True Root Causes of Dis-ease Part 1  
Transcription

All right, we are live. And again, I want to welcome all of you to today's special presentation from the School of Applied Functional Medicine. My name is Tracy Harrison, I am the founder and lead educator here at SAFM. It is our passion to offer advanced technical and clinical training to a rich diversity of healthcare practitioners around the world, all of whom specialize in a specific modality, all of whom already have their foundational licenses and certifications and have busy, active practices.

We are passionate here about teaching, rigorously teaching, the science that anchors the world of functional medicine, but also about teaching that practical, applied devil in the detail know-how that makes the difference between knowing the theory and actually being able to help the next person that walks in your practice who has the particular disease dynamic you've learned about. We're also passionate about practicing, in the same way that you can't really learn to confidently swim in a pool by reading a textbook, we believe in getting in the pool. So while you are learning the science, while you are learning the devil in the detail know-how, we engage our students in a rich diversity of complex real-life patient case studies throughout our educational offering.

We like to say, we're all going to get in the pool together, even if you don't know how to swim yet, even if you have to hang onto the side of the pool and put on some swimmies. The best way to learn how to swim is to get in the pool and start where you are and practice your strokes. Today's presentation is part one of four in a webinar series we have fully revised in our offering which is called true root causes of disease, functional medicine fundamentals. I appreciate deeply that some of you are veteran scholars of functional medicine, and you're very welcome here today, especially in this part one, you're going to be getting what I hope are some excellent reminders, perhaps some perspective expanders.

But today, I am going to talk about some foundational concepts because I appreciate that many of you on the line are relatively new to functional medicine science and the practice of functional medicine. Perhaps you're practicing today in a more purely allopathic or conventional medical model and are exploring. You're curious, you want to understand a bit more about what is this functional medicine thing anyway, and why can it be okay, not only effective, but deeply richly satisfying and fulfilling to compliment your existing practice with functional medicine knowledge and functional medicine know-how.

I say to complement, because here at SAFM, as I said before, we honor all modalities and all practices. That certainly includes the conventional allopathic practice of medicine, especially if a patient is in need of acute care, emergency care, acute disease intervention, especially to save a life, save a body part, stop the downward spiral of disease in order to create time and space and opportunity, in order to address the root causes. We believe that functional medicine is complementary to all of these things, and really, healthcare has essentially become ineffective, not because conventional allopathic medicine
is wrong, but because we are using good tools in inappropriate circumstances. At the end of the day, if we have

epidemics of chronic lifestyle diseases, tools for acute and emergency medicine are not going to effectively, much less efficiently, be able to arrest and reverse those epidemics. For chronic lifestyle disease dynamics, we have to understand those dynamics and we have to address the lifestyle root causes that actually created them. I'm going to talk quite a bit about that cascade of dis-ease today.

Again, I thank you all for joining us. If you're here live, please do make liberal use of the chat thread for your comments and observations. Make sure you choose all panelists and attendees from the dropdown menu, or only my team and I will see you. We also here make use of the Q&A utility on the Zoom dashboard. If you have a question at all about what I'm presenting, about an overall medical or biochemical concept, or about the school, or even "Whoa, whoa, what did she say?" Please put all questions in the Q&A utility to make sure that we don't miss your question on the chat thread, and my team and I will do the very best we can to get you a clear answer either via typing you an answer directly in the Q&A utility, or I will do my best in order to seed my comments with answers to your questions as we move along. We're together today here for about an hour, and this is the first of this four-part webinar series.

First of all, I'm going to talk about some very specific tenets of functional medicine. I find that the vast majority of practitioners, even those who've been studying functional medicine, come at it from, what I might call a vague or generalized perspective. Here at SAFM, we believe in some really specific principles of functional medicine that we have found to be most effective with regard to disease reversal and sustainable health. I'm going to speak to each of those. I'm going to talk about the difference between diagnoses and dynamics and mechanisms and root causes. This is another common arena of confusion amongst practitioners, and then I'm going to share with you what we believe, what we teach are the true most common root causes of disease when we look across these multiple epidemics of chronic lifestyle disease. This is not at all to take away from the fact that, as I said before, now we certainly have individuals in our global family of humans who struggle with congenital disease and injury and accident and acute, especially acute infectious or inflammatory disease.

But the vast majority, the lion’s share of the burden of suffering in our global human family is not about those acute medical situations that necessarily need to be practitioner centric, but rather individuals are suffering from chronic inflammatory lifestyle disease epidemics. This is where functional medicine is progressively filling the slices of that healthcare pie that we so need in order to make healthcare, not only effective, but also affordable and sustainable. Then, I will introduce the most common mechanisms via which those root causes create disease. I will do that briefly today, and then the follow on three webinars, we'll do a deep dive into each of those mechanisms in terms of sharing with you the particular physiological and biochemical mechanisms via which they create dysfunction in the body that eventually becomes bad enough to be diagnosable.

