

Episode 416: Q&A: Supplements, EMFs, Protein Snacks, First Principles and More

Child: Welcome to my Mommy's podcast.

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Katie: Hello, and welcome to the "Wellness Mama Podcast." I'm Katie from wellnessmama.com and wellnesse.com. That is my new line of personal care products like hair care, toothpaste, and now hand sanitizer as well. This is a solo episode where I will be answering some of the questions that you guys have sent me via email and via social media. If you have questions you would like included on future episodes like this, please sign up for my newsletter at wellnessmama.com so that every time I ask that question, you can weigh in. And also, you can ping me on Instagram, I'm WellnessMama on there as well, and send me any questions you have for future episodes. These always fun for me because I get to hear from you guys and get to, hopefully, answer some questions that are pressing for you guys and just talk about some topics that I may not talk about otherwise. So today, I'm gonna go through as many as I can in about 45 minutes. And like I said, ping me with any future questions you have.

First question is from Desiree. She asked, "How do you cycle supplements and why should you cycle supplements?" And this is a great question. First and foremost, I wanna say this does not apply to medications

that are prescribed by your doctor. You should definitely talk to a doctor before cycling or changing any medications. I'm only talking about supplements and I'm only sharing here what I personally do. I originally got this advice from a doctor named Petra, Dr. Petra in Switzerland. And I have followed this advice ever since and it has served me really well. Her advice was, never do anything every single day. And I think this is really sage advice.

My general rule, and the way that I work this in, is that I simply stopped taking things on the weekends. It's an easy way to remember it. It's usually busier at our house on the weekends anyway. And so, short of special circumstances like if I'm sick, and I'm trying to recover, and I'm taking immune-boosting supplements or I am replenishing a specific deficiency that I've tested for a short time, I tend to not take any supplements on the weekend. Like I said, always exceptions but in general. I also tend to not eat any food every single day. I very much believe food is medicine as well. And so I don't think it's helpful or beneficial to consume the same food every single day. There's some really interesting research on this and how if we over-consume certain foods, we're actually more likely to develop an intolerance or an allergy to those specific foods. So, I try not to, again, follow the same diet every day, to mix up my diet from day-to-day but certainly not to take supplements on the weekend.

And the idea here is that you don't want your body to get used to any constant external inputs and to down-regulate natural production of any substance. And that applies to things we get from food as well. This is one of the reasons I also occasionally will fast for short amounts of time, just to get used to not having those inputs as well. But with targeted supplementation, I feel like this is especially important or at least it has been for me. And I find that I also get more benefit from supplements when I do this. As a side note, I also find this really helpful with caffeine. Although I find that most people don't love to do this, to either go off caffeine on the weekends, which is tougher, especially if you still have a lot going on on the weekends, and much less fun. Or what I prefer to do, which is to cycle caffeine throughout the month. So for one week of a month, one of every four to five weeks, I will not drink caffeine or just drink decaf coffee in small amounts. And what I found is this makes caffeine so much more effective the rest of the time when I am drinking it, which many of us are drinking caffeine for the little bit of energy or focus boost. And I find it's much more effective when I do that.

So, just a simple tip that has been really helpful for me and one I would encourage you to experiment with in your own life. You'll find me saying this over and over, but I do think there's a tremendous amount of variability and personalization when it comes to any aspect of health. So certainly always experiment and find what works best for you. Don't ever take anyone's advice, including mine, completely at face value. Use everything as a starting point to figure out what's gonna work best for you.

I'm also very careful with supplementation to try to take only targeted, careful supplements to accomplish a specific purpose. And personally, what I've done is to run...All the supplements I take are somewhat based on either, like I said, deficiencies from testing or on my genes. A concrete example I can give here is that when I ran my genes through Nutrition Genome...I have a discount with them and I will make sure that's linked in the show notes. They are an affiliate partner. I'll link to it so that you guys can find that. Look out for that link. But I ran my genes through there. They give a lot of really helpful data about what things your body might prefer just based on your genetics. And certainly, there are many considerations beyond that including if you have

intolerances based on your current immune status or your current gut health, it's not the only thing you should look at. But I found it a very helpful starting point.

So, the specific example I will give here is that I found based on my genes that I had a higher than average need for certain types of choline. But I, ironically, also am intolerant to chicken eggs, which for many people are the main dietary source of choline. But having avoided eggs for almost a decade, I was consuming very low amounts of dietary choline and I had this drastically increased need for choline. When I started supplementing, I noticed a really drastic difference relatively quickly. And so that's one of the ways I find that genes can be really helpful in pinpointing maybe some of the things that could be nutritional holes for us and then using those things in a targeted way to get a very specific benefit.

Because as we all might know, just from looking at the marketing, there are literally thousands and thousands of supplements. And they all have potential benefits, depending on what you specifically need. But if you just go based on the benefits of supplements, you can end up with a huge list that may or may not necessarily benefit you personally. So, I'm a big fan, like I said, of finding a good starting point based on genetics and then using a lot of tracking and personal experimentation to really dial that in. And even at that point, still skipping them on the weekends.

Heather asked, "What do you personally do to address all the forms of EMFs within your home and exposures for your kids?" This is another great question, I think one that will become increasingly relevant. As it appears, I would think that EMFs are not going to be going down anytime soon and that this is something we're gonna be more and more potentially exposed to in our environments on a daily basis. I have two schools of thought here. The first is that we should minimize when possible and within reason and within our sanity. But also realize that EMFs are and likely will remain a relatively big part of our lives. So it's important to also cultivate resilience and ability to handle when exposed.

