

Real Health Podcast

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Episode 61: Impact of Metabolic Health and Lifestyle on Cancer

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Intro: This is the Real Health Podcast brought to you by Riordan Clinic. Our mission is to bring you the latest information and top experts in functional and integrative medicine to help you make informed decisions on your path to real health.

Dr. Ron Hunninghake: Well welcome everyone. It's Dr. Ron Hunninghake from the Real Health Podcast again, and it's my real pleasure today to have Dr. Charles Meakin, who is very happy to be referred to as Dr. Chuck. So Dr. Ron and Dr. Chuck are going to be on the program today. Dr. Chuck, thanks so much for coming on and speaking with us today.

Dr. Charles Meakin: I'm honored to be here and thanks to Amber for getting this set up pretty quickly. And my partner Addie, from Heal Navigators, we work with Heal Navigators for sort of finding this and this time slot and I'm honored to be here.

Dr. Ron Hunninghake: Well, this program is about real health and you have in your background, you've been in oncology, you're a metabolic coach. This concept of metabolic health seems to be at the core of what you do at this point in your career. What is that, and how did you arrive at this point?

Dr. Charles Meakin: So like all of us in our career, at first the path isn't that clear. As a kid, I was always interested in mind versus body and studied the martial arts and studied eastern religions and eastern philosophies through high school and college. Ultimately went to med school, was very charged to help out in the caring profession, and therefore, chose oncology because I thought that best studied the relationship of the body, the mind, and the spirit in a difficult situation.

I worked in a way where I always tried to bring the easiest, most available therapies to people using the best of standard of care. I was in a big group with some of the best and the brightest and secondly, but also the lifestyle issues that I felt that were just so important. It never made sense to me to see a patient that had terrible lifestyle issues, sleep, diet, exercise, emotions. That I call mission alignment, sort of a

purpose in life. Yet we were only dealing with the details of some sort of chemotherapy or radiation treatment.

And so as that wound through, I ultimately launched into this second career focusing on mainly metabolic issues using repurposed drugs to enhance the outcome with cancer care and also to prevent chronic disease. Metabolic care would be described as how to best improve or optimize the internal utilization of our nutrient energy, oxygen substrates to have efficient metabolism, and therefore, help our body to work most efficiently. And like in the work you do, this involves a lot of micronutrients, a lot of good lifestyle modifications. And I try to bring a platform to people that they can study that rather quickly in a virtual format at low cost, and then have options to modify, hitting the big priorities first as they go through their health path, generally with cancer, but sometimes with other things.

Dr. Ron Hunninghake: The whole cancer paradigm has been so tumor centric, like focusing on the cancer as the tumor, without really looking at how that person's metabolic health or lack of it, set the stage for that tumor to find a place to grow. In other words, if a person has a weak immune system or if they are inflamed, or if their blood sugar's way out of whack, that's setting a ground stage, a terrain stage that allows for cancer cells to grow and to thrive. So without dealing with the metabolic part of the human being, the outcome is not going to be as good in cancer care. At least that's been my experience.

Dr. Charles Meakin: Exactly, exactly. I always say that we need to put out the fire but also correct the terrain. And everybody in the cancer world has read the hallmarks of cancer by Hanahan and Weinstein, and in 2019, they added two more hallmarks that are more metabolic in their mindset. So there's sort of this debate and my partner at Meakin Metabolic Care, Travis Christofferson, he's an author and

Dr. Ron Hunninghake: I love his book. I love his book, he's a great author.

Dr. Charles Meakin: Yeah, and he's a wonderful writer. He can take complex things and simplify them. And so he was able to communicate the message that we're missing something here. There's the somatic mutation theory of cancer, where you look at a gene mutation and then once again, as you said, so well, look at just the tumor and you pound away at maybe mutations or over proliferation flaws in a certain genome. And many of those mutations are downstream mutations from lack of regulation. Whereas Travis and many others have targeted more, let's look at the metabolic theory. The somatic mutation theory is not unimportant, but the metabolic theory is also important, and that involves, once again, the environment of the body, how metabolism works and how to optimize that to get the immune system and the drivers of proliferation back in control.

And so that's sort of what we do to help people improve the outcome or optimize the outcome with their cancer therapies. And we have a virtual platform. I cover 45 states, keeping up with those licenses. I know Riordan clinic covers 50 states and 50 countries, but I got my 45 licenses and we have pharmacies that cover all the US. And then for outside the US, I just do sort of coaching calls more than MD calls.