There are many popular definitions of functional medicine. I like best the one from my friend, Dr. Mark Hyman: “Functional medicine is a science based personalized healthcare approach that assesses and treats underlying causes of illness through individually tailored therapies to restore health and improve
function.” We often use the analogy of the bonsai tree, a beautiful little intact organism, ideally thriving. When we look at disease, whether it's in the human body or in this little bonsai tree, we tend to target the particular part that is suffering such as a leaf. A leaf can become dry or diseased. There can be some type of fungus or some type of microbial predator, or it can suffer from malnourishment, maybe not enough water, maybe not enough nutrients etc.

But when we think about this from an ecological perspective, I think most of us, even if we have no gardening experience or passion whatsoever, would agree that it's kind of silly to think about evaluating, much less treating that leaf, without looking at the whole organism. That would just be quite shortsighted, and most likely, be ineffective. Because we know intrinsically that that leaf’s health, whether it is thriving or struggling, cannot possibly be separated from the health of the stem or the limb from which it grows, or the branch that supports that limb, or the trunk that supports all of those limbs, or the roots, or the dirt, or the air, or the environment.

If we are to ever be effective in restoring the vitality, not just managing the disease, but restoring the vitality of that leaf, we must necessarily look at the entire integrated organism, in this case, the bonsai tree, and we also must necessarily look at the environment in which that little bonsai tree is trying to thrive. Who are its neighbors? What is the environment like? What's the noise level? What's the air quality level? Where's the water coming from? Where are the nutrients coming from? What kind of medium are these roots trying to find nutrients from on an ongoing basis? How much sun is there? How often does it get trimmed? In taking a look at the plant, we can perhaps see some truths that, most often, historically, we have not honored in the practice of conventional medicine toward the goal of health and vitality restoration.

Certainly, functional medicine is based on the, what I like to say is the same old physics and chemistry, and biochemistry, and physiology, and anatomy that all medicine is anchored on, but it uses those foundational principles through a larger and longer and differently focused lens. It's worth pointing out here, by way of introduction, that I think one of the most important discerning factors about Mark's definition is that it's about truly assessing and treating the underlying causes. It's not about just addressing the leaf. In fact, it's not even just about addressing the tree. Putting a bandaid on the wound on the leaf, or a bandaid on the wound on the trunk. It's about assessing all of these different levels of dis-ease and finding what is causing the imbalance and actually addressing it at its roots, not toward the goal of numbing the symptoms, not toward the goal of managing the disease - maybe just keeping it from worsening. Not that there's anything wrong with either of those. Those are both wonderful intentions and goals, but the lens of functional medicine allows us to do more. It allows us to know better. When we know better, we all do better. Ultimately, the goal of the practice - the effective, confident, competent practice of functional medicine - is to actually restore health, restore vitality.

There are some key tenets of functional medicine that we honor here at SAFM. The first one is that each person is unique. As the saying goes, when you know one person who has Autism, well, you know one person who has autism, and when you know one person who has fibromyalgia, you pretty much just know one person who has fibromyalgia. The lens of functional medicine compels us to focus on not so much what is this disease, but who is this person that has this dis-ease that has gotten bad enough,
severe enough to now be diagnosable as a formal disease. But each person is unique, and therefore, regardless of whether we have the ability to accurately label it with a diagnosis, because ultimately a diagnosis it’s just our collective agreement that a certain set of symptoms have a certain name. It’s like a rubric.

Everything in the body is interconnected. Again, the leaf is not separate from the stem, or the trunk, or the soil, or the roots, or the air, or the ambient environment. Everything is interconnected. While the conventional medical model has practitioners largely studying and choosing specializations, which if you are going to engage in healthcare from an acute or emergency medicine viewpoint, this is critical, especially from a surgery viewpoint. Mastering the particular body system, the glands and organs in a body system so that one can be very effective at assessing and treating an acute disease dynamic. But especially when we are looking at helping someone to get well and especially to stay well after suffering from chronic lifestyle disease epidemic, we must necessarily consider the interconnectedness.

Because when we don't go beyond the actual body parts that are screaming the loudest, the ones that are suffering the most, that they are causing complaints, that they're causing lab work, that there are notable, if we don't go beyond those boundaries, then ultimately what we're likely creating is simply the revolving door of disease that will get better for a little while and then come back, and get better for a little while and come back. Or get better for a little while and then cause a different dysfunction. We just prescribe a pill for that and that gets better for a while, but then something else goes wrong, and we create this downstream, progressive cascade of dysfunction and impairment. It's so ubiquitous, we call it just getting old. But those of you who have been studying functional medicine and using it in your practice know it does not have to be that way.

