



Episode 463: Matt Dawson on Wild Health,
Precision Medicine & Genomics

Child: Welcome to my Mommy's podcast.

This episode is sponsored by Levels Continuous Glucose Monitors. I have been experimenting with this continuous glucose monitoring system for the past few months, and I've learned so much personalized data about my body's own response to different foods, even to workouts, to sauna, and to when I don't get enough sleep. I've been using Levels, and this has made a significant difference in the way I track my glucose data, and especially as it relates to diet and fitness. Levels is cool, because in addition to providing you with the continuous glucose monitor sensors, their app interprets your data, scores your individual meal, and allows you to run experiments across different inputs like diet, exercise, or even fasting protocols. They're backed by a world-class team, including Stanford-trained MD, top engineers from SpaceX and Google, and a research team that includes legends in the space like Dr. Dominic D'Agostino and Dr. David Perlmutter, both who have been guests on this podcast before. Health is so personalized, and this has given me a way to know the best foods for my own body, and it's helping me get enough protein and carbs while still maintaining weight loss. Levels is currently running a closed beta program with a waitlist of 100,000 people, but, as a listener, you can skip that line and join Levels today by going to, levels.link/wellnessmama.

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Katie: Hello, and welcome to "The Wellness Mama Podcast." I'm Katie, from wellnessmama.com and wellness.com, that's wellness with an E on the end. And in this episode, I talk to Matt Dawson about Wild Health, precision medicine, genetics, and a lot more. Matt Dawson is a father of four and a doctor who wants to be a farmer when he grows up. He also learned Italian just as a joke, and we talk about that story as well. He has won national awards for education and innovation. He's published two books that reached number one in iTunes in the medical category. He's created apps that have been downloaded over 100,000 times and published many peer-reviewed articles. He's the founder and CEO of a genomics-based personalized medicine company called Wild Health. And that's a lot of what we focus on today, is the paradox of how medicine is often 20 years behind the current science and how it also often ignores the age-old wisdom and how we can help to bridge that gap. He talks about why your DNA is not your destiny, the really surprising research around genetics and mindfulness, and the astounding amount of data around that. The importance of sun exposure, how he's helping his patients see a 15% increase in their HRV, and a lot more. So a very practical, fascinating interview and I know you'll learn a lot. Let's join Matt. Matt, welcome to the podcast.

Matt: Thank you so much for having me.

Katie: Oh, thanks for being here. I am excited to chat with you. But before we jump into the health stuff, I have a note that you once learned Italian, just for a good punchline and I would love to hear the story.

Matt: Yeah, that's funny. And I don't remember any of it just to be clear. So I think it was probably 10 to 15 years ago, I was presenting at a conference in Rome, and I was just newly married not long after I was married, and my mother-in-law was gonna come along on the trip. And I thought it'd be funny to learn Italian and not tell my wife and mother-in-law that I was doing it. So I spent probably six months, like, just listening to all these audiotapes, practicing. And then when we got there, we got there early and I went to pick up my mother-in-law at the airport. And when she got in the taxi, I just started speaking in Italian to the taxi cab driver. And they looked at each other like, what, did you know he spoke Italian? And I told them that I heard a lot of Italian on the flight over and just picked some up. And I thought it was hilarious as a joke. A lot of times, it was totally worth it. A good joke is always worth it.

Katie: That's really fun. And you got a foreign language out of it. I love that.

Matt: Well, I got a foreign language for about a month out of it, yeah.

Katie: That's impressive though. Teaching yourself a language is not an easy feat. So what a cool story. Okay, so I'm excited to jump in with you on so many topics. But I also have a note here and I would love to kind of just as background go into this first, about how in a lot of ways we're practicing medicine so far behind the science, but then we're also kind of ignoring age-old truths.

And this is a topic I know you've talked about before. But I feel like it's a frustration point for so many people and certainly was for me when I was navigating the worst of my own health challenges. It was hard to get answers within the conventional medical system and I felt like the medical system largely ignored stuff that could have been helpful because it wasn't backed by the science they were understanding at the time. So can you kind of give us just the background of what's going on and what you mean by that when you say it?

Matt: Yeah, I feel like we're kind of in this no man's land when it comes to science and medicine kind of behind and too far ahead. So what I mean by that specifically, is before I started Wild Health and doing precision medicine, I was working in an academic center university teaching other physicians and medical students. And I looked and there were so many things that we've forgotten that we weren't talking to our patients about like Hippocrates when he says, "Let food be thy medicine," and when he says, "Walking is man's best medicine" and so many truths like that.

And just that we've known forever that being outside is really important. And all these basic things that medicine ignores and physicians never talk to their patient about, food something that basic, and sleep, and being outside, all these things. And so I felt like we had kind of "moved beyond that" and thought we were better than that for some reason and forgotten those things. And at the same time, I saw us applying the science we had and medicine is always, it seems, about 20 years behind the actual science and the evidence that is emerging.

So there's so much that we could do that we had good evidence for that we weren't doing and we were ignoring the things that are our ancient truths. So it just felt very disconnected. I felt like frequently we were doing more harm than good.