And I'll admit, I haven't always felt this way. I in many times have been much more careful about avoiding all types of EMFs, especially when I was in an active healing phase. And I think there are certainly times and places for that. But I had several experiences with people in the health world that I very much trust, over a span of a few weeks, who all had devices in their home that put off different types of EMFs. And it kind of surprised me to see them there. And they all had the same idea that since we cannot totally avoid EMFs, that it's perhaps better to find a more conscious and targeted way to use them, but also not completely avoid them in our home environment so that we're actually less resilient when we are exposed. So, I think there is a balance there. I don't think it's possible in today's increasingly technological world to completely avoid EMFs. And I think we could all probably encounter a whole lot of stress if we were trying to completely avoid them.

But I do think there are levels of ways that we can mitigate or avoid extra exposure, and a lot of them are pretty easy. I have several posts about this that I can link to, to make sure you guys can find them. We did have an EMF expert come to our house, who tested all of our different bedrooms especially, but just the whole house and figured out where our highest areas of EMFs were, where they were coming from. That was really helpful just to have a tangible idea of what we were working with to begin with. And I did a podcast with

Brian Hoyer who did the analysis in our house. After that podcast, we painted a couple of rooms with a specialized paint to minimize exposure to EMFs from sources that I think were above levels that I felt safe with, like, for instance, from a smart meter.

But then beyond that, we had relatively low levels in the rest of the house. So we were able to mitigate it with things like taking our Wi-Fi down at night, using a really inexpensive digital timer hooked up to our router and modem, and all that equipment. So it automatically turned off when we were sleeping. And we also put our cell phones in airplane mode at night, especially if they're in our rooms, just so we don't have that exposure while we are sleeping. There's some evidence that we are potentially more susceptible to some of the harmful things that can happen from EMFs while we are sleeping because we're in a parasympathetic state, and our body is potentially less resilient or we at least need to be in more of a healing state. So I felt like it was more important to mitigate at night. And if you were looking kind of at the 80/20 principle, and you guys have heard me talk about this, mitigating exposure at night when you're certainly not using Wi-Fi anyway, is an easy way to kind of reduce overall exposure.

We also spend a lot of time outside during the day and EMFs are typically, not always, but typically more concentrated in buildings and in homes where we have Wi-Fi, and cell phones, and smart appliances, or whatever it may be. And so, we spend a lot of time outside during the day, so I wasn't as worried about our exposures then. My kids especially are outside a good amount of time. So I was more concerned with mitigating our nighttime exposure, which I have explained. And check out a link below where I will show you how to do that with a timer on your Wi-Fi. That was a really easy one that we don't even have to think about anymore.

But at the end of the day, I think that, like anything, EMFs can be more problematic if you're already struggling with other health problems. So, I think it's also important to have a good focus on overall health and resilience so that when we do encounter EMFs in small amounts, they aren't as harmful. I've also seen cases where people, for whatever reason, had to be very careful about avoiding them or were so careful about avoiding EMFs that any exposure potentially caused problems. So I think it's about finding that balance, and mitigating what we can without it becoming an obsessive focus, and spending time outside whenever possible, curating a really good sleep environment when it comes to EMFs, and then also making sure that we are resilient so we can handle when exposure does happen because in today's world, it will.

I got several questions related to protein, specifically after a podcast I did with Dr. Gabrielle Lyon, who talked about the importance of protein consumption. And also another one that I did with Diana from Sacred Cow about protein, especially for women and how important that is. I've gotten a lot of protein-related questions from you guys. And Brianna asked, "I'd love to know what your protein meals and snacks look like, especially on the go. Thanks for the information you share." Lindsay said, "I would love to hear more about your strategies for getting enough protein with minimal saturated fat, especially with the APOE4 gene as I'm struggling with this. Do you use any kind of protein shakes or bars for busy times? I'm intolerant to whey and casein so that adds a whole other layer of difficulty. I love fish, chicken, and turkey, but would be thrilled to have more options. Also, any thoughts on soy?"

So, just a quick few suggestions there. I'm also a big fan of seafood, Lindsey. And a lot of my protein does come from seafood from various sources. We're lucky where we live that that's an easy thing to access. But it's also a tougher one to have on the go. And I found that, especially in, like, social situations, it's hard to just open a can of sardines or eat seafood. So, I'll put an exhaustive list below that you guys can find. But something that I really enjoy, I'm a big fan of Paleovalley beef sticks, which are relatively low in saturated fat, especially for beef. And I like them because they don't have any of the nasty additives like corn-based citric acid that a lot of beef products have, especially beef stick products. And they're naturally fermented. They use an old-school uncured fermentation method. So you also get a boost of probiotics from eating those. And it's hard to find anything more convenient because they're already non-perishable and ready to go. My kids are a big fan as well. So those never last very long in our house.

I often also have duck eggs or hard-boiled duck eggs around. We have ducks, so there's an easy protein source for us. But as I mentioned before, I can't eat chicken eggs. That's the one intolerance I haven't been able to fully reverse yet. So, I avoid chicken eggs still currently but do fine with duck eggs. And so I tend to keep those on hand. That'll be a quick protein if I need it. It's also a very common breakfast for me to eat just a few eggs.

Harder in social situations but on the go, I love cans of sardines and salmon because they're so inexpensive. You can get wild-caught sardines with the bones, which are also a great source of calcium, or wild-caught salmon in a can with the bones, again, a great source of calcium. And compared to the fresh versions of either of those, they're so inexpensive. They are packed with protein and all kinds of other vitamins and minerals and, comparatively for protein sources, very inexpensive. I know that sardines are a tough one for a lot of people and they are an acquired taste for sure but if you can acquire the taste or learn to love them like I have, it took several years but I actually love them now, they're a great go-to protein source. A couple of tips that I find helpful if you're not a fan of the taste, plain yellow mustard does a pretty good job of masking it, as does nutritional yeast. It's also a source of protein and B vitamins. And that tends to help, kind of, dull the really fishy flavor. I also love making chopped salads with canned sardines where I chop up some romaine lettuce and some cucumbers, and onions, and a can of sardines, I'll kind of, like, mash it up and then add lemon juice, and find that really, it's a very, very mild flavor with that and that's a really easy, inexpensive lunch.