Not only that, but the body's natural default state is one of wellness. The body is designed to be well. The body is designed to thrive. When it is not, regardless of whether a person is eight or 38 or 88, there is a reason, there is a mechanism of dis-ease that can be reversed in order to improve vitality and ideally fully restore health. It's also true that no disease comes out of the middle of nowhere. I know we've all, maybe personally had this experience. We know people, or we've seen people in our practice who feel like, oh my gosh, it was just going along and everything was fine. Then out of the middle of the blue, I got heart disease, totally unexpectedly, I got type two diabetes. Oh my gosh.

The reality is that no diagnosable disease happens out of the middle of nowhere. It just doesn't. The body is not that vulnerable. The human organism design is spectacularly resilient. But what is true is that dis-ease, imbalance, blockage, impairments are frequently happening behind the scenes for months or years or decades before those patterns of dis-ease become severe enough, frustrating enough, debilitating enough, overt enough, observable enough. They become bad enough that we're finally willing to diagnose them. This frequently, after a person has been suffering for quite some time, and if not suffering noticeably, the mechanisms of dis-ease have been simmering in the background, and they simply have not been identified because our focus in allopathic conventional medicine is not about prevention.

It is not about looking for imbalances, blockages, and impairments when they are simply suboptimal. Today's allopathic model requires that diseases be severe enough that we need an overt, superficial,
external reaction to correct the dynamic. Of course, again, it doesn't have to be that way. Certainly, we have jillions of diagnoses out there. It's amazing how overwhelming it can be, even when you're a practitioner and you know better, when you go to a blog, a newspaper, a magazine, the radio, any type of media, and yeah, there's another way to suffer. There's another way to die. There's another thing to be afraid of. There are actually 55,000 different unique things you can label suffering according to the ICD-11 Guidebook. No wonder the people we serve feel overwhelmed, scared, disempowered. I think disempowered is the most debilitating dynamic that they can feel. They don't feel like they can own their health. They can't take care of themselves because the other shoe’s going to drop at any moment and they're going to get something, they're going to catch something. They're going to be labeled in such a way that they go home and google it late into the night and become terrified. This is people's experience of health care. By and large, health care is something that the populations we support largely advocate to us. That is perhaps the most dysfunctional dynamic in our healthcare system today. Because until we can return empowerment to individuals to feel confident and competent in owning their health and maintaining their health, and only engaging with us as practitioners when they need guidance and teamwork, in order to understand and counter something pesky that's gotten them off in the weeds so that they can return to their own path, if we leave people in a state where they feel that their own health is so complicated and so complex and so frightened that they can't do anything about it on their own, then we will never, ever have even an effective health care system, much less an affordable and sustainable one.

But it's also true that for all of us, as practitioners, whether you've been doing this work for two years or two decades, what I know from experience supporting thousands of you, here at SAFM, is that you did not go into healthcare, regardless of what kind of practitioner you're - you did not go into healthcare in order to have your arms tied behind your back, and have a very, very short list of options and alternatives to support people. I doubt very seriously you had a calling as a practitioner to just manage disease, help people to suffer less. Ultimately, I think everyone in healthcare has a deep-seated calling as a healer, a deep-seated calling and desire to help people to really fully restore their health and be fully well. What we definitely have an epidemic of today around the world is practitioners who are burned out, frustrated and deeply unfulfilled, especially individuals who, at least here in the US, the system I can speak to most personally, who are trying to function and use their passion, their commitment, their skills, their expertise, trying to use that in a highly constraining managed medical care environment. Where there's a very limited set of tools, there's very little freedom to use your intuition and the full spectrum of your skills as a practitioner, and there's very little time in which to engage with the unique, precious individual who's sitting in front of you who desperately wants to feel better.

Part of that, seeing not only the leaf, but the entire bonsai tree and the entire environment in which that organism is trying to flourish, is going beyond the traditional health model. For a long, long time, we believed that what you got, what you were diagnosed with was courtesy of mom and dad, and you couldn't really do much about it. You were going to either be pretty well or suffer as you age, just based on what you inherited, and whether that's inheriting a gene or inheriting a lifestyle habit, that wellness or illness was largely deterministic. Thanks, in particular to research, over the past 20 years, we know that's not true at all.
We know that, not only is our biochemistry highly adaptive and constantly shifting to try and help us to thrive in the environment in which we’re asking our bodies to live, but our genome is highly responsive and adapted to our environment. And both our environment and our biochemistry are being informed by choices, choices that we are making knowingly or unknowingly. This hearkens to a concept that I am deeply grateful to Dr. Jeffrey Bland for introducing me to about 15 years ago. This notion that dis-ease in the body, impairment, blockage, dysfunction, always precedes a diagnosable disease, and the particular origin of that dis-ease is always unique. Always unique. We must have the time and the space, and the education, and the curiosity to be able to explore the particular set of puzzle pieces that come together and form the picture of dis-ease for a unique individual if we are to ever help people get sustainable health and if we are to ever be fulfilled and satisfied as practitioners.