And I just kind of wanted to extract myself from that situation and start really focusing on both cutting edge medicine, where we actually can do and the sciences we can do and these ancient truths and really start teaching people those things and making it okay for physicians and others to talk about these basics. Because we may consider them basics, but so many people that we were treating, didn't understand how important those basics were.

Katie: Yeah, absolutely. It seems like it very much should be a both-and not an either-or. And I had that same experience with doctors even directly telling me "Oh, there's no connection with what you're eating and your thyroid," or things that I now know just blatantly aren't true. And I know this is some of the work that you're doing, but what do you think it would take and how can we start to navigate that so that we're not...medicine isn't 20 years behind what the science is saying? Like what are some ways to be able to integrate that science more quickly?

Matt: Well, I think what you're doing is one way, I mean, the podcast. Like science has moved a lot more quickly now. There are a lot more people that aren't physicians and aren't scientists but are curious and really smart and putting it out there and demanding it. So the more of us that talk about it, the better as well. I think it used to, 10 to 20 years ago before podcasts and before social media and before all these ways for us to communicate and accelerate learning, people just kind of took what their doctors said and that was it. And we're not doing that anymore which is good.

So I think it has to come from both ways. One, physicians embracing this which they are. Physicians are learning much more quickly and continuing to learn knowing that they can't get stagnant. And the patients demanding it as well and saying wait a second, like, you said food doesn't affect this but what about this? And actually showing those studies and talking to their physician about it. So from both, from our end as the physician and from the patient's end, demanding it is how I think we accelerate.

Katie: Absolutely. I've said on here a few times before that each of us ourselves is our own primary health care provider because we're the ones who are making our food choices and sleep choices, and lifestyle choices every day. And that at least in my experience, the best outcomes happen when you have a partner with a physician or a practitioner who really knows what they're doing and who respects that you are also invested in your own health. That's for me what led to finally the results that helped me heal.

And I know that kind of...it seems to be your approach, as well, is helping people to work within that paradigm, take ownership for their own health. And then have the tools and the knowledge that the medical side can bring that they may not have on their own.

Matt: That's exactly right. And I love that you say that everyone should be their own primary care physician. One of our core values at Wild Health is the very short phrase, "Together we heal." And what we mean by that is we partner with the patients and we talk a lot about how, look, we may know a little bit more about physiology or may have certain experience and we want to convey that to patients, but we don't know more about a patient than they know. They've been living with themselves forever, they know what works, and what doesn't work.

And if we can partner with our experience and maybe the things that we've learned treating others and reading the scientific studies because it's not a patient's job to know all of that evidence, if we can educate with that, and then really let the patient trust themselves and that relationship, that's where we get some real power in that partnership.

Katie: Absolutely. And yeah, at the end of the day, no one will have as much vested interest in their own health, hopefully, as the patient. And I think it seems that we're seeing a trend of people being more aware of that individually as well, which is exciting. Because I know that leads to better medical outcomes as well and probably alleviate some frustration for you guys. Because I have also seen on the medical side, all these amazing doctors and practitioners who know so much and then are trying to communicate it to patients, and when the patients don't do the work, then the results don't happen. So I think that balance is so important.

And you used the term "wild health," and I know this is a name that you use in your practice as well. Can you explain where that name came from and define what you mean by wild health?

Matt: Sure. And we kind of already talked about it, it's an allusion to two things. First off what we do in our practice, we consider kind of wild and out there when it comes to cutting edge science and moving the science forward. So every patient that we see, we sequence their DNA, we do a really deep dive on their bloodwork and biometrics, looking at microbiome. A lot of these measures that are kind of wild and out there, it's not in traditional medicine.

But then the other part of wild is an allusion to the wilderness and nature. We feel like a lot of our problems today are a real disconnection from nature and from the wild. We've become a little too tamed. And it's easy to be tame. And so we really try to help people express their wildness too. While we're doing this kind of wild and cutting edge science, we also wanna remind people about getting in nature and being wild and living like you were kind of meant to.

Katie: I really love that. And I definitely I'd love to hear some practical tidbits of ways that you encourage people to do that. Because on my own, I know I see a big difference when I make a point to get outside first thing after waking up in the morning and just get that natural light, get on the ground, even if it's just drinking coffee outside with my kids, whatever it is, I notice a difference in myself when I do that.

And I know there have been some really cool studies even about kind of the idea of getting back in nature and how camping for a certain amount of time can help reset your entire circadian biology, how in nature, we're interacting with not just the sun which is vital for life, but also a microbial environment that's different than an indoor one. But what are some of the ways you encourage people to really integrate that into their lives?

Matt: So the Japanese do this really well. So they have a concept called Shinrin Roku and it's...forest bathing would be the English term for it. And they've done incredible amount of studies just showing decrease in cancer risk, decrease in blood pressure, and lipids, and inflammation, and all of these things. There's really good science behind it.

How we approach this with patients though is most of the patients that come to us, they get excited about talking about the cutting edge things and we like talking about those as well, but we always try to take it back. And I guess to give you a few examples of that, you mentioned sleep specifically. So people always...the first question is because this is how we've been trained in America is like what can I take to improve my sleep?