Also funny confession, I love raw oysters as a source of protein. And this isn't a common one. I haven't seen this on anybody else's list of protein to eat on the go. But we have a local seafood market where we live, and I love to run in and get a pound of pre-shucked that day raw oysters. In fact, this is my version of fast food. So I guess some people would go through a drive-thru. I like to just run in there and grab a pound of raw oysters and eat them in my car if I'm on the go. It may not be everybody's cup of tea, but I absolutely love oysters and I love all of the zinc, and protein, and everything else that they come with. And it's about the same price comparatively as eating out. So, just a random tip there. You mentioned you like chicken and turkey already. Pre-cooking either of those are great to have on the go for a high protein snack. I often will throw a lot of chicken into the instant pot or pre-make something like egg roll in a bowl and have that on hand to take with me.

Lindsey said she can't have whey or casein, so this wouldn't be an option for her. But I do tolerate dairy now and I'm a big fan of grass-fed cottage cheese. The one I usually get is called Good Culture. And that's a high protein...they have very low-fat options but the high protein grass-fed dairy option, if you tolerate it, that's a great one.

We make a lot of homemade jerky at our house. We have a smoker and also just have done this in the oven for a really long time. I have a recipe on site at wellnessmama.com on how to make jerky. It's actually way easier than you would expect and you save a lot of money when you make it yourself versus buying it. Plus, you can add all kinds of beneficial spices and healthy versions of salt instead of the processed salt that's used in a lot of those.

Especially this time of year, I also really love any kind of leftovers or soup in a mug or to-go cup. And these are so easy to make. I'll often just dump leftovers into a mug and add hot bone broth and then I have a meal ready to go, whether it's just lunch at home or if I'm on the go. And not related to protein but if you are consuming more protein, another thing that I have found really helpful is to make sure you're getting enough prebiotics. And I personally love the prebiotics from Just Thrive. I will link to those as well. They're not protein, but they do help with digestion and they taste great. It's a great drink option to, kind of, mix things up.

Jamie asks, "My question is can fasting blood sugar be too low? I've been really interested in tracking my blood sugar over the past few months, especially after listening to many of your podcasts about metabolic health. My fasting blood sugar in the morning has been around 70 and my glucometer says that I'm hypoglycemic. Is that a bad thing?" First and foremost, very important, I wanna say for any specifics related to your personal health, absolutely check with the doctor. This is not medical advice. I do not play a doctor on the internet. I will only speak to my personal experience here.

I think what Jamie is referencing, I have been for several months wearing a continuous glucose monitor from Levels. And I will link to that as well If you guys wanna try it out. I have found it really helpful because I've been able to pinpoint how my body responds to different types of foods and what my glucose response looks like. I'll also caveat and say that I do not think carbs are bad. I do not think that glucose response, in general, is bad. I think it's really helpful data to have. But there's a whole lot that goes into this. For instance, a really heavy sauna session or a workout session can give you a spike in glucose. This is not a bad thing. It's actually a great thing. Even from diet, eating a lot of foods like sweet potatoes, even though they're high in carbs and in starch, can raise your blood sugar, typically not as much as processed food, although some people will see a bigger spike from that. There are also random foods like grapes that tend to spike people pretty high even though it's considered a natural food.

I think there's a lot of experimentation that goes into this. And so I'm definitely not giving any blanket advice here whatsoever. I haven't gotten to wear a glucose monitor in the summer yet, but I also have a theory that in warmer weather and when we're just in a hotter environment, we handle some of those foods like grapes and tropical fruit a little bit better. But I will keep you posted on that.

Having worn a continuous glucose monitor for several months, I will say that my fasting glucose is usually in the 70s as well. And I consider this variation within the range of normal. My doctor does as well. And my doctor has said that 70 to 85 is good fasting range. Mine is usually in the 70s, sometimes as high as like 83, 85, depending on what I have done the day before. I have also had my glucose as low as the 50s when I was doing water fast, which I do feel like is low, but I still felt okay during those times. I am not recommending that by any means and I'm definitely not recommending water fasting, in general. I've done that under the care of a doctor. I think it certainly can serve its purpose but it's not something I think is beneficial for everyone. But I'm just saying that to illustrate that I've had my glucose go as low as the 50s and still felt great.

I've also seen that some things tend to impact fasting glucose the next morning, including meal timing the day before, and things like how much protein you ate, in general, the day before, and at lunch the day before, especially, and then anything you consumed after dark. I've said before that I'm a big fan of circadian fasting, just simply not eating when it's dark outside, which is something that probably biologically lines up with how we were designed to eat. But if you're worried about your blood sugar being too low, some things you could try experimenting with would be adding more protein to your meals the day before, especially at lunch, or even adding a small protein and healthy fat snack before bed. So eating before bed does tend to keep your fasting glucose higher. For that reason, a lot of people avoid eating after dark or before bed. But if you're worried yours is too low, that could be a good strategy as well. Again, I think this is something to work with your own healthcare practitioner about. It's very individualized. I personally feel fine and actually really great with fasting glucose in the 70s but there's a lot of considerations. So, consult with the practitioner if you are concerned at all.