We can take it even further. Our choices, ultimately, on our environment, that our genome is actively responding to, turning various genes off and on, are all about what we maximize, minimize and prioritize. Are we maximizing what we need to thrive? Are we minimizing while it can be harmful or debilitating? Most importantly, are we prioritizing regularly an environment for healing and repair and restoration? Our genes are responding to that. Just because you have a gene for a certain disease or a SNP for a certain biochemical dysfunction, does not mean it is active and does not mean it’s affecting you, or it may be viciously affecting downstream dysfunction. In that sense, genetic testing can be valuable, but it is a long, long way from the whole picture. It is simply one puzzle piece. It can be a valuable part of assessment, but we must always go beyond genetic testing to look at what is actually going on at this time for a unique individual.

We have interactive biochemistry responding to those choices, responding to those genes. If we take just a simple diagnosable dynamic, let’s say someone has irritable bowel syndrome, IBS, our diagnoses would just say, oh, you have IBS. Here, take this drug. It will help you feel better. It will reduce your symptoms so that you experience less suffering from that IBS. But we know through the functional medicine lens, that is a long, long way from everything that’s going on. We could take a given individual who has IBS, and we could say, okay, you have an IBSD, let’s say. You have chronic diarrhea, distension, bloating, maybe flatulence, gas. Clearly there is dis-ease in the GI tract. If we look from a more enhanced gastrointestinal perspective, we know that, because there’s diarrhea, there’s fast transit time, there’s likely to be dehydration, there’s likely to be malabsorption of nutrients, simply because there’s less time to absorb nutrients through the intestinal lining, especially in the small intestines and the duodenum. But that is only one puzzle piece. We also know that, let’s say a given individual may be suffering from that in part, because they are chronically stressed.

Maybe they have a very stressful job. Maybe they have food allergies that are not acknowledged, and so they have physiological stress with the nervous system responding and with the sympathetic nervous system responding to the threat of ... in foods that we’re consuming on a regular basis, that we don’t know the body is interpreting as stranger and danger and therefore being inflamed by. And sympathetic nervous system mode naturally suppresses digestive secretions, naturally creates dysmotility in the GI tract. That is normal functioning in the human body. We also know that chronic stress is
We can end up with a pathogenic microbial growth and sustained presence in the microbiome, or we can have a dysbiosis, an imbalance of normal innate human microbial species, what we like to call our microbial friends. But wait, it goes further. If this person ends up being malnourished, ends up being dehydrated, then we're going to end up with cellular metabolism being impaired. That could be at the mitochondrial level. It could be at the hypothyroid level. We have to have nutrients. We like to say, you don't have a pantry for nutrients in your left butt cheek. Nutrition, function, vitality depends on nutrients, depends on the diet, absolutely critical. You can't just keep eating crap food and expect to thrive. The body will be resilient in the face of that for some time to a variable degree, but not perpetually. A person can end up with, let's say, a hypothyroid function, let's say in this scenario, poor conversion of T4 to T3 thyroid hormone, which is dependent on nutrients like iron and selenium and zinc. That hypothyroid function is further suppressing digestive secretions, further suppressing motility, causing maybe sluggish energy overall, maybe weight gain, maybe emotional swings that are causing people to self-medicate with more crap food.

For that matter, we could also be struggling, both from a detoxification as well as an endocrine perspective, because people are using personal hygiene and beauty products that are laid in with chemicals, that they slather on their skin. As we know, the skin is a big mouth semipermeable membrane, and we're bringing in all sorts of chemicals through the skin that drive really dramatic, overt endocrine disruption, causing imbalances with regard to estrogenic effect, completely separate, in addition to, and frequently more potently than the behavior of endogenous hormones and receptors. Extra estrogenic effects can impair thyroid hormone further. For example, by increasing thyroxine-binding globulin as a stress response from the body and making less thyroid hormone available. Let's say making less T4 thyroid hormone available to the liver, to the kidneys, to the intestines, to a variety of other peripheral tissues where we need to convert T4 to T3, with T3 being, by far, the most important thyroid hormone for actually driving metabolic function. It's easy to say, "Oh my gosh, I have IBS," but how tremendously shortsighted and ineffective is our healthcare if we stop there. Because we're never going to help this person with their IBS to actually truly get well and stay well if we don't look at the cascade of interconnecting biochemical systems, mechanisms of dis-ease, and then the true root causes for a unique individual and help them progressively step by step to reverse them so that health is actually restored.