So okay, that's fine. There are some supplements, there are some advanced things and peptides, some other things, but then I immediately remind them of exactly what you said, hey, there's good studies on just getting morning light and being outside, and making your sleeping environment more ancestral. If you think about someone kind of sleeping in a cave, it's gonna be cool with the temperature, it's gonna be dark. It's either gonna be really quiet or some ambient sound of like a stream running through.

So kind of taking anything that someone comes to us and says what is the cutting edge way to treat and address this? Well, what is the ancestral way first? I mean, I could give you multiple examples. The one that just popped in my mind is there's a peptide, people are really interested in peptides now, called MOTS-c. It's a mitochondrial peptide. So frequently I'll have people say, "Hey, can I take this peptide for more energy and performance?" and I say you can, but what it does is it increases PDC alpha, you can also increase that with intense exercise, with sauna, with fasting.

And so you could inject yourself with this peptide, spend a lot of money on it and it'll probably work. You also could just go for a long walk in the sun in the morning while you're fasted and probably get as much of an upregulation.

So teaching people that we're not just saying get in nature to get in nature, but there's actually really good science behind it. Educating like, we've talked about, partnering with patients. We try to never be paternalistic and say, "Do this." We say, "Hey, if you do this, this is what it leads to," and making people understand there's really good science behind just getting in nature and being outside.

Katie: Yeah, I've definitely seen that trend as well, especially in the more biohacking side of the health and wellness world where people will get really interested. And I'm right there with them, I get excited about the genetics and the peptides and the cool biohacking gear. But I feel like often people are looking for that thing that's gonna fix them when, like you said, so many of those things are already right there and they're free or extremely inexpensive. And it's another both-and, if you're not addressing the sleep, and the light, and the core nutritional stuff, you can do all those really expensive things, and they're not gonna be as effective anyway. And so I love that you guys pull that both-and, the importance there.

That said, I am curious to learn a little more about what you guys address when it comes to genetics because this is a pet project for me and I've done a lot of deep-dive research into genetics just on a personal level. And I know there's now so much more information than there even was 10 years ago when I started doing this. So what are you guys running when it comes to genetics, and what are you looking for?

Matt: Sure. So several years ago, when we started to see if there was an incredible amount of evidence for this and you actually could practice personalized medicine, we dove in. My founder and I, Mike, we were both physicians teaching other physicians and some other things. And we got fairly obsessed with this because we fixed a really big issue for him. His lipids were through the roof, he started on a diet that his physician told him to and he got worse. He was put on a stat and he got really bad muscle breakdown and myopathy.

And at that time, we were looking at his genetics, we saw oh, wow, he has all of these SNPs that make him almost...that he needs to be on the opposite diet of what his physician told him. And then we saw he had a SNP that made him almost guaranteed to get this muscle breakdown. And we were very frustrated with why did his doctor not know this. And we realized it's because no one is doing this. The evidence is there, but no one is just doing it.

And I solved some difficult issues for myself as well related to overtraining and things. I looked at my kind of exercise SNPs. So we dove in really deeply, and we believe very strongly that precision medicine is the way to go. When in medicine right now if a doctor or someone tells you, "Hey, do this because the study says it

works," what they're really saying is the study says it works for 60% of people or 70%, or 80% but we can do better than that. We can be much more precise.

One of the things that we've really learned though too, is that your DNA is not your destiny. And while we do think it's an important piece of information, it's only part of the story. So we never ever base anything just on genetics. It has to be taken in a holistic context of what does your blood work say, what are your preferences, what is your lifestyle? I see that mistake made a lot.

And just to give you a couple of examples of that, people talk about FADS2 polymorphism. Well, that means you don't convert the plant base form of omega-3 and alpha-linolenic acid into the active form. So I'll see people get a report and say they have a FADS2 so they need to take fish oil. Well not necessarily. I have a FADS2 and I eat two cans of sardines a day and I don't...my omega-3 level is perfect, so I don't take a fish oil.

The same thing with vitamin D SNPs. There are vitamin D SNPs that make me more likely to need vitamin D, more vitamin D, but you may live in the tropics, or you may be outside all the time, or you may eat a lot of shitake mushrooms and not need it.

So we need to see that kind of operating system, the DNA, but then everything you do, what you eat, or exposed to, your exercise, turn these genes good and bad genes on and off so we need to see where you are with the bloodwork and then talk to you about your preferences. If I do see that you need to eat more sardines and you're not gonna eat those, then maybe I will recommend a different fish or an omega-3. So it's the conversation, the bloodwork, the genetics, the microbiome, all of it together is where you get the real power when it comes to genomics.

Katie: I'm with you on the sardines thing. I tried to make that a regular part of my routine as well. And I know people are hesitant, like so many people are resistant. I didn't love them at first, but they are an inexpensive, great source of so many things and I've found firsthand you could definitely learn to love them.

But I think this conversation around genetics is also so important right now as we have so much more data. Because an example I can give from my own life is when I first started researching health I came across all this information about how saturated fat had been unfairly demonized and how we had kicked it out and replaced it with vegetable oils, which I firmly believe none of us should be eating still.