I don't have a name but somebody asked, "What about loose skin after losing weight? I have seven kids and I'm trying to lose weight. I've lost 20 pounds, but need to lose 40 more. I already have loose skin on my belly and some severe stretch marks. What did you or do you do after your weight loss for loose skin?" Well, first and foremost, whoever you are, congratulations on your weight loss and also on bringing seven humans into the world. I've had six and I know it's no small feat to have one baby much less more than one baby. So congratulations on the incredible things your body has done. I will also say, I am right there with you. I think some skin changes are very, very normal, even after one pregnancy, even after no pregnancies, just as we get older. But especially after multiple pregnancies, that seems to be a pretty common thing. I think there's genetic factors that come into play here. I think there's some things we can do that help, kind of, mitigate the difference. But I think that there are some changes that happen. And I think this is, kind of, a two-part thing.

On the one hand, I don't think we can or should expect our bodies to look exactly like they did before having babies after we have babies because it is a change and we got an incredible payoff through that change. Most of us I don't think would change that for the world but that also doesn't mean we can't do things that help us feel and be able to move better after that happens. I certainly have this too. And I had some loose skin, even before losing weight just from having six babies. And now I have even quite a bit more after the weight loss. And I'm very close to my weight loss goals. I'd like to lose a little bit more fat but actually maintain body weight relatively close to what I am now but gain some muscle as well. So I will likely still end up with more loose skin. I can say without a doubt that I would still opt to lose the weight again, even if I knew how much

loose skin I would have just because I'm so much less bothered by the skin than I was by the extra weight. And I'm able to do so much more now, just with the way my body is and the ability I have now versus before.

But loose skin certainly is an issue and I certainly understand where you're coming from with this. For me, the skin is slowly but surely tightening back up. I think some of the factors that have come into play that were helpful here were consuming enough protein, using some form of red light therapy regularly. Also, not a fun suggestion for a lot of people, but cold exposure has been really helpful for this. And when I am bold enough and can keep myself doing it, getting regular cold exposure is probably the most beneficial for continued fat loss, especially visceral fat, and for tightening my skin. It's not necessarily the most pleasant in the moment. But the feeling after cold exposure is absolutely incredible. And I've written about this before. There are certainly many expensive ways you can do this but you can also build a relatively inexpensive cold plunge in your house using an old freezer or just add ice cubes to a bathtub and do cold exposure there.

I think there's gonna be, again, a personalized supplemental factor that can help here as well. For me, choline and certain amino acids have been helpful, I think, in tightening skin from what I can tell, but I don't know that that is gonna be applicable to everyone. I do think it's extremely individualized, like every aspect of health, and I think some people might see tightening more or less than others but I think those things, in general, will help everybody. I also know people who have lost this much weight or have had that many kids who opted for loose skin removal surgery. From what I've read, I would probably actually lose about 8 to 10 pounds of loose skin if I opted for something like that. But it's not really on my radar right now because the recovery sounds pretty tough and I'd probably only consider it if the loose skin was getting in the way of activities I wanted to do or causing discomfort during those activities, but I would say it's not completely out of the question. I'm definitely going to stick with the cold therapy and eating enough protein and red light for a long time first to see what I can do naturally before I would ever consider this.

Kristin said, "Can you talk more about the concept behind first principles? How do you figure them out and how do you get from here to there? Though, I have a feeling this is what your homeschool program is going to be about. Is there a good resource or book to read about first principles? I love hearing how you base your homeschool program around it and it really resonates with me. I'd like to teach my kids this. College is not the end-all-be-all goal for us or for them. Our kids are 8 and 10. We wanna teach them real-life practical skills so they're not just living in debt or working to pay bills with no end in sight. My husband just retired at 52 and we have no debt, not even a mortgage. We wanna pass along that mindset." Congratulations, Kristin. That is a huge accomplishment in and of itself.

There are certainly some books. I've talked about first principles quite a bit before. This is a really fun topic for me. Some books I would recommend off the top of my head would be anything and everything from Charlie Munger. And you don't even have to go to his books, you can just look up...He's got a lot of recorded talks that have been online or a lot of articles written about his thought process. And those are a really helpful starting point. Elon Musk is also a very much first principles thinker, as was the physicist Richard Feynman. You can find a lot of his work as well. He's got a great book that my kids love too that's called "Surely You're Joking, Mr. Feynman!" A lot of those are really great starting points.

Also, to answer your question, yes, I will be covering this in-depth in my curriculum. This is called Unstitute, and should have that to you guys, very, very soon. If you're not familiar with the concept of thinking in first principles, the idea is basically dialing things back to the most common true denominators and then building from there, trying to strip out the assumptions that have already been in play related to that thing. Some common thinkers that thought like this, you might have heard about a few of them, people like Elon Musk, Aristotle, Thomas Edison, Richard Feynman, Nikola Tesla, and Einstein. I would say Elon Musk was probably the most well known modern first principles thinker that is most outspoken about it, but there are certainly many, many others as well.

And Musk said that he thought it was a good framework for thinking. It's basically physics. He said, "You know, the sort of first principles reasoning, generally, I think there are. What I mean by that is to boil things down to their fundamental truths and then reason up from there, as opposed to reasoning by analogy. Through most of our life, we get through life by reasoning by analogy, which essentially means copying what other people do slight variations." And he said, "If we can go back to first principles, we can often think of completely novel and innovative ways of thinking about things. And this has become something I try to do as part of my daily and yearly process. It starts by basically questioning everything I think, or I think I know, or I think I believe to be true, and then doing this continually to get to the most basic building blocks, and then building from there."

So as Musk said, typically people reason by analogy or they'll think in a pattern that kind of goes like this, you start with what, kind of, already exist or with limitations, and then you'll iterate or improve on that, try to make it a little bit better, or you'll explore available solutions, basically as a form of variations of what exists, but without maybe completely understanding the basic building blocks to begin with. And then you'll look back in time, based on what's been done, to try to determine what to do or what course of action to take, or what to build.

