 18:48

So we can now induce hypoxia like conditions in our injured population or even within our athletes with blood flow restriction training or putting on kind of a mask to simulate altitude, which drives this erythropoietin and more blood cells which has a net positive on performance and ability to utilize less oxygen. What's interesting in terms of obviously performance and how do you kind of mitigate that effect? Because certainly is we don't realize that training volume has to be considered. Training altitude has to be considered. But equally is nervous system

readiness. So how much can we push? I always tell athletes if we want to train hard, we have to recover as hard. Look.



Dr. Jill Carnahan, MD - 19:34

Agreed. I love that. Yeah. So important.



Dr. Daniel Chille - 19:37

Yeah. Case in point. LeBron James like notoriously spends quote unquote \$1 million a year in recovery. All the highest level athletes. We recognize now the importance of recovery, most notably sleep. The gold standard for Olympians 8.6 hours. But we know now with sleep cycles is occurring about 90 minute duration that nine hours. If you're asleep, you're actually, if you're in bed for nine, you're about sleeping for eight. So to me, as I'm always talking about, sleep is the pillar. Okay? I cannot heal somebody if they're in this again. Dysregulated, constantly sympathetic dominant state. What is our athletes in? It's constantly go. They're wired just like me. We are wired to excel. I don't accept anything less than the best. And that's how I, I approach my patients. That's why my goal is to help them heal faster and safer.



Dr. Daniel Chille - 20:27

But certainly sometimes we do too much. Right? In my philosophy, sometimes actually less is best. And that's why Recovery 3 has to be prioritized. So I'm looking at HRV, I'm looking at the immune markers, the balance in the CD8, CD4, T reg, NK cells, I'm looking at inflammatory markers, CRP, SED rate, fibrinogen, LDH. I'm doing a very comprehensive blood test to see kind of okay, what's off and, and where do we need to plug those holes. And then we can do a stool test and we can discern very quickly what is going on at the level of the gut. But certainly this is something that I learned from my mentor over 10 years ago, which is now ubiquitous. There's three things, three kind of clinical pearls. Number one is assume everyone is magnesium deficient. Number two is assume everyone needs fish oil.



Dr. Daniel Chille - 21:17

Now the one caveat, my stance is a little, I'm a little bit different than many practitioners because I don't think our food system isn't that of our ancestors and our fish are definitely contaminated. Now they're trying to squeeze out the contaminants. But while we still quote, unquote, prescribe fish oils and PRMs, SPMs, activated fish oil, which helps kind of resolve any sort of mediated inflammation and obviously manage infection or immune dysregulation. I'm just mindful with administration of specific nutrients and nutraceuticals particularly because certainly quality does matter. And then the third is glutamine.



Dr. Jill Carnahan, MD - 21:53

Yeah.



Dr. Daniel Chille - 21:53

Why the, this very kind of essential amino acid that can kind of mimic other amino acids, but it's very therapeutic for the gut lining which is constantly under stress and kind of perturbations, not only the digestive system, but now poking holes at the gut lining from this chronic cortisol driven state. So if you look at exercise, you're up regulating cortisol, obviously chronically is very inflammatory, acutely is necessary for this hormetic effect of we get stronger, right, you stress the bone, obviously we rebuild, regenerate with osteoblast, same thing with the muscle, that's how we develop strength. Then we secrete myokines which kind of buffer against some of these inflammatory cytokines. But what happens is when we're under chronic status and we're overworked and under recover, we're overfed, but we're actually malnourished because the soil is depleted or no longer mineral rich.



Dr. Daniel Chille - 22:49

I'll look at micronutrients, I'll look at the blood, I'll look at the stool and then we begin just a hyper targeted approach. But certainly those three nutraceuticals alone make a very huge difference. The last one is a bonus tip. He always said assume everyone is xenotoxic until proven otherwise and it goes back to our endocrine disrupting hormone, the chemicals, the phthalates. Certainly it's coming in the food with the pesticide, herbicide, fungicide. Obviously we know the damage of now glyphosate and atrazine, the plastics that were, they're accumulating. So I look at a toxic profile as well. Fortunately those that move the most are usually sweating the most, usually excreting the most, but not always. That's where the nutrigenomics comes in. What is their kind of, how does phase one, phase two look? Hopefully their motility is pretty good and phase three they are excreting.



Dr. Daniel Chille - 23:38


So those are some things we're looking at a CGM as well. What is their blood glucose disposal look like? Obviously the more muscle, the more, the better they're doing. But if you look at the marathon runners, those are some of the sickest among us. We're not designed to do these competitions. We weren't. If you look at some of these indigenous tribes, they are more sedentary than we are. How interesting. They don't have any Alzheimer's, they don't have any diabetes, they don't have any cardiovascular risk factors, they don't see any of the prevalence of cancer. Why is that? Yet they're sedentary where they're constantly moving, they're constantly foraging, they're constantly living in nature instead of going from one box to another box, from our car door home to our office under these blue light exposure.