Again, Dr. Bland's wisdom comes into play. Ideally, we are willing, we are skilled at, we are able to effectively look at the early signs of dis-ease and get in front of them ever becoming severe enough or interconnected enough to actually be noticeable, thus, avoiding all of the suffering that typically happens in the interim.

We keep going here with the tenets. Resilient health repels dis-ease. We certainly have been seeing this over the past year in the pandemic environment. Individuals are finding out just how much other diagnoses, the presence of other diseases, comorbid factors, increase the risk of having a disease experience as a result of a certain virus. Well, we've seen this in many other viruses beforehand, but it
goes well beyond infectious disease. We know that two individuals can experience the exact same crap diet, say while on vacation or the exact same stressful work project that drives poor sleep or overt insomnia for a couple of weeks or a few months. The downstream experience of those individuals is going to be different. Disease is not deterministic. To the extent that one has more health going into those challenging factors plays a huge role in how the body is going to be able to be resilient or not in the face of that challenge. The root cause, the true root causes and the complaint, the mechanisms of disease and where the actual most frustrating symptoms show up may be quite distant from one another.

Distant in the body, physically, distant in time, in terms of when the dis-ease started brewing, and also distant in the biochemistry. We’re really passionate about teaching all of those here at SAFM. The collection of root causes is unique. By definition, the most effective medicine is going to be as customized as possible for each person. Of course, we know, just as in the example of the IBS that I just gave, that all things are interconnected. This not only includes the thyroid gland and the gut and the cell membrane and the brain and the left toe and the right knee joint. Of course, everything is interconnected internally, but it also has to do with our environment.

Keep in mind that perhaps the most ubiquitous part of our environment is people are thinking to themselves all day long every day. Because the brain, the nervous system is taking all of those thoughts, those ruminations, those observations, those beliefs as part of the system, part of the environment in which we are asking it to thrive. Functional medicine honors that wellness includes the entire experience. You cannot remove a person's mental, emotional stress level from the state of their body. It's ridiculous. It would be like saying that little bonsai tree, if it's a high smog environment, it doesn't really matter. Or, if there's not enough water, that doesn't really matter. We still expect the tree to thrive. From a liable, just intelligent functioning human being, you know that's silly.

It is our assertion that, through the lens of functional medicine, it is silly for us to believe that we can provide comprehensive effective healthcare without honoring the entire patient experience as well. Active participation and belief in healing are central to a person's ability to truly get well and especially remain well. We move from the notion of the placebo effect to being a pesky annoyance in pharmaceutical research, to being an incredibly powerful mechanism that we can harness in our therapeutic encounters and the way we interact with a unique patient in order to use that highly validated, highly researched and documented dynamic in order to speed healing. Again, we honor that all modalities have a key role, and that different modalities are going to come into play for a unique patient, given their belief systems and the particular patterns of interconnectedness in their dis-ease.

I love this cartoon. I think sometimes this is a lot of what's actually going on when we try to use an acute and emergency medical model to try and manage lifestyle disease. We have standards of care, right? There's this drug and it's supposed to work. If it doesn't work, let's just try a different brand. Let's just try a different dose. How come you're not getting better? When we step back and look at it from 10,000 feet, you can keep trying to shove that same puzzle piece into that spot, turning it every which way, but if it doesn't fit, it doesn't fit. The science and the practical application of functional medicine compel us
to step back and develop the discipline of having beginner’s eye for each unique individual, and being curious about seeing which puzzle pieces actually fit together for a unique individual.

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Not assuming that, just because they're craving sugar, just because they have itchy ears, just because they're overweight, just because they have brain fog, they do not necessarily have candida overgrowth. They might, but they might not. If you develop too much of the, if this, then that, if this, then that, is the exact same dysfunction that we see in conventional medicine, it’s just simply using a greener "more natural" set of black and white assumptions. It is still shortsighted, and long-term is going to be highly ineffective. We must be willing to puzzle piece. We use maps here at SAFM. There's nothing magic about our map, by the way.

We have all sorts of really wonderful colleagues here in the functional medicine educational world, the leaders and founders of which are some of my dearest and beloved friends. I honor that all of us play a critical role in teaching the science and the application of functional medicine. We’re all different, and the opportunity for practitioners is simply to find the educational outlet that most makes their hearts sing given their particular way of learning and their way of looking at this opportunity. But maps are critical, some sort of template framework for looking at, how do all of these different aspects for this unique individual fit for this unique person so that we don't jump to conclusions.

Let’s talk about the differences, because we've spoken here of the leaf and that we need to be more expansive and look at the entire tree and look at the entire environment, but wait a minute, it goes further than that. If we actually want to look at what's behind this dynamic, we’ve got to consider the sunshine. What about the pollution? What about predators? Or what about commensals? What about overt environmental threats? The big stuff that we can see, the big frightening fiery stuff, but also the microscopic, quiet, silently deadly things. The presence of nourishment, hydration. Then what about the "protective mechanisms" that actually might at their heart be promoting disease?