But alternately, if you were gonna think in first principles, it might go more along the lines of asking why over and over and over again until you get back to the core fundamental building blocks. So that way, you're starting with the possibilities. From there, you can define and explore a completely new path based on those first principles without the assumptions that have gone along with how things were done in the past. From there, you can create a new recipe based on those very basic building blocks and then start asking and working backwards from the question of what is the goal? And working backwards to build to there knowing what you know.

It's a, kind of, tough concept to grasp at first. But once you get it, it really sticks and it, kind of, revolutionizes how you think. And like many things in life, I think kids are naturally great at this. In fact, they are the best at asking "why" questions over and over and over to get to the root of thinking, in general. And for them, it all is new information. So if we're able, one of the best gifts we can give them is just to answer their questions of why as much as possible to help learn those things. And I get that it's hard. I recently traveled alone with my 4-year-old. My whole goal in that 18-hour trip was simply to respond to all of her questions without getting exasperated, and I was able to do it. But by the end of that day, I think I had answered literally hundreds of

questions and I was probably close to the edge of my patience. But she remembers it as being an incredible day where she felt like she learned a lot.

But kids are always asking why. "Why do we have to go to school? Why do you have to go to work? Why do I have to clean my room? Why do I have to do this?" And if we are able to give them solid answers to those questions, we can really give them a solid foundation for critical thinking. It's a great opportunity, certainly a tough one as a parent. And often we shut down these questions with, "Because I said so," or, "that's the way it's done," or, "That's the rules." Not to say there aren't times when our kids do need to just do what's expected of them but we can use their why questions as a way to really give them a foundation for thinking. So as I mentioned, an example of this would be when it comes to school. I've done a more in-depth podcast specifically related just to this topic, and I will link to that as well so you can listen more if you're interested.

But I feel like we have, in the past 100 years, really just iterated on current variations of education, finding marginal ways to improve them with testing. Although I would argue in some ways, we've actually made them worse, but not really revolutionizing education despite the incredible advancements in technology. And that was the, kind of, motivation behind what I call Unstitute, which is my own curriculum, realizing if the goal is just to get kids to sit still for eight hours a day and to learn how to do things over and over, then school can be very productive for that. But if that's not the goal anymore, what would actually accomplish the goal and whatever that looks like? And looking backwards, I realized we need our kids to have things like creativity, critical thinking, the ability to ask hard questions, the ability to always ask why. Those are things that are never gonna be fully outsourced to technology.

And so how do we best give those gifts to our kids? And the curriculum was built around those ideas, not assumptions, like how do we keep kids busy for eight hours a day? So I think when we go back to core principles like that, we're able to approach things in a new and novel way. And that has let me give my kids the educational part they need in just a couple hours a day and then have more time to do hands-on activities with them and let them really explore their creative passions. And this is a huge area of interest for me and I will be sharing more with you guys as soon as I have it available. I've been scrambling to turn this into a virtual system for other families, as virtual learning gets more and more available.

Some other examples I think can, kind of, illustrate first principle thinking. So, people often think that, "Okay, so to lose weight, I just need to eat less or move more." And that's what a lot of weight loss programs are based on. But if you keep going back to core principles, there's certainly an element of that but if you're only basing on those assumptions, you're gonna only make marginal improvements to existing systems. And so, you're also not gonna be able to necessarily get more efficient at those systems.

So, for me, weight loss really got effective when I went back to, "Well, what are the actual building blocks necessary to have a healthy weight?" And realizing that a lot of those things weren't just calories in, calories out at all, but being able to exist in a state of low stress because stress or being in a state of fight or flight constantly makes it extremely difficult to lose weight because your body is in survival mode and it's not in a natural physiological state where it is ready to lose weight. It has more important priorities. It's protecting you.

So from there, I was able to ask, "Well, what can I do to get my body in a healthier state so that it wants to reach a healthy weight and I'm not fighting it?" And that led to me exploring my past trauma, my mental and emotional health at a much deeper level. And it made all the physical aspects so much easier. I've used first principles thinking with investing with many, many areas of my life and had incredible results across the board.

Another example and what I'm working on, a resource for you guys, is going back to first principles with all the things moms have to do in a day. I've said over and over that I think moms are the most powerful force for good on this planet but I also think we're the most busy often. And I think if we can give moms more bandwidth and ability to be more effective, not just efficient, to me, it's all about being effective, we can truly change the world. So that means going back to the core building blocks, the first principles thinking of what do moms actually need to do and what are the core things that make us effective as a mom, and then building from there toward the goal of how can we create incredible humans? How can we operate from a place of low stress as moms and building from there? So, like I said, I'm working on a resource for you guys about that as well. And stay tuned, I will release details as soon as I have it.

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Another great question from Tracy. This has been a recurring one in different ways. She said, "Mark Hyman recently talked about sugar causing cancer. I've heard Christopher Walker say that sugar is not the bad guy. Also, could you clear up the nuts and seeds debate? This one is crazy-making. Mark will say some of the healthiest things to eat are nuts and seeds. Christopher Walker will say they're anti-nutrients. Even if you could explain how to make nuts work for us, they intuitively seem like health foods. But lastly, the debate on green vegetables, yes or no, healthy or not? Can you help with some of these contradictions?" And I love this question because it really brings to light an important thing I don't think we're talking about enough when it comes to health, and that is that there's almost no universally good or bad food or supplement. There's always more at play than that. It will be very, very difficult to say anything is universally good or bad. I think I could make an argument for certain types of vegetable oils. But beyond that, it's very difficult to say something's universally good or bad.