Dr. Ron Hunninghake: We've been fascinated with how many cancer patients, when you start digging down into the causes of their cancer, there's oftentimes a traumatic event or a series of traumas that were kind of an initiating, didn't necessarily start the cancer, but it had a kind of domino effect on their whole metabolism. To me, what's interesting about that is that we're now finding out that the brain is very susceptible to traumas, not just concussions, but life traumas and stress and those kinds of things. And so it's interesting to see how the mind body connection is now starting to be understood as a legitimate scientific area of exploration, to where we need to help our patients understand themselves and to take action in the direction of healing some of these traumas and helping their brain body

connection to work better together. And that does involve a lot of coaching and one-on-one therapy. So do you get into that much these days?

Dr. Charles Meakin: Yeah, I do. Thank you, Dr. Ron. On our onboarding form, and I'm trying to walk the rope between making it easy and available, cheap, people pay out of pocket, but also high touch, high effective. People do an onboarding form and we ask about the stress in their life. We ask about their social engagement, we ask about their mission alignment. And mission alignment is the term that describes, what you do every day, how does it match up with your long term life goals? Some of those goals might be altruistic or how to leave a footprint or a fingerprint when we're gone. And then social engagement, especially with us men, we collapse into solitude and we are pack animals. We're used to sleeping in caves with our tribe, more or less. And it's important that we lock arms with our loved ones and work through this together.

And unfortunately, so often in our standard of care programs, and I hear this every day as I see people, like, "Yeah, I went to that big cancer center and they told me I got three or six or nine months to live." And I know they need to give consent and give people sort of straight beef on what the risks are, but there's never a good reason to destroy hope. And the nocebo effect is just as powerful as the placebo effect, in a positive way. So you can walk people into a deterioration if you allow your language to do that. So I try to spread the word, that that is very important. In fact, it is probably as important as a lot of the hardcore standard of care stuff we do, in my mind.

Dr. Ron Hunninghake: So, one of the books I recommend all of my cancer patients to read is "Anti-Cancer Living." Is that by Dr. Cowan? I forget what his last name is, but he's the head of the integrative department there at MD Anderson. And he basically says that epigenetically speaking, in other words, the lifestyle choices that we make in our lives, have at least 50%, probably more than 50%, to do with the outcome of the therapy in a cancer situation. And he lists as his number one factor, is connectivity. So just what you were talking about, if people feel disconnected, that's not a good prognosis for their outcome.

And so helping people get connected with their tribe, but also with themselves, because a lot of people are, especially in the world that we're living in, that they're trying to find connections. They're trying to take better care of themselves, but they don't know where to turn. And so here at the Riordan Clinic, we've always emphasized the lifestyle component as being an incredibly important part of effective cancer therapy.

Dr. Charles Meakin: Yeah, I've been on an integrative oncology program with him and the original book, "Anti-Cancer" by Paul Schreiber.

Dr. Ron Hunninghake: Schreiber, yes.

Dr. Charles Meakin: Yeah. And he talked about the terrain. And then of course, the book about people who act the code and figure out survivorship... Kelly...

Dr. Ron Hunninghake: Oh, Radical Remission.

Dr. Charles Meakin: She'd also-

Dr. Ron Hunninghake: Kelly Turner.

Dr. Charles Meakin Big part of it, I think there was nine key features with all these people who had surprising survival from difficult situations and five of the nine were emotional, spiritual. So it goes to show you the importance of that. I always ask patients, "Well, why do you want to fight this cancer?" And a lot of times it comes out like, "Well, gee, of course I don't want to die." Or, "I don't want to be in pain." Or, "I don't want to leave my wife and leave my husband." And then I said, "Well, why do you not want to leave them?" It's just peeling back the onion. And ultimately, they get to the core and they figure out why they want to be here, and that's where I get them to try to focus. I said, "You need to put that on your mirror."

And whether it's teaching your grandchildren lessons in courage or whatever that is, put that on your mirror and then look at that every day. And then the hard things of being a cancer patient or a chronic disease patient become easy. You can run from a lot if you have a good purpose in mind. And so that sort of lights the fire frequently.

Then you talk about social engagement, you talk about the importance of a spiritual connection. You talk about, as you well know, about you can't do this alone. Accept help. But also encourage people to start, even in the difficult woes of dealing with something difficult, you want to reach out and help other people, and that's going to immediately catch you as someone that's going to do battle, no matter what you read. I always go back to the book by Louis Gonzalez, "Deep Survival" and the biggest predictor of getting through a shipwreck or a plane wreck or a flood, was it someone had to help an older person, a child, somebody who was injured, would almost guarantee their success and they get out of themselves and reach deep.

And so, yeah, we try to emphasize those things. We also look at more mechanical things like what your HOMO-IR is or your insulin resistance. Cancer cells have IGF and insulin receptors on them, and we want to allow that down through diet, exercise, repurposed drugs, intermittent fasting, those tools. We look at high sensitive CRP. We have a battery of 12 simple lab that are relatively cheap to get. We get them at Quest through sort of a, they pay us and then we extend the discount significantly to them. And it looks at some of the core things, not as in-depth as I'm sure you do with your micronutrient levels and vitamin levels and food sensitivity stuff. We do that if we need to, but we get the core stuff, like basic methylation screen, homocystine, thyroid screen, magnesium, LDH, uric acid. We look at fructose metabolism and things like that. All the basic chemistries.

