

Episode 641: Dr. Dana Cohen on How to Hydrate Correctly for Health and Longevity

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Katie: Hello, and welcome to the Wellness Mama Podcast. I'm Katie from WellnessMama.com, and this episode is all about hydration and why you probably are not hydrating enough or correctly, although there is a small chance you're hydrating too much and incorrectly. And we go deep on all the nuance of this. I'm here with Dr. Dana Cohen, who has been practicing integrative medicine for the last 20 years in Manhattan and is a nationally renowned internal and integrative medicine specialist whose multidisciplinary approach has helped treat thousands of patients using a variety of conventional and complementary therapies. As I said, she's been in practice for over two decades. She actually trained under the late iconic Dr. Atkins and then went on to become a pioneer in integrative medicine as well.

But in this one, we talk a whole lot about hydration, and we talk about her book called Quench, which is a book about beating fatigue, dropping weight, and healing your body through the new science of optimum hydration. And I definitely learned some things in this episode, even though I do make hydration a priority. We
talk about how much water we actually need, and what it means to be hydrated on a cellular level. The reason that low level dehydration ages us prematurely and increases our risk of chronic disease. How not hydrating can directly increase our chance of diabetes and Alzheimer's, and why we can't detoxify without enough water. We talk about the different types of energy in the body and how hydration affects them all. She explains what's something called the fourth phase of water and why there might actually be 14 different types of water. We talk about mouth breathing, loss of water while we're sleeping. We talk about how to hydrate from foods and why this is so important and why many of us are not getting enough plants for optimal hydration. And then she gives us an overview for what optimal hydration looks like. She definitely has a lot of expertise and knowledge around this topic, and I learned a lot. I know you will as well. So let's join Dr. Cohen. Dr. Dana, welcome. Thanks for being here.

Dr. Cohen: Thank you so much for having me. I'm excited.

Katie: I am, too. I'm excited to learn from you. And before we do, I just also want to hear a little bit about this story I have in my show notes of you being in an Off-Broadway show called The Thinnest Woman with the Fewest Wrinkles Wins, because that sounds like a hilarious title with probably an important message.

Dr. Cohen - Exactly. It was many years ago, probably going on almost more than a little more than ten years ago. My Pilates teacher asked me to get involved in this thing that she does, and it was an off-off Broadway show called The Thinnest Woman with the Fewest Wrinkles Wins. And it was basically a movement piece where we put, we put our thoughts and stuff into movement over the course of many months, and she took it and put it all together and made this show. Half of the show were professional dancers. The other half were either choreographers or in the business. I was the only one who was not in the business. And I actually quit in the beginning because I felt so uncomfortable in my skin and so uncomfortable in my body. And then opening night, I literally was leaping across the stage while we were warming up, saying, I'm a dancer. I'm a dancer. And it was an incredible piece. It talked about women's issues with self esteem and body issues, and it was put into our own words, and it was incredibly moving, and the audience loved it. It was phenomenal. It was an incredible experience.

Katie: That does sound incredible. And, yeah, it sounds like a very cool thing to be a part of. And while that's probably not what you are most well known for, you are very well known for the work you do in the health world. And I'm excited to learn from you on that today as well. Specifically around the topic of hydration, which I feel like people at least know what that word means. They probably feel like they have an understanding of what hydration is. And I'm guessing there's a lot more nuance to this conversation than just, are you drinking water? And maybe some charts that we've seen online for how much water we should drink. So to start off maybe a little over simplistically and broad, can you just define what we're talking about when we talk about hydration?

Dr. Cohen: Yeah. So hydration. Well, I say this on every podcast I do every interview. The single most important thing we can do to treat and prevent chronic disease is you must start with learning how to hydrate our body, hydrating our cells. So hydration is literally that getting fluid into and around our bodies. And it's not
just about drinking water. We get hydration from our environment. We get it from our foods, and we get it from water. We'll talk about what I mean, we talk about eating your water in the book. I'll put it right out there. It's very simple. It's getting more plants into your diet, period. The good news is this is easy stuff. This is not like a major lifestyle change that you have to go on. Learning how to hydrate is easy. And you'll notice a difference in literally one day if you do it right. Exciting.

Katie: I can definitely attest to that just from personal experience at the times where I started to notice I hadn't been paying attention to hydrating enough, and then I did for a couple of days. The energy difference is very drastic, very quickly. Which makes sense because if we're talking about health, we are typically drinking much more than we're even eating. So that is in the order of triage. More important thing that we might notice a noticeable change from quickly. When it comes to hydration, I feel like there are so many differing opinions out there on how much water we actually need, whether it's our body weight ounces or half of our body weight in ounces or half of our body weight in ounces, plus some sort of math variable. What is your take of figuring out how much do we actually need?