There's genetic factors that come into play. There's current immunological and health factors for every individual that come into play. And I think it's easy to try to vilify or glorify certain foods or supplements and it's almost impossible to do because we are so different. And so, trying to follow anyone else's system is almost always gonna be problematic. This is why I am very hesitant to publish, in any way on my site, exactly what I did and what I think other people should do based on my own experience because I think I found what worked for me. I think Dr. Hyman has found what worked for him and also for many of his patients, certainly. I think Christopher Walker has found what works for him and has also helped many of the people he works with as well. I think there's tremendous wisdom in all of these approaches but I think there is also a huge pitfall and we have to be careful when we try to follow anyone else's system exactly because there's so much individualization.

So, from my experience, there is a threshold for all of these things. And what that threshold is, it varies from person to person, based on current health, on genetics, and lots of other factors. So we can't make black or white statements about most things. So, for instance, I don't personally think sugar is objectively bad. I think refined sugar can be problematic, especially regularly or in large amounts. But if you're talking about just sugar, you're talking about things like glucose and fructose, things that are present in many, many foods, things like carbs, that's what's present in many, many foods. Carbs turn into those things in the body. And how much of those things we need varies, again, based on our individual needs.

So, I think there is a threshold. I think we each have to figure out what ours is. But eating one refined sugar cookie is not likely to cause cancer. Eating a pack of cookies every day could have some long-term problematic health consequences, especially depending on where your body is, just like smoking one cigarette is probably not going to cause problems. But smoking a pack a day, very well could cause some problems. It's all about a threshold and it's about knowing what each of our bodies actually need.

So, to directly answer your question, I don't think refined sugar is a health food for anyone necessarily but I think how much carbohydrates and even glucose and fructose a person can handle varies a lot based on person to person, based on genes, and a whole lot of other factors. I don't think we can make blanket statements. I think that nuts and seeds can be a great source of protein and fats but they can also be problematic for some people who have an immune response to them. Nuts and seeds are also very calorie-

dense so they can make weight loss difficult, even though they're not objectively bad. I think it is possible to be healthy without nuts and seeds. I think it is possible to be healthy without sugar. I also think those things can be part of a healthy diet, especially in moderation. I think it depends on you.

I think there's a lot of wisdom in past cultures when it comes to nuts and seeds. They soaked them or sprouted them, and those things reduce some of the anti-nutrients that Christopher Walker is talking about, like phytic acid. So I think, in general, those things can be problematic to consume every day depending on your own health status. And I think you are the best expert on that. And that finding out and experimenting for yourself that you are your primary healthcare provider and that when you find those answers, you will have the best shot at success for yourself.

Same thing with green vegetables. This one might be a little more controversial. I think green vegetables can be very healthy. I think you can also be very healthy without them if you need to. I think they contain things like oxalates, which can be problematic for some people, especially at certain times, especially in huge amounts. So personally, I find I do better on cooked green vegetables rather than raw. And I've been actually eating more root vegetables and carbs lately, based on how my body feels and based on a much higher degree of exercise. It's all very individual. It depends on you. It depends on what you're doing. It depends on your genes. It depends on how much you're moving. It depends on how well you're sleeping and what your glucose response is.

So, the bottom line is, these aren't contradictions. They are just beautiful examples of our individuality. And so if we stopped trying to define foods or supplements or anything as good or bad and we shift to the focus to just nourishing our bodies, how do we best nourish our bodies, then we can build good building blocks rather than trying to avoid these foods completely and hopefully come to a much better place of individualization for what's gonna be best for our health.

Cheryl says, "I would like an update on your red light therapy. Do you do it daily and what results do you continue to see and feel?" So, to answer that question, I still use red light mostly daily. I don't do anything every day, again, but I am now using it largely for helping with my loose skin, hopefully, but I've also found that it's helpful for protecting against sun damage. I spend a lot of time in the sun whenever I can and I have no plans to stop that. And I've found that red light therapy tends to protect against damage from the sun. And even anecdotally, just my experience, that spending time on the red light before going out in the sun in a given day tends to give me more sun tolerance so that I'm less reactive, I'm less likely to burn if I am out in the sun.

If you're not familiar with red light therapy, it's also known as photobiomodulation or low-level light therapy, also called biostimulation, or photonic stimulation, or lightbox therapy. It has a lot of names. The basic idea is that it's using a specific wavelength of light to treat the skin to accomplish various outcomes. And studies have shown that different wavelengths affect the body in different ways. The most effective wavelengths tend to be in the ranges of 630 to 670 and 810 to 880. And these very specific wavelengths of red light create a biochemical effect in ourselves that serves to increase mitochondrial function. And this is a big deal. This improves ATP. If you're not familiar with that, that's adenosine triphosphate, which is essentially cellular

energy. And it increases production of ATP in the body. And ATP is essentially our source of energy for every cell in the body. Without it, we don't function. Without enough of it, we don't function well. So this is a big deal.

And those wavelengths between 630 and 880 are used on the skin surface. Red light therapy penetrates about 8 to 10 millimeters into the skin, depending on what area of the body is using the red light. This can easily affect all skin layers, even reaching into blood vessels, lymph pathways, nerves, and hair follicles. I wanna make sure that I talk about this specifically but red light therapy has been said to help things like rejuvenating facial skin and smoothing skin tone, helping build collagen, which is great for wrinkles, repairing sun damage, like I mentioned, activating the lymphatic system for potentially improved detoxification, decreasing inflammation, especially on the skin, helping fade scars and stretch marks, which is certainly one way I'm trying to use it, improving hair growth and hair thickness, stimulating wound healing, and many other things.