All of these have their analogous issues in the world of human health care. But I want to cast our lens way, way beyond the diagnosis, because again, if we're in acute or emergency medicine injury treatment, that is powerful science, very powerful and effective healthcare, and I am deeply grateful to get that type of care from my brethren if I am in an accident or have an injury of some type. But that is only one slice of the health care pie that is needed to feed the global human family. We've got to go upstream when we're looking at ongoing chronic diseases and look at, what are the mechanisms that are actually causing it? Because if we just keep managing symptoms, all we're going to do is make a lot of money for the pharmaceutical industry and all of the different suppliers to the pharmaceutical and the surgical solutions industry.

But the upstream mechanisms of disease, we got to start looking at the lens and the branches and the environment. What is actually a place. For the IBS, if we don't find and look at that hypothyroid, the IBS is going to go away and come back, and go away and come back, and go away and come back, and whoops, now it's progressed to insulin resistance, which is highly mediated by gut health. Now we have a second disease. Five years later and a couple of drugs later, now we have a third disease, and so on,
and so on, and so on. Going and looking at the mechanisms is powerful, but it's still not enough. We still got to go further upstream and look at the dynamics. As I shared earlier, what's upstream of that IBS? Oh, it’s the hypothyroid. Okay, but even if you find the hyperthyroid what’s causing it for this unique person. Is it an autoimmune dynamic? Is it Hashimoto's? Where the thyroid itself is being prohibited

from producing sufficient T4, likely because of molecular mimicry because of some type of microbial overgrowth and enhanced intestinal permeability that's overexposing the immune system to lipopolysaccharide from some particular bacterial strain. And that lipopolysaccharide looks a little too much molecularly like a thyroid enzyme. The immune system is not dumb, is not weak, is not imbalanced. It's simply throwing the baby out with the bath water. Our thyroid gland is struggling because of a gut mediated dynamic.

Yeah, we got to find those things, my friends, if we want to help someone actually get well and stay well. Right. But here's the thing, you’ve got to go even upstream from that. What are the actual root causes? We address these in order. If someone has something severe enough to diagnose it, we got to start there, but that's not enough. We got to back up and look at the mechanisms and rapid relief for those mechanisms so that the diagnoses stop happening. But even that's not enough. We got to go upstream for the mechanisms and look at what's driving them, what dynamics are driving them. But if we really want to be 100% fulfilled as practitioners, if we want to know that the person we helped, not only got well, but stayed well, and maybe they're going to send us a delicious email 10 years later to share with us just how much vitality they are savoring, then we must address the true root causes.

Here at SAFM, we honor the fact that when you get that far upstream, the reality is that the vast, vast majority of people in our practice populations, regardless of what kind of practitioner you are, are not ultimately suffering from a root cause viewpoint because some body part is broken. Some body part has just lost its mind and is doing something completely illogical and unnatural. That just doesn’t happen, my friends. There’s no evidence of that happening. Unfortunately, a lot of our patients and clients believe that’s what’s happening and that’s why they were afraid, that’s why they’re disempowered, and that’s why they’re abdicating their health in a completely unsustainable way. But the vast, vast majority of people who are struggling from these chronic dynamics are simply making choices - the common cultural choices that everybody's making, the popular ones, the promoted ones, the advertised ones, the ubiquitous ones. They’re making choices that are promoting a sympathetic dominant nervous system, that are promoting an evolutionary mismatch between the inputs and the outputs, because we’re making choices that trigger a sympathetic dominant nervous system and set up the body for dis-ease, when what people want to have is a parasympathetic life experience. The average person is choosing all sorts of choices on a day, every day basis, knowingly, unknowingly. Working crazy jobs, workaholic, burning the candle at both ends, stressful relationships, stressful friends, stressful jobs, stressful parents. Existential stress.

But we’re also living in a toxic environment, where all the foods we eat are highly hybridized and processed. They have all sorts of chemical additives, artificial sweeteners, artificial colors, artificial flavors, artificial preservatives, artificial texturizing agents. The combination of that pretty much is making us chronically inflamed, chronic simmering infectious dynamics, chronic simmering inflammatory
dynamics that the immune system, because it's being suppressed by toxins and mental emotional stress, leave us with chronic immune dynamics like high viral load that the immune system is containing, but not overcoming.

That same crap food is leaving us malnourished because it's high in calories, high in colors, high in chemicals, but very low in nutrients. While we're doing all of this, sleep is just sort of annoying and inconvenient, and we only do it when we have to. We much prefer to sit up at night, self-medicating with a little more red wine, a little more dark chocolate watching Seinfeld reruns. This is the average westerner experience, except for what? Vacation? But wait, those same people want to have beautiful skin, lose weight easily, eat anything they want and have perfect bowel movements and no GI symptoms.