Dr. Daniel Chille - 24:22

And now the EPA comes out that our indoor air is two to five times more toxic. So we're in this different, we're non native EMF which actually we, you And I talked about when were at the conference together, right. Why is mold,


mycotoxin not only so much more prevalent but so much more damaging for our patients? Right. So that's kind of where we're considering all these variables. But those four in con, like those are four foundational. And now the extra bonus, which is the fifth is peptides.

 Dr. Jill Carnahan, MD - 24:53


Yes.

 Dr. Daniel Chille - 24:54


So when you're saying that, okay, how can we have these people, you know, train in these conditions? Well, I'm actually getting my patients better in half the time. So if it took a year, now it's six months. If it's six months, now it's three months. How with peptides? This is so crazy what's happening. I have people walking into my office on crutches and two days later walking out pain free because of BPC injections coupled with TB4, right. Or yes, TB4, fragment of the thymic peptide or TB500, kind of synonymous. I had a stroke patient because we treat kind of the full gamut. And she came to me 178 out of 10 level pain in her knee. And I go, whoa, we got to get you to the hospital. Yeah, this is my life. And all these we have Testimonials for.

 Dr. Daniel Chille - 25:39

After two rounds of injectable administration, pain went down from 178 to under 10. Can you imagine the quality of life? So going back to our athletes, they heal the fastest. In lieu of this hyper stress state, there are certain nutraceuticals and peptides that certainly allow us to mitigate the damage of what they're going through.


 Dr. Jill Carnahan, MD - 26:05

Wow, that was an incredible whirlwind. And you really covered all the gamut of where I wanted to go without him even asking any questions. A couple of comments. Love peptides, and I couldn't agree more. It's really taking really all of our patients to be able to heal more quickly and they can be done safely. And I couldn't agree more. They're cornerstone to the future of integrated personalized medicine. Second, I've been presenting on some of the athletic data and in the cardiovascular module, and there's a randomized review, a meta analysis, and that takes all the different interventions, mentions and some of the ones you just mentioned, DNA you mentioned, glutamine is high up there. They talk about bovine immune globulins for probiotics and then antioxidants like vitamin C and then avoiding NSAIDs. So that's from that meta analysis.


 Dr. Jill Carnahan, MD - 26:49

And you just covered, you know, 80% of those in what you just said for Those high performance athletes or long distance runners that are also suffering from leaky gut. Now the other thing I'd add number six to the assumptions is assume everybody has some degree of leaky gut. Right. Like that's the other thing as you're, we're talking. So I just love that. And I've always said, you know, if I was on a desert island, vitamins, which means like the things that


are non negotiable mag and fish oil. Right. Except that I was always like, well on a desert island you could probably go fish and have real fish instead of fish oil. But that was really well done. Recovery, I think is crucial.

 Dr. Jill Carnahan, MD - 27:22


And I really liked how you said really that is the framework for these high performance athletes is how are you recovering? And I think that is the key because you can really push the human body and you can support it with peptides and that. But what would you say are your top three to five recovery interventions for athletes?

 Dr. Daniel Chille - 27:43


Yeah, and I want to piggyback on what you just said because the use of NSAIDs, we now realize the damage and we're doing that with herbals very effectively. Peptides even more effectively.

 Dr. Jill Carnahan, MD - 27:54


Agreed. And I love SPMs, you mentioned them. Pro resolving mediators. SPMs, PRMs, phenomenal. In my mind, they're natural ibuprofens and I use them frequently for pain and inflammation without damaging the gut.

 Dr. Daniel Chille - 28:07

Yeah. And looking at exercise in particular and through the lens of recovery, I mean, what happens, right, we're damaging muscle, we're raising blood pressure, we're raising heart rate, it increases free radical damage, it increases inflammatory markers, it increases cortisol. That's exactly what exercise is doing. But we recognize that if there was one component that would encapsulate longevity perhaps better than anything else, and we could take a pill to help us live longer, healthier, stronger lives. It would be a controlled dose of exercise, right?

 Dr. Jill Carnahan, MD - 28:42

Yeah, exactly.

 Dr. Daniel Chille - 28:44

That helps with mitigating any.



Dr. Jill Carnahan, MD - 28:49

Sort of metabolic risk, 100, brain health, cancer risk, cardiovascular health, depression, anxiety, insomnia. Like couldn't agree more. And I actually love that you're saying that because there's so few even great functional doctors that say, you know, the number one studied intervention is exercise and movement. So good for you.