I've personally used it for my thyroid and for helping with hair growth after thyroid disease. I'm now in recovery from thyroid disease, but it's helped me to recover my hair. And I'm also now using it like I mentioned to tighten loose skin after six babies and a lot of weight loss. There's a lot more to it as well. I'll make sure that there are some links you guys can follow to learn more if you're interested, as well as to see the specific devices I use. I think you can get a lot of the same benefits from careful sun exposure. I recommend the podcast I did with Ari Witten about sun. But I think a red-light light in your home can also be a really beneficial health tool.

Amy asks, "I tried intermittent fasting and keto for almost a year and I gained over 20 pounds despite eating only 1 to 2 times a day. I'm not even sure how that's possible and I have been keeping records. My metabolism is a mess now. It's extremely slow. I'm wondering how to fix it and if some bodies just don't do well with IF." I think this absolutely goes back to that idea of individualization, especially for women, our hormones are a lot more sensitive. And I've tackled this subject in a lot of podcasts because there are so many conflicting opinions. I think the answer, again, goes back to figuring out what works best for you. It sounds like your body is not loving keto. I think there could be a lot of things that come into play here. I think there's also a lot of variation in what keto means. And I don't know which version you've been following.

But I, for instance, don't do well on strict, what a lot of people call keto as well because it's high in saturated fat. One of the things I found for me was that I needed to really severely limit saturated fat, and I consume very low levels of that, much higher amounts of things like olive oil, and do much better that way. Some women will also just not respond well to very strict intermittent fasting, especially eating once a day, which can down-regulate certain hormones. So, I would start with actually researching people like Christopher Walker, or Reike, and the hormonal metabolic things they talk about related to that. And experimenting with still looking maybe at calories just to get an idea of how much you're eating, but experimenting with maybe instead upping protein and still potentially some things like root vegetables to get some healthy sources of carbs, maybe circadian fasting.

So rather than just eating one or two times a day, eating more often, eating more calories, but just not eating after dark or experimenting with early morning sunlight to help get your hormones back in the right level, and then experimenting with how much protein, fat, and other just food, in general. There also is a good possibility you're not eating enough food. I know this sounds counterintuitive, but this ended up being a big key for me. So I have, in the past 2 years, lost over 90 pounds and I'm eating much more food now than I was before I lost weight, like a lot more and a lot more protein. I'm eating over 100 grams of protein most days. I am eating just much more volume of food and I found that that's made weight loss easier. So I think there's gonna be an element of really experimenting with your body and figuring out what's gonna work there. I have a lot of resources related to this. So I'll make sure that some of those are linked so that you can continue to learn.

Melissa asked, "Can you share any of your family systems and checklists, grocery shopping app? Do you use an electronic calendar or paper one that you can write on?" So, the good news here, I've gotten versions of this question enough that I am working on a resource. I'll have a book actually out for you guys soon, called "Zen and the Art of Dirty Dishes" that has all of my systems and how to build your own. But to directly answer your questions now, I use a system called Real Plans for meal planning and grocery shopping. And I will put a link here so that you can get all of my recipes. If you try it, all the Wellness Mama recipes will be automatically in there.

It's amazing because it lets you meal plan for the whole week, input how many people you're meal planning for, and then it will export a shopping list in the app that you can use and it checks off as you go. You can also already check off anything you know you have in your house. And as you're planning, if you have allergies or just kids who won't eat certain things or you won't eat certain things, you can have it exclude any recipes that include those foods. So it's extremely intuitive and easy to use. It even has a feature to help you use what you have in your pantry and freezer. And this has really simplified my life, especially this past year when we had been eating at home literally every single meal. So, I'll make sure that's linked as well.

I use my phone calendar for everything now so that I can sync with my family and make sure we're all on the same page for schedule. I used to use a paper calendar but have now fully digitized. And I have written systems in our home as well for our kids. So the older ones who have technology, these systems are on their technology as well but they're also written down at home so nothing falls through the cracks.

Last two questions. Thanks for sticking with me, guys. Bonnie asked, "Is there anything that can help with cellulite?" And I have a whole post about this that I will link to so you guys can learn more. But I think that there are some things that can definitely help. But first, I want to say that some variations in skin tone are completely natural, especially for women. There are very, very few women, even women very low body fat who have absolutely no cellulite. So I think that there's two parts of this. I think there is a part of recognizing that we aren't meant to be perfect and having some variation there is actually a wonderful, beautiful thing. That said, there are still things we can do that are also helpful and beneficial to our body that can help reduce cellulite if it's a thing that's causing you to be self-conscious.

Specifically, I've written about these things before. You can try dry brushing, which is the process of gently brushing the skin with a brush dry, as the name suggests, not with water. And this is said to stimulate the lymphatic system. And many people claim that it really helps with cellulite. I've noticed a difference as well. It doesn't seem to be entirely universal but there are other benefits to this as well, especially if you're well hydrated. So, hydration and dry brushing, both very inexpensive or free and at least worth a try. Red light therapy, which I mentioned as well, can also be helpful for cellulite. Anything that increases collagen production can potentially be helpful for cellulite.

I think that's likely why red light is beneficial. And also getting enough dietary protein and collagen seem to have a positive effect for a lot of women. I'll make sure that the post is linked there as well so that you can learn from it but, again, realizing that there is some normal variation here. We're not meant to be airbrushed and that's perfectly okay. But we can do some things. And dry brushing, red light, eating more protein are all largely beneficial to us on other levels as well, not just getting rid of cellulite. So I think there are some wonderful holistic things we can do that help really reverse that.