They want to feel fantastic and have a flat belly, and good sex drive, and awesome orgasms, and get pregnant at the drop of a hat and never be constipated. No wrinkles, but here's the thing. There are a lot of practitioners making a jillion dollars offering all sorts of promises that, yeah, yeah, I can make it possible for you to do this and still have this experience. There's a lot of sham, spam, scam dynamics out there promising people that utopia existence. But here's the thing, it's not natural, and it's never, ever, ever going to happen naturally, because the body in its wisdom knows that when we are making choices that tell the body that we can't possibly risk thriving because our very survival is being threatened, the body would never allow us to do that.

Because we are still here as humans, we have really resilient genes that are highly focused on our survival. Otherwise, we would have died out a long time ago. This combination is not natural. If you want to get the latter, you've got to affect the former. Otherwise, it's just a revolving door of drugs and bandaids. We've got to address crap food, toxins and stress. And this is why I strongly believe, and I've seen played out over and over and over and over and over again, that when we're talking about chronic lifestyle disease epidemics, these chronic inflammatory diseases that we know eventually kill the vast majority of humans - it's how we die - what you provide, the biggest service you provide, is education, inspiration and empowerment.

Because your knowledge, your expertise, your puzzle piecing can absolutely help provide someone rapid relief, which is critically important, by the way, but it's only the first 10% of the journey. Then it's a matter of unwinding where the upstream mechanisms and root causes are promoting chronic dis-ease. If we want someone to follow through on changing their life, hey, that's not an easy order, it's really not. People don't really want to change their lives. They're still looking for the magic pill. But if we want them to change their lives, we've got to focus on education, inspiration, and empowerment. Once they start to feel better, once they're no longer afraid, there is no other way to help them to sustain health and vitality, because people will do what you tell them to do while they're afraid.

They'll do what you tell them to do. They'll be compliant. I hate that word. They'll be compliant when they're afraid, when they're abdicating to you, when they're suffering, but when they start to feel better, unless you have given them a palpable reason to do otherwise, they're going to return to the same old dysfunctional choices that are just going to create the revolving door disease. If we want
people to get well and stay well, we must find a way, in our practices, to educate, inspire, and empower. Whether we’re doing that specifically or someone else in our practice or someone else in our network or someone else in our referral group. We have to get to the root causes, which at the end of the day, my friends, are crap food. Lots of color, lots of calories, lots of chemicals, very little nutrients, lots of profits though.

We've got to get at the toxins. They are ubiquitous, they are myriad in detail. We are inhaling them. We are swallowing them, and worst of all, we are slathering them on our skin, which is a giant mouth. And we are causing dysfunction in every human gland, every organ, every biochemical pathway. We've got to get at the stress. Not just talking about the stress - oh my gosh, it's a common Western habit to talk about our stress and joke about it, but behind the scenes, we like to compete. Who’s more stressed? Oh my gosh, I had such a terrible week. You think you had a bad week, let me tell you about my week. Really, We want the blue ribbon in badness? My life sucks more than yours so you should feel sorry for me, and somehow that's sort of a prize?

It's crazy, but it's not just mental, emotional stress. It's not just to do lists and demands. It's physiological stress, it's physical stress, it's biochemical stress, and the collective combination of these different forms of stress, especially when we combine it with toxins, we combine it with crap food. Is it any wonder we struggle with so much dis-ease that’s not being looked at, not being diagnosed early enough? I'm amazed we're doing as well as we are considering the massive collection of dysfunctional inputs that we are providing into our system, the dysfunctional combination of choices, which are synergistically bad, synergistically dysfunctional, and debilitating. Ultimately, we've got to get to these roots.

Crap food isn't just low in nutrition, it also provides a lot of chemicals. It creates toxicity because of what it comes in with, what it brings along and it's basket. Depending on the hypervigilance of our immune system, it makes our immune system see the food as a potential threat because of the embedded chemical or because of the unnatural strange looking disfigurement of the food, depending on how highly refined or modified it's been. Because of that, it can actually increase stress hormones, right? Whether food intolerances, food, sensitivities, food allergies, all sorts of different types of dynamics of that, but they're all examples of our immune system tagging a food. Keep in mind that the primary function of our immune system is to assess and tolerate, assess and tolerate, assess and tolerate, and only react incisively and fully when a threat is real, but our immune system is highly confused today.