So for a while, I was eating a lot more saturated fat which I think for a lot of people can be a good thing. When I went into a deep dive in genes, I realized while that might be true for 70% or 80% of people, it is in fact, not true for me. And I don't do well with saturated fat. And so that one change alone made a big difference for me.

But that's where, like, the personalized aspect comes in, you can't know that just by guessing. It's even hard to know that by experimenting because you're not necessarily seeing...unless you're isolating variables, it's hard to do without looking at your genes. So I'm so excited that we have more information now and have the ability to do this more precise form of our own individualized medicine.

And I'm with you, I think the microbiome is also a huge key here. So I'm curious what kind of microbiome issues are you seeing people come in with most? Again, of course, it's very personalized. And what are some of the approaches you take there?

Matt: Sure. And the saturated fat example you gave is such a great one. And just to get specific about Mike who I was talking about earlier, he and I have almost opposite genetics when it comes to that. And I tolerate an incredible amount of animal fat and do really well with my lipids and inflammation, everything else and he does not at all. So it was the perfect example of how personalized diet is just so different. He's almost vegan, and I eat an incredible amount of animal protein to get to where we want to be.

When it comes to the microbiome it's difficult. We know that there is something there but in my mind, it's almost like the depths of the ocean. Like we know there's really incredible things there. But I think a lot of the microbiome companies out there, they're a little bit over their skis when it comes to recommendations and how to actually change it. So we do look at kind of gut inflammation. We can work on that with certain interventions. We do look at different species. And there are some species we know that lead to better health, certain ratios of different organisms and we can try to affect those.

Most of the recommendations around that though, end up being fairly straightforward of eating more prebiotics, of taking maybe some supplements that are gonna decrease the inflammation, and mainly stop killing the good microbiome, like moving people away from sugar and the vegetable oils, like you said, when we see they have issues with their microbiome.

And maybe probiotics, I think the research on that just keeps going back and forth and I'm excited to get more research on it. But right now we're measuring the microbiome, we make changes frequently. Not as often as you do with the genomics and bloodwork. When we look at genomics and blood work, we always find four or five, kind of easy targets. The microbiome, it's a little more hit or miss. But I think in the future, it's gonna be an extremely important area of study.

Katie: And I feel like the microbiome as well is an area where definitely we're seeing this influx of fancy supplements or like very targeted things. But at least for my understanding, at the end of the day, that also is an area where as far as we know goes back towards some of these age-old ancestral things, as well.

Like we know sunlight has a positive effect on the gut. We know that a wide variety of foods with micronutrients from a variety of sources, overall have, like, a benefit for the gut. We know, like you said, keeping inflammation down and not eating foods that are directly harmful, like those are all relatively free or easy things to do but still often get ignored. And so I think, like, it's another area just to be cognizant that while there are some expensive things that might help, there's also these simple foundational building blocks that we can all do that are largely safe, and they're a good starting point anyway.

And the microbiome definitely seems to have a connection also to mental health. You know, we hear the gut referred to as the second brain. I know statistically, mental health issues have been on the rise for a long time anyway and then certainly the last two years have really catapulted those numbers even higher. So I'm curious if you guys are seeing people come in with an influx of higher rates of mental health issues and what your approach is there?

Matt: For sure. And to add another thing to the microbiome is you just get out and work in the garden. I mean just getting your hands in dirt is gonna have a really great impact. When it comes to mental health, you're exactly right, there's fascinating...if you don't believe there's a connection between the gut and mental health, I mean just look at some of the really incredible fecal microbial transplant studies on kids with autism and many other disorders. And there's really incredible data. So there's definitely a connection there.

We live in a time right now where mental health problems is on the rise. It's a really big problem. And we are seeing more and more people with those issues. Now, whether it has to do with the microbiome or coming out of a pandemic, or just the way we've designed our lives, I'm not sure. But it's getting worse and worse and it is a big problem that we are very serious about. I mean, to be honest, it's the thing that we're most concerned about.

We try to optimize the whole person but really I always say there is no health without mental health. Like all of...everything we do is dependent on mental health. It plays back and improves mental health, we're optimizing someone's health, and we can't make real behavior changes without addressing that as well.

So my wife is actually a double board-certified psychiatrist in child and adolescent psychiatry and adult. And Mike and I, my founder, like we...mindfulness is the one thing that...it's funny, like we make all of these really interesting and precision recommendations, but the one thing we see that really has the biggest effect on everything else is sleep optimization and mindfulness. Those are the two things that make such a big difference.

And when it comes to mental health, we believe strongly in taking a holistic approach too. You'll hear people talk a lot of times about set and setting, for example, when you're talking about psychedelic medicine. But I always say like, just mental health, in general, is so much about set and setting.

Like if you don't have the set and setting of the person and just their milieu of how they live, and their sleep, and their food, and their exercise, and all that dialed in, it doesn't matter how great the psychedelic medicine, or the talk therapy, or the CBT is. If you haven't optimized these other things and got the most important set and setting right, which is just your body and giving it an opportunity to heal, then it's hard to make any progress with mental health. So we take a holistic view when it comes to mental health, as well.