And then, that goes into a calculator called the MOP calculator, metabolic optimization protocol calculator, and that creates a score. We also do a pheno age, the age clock devised by Morgan Levine, and we put those in, and it's an open domain pool, I just believe, I think in 2021, maybe. And we calculate their biologic age to compare with their chronologic age or real birthday age, and that gives us another metric to follow.

And then we suggest kind of the five biggest variances, and it might be three of them are non-laboratory driven. They're more like you need to set up play dates with your buddies, or you need to start the day with ... You got to get rid of the trash. You got to rehydrate in a vigorous way in the morning. Or it might be you need to really step up with resistance training. And everybody we see and send pharmaceuticals to or supplements to, we send a really durable stretchy band, that I give them like a six basic around the body, the six biggies, bicep, tricep, chest, back, squat, deadlift. So they hit those muscles in a gentle way and work up three times a week.

As you know, the work on muscle maintenance remains incredibly important to impact all chronic disease, dementia. The myokines, the cell signaling that come from that, are very powerful, and it's so frequently undone and overlooked.

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Dr. Ron Hunninghake: One of my favorite tests to do, just to narrow down to one test, is a fasting insulin. I've been reading Ben Bickman's "Why We Get Sick" book, and if people would just do that test and let that be a kind of wake up call. It can be a big pat on the back if you're less than four or five on your fasting insulin, you're doing a great job. But if it's starting to climb up, you're in danger territory. And so this is where I try to invoke Dr. Riordan's great term, co-learning, where I want to get into a relationship with the patient where we can learn more about what is it that's unique in your life that allows you to make better choices in favor of better health. Certainly everything in life is a choice, but how do we know when we're moving in the right direction?

And so this is where in functional medicine, by measuring things, it gives you standards that you can then judge how well you're doing that particular area. Whether it's a certain vitamin D level or the insulin resistance marker, any of these things give people a starting point. Then you say, okay, now with that, go out and here's some things that you can do. And then in two or three months, come back, and let's re-measure and see if you've made any progress. And people will change their behavior more to a fact than they will if you sit there and pound them over the head. If they know that that fact, that insulin resistance number is scary, that's going to get them to adjust their sugar intake and get their exercise going and those kinds of things.

Dr. Charles Meakin: Yeah, yeah. I like to work with Ben Bickman. He was on our consulting board at the company I used to work for that ultimately merged home care oncology. We do a HOMO-IR, which is just your fasting glucose. I think it's calculated with a division by 405 by your fasting insulin. And the data on that is very powerful. I mean, you will see insulin resistance five to 15 years before your hemoglobin A1C pops. I had a gal just recently, looks fit as a fiddle, mid-30s. She had a fasting glucose in the mid-80s, but she needed an insulin level of, I think it was 12, keep it there. So she's working too hard to keep that insulin down. And she's on the path, she's going to correct, of course. But you can look under the hood pretty easily without spending a lot of money.

And we all know that cancer cells have IGF and insulin receptors on them. Insulin tells the body to do three things. One is, tells cells to multiply because we're in the fed state, we got food around or substrate around, and you don't want your cancer cells seeing that all day long. Of course, it also does other things. It turns off fat burning and it tells the body to store energy because we're in the fed state. So that's what, as you say so well in some of your programs, we in America are not fit, and over half the population has metabolic disease, and it's because of the cycling we see all day long of our insulin growth factor and in the change in our lifestyles. So I'm hoping that we're gradually spreading the word. I see windows and opportunities that make me excited. On some of these integrative oncology working group talks, we have people like some of the teams from MD Anderson, Sloan Kettering, we can talk by the breast expert at Sloan Kettering.

And what I used to notice was we treat women with breast cancer, and virtually a good many of them, at least where I was in North Carolina, would become metabolically unfit after treatment. They would gain a lot of weight, they became inactive, they had mitosis all over the body, you know it. And I said, "What are we doing?" Of course, harming people with decadron as an anti-nausea agent, we're giving them stuff that makes their joints sore and disrupts their sleep. And now they've shown that, at Sloan Kettering where they have the resources, that those women that became insulin resistant or partially

insulin resistant through treatment, have a much higher rate of recurrence. And that doesn't surprise any of us, I'm sure. But now they're looking at ways to sort of best manage this upfront. Well, like the stuff you and I do every day, I believe, to prevent that, while still, people get standard of care. So I see some of the conversation slowly coming our way.