Alyssa has a fun question. "What shoes does your family wear both indoor and outdoor?" And I will say indoor in our house, none, we never wear shoes at all. And even indoor other places, as minimal shoes as possible. Outdoor, I prefer my kids not wearing shoes. I don't wear shoes. I do and they do wear boots when it's really cold or I'll sometimes wear sandals or flats if I'm on rough ground. But, in general, I don't push shoes much. And I prefer to be and I prefer my kids to be barefoot and grounded when they're outside. This is a surprisingly controversial topic that I would not have expected, just because being barefoot is so common to me, I forget that it's not to everyone else. But there's a lot of potential benefits here that other cultures have understood that we don't, potentially.

Walking barefoot benefits the body in various ways. If we think about it logically, feet weren't really designed to be in shoes, at least not the kind of shoes we wear today where our toes are constrained and the soul of the shoe is very stiff so the body is not actually feeling the ground or moving. And walking around barefoot might have some pretty impressive benefits. Specifically, it supports the body's natural feedback systems. There's a biochemist named Katy Bowman, you might have heard of her, I will link to her. She's really, really phenomenal. And she claims that modern shoes are contributing to a lot of our problems, including things like osteoarthritis, osteoporosis, knee, hip, and back pain and bunions. And this is partially because shoes block full motion of the foot joints and they block nerve feedback from the feet.

She explains, "There are nerves that interpret the shape of the ground by how the bones and the feet bend at 33 different points. This creates a mental image in the brain, similar to how a dolphin uses sonar to avoid obstacles. Wearing shoes prevents any motion in these joints except the angle and leaves the shoe air essentially blind to the environment. This is what makes stiff shoes the worst when it comes to natural development." And this is a large part of the reason that some neurologists recommend really flat shoes or bendable shoes, like minimal shoes or swim shoes for children with neurological delays. This is actually a pretty well-documented thing, that wearing shoes with less padding improves the feedback there from the feet and helps these kids learn how to walk. But even if we don't have those specific concerns, we can get that same benefit.

Most of us are also wearing very cushioned supportive shoes with a positive heel. Positive heel means that the heel of the shoe is higher than the toe. Typically for women, the dressier the shoe, the more positive the heel. And the more athletic the shoe, the more cushioned it is. And, again, this is a controversial one, some experts speculate that this may cause more harm than good, saying that cushioned running shoes, which only date back a few decades, may seem comfortable, but they might contribute to foot injuries. And again, with the neurofeedback, they might contribute to other injuries as well. So, this is a somewhat controversial topic, but I do think it seems like there's a benefit and that the feet are meant to sense temperature and terrain within reason, not saying get frostbite or burn your feet, of course, but it's worth a try, especially if there's a safe way to be barefoot more often.

And I know that there's gonna be some potential pushback, especially what about the lack of arch support? What about the potential for parasites? I always get those follow-up questions. I'm not worried personally, because when it comes to lack of arch support, many people are now wearing orthotics and extra support for their feet. Back to Katy Bowman, she feels like this could actually make the problem worse. And the reasoning is that feet weren't designed to have that much support like modern shoes provide. So over time, when they get too much support, the muscles in the feet atrophy, and it actually causes the problem, and then we need more and more support to not have the problem.

It's kind of like something that happens similar with our eyes. With any muscle, we have to actually use it to strengthen it. So, foot pain without any arch support might just be a sign that there's weakness in foot muscles that need to get stronger. So incorporating more barefoot movement carefully or wearing shoes that allow for more natural movement can help the feet regain that strength over time. A podiatrist friend of mine cautions that he often sees injuries when people switch too fast from highly supportive shoes to barefoot shoes. And like any type of exercise, I feel like it's very important to start slowly and work up because if you're used to working out in like a mini mattress of a shoe, and then you're all of a sudden barefoot, you definitely might discover some discomfort while your body adjusts.

The other thing that always comes up, of course, is the potential for parasites. When I mentioned that my kids are barefoot literally 99% of the time, I get at least a few responses, like, along the lines of, "Well, I prefer my kids not to get parasites, thank you very much." And I understand it completely. But to me, the risk of parasites from going barefoot, if you google it, or any health condition, you'll be convinced that you're about to die from the idea of going barefoot, but the data does not back this up. If you're reading this, or listening to this I mean, you are likely living in a first-world country, you likely have indoor plumbing, you likely bathe once in a while. So while hookworms and other parasites were common when the majority of us did not have those things and we were often walking on human feces, that's not happening as commonly right now. Hookworms can be easily transmitted through human excrement, which, again, it used to be much more common. But improved hygiene and improved disposal of human feces has greatly reduced this problem.

So I'm not as concerned with that. I do think if you're worried, there are options like barefoot shoes that are healthy, compromised, they don't have the raised heel. They allow more movement of the foot and of the

toes so the body gets the neurofeedback of the ground and they protect against parasites if you're concerned about that. I can link to some of my favorites below if that's a concern for you. But I think it's also fun and important to be actually barefoot when possible. I know I take this to an extreme that most people might not necessarily that I will go in stores barefoot or walk around in public barefoot. I'm not necessarily recommending that. But I do think our feet and our neurological system can benefit from being barefoot a little bit more often.

Well, I have tackled at least some of the questions. There are many, many more. I would love if you would send me any questions my way for future episodes, I would love to answer them. But I'm gonna end there for today. Find me on Instagram or on wellnessmama.com. Sign up for the newsletter if you have questions for future episodes. And I would also, as always, be honored if you would spend just a moment and leave a rating or review and honest feedback on this podcast. It helps me to improve and it also helps other people to find this podcast so we can keep growing the community. I'd also be honored if you would subscribe if you found any of my content helpful. And I'm so grateful to you for being part of this community, for listening, and as always, for sharing your most valuable resources, your time and your energy, with me today. I'm so grateful that you did. I'm so grateful that you're here. And I hope that you will join me again on the next episode of the "Wellness Mama Podcast."

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