Dr. Cohen: Well, it's extremely individualized. If you twisted my arm and you made me give you a number, like, I would say half your weight in ounces is okay. But think about it. If you're on like a ketogenic diet, as many people are, it's probably more like $75 \%$. That's a natural diuretic. It depends on where you live, how much you're sweating. I think the important thing is, and this is something really to strive for. So, first of all, number one, we need to stop being cut off from our bodies. We need to be in our bodies, feel our bodies, know what our bodies like and need. Once we know and do that, and once you know what it feels like to be properly hydrated, strive for that. But if I had to give you the one thing to look for, the most important thing is our urine output. So we are meant to urinate every two or 3 hours during our waking hours. And if you're not doing that, you're not hydrating enough. So that's a really important thing to think about. And I know there are days I sit at my desk for 8 hours straight and don't get up. Once. I'm like, what am I doing? I know better. That's a really good thing to think about. How many times you're getting up to pee during the day.

Katie: That's in a very personalized metric people can pay attention to for themselves. Is it true that the things we hear about coffee depleting, we need more water if we drink a lot of coffee, if we drink alcohol, if we do intense exercise, if we sauna, etc.

Dr. Cohen: Yes. Okay, so, good news first. Coffee is fine as long as it's under, they've done studies and anything under four cups a day is not a diuretic. So that's good. Now, I just wanted just a caveat. If I were to drink four cups of coffee, I would be like, off the walls handshaking. So caffeine, we're not talking about caffeine, which is a drug, so we're not talking about caffeine, but the hydrating effects of coffee are okay. Anything under four cups a day.

Alcohol. Unfortunately, that's the bad news. There is nothing great about alcohol. It is absolutely dehydrating. It takes, our liver has to get rid of that alcohol, and it takes a lot of water hydration to process it. I'd like the old adage of drink one glass of water in between each drink. I think that that's really helpful and a good thing to do because we all imbibe sometimes. So I think that's good.

What were the other things? Exercise and sauna. Yeah, I mean, if you're sweating a lot, you need to replenish that. You need to be a little careful, though, because if you're sweating a lot, you're sweating out electrolytes. And if you're doing, like, endurance athletes, endurance sports, where then there are things you have to look at, and there are equations you have to look at about how to replace those electrolytes. So I have a lot of hot yoga people, bigram yoga people, and they often say, I can't quench my thirst no matter how much water I drink. So I tell them, put a little you know, some of those people, not everybody needs to do this, but some of them maybe needed a little electrolyte replacement. So they have those powders you could put in one or two of your waters throughout the day or a little pinch of real salt or full spectrum salt. Not just table salt. So, like, sea salt is a good salt. Real salt is a brand that I love. Pink Himalayan salt, those are all full spectrum salts where they have all of the minerals. So you're getting some electrolytes in there. Those are good ways to replenish some of those lost electrolytes. And once they do that, they feel like, oh, I'm finally quenched, I'm finally saturated. I finally can understand, you know, how to get those electrolytes back in and quench your thirst.

Katie: Yeah, purely anecdotally. I like doing those electrolyte replacements after sauna or sometimes first thing in the morning, I notice if I hydrate, even if I'm going to drink coffee, if I hydrate first, it makes a big difference in my energy levels more than the caffeine does.

And I'd love to go a little deeper physiologically as well, because, like I said, I would guess not many people would argue we don't need to be hydrated. Like, drinking water is a generally agreed upon important thing we do. But maybe people don't understand just how important it is for other reasons besides just that immediate hydration. So can you talk us through how hydrating can slow down aging and potentially offset disease as well because that, I think, is maybe new information for some people.

Dr. Cohen: So first of all, it's new information for many people. Less than a month ago, a huge study came out from the NIH, the National Institute of Health, saying and proving that low grade dehydration, meaning day in and day out, the kind of dehydration that we all experience, not overt dehydration where you got to go to the hospital and get IVs. But this low grade dehydration ages us, decreases lifespan and increases risk of chronic disease like diabetes and Alzheimer's and those things, those things have been touted about for many years. We wrote about it in my book Quench, that this low grade dehydration puts you at risk for Alzheimer's and diabetes. Who would actually think that? But yeah, it definitely does. And now we have a phenomenal study of over 15,000 participants showing that it ages us. So getting on top of our hydration day in and day out, every single day is super important for those reasons.

Katie: And that makes sense intuitively since our body is I know it varies a little bit, but quoted it's a large percentage water. So if we didn't have enough water in our body, it makes sense that it wouldn't be functioning optimally. But what's happening cellularly in the body when we don't give it enough water over a long enough period of time?

Dr. Cohen: Well, it's everything, right? So think about homeostasis in the body. Homeostasis is when our cells are flowing. Everything is flowing in and out nicely. That's what we always strive for. Can't do it without hydration. You can't detoxify without hydration. Think about that. The ways we detoxify, peeing, pooping, sweating, breathing, those are all detoxifying events. You can't do it without being properly hydrated. It is just the basis of everything. And yes, we are made up of $60 \%$ to $65 \%$ water as adults. But molecularly from the molecular level that water molecule is, we are made of $99 \%$ water molecules. So it is everything.