Katie: I love that you brought up the fecal transplants as well because this is...I know, it's a little bit of a fringe topic. But it's one I haven't talked about on here yet. And like you said the studies are pretty astounding of what they're able to accomplish with those. But I'm guessing that's a new and unfamiliar topic for maybe a lot of people listening. So can you just give us a high-level overview of what that actually is, and then maybe just some of the high-level results that we've seen in studies so far?

Matt: Sure, and it's kind of a gross topic so people don't talk about it a lot. But the studies are pretty fascinating. I mentioned specifically, an autism study where they took kids on the spectrum, they gave them FMT is the abbreviation for it. And I am struggling to remember the exact results, but I think about a year out, right at just over half of the kids no longer actually qualified as fitting the definition of autism because their symptomatology was so much lower. It is an amazing study.

One of the studies I just point to a lot of times to just demonstrate how powerful it is, is they've done these mouse model studies, where they would take the microbiome of an obese person and a lean person and do a transplant to two different sets of mice and feed them the exact same foods. And the mice that got the microbiome of the obese person, it's obese. And the other mice that got the lean individual's microbiome stay lean eating the exact same food, everything else, the same. So we know it makes a profound difference.

Now operationalizing that and moving it into a clinic is difficult and messy both metaphorically and literally, potentially, so it's not something that's caught on super often yet, but it is. And there's been a couple of complications in some of the studies that have led to it catching on more slowly. But there's certainly something there, there's multiple companies, multiple universities are working on studies. And I think it's an area that has a lot of potential in the future.

Katie: I agree. And to me, it highlights that microbiome and how important that is as well. Because like you said in the studies, it's really astounding to watch that that is literally the only difference. Because they're tracking all the other variables, they're controlled for, the mice, like you said, are eating the same thing. And it seems like in the early human studies, we're seeing similar results. And even...I know there have been a couple

ones looking at things like autoimmunity, and other types of issues as well, and it's really kind of amazing. So I'm excited that we're hopefully gonna continue to see research in that area. And now it seems to be used more in kind of extreme cases where the benefits would likely outweigh the risk. But I think we'll just continue to learn more and more about the microbiome and how things like that can be really valuable.

And I think anything like this, and I'm sure you get this in other areas of medicine as well, I hear people push back and say like, "It shouldn't be this hard to be healthy. We shouldn't have to do these extreme things to be healthy." And I think that actually brings us back to one of your earlier points, which is that we have so many more negative inputs that we're encountering on a daily basis, and we're in artificial light, we're eating a non-natural diet for a lot of us. We just have more negative inputs than even our grandparents did.

So there is certainly a time and a place for a more proactive approach. But yes, in a perfect world, it shouldn't take this much to be healthy. But we're also facing more than previous generations potentially have. I also love that you brought up mindfulness because personally, this is an area I ignored for a long time. I very much was in the science side and I had all of that dialed in. And I wanted to just stick with the science, and the supplements, and the genetics, and kind of discounted the importance of mindfulness and meditation and addressing those variables until I actually tried it myself and saw the difference.

But I love that that's actually part of what you integrate with your patients because I didn't realize till I started doing it and then looked at the research after. There's an astounding amount of research on that as well. So can you just talk about maybe some of the practical things you guys do surrounding mindfulness or how you encourage people to make that part of their routine?

Matt: Sure, and I think one of the issues a lot of people think like you used to think where you're like, hey, I'm gonna stick to the science, let's do the science-based stuff. And then when someone says to me say, okay, then mindfulness, like there's nothing that we have as much science on as mindfulness and its effect. And it's not just that hey, you're more relaxed. But it has an effect on your lipids, it has an effect on your inflammation. And inflammation, we all use the term inflammaging now because it drives all of chronic diseases.

Mindfulness has an effect on all of these things. It's almost a panacea for so many things. And so I think a lot of the patients that we see are similar to you. You're really hard-charging, achieving, doing a lot of things, you have six kids, like you don't have time for something like that. Well, that's exactly who needs this the most. And we tend to take a scientific approach and say here's why mindfulness is important, these are the effects you're gonna have. And when you think about, I don't have time for this, it's actually a really tiny investment for the amount of benefit that you get from it. So it's one of the most efficient things that you can do.

So how we approach it with patients is we actually have some...there are some interesting genomics around that. So we actually do...when we look at people's SNPs, for example, there's an OXTR SNP, that if you have that people tend to do a little better with loving-kindness meditation. So we may look and just see what you're predisposed, potentially do better for. But then also, depending on your personality, we may recommend transcendental meditation or just a walking meditation if you feel like the sitting is too much. There's multiple different tools and ways to approach mindfulness.

And then if someone does show some interest, we actually have a very specific six-month track where we really dive deep and talk about all the different types of mindfulness. People get a workbook and they practice and they figure out what is the right type of mindfulness because there are so many different ways to do it, and everyone is different. And so we kind of help people figure out what is gonna work for them and their lifestyle and their personality.

Katie: Yeah, it really hit home for me when I had a previous podcast guest who is one of the top neuroscientists in the country and does a lot of very targeted, brain-specific, like, neurofeedback and healing people from traumatic brain injuries. And the mindfulness meditation side is a tremendous part of what they do. And they regularly host all kinds of events and workshops related to that because they said it's completely invaluable in its effect on the brain.