Dr. Daniel Chille - 29:08

Yeah. Muscle is medicine. We now recognize it as, I mean, skin being kind of our largest organ, if you will. But muscle, if you compare that actually would be even more notable and larger. If you compare that, better still, turn your microbiome, that truly is the largest organ of Longevity. So when you're talking about recovery, I think, well first let me just underscore my foundation five. So you gotta eat right, sleep right, move right, talk right, poop right. Okay, that's my foundation five that I need to master with anybody. Whether that's a, a kid that comes to us with, you know, pans, pandas, neurodivers, neurodivergence, autism, whether that's an aging senior who just wants to live healthier, that's a professional athlete. The Foundation 5 holds true to anyone in terms of recovery that the biggest pillar there is sleep.



Dr. Daniel Chille - 30:02

So that's where I'm always starting. And I always ask people, because often enough people want to look better, feel better, and I always say, you know, what do you think the shortcut to fat loss is? And they go, oh, nutrition, oh, exercise, oh, I gotta drink more water. And in fact it's not even how much you drink, it's how much that you absorb. Are you a hose or a sponge? Are you, is the, is water adequate hydration, which this ro kind of distilled water that's devoid of any sort of minerals and structure. It's not able to enter the cell to adequately flush out toxicity. But the principle here is sleep. The shortcut to fat loss, sleep, that's when the body really upregulates detoxification processes. That's why tumors cannot proliferate at night.



Dr. Daniel Chille - 30:44

This is when the body begins to really repair on a cellular level. If you look in terms of nutrition, three orders of operation. Number one, we go through toxin elimination. The body is constantly on red alert trying to figure out, okay, where's the danger, where's the poison we got to eliminate? Second is nutrient absorption and third is cellular repair. But most of us are not going through that third phase because we're stuck in the first. And if you look one night of poor sleep, the next day you're automatically kind of in this TH2 dominant pro inflammatory state. Your glucose, if you are asleep for only estimated four to five hours in one night, your blood sugar dysregulation is that equal to pre diabetic. And then after two nights more so toward that diabetic route. So we see how impactful sleep is.



Dr. Daniel Chille - 31:31

I mean we can go without food about 30 days, water about seven days without sleep. After three days you're induced kind of psychosis state. So recognize that sleep far and away is the number one. But what's interesting is with performance based individuals, myself included, much like yourself, we're on podcasts, we're doing conferences, seminars, speaking engagements. We have our patient population. What happens? Our health becomes last. And I know your story very well. Obviously, going through med school, we're burning the candle on both ends. What happens? Leaky gut. You said it very elegantly. Assume everyone has leaky gut in this day and age, 110% leaky brain, leaky gut, leaky heart, leaky gut, leaky blunts, leaky gut, leaky black. Any sort of biological system. So the first thing is sleep. The second thing is the gut. And then we go one step further within the gut.



Dr. Daniel Chille - 32:23

It's this interplay of our microbiome in every biological system. So I'm looking at, you know, the firmicutes to bacterioides ratio. I'm looking at gram negative to gram positive bacteria, where their proteobacteria are, where their actinobacteria are, where the damage is to the secretory iga. Looking at your immune defense, which is estimated somewhere now between 79, 90% of the gut lining. Where is the, how is the integrity of your gut barrier in the mucosal membrane? Do you have a healthy range of commensal species? So this whole kind of ecosystem internally that then drives this external glow or this external performance. So the first one, again, recovery, sleep. The second one is we need to really underscore the gut. And I think that we're only learning now this interplay. We've sequenced, you know, the whole bacterial genome.



Dr. Daniel Chille - 33:13

It's estimated that we are 57% bacteria and 40, 43% human. Right. There are our gut microbes outnumber us 10 to 1. And we still don't understand the full microbiome. So not only the microbiome, but specifically the microbiome. So there's a lot still to learn. But we see in terms of chronic disease, this dysbiosis, obviously Parkinson's, Alzheimer's, we're treating kind of ends autoimmunity, we're treating end stage, we're treating kind of where the problem is, but it's not where the problem starts exactly. So. So well, and that's why I love kind of tuning into everything that you're doing and the research that you've spoken about already. So in terms of recovery, that's kind of where it starts. We're looking at the tech, we're looking at the whereabouts. The third thing that often is overlooked, which really shapes our environment, which has really reframed my paradigm.




Dr. Daniel Chille - 34:05

If you look at the blue zones, the two things that really stood out to me that were kind of underpinned or representative of each blue zone population was community and movement. Firstly microbes. We talked about the fitness component.




Dr. Jill Carnahan, MD - 34:23


Right.