And it's energy too, by the way. So we often think that we get energy from food, from glucose, ATP. That's how we get energy. We now know that water is electrical energy in our body and it's even hydraulic energy. I want to be clear, I'm going to sort of differentiate between my beliefs or my clinical beliefs versus where the science is, right? The science is here. This is what we know right now. This is the science. So when I say that water is hydraulic energy, that's the theory.

That's the theory we're working on. So the idea of we make energy from food, we know that to be true. But it's always been sort of a mystery as to how do we make so much energy from one glucose molecule. Like you can only make so many ATPs. So the idea is that, well, the water actually going in and out of our cell and moving through our body is a hydraulic energy. It's a pump. It creates other energy. And in the electrical energy of it, our cells can store energy much like batteries can store energy through water. So it's fascinating.

Katie: And this makes sense, probably also in line with the minerals and the electrolytes you mentioned, but that our body is being electric to a degree, it would seem like water, of course, being very important. And also things like sodium and potassium would increase the ability of the body to transmit electrical energy. Even in things like neurotransmitters, I would guess. Is that part of the reason you think people feel more energy almost immediately from better hydration?

Dr. Cohen: I would guess that. Yeah, sure. I definitely would guess that. Let me just put it in an even clearer way. Think about H20, right? So it's two hydrogen molecules to one oxygen molecule. When those water, when they layer upon each other and they structure within the cell, they become different. Those electrons start to pull energy towards each other because one has a negative, one has a positive. And it's in that sense and in that structuring of how they change and how they hold on to electricity. And then when you add things like the minerals, you're moving that energy throughout in and out of the cells. And that's also one of the ways of how our cells structure water better within our bodies.

It's complicated. And before I started writing this book, I didn't realize how complicated it was. I was like, oh my God, what did I get myself into? This is really complicated stuff. And in fact, there was just even very recently a new study that came out. I talk about a fourth phase of water in our book. So we know that water exists as liquid, ice, and vapor. We talk about this fourth phase in the book. It turns out now that there's probably 14 phases of water that scientists are uncovering. So it is a very complex molecule for the simplest molecule in the world.

Katie: That's fascinating. And I'm guessing we'll hear more about that as scientists continue to learn more about it. It seems like purely anecdotally, and I'm curious if there's science to back this up, but when people are losing weight, I see often drinking more water as advice for people who are trying to lose weight. And it seems like this is actually really helpful for a lot of people in weight loss. And I'm curious is that just because they are there's more volume in their stomachs, they're not as hungry or l've heard that often our hunger cues are really that we're thirsty and it's disguised or why do you think so many people find that when they drink enough water it makes it easier to lose weight?

Dr. Cohen: So great question. Yes, number one, I do think that our hunger cues are more often thirst cues than anything. So I always say when you get that afternoon slump, instead of reaching for sugar or something, just thinking your blood sugar is dropping. Try staving it off by becoming hydrated, front loading your water earlier in the morning, like really working on hydration. I think most people find that they do lose their that our hunger is more often really thirst. So, yes, that is that's a big one.

But the other one, I mean, there are some studies we talk about a couple of studies in the book. There's one that drinking a glass of water before every meal. You lose 5 pounds more when you're dieting than if you're not drinking that water. So there's actually published studies on that, which I think is five pounds is significant. Go lift a five pound dumbbell. It's heavy and the stomach being fuller. I'm not sure I don't know if that's necessarily I try to live in my body, and it certainly doesn't work for me, but I think it's more of the thirst hunger thing, and I think it's end to end. We're detoxifying better. Our energy is better, we're pooping, we're peeing better, all those things.

So I think there's many reasons I always say, too, before starting on any formal diet plan or even formal supplement plan, start here, start with hydration, start with eating more plants, getting more plants in your diet. Start there and then go from there. It's surprising at how it might not be as fast a weight loss, but it's surprising at how it changes us when we do the right thing and how our old habits sort of get pushed out of the way. So it's good, easy advice. It's simple. It's not difficult.

Katie: And that makes sense because you said without enough hydration, we can't detoxify properly. And during weight loss, it would seem like actually those pathways are working harder because of all the things happening within the body. I've also heard it said that we lose quite a bit of water while we're sleeping, just through our breathing, and that's why it's so important to rehydrate in the morning. I know many people just turn straight to coffee or straight to breakfast, but how much water do we actually lose while we're sleeping? And how much do we need in the morning?

Dr. Cohen: I don't know the answer to exactly how much we lose. I think a lot of it depends on are you a sweater? Are you a mouth breather? Mouth breathers tend to lose more water. They woke up with very dry mouth. There are ways to train yourself to be a nose breather. There's tons of YouTube videos of, and I do think it's better you're cleaning out the air a little bit. There's some interesting research about nose breathing versus mouth breathing, nose breathing being better.