Dr. Ron Hunninghake: And it's happening in several different fields, even in mental health. A lot of people who get the various medications for schizophrenia or for depression or for bipolar, the medicines themselves are setting them up to be metabolically disabled. So we're having to rethink how do we deal with these chronic illnesses besides just using pharmacology or chemotherapy. Not to say that these shouldn't be used. But I think there's an integrative role for the metabolic syndrome to be a kind of foundation on which we can help people make overall better choices and thereby reduce their risks for this whole plethora. Alzheimer's, the mental health diseases, the autoimmune diseases, and just the list goes on and on. They're all related to the metabolic syndrome.

Dr. Charles Meakin: Bingo, and I wish I could pull the author out of my ... But one of the original studies took place in England where they simply gave one-half of a giant prison population, a daily multiple vitamin, and the other half they gave placebo. And what they saw was the group that got the daily multiple vitamin, which most of us wouldn't think would be that impactful, they had a great reduction in their violent behavior, in their misbehavior, and getting further lockups. They had a much, much improvement in their overall behavior.

And then I go to the work of, I think it was Dr. William Wall with the book, "Nutrient Power," he was an engineer and worked at a local hospital in Chicago and started seeing these patterns and just had this lifelong learning mindset and started studying people's diets and their nutrients levels. And he found that when he replaced those, many of these people normalized.

So my mantra is don't really make the diagnosis of a mental health condition until you optimize people's nutrition health, metabolic health, remove some of the stressors because I think all of us could be mentally unstable with, you name it, if we were put in the right circumstances of stress, poor diet, circadian rhythm, disruption. And so I think, unfortunately, we first treat with meds generally, and then people are labeled for life instead of supporting them metabolically and lifestyle-wise and then see how they behave. But I think the work's coming around, some exciting work at Stanford and some of the other, a recent doctor from Harvard who's written on this ...

Dr. Ron Hunninghake: Dr. Christopher Palmer.

Dr. Charles Meakin: Palmer, yes.

Dr. Ron Hunninghake: Yeah, I just finished his book on brain energy, and it's all about, this psychiatry has missed out on a fundamental foundation of mental illness, namely dysmetabolic syndrome, that you could just call it that. And so I think the roads now are all starting to converge towards this metabolic syndrome as a foundation in chronic illness. And the value of that is people can take control of their lives and make better choices and thereby heal and maybe prevent better than what they ever thought they could.

Dr. Charles Meakin: Yeah, I agree. I agree. I love your sort of organized co-sharing of decision-making there at Riordan Clinic. My tagline, after I finished big hospital work, I started a blog or a charity website to coach people, and it was always, "Stay strong and curious and be your own best doctor."

Dr. Ron Hunninghake: There you go.

Dr. Charles Meakin: And that sort of turns back the responsibility, show up and follow through if you really want to tackle this. And it's a little scary for some, but most people would rather have some switch of control-

Dr. Ron Hunninghake: Exactly.

Dr. Charles Meakin: To help themselves.

Dr. Ron Hunninghake: Dr. Chuck, this has been wonderful. I think we could go on for another couple hours here, but I think we have to wrap it up. I'm sorry that we couldn't go more, and maybe we can get you back on again, and we'll go into greater depths. Because I think this metabolic syndrome is going to be a place where we can circle the wagons and get all the various components of medicine working together with a commonality that we haven't had before.

Dr. Charles Meakin: And as you said, there're converging. I believe that, like you do, whether it's mental health or metabolic health, cerebral, vascular, cardio, cancer, it all comes down to mitochondrial function.

Dr. Ron Hunninghake: That's it.

Dr. Charles Meakin: And Robert Lustig, metabolic researcher at UCSF, he pointed out there are now 14 cancers that are on the rise that are all metabolically driven. They're associated more commonly with the risk factor of metabolic, just health or obesity, metabolic syndrome, however you want to call it. And so that's our call to arms to really make people aware of that. And good news is you got easy tools to fix it. But I also want to shout out for your clinic. I mean, I know that you guys have been doing a lot of hard work for 30 to 40 years. There are probably times where, you were sitting alone there at the medical conferences with all the doctors sort of pointing out that's not quite standard of care and stuff. But it's nice to meet a teammate that I think our team is getting a little bigger over the years.

Dr. Ron Hunninghake: I think so too.

Dr. Charles Meakin: And that brings me excitement to go to work every day.

Dr. Ron Hunninghake: You bet. Dr. Riordan had a vision, and he felt like he was a bit of a loner. But gradually, more and more people are seeing that this metabolic foundation to health, we've got to build that back if we're ever going to really restore our population to the health levels that they really need and deserve.

But thank you very much for being on our program, and I wish you all the best, and we'll try to get you back on again here in the near future.

Dr. Charles Meakin: Thank you, Dr. Ron, and thank you, Amber. Appreciate it.

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