Not because it's not smart and resilient, but because we are defying our evolutionary wisdom and chronically exposing ourselves to makeup and snacks that don't look natural. They look a little too much like a foreign invader, not a food, not a normal ubiquitous part of our environmental flora and fauna. Toxins deplete nutrients. Biochemistry is not one of those things that happens with a magic wand. It requires nutrients. Phase zero, phase one, phase two, phase three detoxification all require nutrients. If we don't have them, we don't do it very well, and what you can't biotransform and clear, you store in your bones, in your adipose tissue, in your brain. Absolutely, that increases stress hormones. It impairs cellular metabolism, sometimes really aggressively. It impairs detoxification. It impairs nutrient absorption. Stress is perhaps the aggregate feature that worsens exponentially, the synergistic effect of crap food and toxins. Stress hormones also have to be metabolized. They don't go away on their own.
They have to be metabolized, that uses up nutrients. By design, stress impairs digestion, not by a little bit, by a lot. Depending on what digestive secretion we're talking about, it can be anywhere from 25% to 50%. It causes dysmotility on purpose. It causes maldigestion on purpose. It causes malabsorption on purpose, because, from an evolutionary perspective, if you’re running for your life, why are you stopping to eat? Why in the world do you need to digest?

Time stamp [54:31]

It impairs detoxification on purpose because it wants to put all of that ATP, all of those nutrients into making sure you can fight and flight and hide and lift cars off of small children. We do not get to send signals chronically to our body day after day, that our survival is threatened, and realistically, logically expect our body to risk letting us thriv. Because at the end of the day, the body loves to thrive, but it prioritizes the need to survive. When we need to survive, when that survival is being threatened and we go into fight, flight, hide mode, the body naturally prioritizes different glandular secretions, different neural transmissions, different hormonal axis balances, different immune function. It does this on purpose because it promotes survival with the assumption that the threat will pass, and then we will go into a period of healing and restoration of vitality. But when our very everyday lifestyle is the threat that never goes away, it's chronic, it's every day, then we're setting ourselves up for an eventual, undoubtable, ubiquitous, logical downstream cascade of illness.

In this webinar series, with this introduction today, in this webinar series, we are going to take those root causes and then build from the ground up an understanding of the most common dynamics via which those root causes create disease, or I should say dis-ease that again, if we don’t arrest, it becomes diagnosable.

The first of those is sympathetic nervous system dominance. We're going to talk about exactly how that affects physiology and biochemistry in order to promote dis-ease that easily, not only becomes on its own diagnosable downstream, but is the fire to the flame of every other chronic lifestyle epidemic we have. Number two, we’re just going to talk about the gut, period, because crap food, toxins and stress impair the gut in multifactorial ways that naturally create dysfunction in the systemic body, naturally. Naturally. We’re going to talk about insulin resistance and why 90% or more of it is not diagnosed, and that in waiting to diagnose even prediabetes, we are missing the initial 80% plus of this disease dynamic. In some people, I think is 95%. But we think about prediabetes, which is a silly label, by the way. We think about that as being early. No, this is way, way, way after dysfunction has been in place for years, sometimes for more than a decade.

Subclinical hypothyroidism, epidemic, absolutely epidemic. It's not being looked for, and for sure it's not being diagnosed, not being treated. But there are multiple mechanisms via which this happens and some of them will surprise you. Xeno-endocrine disruption. Like I said, our skin is a big mouth. Chemicals have hormonal effects, in some cases, really aggressive hormonal effects, and we must understand the mechanism and why we're seeing them so often. And then toxicity mediated immune hypervigilance, the huge epidemics that we have of allergy and asthma and atopy and autoimmune diseases. What are the actual dynamics? The combination of mechanisms via which this happens?
At SAFM, we have deep dive clinical courses in all of these, where you can really understand everything you need to know about these dynamics, but I really want to serve all of you by giving you an overview of each of them so that you have some practical clinical pearls to begin to use right away in your practice. This is the first of four webinars. There will be three more where I will be bringing to you a sample of how we do things at SAFM.

But this series is not a marketing pitch. It's really just yet another example of our passion, my passion for public service. I appreciate deeply that there are many, many practitioners out there who are already skilled in integrative and complementary and functional or naturopathic medicine. Our programs may not be right for you, but for sure, I want to do everything I can through this type of public service education, to help your practice, help your eyeball to eyeball, human to human, heart to heart engagement with the patients you serve to be as effective as possible in serving those people, the person in front of you, who's a mother, who's an engineer, who's a peacekeeper, who's an author, who's a child.

People have rich skills and amazing gifts to give our global human family. But when people don't feel well, they can't give their gifts. They just can't. I want to serve you by bringing you additional knowledge and know-how, helping you to be as effective as possible so that you can serve the people in your practice, and they can turn around and serve all of us by giving fully of their gifts. I hope that you will join us for parts two, three, and four, where I'll be diving deeply, progressively into the five most common dynamics of dis-ease that I just shared with you. I want to thank you so much for being with us today, and I look forward to being with you for part two and beyond. Thank you so much. Have a great day.