I think I even saw a study recently that came out that the brain of someone who meditates regularly is on average 7.5 years younger than the brain of someone who doesn't. And as we're seeing...I know the rise in brain-related issues like dementia and Alzheimer's with aging populations, to me, like you said, that's a very inexpensive and free way that you can help kind of protect your brain in a very serious way. And like you said the studies are actually astounding. I kind of ignored them for a long time but the research is definitely out there.

Matt: Yeah, and that study you brought up is a great one. That's one that just brings it home for people. And that was an MRI study that actually looked into the morphology of the brain. It changed, it very clearly changed. And they had a control group that wasn't meditating and another group that was, and it was amazing to see how much the brain changed.

Katie: What do you think...knowing all these factors, and it just seems like research is coming out so rapidly right now. It's incredible the amount of research that's just constantly coming out in new different areas as well. What do you think the future of medicine looks like as we keep having this huge amount of data and research coming up?

Matt: Yeah, so the future of medicine I think it's gonna be a very personalized future where we're not treating people like they're statistics. And based on epidemiology, I also think it's gonna be much more patient-

centered. Patients are gonna have control of their health and take more control. And there's not gonna be a paternalistic model of medicine, where a doctor is all-knowing and tells you what to do. A doctor is more like an educator and a guide.

And I also think it's gonna be very data-driven. So we're getting so much data coming out. And while a lot of people have concerns and are worried about things like artificial intelligence and machine learning, it also if applied appropriately can really be an accelerant for these things like personalized medicine. Personalized medicine is a lot more difficult than I think people think because there's such an infinite number of variables when it comes to a human's health.

And so being able to apply some of these kind of AI and machine learning things to actually have better predictive models also. So people will be more in control, I think they'll be more empowered. And they'll be looking to the health care system more as a guide and a source of education than someone to tell them what to do.

Katie: And I think right now in this place it seems like...because like you said in the beginning, the conventional medical model is a little bit behind the actual current science, but that's what insurance companies are used to, and the traditional model is used to paying for...I know I had to really figure out how to navigate when I was going through my health stuff, a lot that the medical system, it wasn't gonna cover in the normal sense and I had to try a lot of different things. And I would guess that's probably a hurdle for a lot of people. So I'm curious, like, how are you working to help make this accessible to a lot of people even if the payment issue is a tough one?

Matt: Sure. So I grew up without really any material things. But I had more than I could ever want, great parents, but grew up in kind of rural Kentucky. And when we first started Wild Health, it was really expensive because of the amount of...just the cost of the testing and the data crunching and so that bothered me quite a bit. So we've worked really hard to make it more accessible. The cost, when we started, to now 2 years later, is 80% less. We can deliver this for less than \$100 a month now, which makes it pretty accessible, but it's still not for everyone.

And so we're also getting ready to run some trials on just actually accepting insurance. We'll be doing that in the near future, just to see if the model works with all the advanced testing. And I think it's going to. So I feel very hopeful with regards to that. I think insurers and folks, in general, are starting to see that the system is gonna break if we don't make some changes and start doing what actually works.

So a lot of the preventative things that we do that, in the past, weren't covered, they're starting to be covered now. So while it's pretty accessible now, because we've automated so much of the data crunching, and we use

software to solve a lot of these problems, in the near future, I think this is gonna be something that anyone and everyone can afford.

Katie: And not discounting at all the personalization aspect of this because we've made such a strong case for that being so important, I'm curious if there are any common needle movers that you see...obviously, mindfulness being one that we've talked about directly. But any other commonalities that in general, for people listening, who wanna take practical steps right now that are good starting points whether it be things to remove, or add, or change, that you commonly recommend?

Matt: Yeah. So the biggest lever, I always tell my patients the biggest lever they probably have is sleep and just optimizing their sleep. And there is some personalization to that. Like we will get your genomics and kind of tell what kind of chronotype you are a little better. But for most people, it's the same things, it's the complete blackness, it's going to bed earlier than we go to bed now. It's getting the temperature right and the sound and the ambient environment right. So things like sleep I think generally just about everyone does better to get outside.

I was getting ready to say and move more as well but that's not necessarily the case, I see a lot of people kind of overdoing that too. But being outside more, working on your relationships, the mindfulness, the sleep, those are the things that everyone could really benefit from. Sometimes you do need a guide and a relationship with someone who has experience in helping you through those things. But those are things that I think everybody would do well to focus on.

Katie: And when it comes to getting more time outside, I feel like another important piece of this that I would love to touch on and get your take on is the sunlight component. Because from what I've seen and what I've read, I feel like the sun has been unfairly demonized. And that, in general, even when we look at the data and adjust for the factors we can control, it is still much more beneficial to get out in the sun than to not get out in the sun, even with...I know that we hear so much from dermatologists about skin cancer and the importance of sunscreen.

But at least my interpretation of the data is it's actually much less risky to get sun exposure. And I think I would add and limit things like vegetable oils that make you more likely to have cellular problems that could lead to things like skin cancer. But I would love to get your take on this and for you to tell me if you think I'm wrong on that. But I just see people being so afraid of the sun. And we know for instance like vitamin D deficiency is common in many types of cancers. We see that in cancer patients, we see that in mental health patients. So to me, it seems like a pretty easy risk-benefit analysis, but I would love to get your take.