There is research that shows when we sleep is when we do most of our detoxifying. So that's when our cells are at work doing all their work of detoxifying and when we're getting good sleep. So that in and of itself is going to be dehydrating because our cells are moving. We want to get that stuff out. So we go in the morning, we pee. Our pee is really concentrated because it's done all that work overnight. And I think I can't tell you how many people I just tell them to make this one change instead of reaching for that first glass of coffee and cup of coffee in the morning, you can have your coffee, but start with a big glass of water. 8 to $160 z$. Put a little salt in there, a little squeeze of lemon. Keep it at your bedside before your feet even touch the ground, chug it down, and then go have your coffee. That alone, this is clinically is like life changing for patients. So simple and life changing for so many people. I hear it over and over again and I still get surprised by it. I'm like, no, I love it.

Katie: I'm a big fan of putting things in my way so it doesn't take any effort to remember to do them. And so that's become a nightly habit for me, is I put just a quart size Mason jar on my nightstand and I usually will add, like, liquid electrolytes into, and sometimes silica because I try to grow my hair out and then it's already right there. So as soon as I get out of bed and turn off my alarm, it's right there in front of me so I don't have to use any willpower or memory to think about it. And then that's now my first thing. And to your point, I feel like I really do get more energy from that first glass of water than from coffee.

Dr. Cohen: Yeah. Yeah. I couldn't tell you physiologically why, except that I have probably hundreds and hundreds of people that have said it's made a huge difference and we need to do it specifically in that order. Water first, coffee second.

Katie: Yes, and yet another vote in favor of how important sleep is. And I will say in the over 600 people I've gotten to talk to on this podcast, I am yet to have a single person ever say sleep is not important. So this seems like yet another reason sleep is so, so vital for overall health, for longevity. We know that many of us still aren't prioritizing it, but sleep plus hydration seems like an extra winning combo there.

I also want to make sure we talk about any potential downsides because, like, with anything with health, I feel like there is a bell curve, and when some is good and then there's an optimal amount, that does not mean more to infinity is better. So walk us through what happens if we drink too much water, especially without the electrolytes, and how to guard against that.

Dr. Cohen: Yeah, I love it. So over hydration is absolutely a thing. And it worries me because there's this drink a gallon water challenge that's been going around. Basically, if you're drinking plain or we call it bulk water, plain water, you're flushing out your electrolytes and you're not replacing them right. So people who are drinking too much water, first of all, those are those bigger people that I was talking about. They're sweating out all this electrolytes, and all they're doing is drinking so much water, and they're not quenching their thirst. So the big thing is, or the little thing I will say is that you'll notice some leg cramps and muscle cramps, that kind of thing, fatigue from overhydration.

But I think the bigger thing is there's not a week that goes by in my office that I don't actually see electrolyte disturbances in a person's blood work because they're drinking so much water, which can have consequences. It can have electrophysiological consequences, heart problems, those kind of things in the bigger picture. And that was always taught to us as being really rare. It's called polydipsia, where you drink so much water and really rare unless there's like, some other issues which certain cancers can do that there are certain things that cause that. I see it just because people drink too much water, and I see it at least one or two patients every single week. And when I question them how much water you're drinking, they're like, I drink a ton of water, well you drink it too much.

Katie: And is there also anything to the rate at which we're drinking water that makes a difference? Because I would guess, for instance, even if a gallon a day were the amount a person needed because of exercise and whatever, drinking all of that at once would be a physiologically much different thing than drinking it throughout the day.

And I had Dr. Andy Galpin on this podcast, and he's known for the Galpin equation of hydration during exercise, which is a smaller amount more frequently, instead of a big influx of water at once. And I know I had Chris Masterjohn talk about the need, especially if we're drinking a lot of water, exercising, etc, for making sure we're getting enough sodium, potassium, and magnesium in particular. And it sounds like if the rate of water consumption does seem to matter, instead of like an all at once, is there an optimal rate, or is it more important that it's just spread out throughout the day kind of evenly?

Dr. Cohen: I don't know about the optimal rate. I don't have a big endurance athlete population, so I wouldn't be able to answer that except but I would say that the people that I do see are people that are just drinking a ton of water all day long. So it doesn't in my instance, in my cases, they're just drinking a lot of water all day long. They have water at their desk, and they're continuously chugging it down. And I often tell them, people who don't know who I see these electrolyte disturbances take one bottle, know what the measurement of that bottle, and do like, literally a hashtag and see how many of those bottles you're drinking a day. And start by eliminating one a day and putting some electrolytes in one or two of them. You don't need to put electrolytes in every single glass of water that you drink every single day. Often one packet of electrolyte mix is good, and sometimes just even a pinch of salt in the morning is all you need sometimes too. Once again, it's so individualized, but the rate I would have been able to speak on.

Katie: And you've mentioned hydration from food a couple of times as well. And I'm really excited to go deep on this because I feel like people often overlook food as being a potential source of hydration. And I know there's a lot of nuance here as well. But walk us through what we're looking at when we're talking about hydrating from food as well.