 Dr. Daniel Chille - 34:23


But if you're stuck, you're not training. Right. People think I have so many CEOs, top level exists, even athletes that their haven is when they're training and they love to train. But what are they doing? They're driving leaky gut because they haven't prioritized the recovery. So the environment certainly matters. But the last component is the community.

 Dr. Jill Carnahan, MD - 34:44


Yes.

 Dr. Daniel Chille - 34:45

And who we surround ourselves with. And you know, the biggest kind of. I find now is your quality of life is really dictated by your partner, whether it's your spouse, your friends, your peers, where you're digesting your information. Are you listening, you know, to our podcast? Are you listening to cnn? Are you listening to Vice News, I don't know, medical journals? Anywhere in between. What we're doing or perhaps what we're not doing for me is I'm a student of life. What does that mean? It's Umberto Eco's library. It's, it's the books I haven't read yet. It's not knowing what I don't know. I try to really open up my periphery to absorb kind of knowledge anywhere I go and understand that things are instruction just like nutrition is instruction. It's going to heal you, it's going to hurt you.

 Dr. Daniel Chille - 35:30

So too will information and so too the people that we keep and so community. I see above all. I look at my Italian counterparts. That's again my. Ingrained in my DNA. People just come over. It's an open door policy. But the capitalistic structure is the wealthy. Look at, look at what happens. We're dry. It's the, the white picket fences with the big. With the. We're closed off, we're flying private. It's like we segregate ourselves versus being inclusive and trying to develop a strong bond within communal relationships as we involved. This is kind of Darwinian's, Darwin's philosophy. It's not survival of the fittest, it's survival of those can adapt. But us being communal creatures are certainly core to that. So that's kind of, I guess maybe the three that I would.

 Dr. Jill Carnahan, MD - 36:16

That was as always, it's so much broader than I expected. And I really love that you didn't mention lymphatic devices or I spazzer. I mean that's all great. Right. But like this is so exciting because it really does come down to Our relationships, our sleep, the things. It's not sexy. It's not like the, you know, the latest hot device that costs a hundred thousand dollars. It's these really basic core things that matter. Daniel, this has been so fun. You covered

a ton in our time today. Where can people find out more about you or follow you or give us a little layout of that? And if you're driving, riding, wherever, don't worry, this will all be in the show notes as well. But go ahead and tell us where we can find more about you and your clinic really quickly.



Dr. Daniel Chille - 36:55

I want to plug the sex and not to make it R rated, but again, looking back in Europe, where PDA is very acceptable on billboards, they have lingerie on the TVs, they have the programs that are more sexually inclined. We are becoming creatures of habit, but we're having less intercourse and less play on average. Adults laugh about 14 times, kids 140. I don't know when transition happened where we, to me, we're big kids and we're animals in nice suits. So I mean, wearing a suit today, but needless to say is we're engaging in less physical activity with our peers, meaning kind of like sexual relationship. And it's only making us more sick.



Dr. Daniel Chille - 37:43

I always, I joke enough when I, when my patients come to me is I, I always ask them about their oxytocin and are their receptors blocked for their peers, meaning for their spouses or for their. Whoever. They're kind of engaging with physical activity, that they enjoy doing that, but we're doing much less of that. And our hormones are severely depleted already from this chemical soup. And yet we are engaging less of this physical activity that we need as a species. We were designed to mate. Yeah, right. We were designed to procreate, to extend life. But what's happening is exactly the antithesis of that. We're engaging in less physical activity, especially as we age. So I encourage people to, at a minimum, get into more playful activities, but don't block your oxytocin receptors. Engage in more play also with your partners. That's critical.



Dr. Daniel Chille - 38:32

Just hugging, kissing, hand holding, cuddling, even like hugging kids, you know, simple acts that go a long way. Where can people find me? Tbdfit.com tomboy David. So that stands for total body diagnostics. So tbdfit.com also on my podcast, which we're gonna have you on here momentarily, is the TBD Fit podcast. So we keep it super simple. If someone wanted to kind of learn more and directly send out an email on the website. It's info we do telehealth. Glad to help anyone on the journey. We treat kind of the full gamut of individuals and so however we can help that's my goal is impact and so glad to continue the conversation if everyone is excited about learning more.



Dr. Jill Carnahan, MD - 39:25

Fantastic. We covered so much in our time here and just thank you again for coming on the show. Hey everybody, thanks again for joining me for another episode of Resiliency Radio. Hope you enjoyed that. If you haven't yet liked or subscribed or left a review wherever you're listening or watching this podcast that would greatly help us to reach more people and get the word out on functional and integrative medicine. I appreciate you and I hope as this is coming out that this finds you well and healthy and living your best life. Stay tuned for future episodes. We have them come out every week on Wednesday and until then I'll see you next time.