Matt: No, I agree. And unfortunately, I think we're in the minority when we say that. And I'll get yelled at by a lot of dermatologists for saying it. But yeah, I think a lot of the skin cancer and things like that is more from an

inflammatory environment and the things that we eat and things like that than the sun. I think I agree, a lot of the bigger data sets looking at this, people that are in the sun have less issues with skin cancer. And I think in general, we have more of a deficiency than too much sun. So I'm trying to be out as much as I can in the sun. I mean, obviously, you can tell if you're starting to get burnt and having some real issues from that so it's like anything, you don't wanna overdo it. But I think in general, we get not enough sun, not too much, I don't think is the problem most of the time.

And I personally don't wear sunscreen. I think the downsides of most of the sunscreen are probably more than the upsides of it. And there are certainly better ones you can choose, but especially the chemical ones I certainly try to stay away from those and encourage others to.

Katie: I'm with you on that. And I can speak only from firsthand experience. But on the inflammation side, I know I saw...my background is a lot of Irish Scottish, and I've always had pretty fair skin. And when I addressed the inflammation and got rid of all the inflammatory foods, my skin and sun tolerance changed drastically. And now living in a very sunny area at the beach, I can get hours of sun exposure without getting burned.

So I think, like, people discount the importance of the internal factors when it comes to skin health and the sun. And I always encourage them don't forget about that piece because it made a huge difference for me.

This episode is sponsored by Levels Continuous Glucose Monitors. I have been experimenting with this continuous glucose monitoring system for the past few months, and I've learned so much personalized data about my body's own response to different foods, even to workouts, to sauna, and to when I don't get enough sleep. I've been using Levels, and this has made a significant difference in the way I track my glucose data, and especially as it relates to diet and fitness. Levels is cool, because in addition to providing you with the continuous glucose monitor sensors, their app interprets your data, scores your individual meal, and allows you to run experiments across different inputs like diet, exercise, or even fasting protocols. They're backed by a world-class team, including Stanford-trained MD, top engineers from SpaceX and Google, and a research team that includes legends in the space like Dr. Dominic D'Agostino and Dr. David Perlmutter, both who have been guests on this podcast before. Health is so personalized, and this has given me a way to know the best foods for my own body, and it's helping me get enough protein and carbs while still maintaining weight loss. Levels is currently running a closed beta program with a waitlist of 100,000 people, but, as a listener, you can skip that line and join Levels today by going to, levels.link/wellnessmama.

This episode is brought to you by Olipop.... A new kind of soda that has become a fast favorite at my house. The idea of soda is usually associated with drinks that are full of sugar, corn syrup, or artificial ingredients like aspartame. But olipop is so different! They use functional ingredients that combine the benefits of prebiotics, plant fiber and botanicals to support your microbiome and benefit digestive health, plus you get all the taste without the sugar or nasty added ingredients. As an example, their Orange Squeeze has 5g of sugar compared to Orange Fanta which has 44g of sugar. And with 90% of Americans consuming more than the USDA's daily recommended added sugar intake (30g) the majority of that comes from sweetened beverages (like soda). All

of their products are Non-GMO, Vegan, Paleo and Keto-friendly with less than 8g net carbs per can. We've worked out a special deal for Wellness Mama listeners. Receive 15% off your purchase. I recommend trying their variety pack. This is a great way to try all of their delicious flavors. Go to DRINKOLIPOP.com/WELLNESSMAMA or use code WELLNESSMAMA at checkout to claim this deal. OLIPOP can also be found in over 5,000 stores across the country, including Kroger, Whole Foods, Sprouts, and Wegmans.

I'm also curious just on a personal level kind of your own 80/20 for health, the things that are your non-negotiables that you find the most helpful.

Matt: I think we've already talked about them and it's just sleep, optimizing sleep. I used to be really obsessed I think with kind of exercise and fitness and I would set an alarm and get up and get my work out in no matter what. But now I don't prioritize anything over sleep. Like I refuse to set an alarm. I think sleep is really critical.

The other basics when it comes kinda 80/20, like I used to be...I've done a couple of Ironmans and was kind of really hard-charging when it came to that stuff. But I know now just walking and just moving as much as possible and not sitting, that's kind of the 80 part and all the really intense stuff is the 20.

And then when it comes to food, if we talk about kind of 80/20, it's just eat whole foods. I mean, going back to Michael Pollan's "The Omnivore's Dilemma," eat food, not too much, I think is really important as well. That would be the kind of 80/20 for those basic things.

Katie: What are you most excited about right now with all the new research we have coming out? I know you're already doing the genetics, the microbiome stuff, and you've even mentioned peptides, but what are any pet projects or pet research topics for you right now?

Matt: I think the...we touched on it a little bit earlier, but I think there's two things I'm really excited about. One is being able to actually apply kind of some machine learning and artificial intelligence to get better with the personalized medicine. I think that's gonna be a really incredible step function forward in what we can actually do with personalized medicine. And that may seem counter kind of to the nature part as well, but I don't think it should be. I think we can embrace both sides of that.