Dr. Cohen: Okay, so very simple. It's eating more plants. There you go. End of story. It's based a lot on the work of Dr. Gerald Pollack, who's a water researcher who's the one who talked about this fourth phase of
water. And it is believed that it is in this fourth phase of how water exists in plants. So let's just talk about what that means. Think about things like cucumber seeds. They're covered in a gel, in a gel like structure. There's other ingredients in that gel like structure. But there's a ton of this fourth phase or structured water or gel water. And the idea is we want to get that water in our bodies in that form, and that's how it exists in our cells, and that's how it exists in nature.

Other things, like, they're a great thing about chia seeds. When you hydrate chia seeds, they hold so much like 100 times their weight in water. They're incredibly hydrating. They hold on to that water. Chia seeds and other fibers, by the way, other plant fibers hold on to that water. So vegetables, plants, spices, fruits, nuts, and seeds, those are all very that's ways of getting and holding on to that hydration in your body with other minerals. There's just no better way to do it.

And if you eat a very plant centric diet now, by the way, I'm somebody who comes from Dr. Atkins is who I started my career off with. I am a meat eater. I'm okay with meat. But all I'm asking people to do is to get more plants into their diet. And the other reason very recently, there was a big study that came out that talked about people who eat over 30 different plants a week, and I call it plants because people always say, like, oh, my God, how am I going to do that? How am I going to get 30 vegetables into my diet? I'm not talking about vegetables. I'm talking about all the spectrum of plants, nuts, seeds, spices, fruits and vegetables. It's actually not that hard to do when you think about it. And those people are the have the healthiest gut microbiomes, very diverse gut microbiomes and than those who don't eat 30,30 different plants a week. So we need to focus on that.

Katie: That's fascinating. And so this extends beyond like people may have heard, for instance, that things like cucumbers and watermelons have a very high water content. But you're not saying we have to just consume a lot more of those things. You're saying any plant-based foods are going to be beneficial in that way.

And I love you touched on the diversity aspect as well because I do feel like the modern world got an extreme with diet. And it's like, oh, if protein is good, we'll eat only protein. If fat is important, we'll eat only fat. And then we exclude whole nutrient groups. And I find it helpful personally to just look at instead of calories or macros, but look at nutrient density and diversity per calorie and per the volume. So if I'm going to eat a certain amount of food per day, it's like, how can I make that food as nutrient dense and as micronutrient diverse as possible? And that seems to be at least where I purely anecdotally feel best is when I'm getting that in.

Dr. Cohen: Yeah, that's what my next book is going to be about. Diet culture is so over, by the way, and 25 years of being in it. I know it doesn't work. It never works. It's short term. People put it back on. We need to learn how to eat well, eat with nutrient dense food and include those foods. Start there. Start by just getting more fruits and vegetables into your diet. Vegetables.

And there's nuances because there are people who can't who have food sensitivities. I mean, there are some nuances, but I often talk about more inclusion versus restriction in our diets. I think the restrictive part is messing us up and even people who have got we're going to get into the whole thing here, but even people who have gut issues and they're on a very restrictive diet, I think in the long term it becomes the source of the problem in the beginning. It helps and then they stay on this extraordinarily restrictive diet for such a long time and we can't learn how to get back into that natural, how to reintroduce those things and become more diverse in our diets. It's hard. It's nuanced.

Katie: Yeah. Well, I recently spoke to one of the leading gastroenterologists in the country and he said something very similar like those can be very valuable tools in the short term and they can be very helpful in an acute sense. But when we start talking about them in a long term sense, they almost always become detrimental because then the body is getting stress in other places and it's going to have issues in other places. And long term, before taking that holistic view, the goal is get to the root cause, fix the problem, and then get back to a much more diverse diet.

Dr. Cohen: $100 \%$. Absolutely. That is the key to doing this.

Katie: And I feel like even people who are avoiding certain foods, like, for instance, I avoided eggs for a while because I didn't seem to tolerate them well. Even if you're avoiding certain foods, especially when you're talking about the plant world, there are so many options that even if you can't have certain ones, like maybe you don't want to eat night shades, there are still so many other categories of plants that you can eat during that time. And I feel like there's simple ways to like, I love making pestos out of fresh herbs and just adding them to everything. And it's great flavor, but it's also a ton of micronutrients all packed together.

Dr. Cohen: We don't play enough with spices, especially in our country, in our culture. Play around with spices and herbs and grow an herb garden. That's the simplest thing you can do, even in your New York City apartment. It's a great thing to do and play around with. But yeah, you're right on. Spot on.

Katie: I love that. I just actually slated a turmeric patch yesterday in my yard. But for the parents listening, who maybe struggle with picky eaters and their kids and vegetables maybe are a battle sometimes. I'm curious, is there any downside to putting these just in a smoothie that kids are likely to drink? Or can we drink them if it's hard to actually chew that many vegetables in a given day?

Dr. Cohen: I'm a huge smoothie advocate. That's what my book is. Quench is at its core, a smoothie book. Yeah. So I think it's a great cheat. It's a great way to get a lot of vegetables in and a little bit of volume. And for kids, it's fantastic. What a great way to sneak in vegetables and put a little bit of fruit in there. I think always start with greens first, so pack it with greens and water, and then you could throw in your fruits for flavor and maybe some lemon, turmeric spices. There's thousands of recipes out there. Play around with it.

I think smoothies are a great thing to do, and in fact, that's a second thing that is life changing for people. Somebody who doesn't already do this, try adding one smoothie a day into your diet doing nothing else. Just do that. And I can't tell you how many people are like, whoa, that is powerful. And that's a big game changer for somebody who doesn't already do that. I love when somebody comes in and says, no, I don't play around with this. I'm like, I can't wait.

Katie: Yeah, I find smoothies make it easy. And also, I love bulk prepping. For me, in my house, I do proteins, but also, like, high volume vegetables I'll bulk prep a ton at once because it's easier to cook, like 10 pounds of sweet potatoes, 10 pounds of zucchini for the whole week, versus having to do it every single day. So that's my general rules. Like, if a vegetable takes a long time to cook, I'm going to make a bunch at once, so I don't have an excuse not to have vegetables available all the time.

Dr. Cohen: I love it. I love it. Yeah. And honestly, though, for smoothie stuff, too, I'll buy organic frozen berries and stuff like that. Keep them in the freezer when I don't have fresh available. And throughout the winter, soups are a great, incredibly hydrating thing to play around with, too. And those you can make in bulk and keep. And bone broth is a phenomenal hydrating tool. Also, instead of coffee, try playing having a cup of bone broth in the morning. Great idea.

Katie: Yeah, I get a little extra glycine and some amino acids in there, too, and you still get that warm drink.

This episode is sponsored by Joovv Red Light. You know how seriously I take my health routine and red light has been a non-negotiable part of my routine for years. And you've probably heard me talk about Joovv before. That's J-O-O-V-V. I use it to support healthy cellular function, which is the foundation of our health. Having healthy cellular function gives me peace of mind that my body is working efficiently and has the energy it needs to get through the day. There are so many clinically proven benefits from red light therapy and I've personally experienced, especially changes in my skin and hair and supporting my thyroid.

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This episode is sponsored by Wellnesse, the personal care company I co-founded when I couldn't find products I felt comfortable using on my family that worked as well as conventional alternatives. My focus was figuring out the 80/20 of products that account for the most harmful chemical exposure and making safer alternatives that worked just as well. We started out with oral care and haircare and now also have a safe natural deodorant that actually works. By changing out just these products in your routine, you can reduce your chemical exposure by as much as $80 \%$ and these products are safe for the whole family. Wellnesse has
three types of remineralizing toothpaste, original whitening mint, whitening charcoal and natural strawberry for kids. The deodorant has a neutral scent and is designed to work without causing irritation like many natural deodorants do. And the haircare is designed as a hair food... focused on nourishing your hair and scalp for healthier and healthier hair the longer you use it. Check out these all the Wellnesse products at Wellnesse.com.

Also, in your book, you talk about micro movements and hydration, and I feel like this is definitely not talked about. So I would love for you to enlighten us when it comes to micro movements, what those are and how they contribute.

Dr. Cohen: Okay, so, big secret. We made them up, and you can make them up, too. Micro movement is just that. It's any kind of movement. This is scrunching your fingers, nodding your head up and down. Any movement in the body that any joint, any twisting, bending, that's a micro movement. And basically, it's based on the work of Dr. Gwamberto, who was a French, I think he was a plastic surgeon, who decided to look at living fascia. Fascia is the connective tissue webbing that surrounds every organ, every cell in our body. It's this network of webbing, and we've never looked at it before. He decided to look at it through an electron microscope under the living skin of a living person.

And what he's discovered is that fascia moves fluid throughout the body like a hydraulic pump. Right? It sounds simple. It doesn't sound like anything until you think about before that. We only ever thought that fluid gets moved via blood and lymph, right? So now we know that there are other means. And the idea of, well, you have to move your joints to lubricate them, we now know really why. So moving moves fluid. It gets fluid to the periphery. Another reason why sitting is the new smoking. We're squelching delivery of hydration to our periphery. They find that people who fidget live longer because they're moving. They're constantly moving.

And they've actually done studies where they've shown, well, this is actually a little something to show that mildly dehydrated people, when they've taken muscle biopsies of them, they've shown that that mild dehydration, going back to that subclinical, low grade dehydration, their cells, the same amount of damage that's done by smoking a cigarette is the same amount of damages as that day in, day out, how dehydration can do for us. So l just went off on a total tangent, sorry. But the movement is super important and so much so.