And then the other thing that I'm really excited about is like we already mentioned too, being able to have this type of medicine be really accessible to where anyone can afford it. So those are the two things I think at Wild Health at least that I'm most excited about. I think we're doing really incredible work. We get really great results. Our patients have 15% increase in their heart rate variability and really great other metrics that we find but actually just getting better and better.

I think one thing people don't understand about personalized medicine is just how difficult it is. Like I mentioned earlier, so being able to apply some of the technological tools that we have that a lot of people are applying towards just making more money or material things, being able to apply those to our actual health so that we're living not just longer but better lives, that's what I'm really excited about.

Katie: For anybody who hasn't maybe heard of HRV before, can you give us just a broad overview of what HRV is? Because 15% increase is pretty astounding. So first of all, what is it? And second of all, what do you think are some of the factors that help increase HRV?

Matt: Sure, so heart rate variability, it's a kind of a measure of...for athletes, a lot of athletes use this as a measure of recovery. You kind of check day to day how your HRV is. It's also just kind of a measure of kind of global overall stress. When we think about cardiovascular disease, it's been shown to be an independent predictor of how likely someone is to have a first heart attack and then subsequent heart attacks. So it's a really important global metric and it has to do with the beat-to-beat variability of your heart.

So the best way to improve it is, I'm gonna sound like a broken record, to take a holistic view and to really optimize all the key things like sleep, other specific things, working on vagal tone, as well. One thing we recommend to a lot of patients is a device that really helps you kind of track, and kind of biohack this a little bit too, it's called a Lief device. I'm not sure if you've heard of this device, but you're aware and it's kind of measuring your HRV at all times.

And it'll buzz when your HRV goes too low, which is kind of indicating you're stressed out, kind of in a sympathetic state. And what that does, then it triggers you to take a few deep breaths. And it's amazing to see how much your HRV increases just with those few deep breaths. And what it allows you to do over time too...because I always hate to have someone use a device or supplement or anything forever so I just like to use it as kind of training wheels and to teach. But what this device does is you start to recognize the feeling you get when you're stressed out, sympathetic, overdrive, and your HRV is low, and you can stop yourself and take a few deep breaths. So I wore this device for a couple of months and then now I can feel when my HRV goes down, and I can stop.

It also is interesting, it can help you kind of figure out maybe who in your life is increasing or decreasing your HRV. Some people may...if you're around certain people, you'll have a drop in your HRV, or if you hate email and you're doing email, you may get that drop as well. But HRV is a really nice global measure of your health both acutely and chronically. And if you can increase that over time, you're really doing yourself a favor.

Katie: Got it. Okay, a question I love to ask toward the end of interviews, somewhat selfishly because I'm always looking for new suggestions is if there's a book or a number of books that have had a profound impact on your life and if so what they are and why?

Matt: So that's really difficult. That's like picking your favorite child. I try to read a couple of books a week. And normally, when someone asks me that, I say, well, on what topic? Are you talking about farming and regenerative agriculture, are you talking about health, or are you talking about mindfulness or what? I think if I was gonna...well, just thinking this morning, when I got out of my car, I noticed I had I think about 10 copies of awareness in the back. So I think that's probably the easy answer.

It's broken into these short chapters that are kind of lessons and I just love it. I feel like every time I read one of these two to three-page chapters, I just get something profound and important. I have it in my sauna, and it's just disintegrating, falling apart because I've just read it over and over so many times. But he has a way of really calling you out, but not shaming you in a loving way. And like, you're reading this, you're like, oh, yeah, I need to do better here. But you can see him smiling at you as he's saying it. And I think it's just a great book that I just continue to go back to over and over and give out quite a bit.

Katie: Thank you. I'll link to that in the show notes as well. And also in the show notes, I will link to your site as well, so people can find you. But for anybody listening can you just let people know where they can find you online and keep learning?

Matt: Sure. So we have a podcast called the "Wild Health" podcast. We also...just wildhealth.com is where you'd go if you're interested in becoming a patient. We also are trying to train a lot more providers in being able to do this. There's not great training programs so we have a fellowship as well for anyone that wants to become a health coach or a physician. But wildhealth.com is where everything can be found.

Katie: All of those links will be in the show notes for any of you guys listening, that's wellnessmama.fm. If you are exercising or driving while you're listening, you can find all of our notes and links there. I am so excited that there seem to be more and more doctors who are really on the cutting edge of this and also still acknowledging the ancient wisdom as well. I think we're gonna continue to see amazing results. And I'm grateful for people like you and for you specifically for doing all of this work and for sharing your time today. So Matt, thanks for being here.

Matt: And thank you for everything that you do and for encouraging people to be their own primary care doctor and really to kind of take health into their own hands. I think that's extremely important. So thank you so much, Katie.

Katie: And thanks to all of you as always for listening and for sharing your most valuable resources, your time, and your energy with us today. We're both so grateful that you did. And I hope that you will join me again on the next episode of "The Wellness Mama Podcast."

If you're enjoying these interviews, would you please take two minutes to leave a rating or review on iTunes for me? Doing this helps more people to find the podcast, which means even more moms and families could benefit from the information. I really appreciate your time, and thanks as always for listening.