Once again, as you wake up in the morning, before you hit your feet, hit the ground, I would suggest from toes to top of your head, move everything. Do ankle squirrels, sprint your toes, bend your legs, twist in bed, nod your head and just make them up. Make them up. We don't move the way we used to move. Everything is so convenient for us, including, I like this example, I say it all the time. I think it's a really fun example. Think about when we used to drive our cars. We didn't have the camera in the front. You'd have to like back out of your driveway by turning your head around and looking behind you. We don't even have to do that anymore
because the camera is right there. We don't move in the way that we used to. Everything is super convenient. So we need to make ourselves move somewhere. And that's lots of bending and stretching and micro movements.

Katie: I love that. It echoes another podcast guest, Hunter Cook of Hunter Fitness, has explained that really well about how our joints, the only way they get nutrients is through movement. And that basically we're movement deficient in today's modern world. And he has a protocol called CARs, where you move every joint. And I find that when I do that regularly, my HRV is great. I feel awesome. And it's so funny how these simple things really can be the most profound.

And I love your work for this reason, is everybody wants to get into the latest biohack, or the shiny silver bullet, or the fancy new supplement. But at the end of the day, I keep coming back more and more to that. It really is our small foundational consistent habits. And I would say hydration obviously should be on that list. Sleep is on that list. I personally would put morning sunlight on those lists. And these are all things that are free. We can optimize them and make them good habits for free. We don't have to go buy expensive supplements or equipment or do crazy workouts to get the benefits of those things. We can just integrate those habits into our lives.

Dr. Cohen: I am still right there with you $100 \%$. And in my 25 years of practicing and I prescribe supplements, I do all that stuff. But it keeps coming back to that in every way. In humanism, it always comes back to just even getting back to back to basics. You know, a lot of, you know, you mentioned biohacking, but computers and the whole thing, like we're getting too far ahead of ourselves. We need to rein it in a little bit. I think it's super important.

Katie: And even if someone's going to do those supplements or do the more advanced things, having those foundational habits are going to make those expensive things more effective. So why not get those foundational habits in place. And for people listening, hopefully we're making a strong case for paying attention to their hydration and making this a daily habit. From a practical standpoint, what would be some tips for someone having sort of like what would an optimal day of hydration through food, getting enough electrolytes, etc? What would that look like for someone?

Dr. Cohen: We talk about front loading your water. So a big glass of water first thing in the morning with a little salt or electrolytes, whatever it may be. I like to do a glass of water before every meal. I like to include a side salad with lunch and dinner. I do one green smoothie a day so that's blended greens with water and then whatever else I want to put in there that's not like yogurt and a protein that becomes a meal, right? I'm talking about just a green smoothie.

And then maybe a little tea or herbal tea before bed later in the day. It's kind of that simple. Once again, it is very individualized. And then I do keep a bottle of water at my desk and I sip at that throughout the day. There are some people who need only one glass of water a day. There's some people who need ten glasses of water
a day. You know, it's remembering what I said earlier about that urine output is, is the more important thing to really keep an eye on that. We meant to be peeing every two or three hours while we're awake. That's the thing you need to be measuring. And if you're not doing that, you need to do it better.

Katie: And then it sounds like on the other end, if someone's drinking a lot of water and maybe not getting left electrolytes and they're feeling fatigue or feeling muscle cramps or headaches, they may want to experiment with reducing their water a little. Although I would guess on average it's a population. Do we tend more towards the not getting enough water than they getting too much water?

Dr. Cohen: Yes, absolutely. I think we all experience low grade dehydration often multiple times throughout the day too. It's the one thing that I'm a stickler on. So I do subscribe to that 80-20 rule. Give me $80 \%$ of diet. Like, do the best you can, you know, give me $80 \%$. With hydration it's a day in and day out. Stay on top of it. It's that important. So, yes, dehydration, we all experience it and it's important to stay on top of it.

Katie: And like you say, throughout the day, not just like we can't skip three days of sleep and then catch up all in one day. We can't not hydrate all day and then just drink a gallon at night and we're good for the day, throughout the day. Daily habit.

Dr. Cohen: Yeah. And especially if you're not eating well. And also you think about the environment that we're in are you living in air conditioning or heat? Like, I live in New York. We have these radiator heating that it sucks everything out of the air. It's so dry. I think actually winters are more drying than summers. Everybody says thinks about summer is the time you need to hydrate. I think in New York, winters are the worst because of the environment. So think about what environments you're in. How much processed foods are you eating, what medications are you taking, how much movement are you getting? All these things are dehydrating us. These are the things you need to maybe if those are the things that you're doing, then be even more on top of your hydration.

Katie: I'm so glad you mentioned processed food because I think people may, like we talked about be aware that if they're drinking a lot of coffee, for instance, they might want to drink a little more water. But I don't feel like people maybe have been told when you eat processed food, there's not water in that and your body is going to take water to digest that. So I have kind of always personally thought of any processed food in the same category is almost like alcohol as far as it increases your body's need for hydration, it seems like.

Dr. Cohen: Absolutely, yeah. I think it's probably our number one everyday dehydrator that people don't know or realize. I'll say one other thing, medication, I'm not only talking about like diuretics, we know those are pulling water out of us, but there was a study that showed almost every single, even over the counter drugs like Aspirin and the purple pill have landed people in the ER from overt dehydration from those medications. So there's other things that are dehydrating us as well, and just even simple medications, aspirin too.

Katie: Well, good to know. And you've mentioned your book a couple of times. I know there's much more in your book than we can cover in just a one hour podcast episode. Just talk briefly about the book. I'm assuming it's also available anywhere books are sold, but l'll put a link in the show notes as well.

Dr. Cohen: Yes, thanks. It's called Quench. It's been out for a couple of years now and it continues to have legs, so they say. It's published in six different languages. I'm super proud of it. It's a really easy read. There's a science in there, but it's very user friendly. It's really written for the layperson. It's written for everybody. We even talk about blenders, for example, you don't have to go out and buy a Vitamix, a $\$ 400$ blender. You can go buy a $\$ 5$ blender in a second hand store. I don't care. It really is user friendly. It's fun. It's easy to read. It's interesting. There's some big ideas like the fascia and the fourth phase of water in there. Then I have a coauthor, Gina Bria, who's an anthropologist. So we talk about the anthropology of water and hydration. It's fascinating.

Katie: So again, that link will be in the show notes for you guys listening if you're on the go at wellnessmama.fm. And speaking of books, another question I love to ask is if there is a book or number of books that have profoundly impacted you, and if so, what they are and why?

Dr. Cohen: It's funny, you sent me this question beforehand, so full disclosure. So I thought about it, and my first thought was like, oh, okay, so what medical books have? And then I'm thinking, well, what? Textbooks. And then I'm just sort of going all over the place and I'm like, there's so many. And there's one in particular that it was written so long ago and I'd love to go back to because I bet it's changed, but it was a hormone book by Jonathan Wright, who's a hormone specialist, he's out of Seattle. That was like my real first foray into getting into hormones. So I love that book.

But then I really re-read the question and you wrote, what book has had the biggest influence on your life? And then I was like, oh, you know what, I'm going to go there. So it's man's search for Meaning by Viktor Frankl. I wonder how many people have said that to you. I think it's many people's life affirming, life changing books. But that changed everything for me. And at times when I've been sort of burnt out of being a doctor, it's hard, it's not easy work. This doctor and the business of medicine, I should say. I always go back to that. And I think we all need to have a purpose and a meaning in life. And he has really taught me that.

Katie: I love that. I 1000\% echo that recommendation. I do the same every year when I do a water fast at the beginning of the year, which is more for spiritual, mental, emotional benefits than physical. When it gets tough, I always reread that book. And it's such a good centering reminder of just to be grateful and our ability to choose our own responses. And I think those kinds of things do they stick with us, they have a really profound impact. So I'll link to that as well in the show notes and along the lines of that and life advice. Do you have any parting advice for the listeners today that could be related to hydration or could be life advice unrelated to hydration?

Dr. Cohen: Yes. Okay. We've sort of touched upon it a couple of times. So I think the biggest thing is, number one, stop beating yourself up. And that goes with the dieting culture. And thinking about dieting culture, live in your body. Feel your body. Live in your body. Your body is incredibly wise. It tells you what it needs if you listen to it. So I think stop being cutting off from our necks down, listening to our body and just stop beating yourself up. Be kinder to yourself.

Be inclusive of the things that are good for you, even if you have to hold your nose and suck down a green smoothie. That's one easy way of being inclusive. We have to get more vegetables into our diet. That is a really easy way of doing it. So do that and get the ball rolling in that direction. And then those other things, hopefully over time will go away. The bad things, the restrictive things, and the things that processed foods, for example, those kind of things.

Katie: I love that and it ties into that idea that I love of a diet culture being dead. And for me, that was a personal shift of focusing on how do I best love my body and nourish my body and take care of my body, not restrict my body and deprive my body and prohibit my body. And that alone is such a paradigm shift because to your point, your body has this wisdom and it will tell you when you become its friend. And l've said it on here before, but the quote that stuck out to me was when I started doing that, I read this quote that said "I said to my body, I want to be your friend. And it took a deep breath and said, I've been waiting our whole life for this."

Dr. Cohen: For this and I think that chills all over. I love it. I love it.

Katie: And I love your work and that you give people this really practical and scientifically backed but applicable way that they can make improvements every single day. I think that's really, really important and valuable. And I'm so glad you are a voice to that message. And I'm very grateful for your time today. I know how busy you are as a doctor. So thank you for being here and for sharing today.

Dr. Cohen: Thank you for having me. I'm grateful to you as well. Thank you.

Katie: And thanks, as always, to all of you for listening and sharing your most valuable resources, your time, your energy and your attention 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.

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